

# **Kidney Stones**

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## **1.0 Introduction**

To provide the broadest possible epidemiologic understanding of kidney stone disease requires the use of multiple, complementary datasets. The broadest understanding of kidney stone prevalence can be gained from the National Health and Nutrition Examination Survey (NHANES) dataset. The surveybased design of this dataset queries the general population age 20 years and older. The survey design relies on participant self-reporting of "ever had a kidney stone" as well as "times of kidney stones passed" but the methodology has been validated and may be considered robust. Given the broad crosssection of age and gender, it provides an accurate estimation of lifetime prevalence of a history of kidney stone among all but the pediatric population.

Despite its strengths as a source of prevalence data, the greatest limitation of the NHANES dataset is its inability to provide granular detail on resource utilization by those suffering from kidney stone disease. Better understanding of health care utilization among the affected population requires the use of two datasets: the Centers for Medicare & Medicaid Services Medicare 5 Percent Sample (CMS 5% sample), and the de-identified Clinformatics® Data Mart (CDM) dataset. NHANES data show us that kidney stones affect adults of all ages, so by using both the CMS 5% sample and CDM datasets, we capture both working-age individuals as well as those age 65 years and older.

The CMS 5% sample provides the ability to track patients longitudinally, so that one may, for example, follow an individual through a stone event from diagnosis to treatment to outcome (ancillary procedure). The nature of this dataset limits it to Medicare age eligible beneficiaries, namely adults age 65 years and older. Consequently, it is not the most robust source of data for a disorder that predominantly affects a working-age population. Even recognizing this limitation of the dataset, its ability to track a patient longitudinally permits a depth of analysis, and even quality-based metrics can be developed and applied to these data. The CDM dataset better captures the working-age population that is most affected by kidney stone disease, as it includes data for individuals ages 18-64 years. CDM is a valuable instrument for defining cost of care, as it captures expenditures associated with treatment. It should be noted that the expenditures are in the form of "charges," rather than actual reimbursement; and all expenditures were recalculated using specific pricing algorithms to account for differences in pricing across health plans and provider contracts. These features of the dataset may overestimate the total economic burden of disease management. Like the Medicare 5% sample, CDM tracks patients longitudinally. This is of great interest, as it permits a better understanding of treatment quality over the entire treatment episode for working-age patients with kidney stone disease.

# 2.0 Methods

#### 2.1 Data Sources

Three data sources were used for the kidney stone analyses, including one national survey database (NHANES), and two insurance-claims databases (CMS 5% Sample and CDM). The NHANES data were used to present the lifetime prevalence of kidney stones in the U.S. non-institutionalized general population, the CMS data were used to describe claim-based prevalence and health care utilization and expenditures in Medicare beneficiaries age 65 years and older, and the CDM data focused on insurance claims for adults ages 18–64 years.

# 2.1.1 National Health and Nutrition Examination Survey

NHANES is a cross-sectional multistage stratified probability sample of the U.S. civilian noninstitutionalized population from surveys conducted by the National Center for Health Statistics (NCHS). Data collection consists of a standardized interview in the participant's home and a detailed physical examination and further questioning in a mobile examination center. The data collected include demographics, medical history, medications used, and results of es. The For each of

physical examinations and laboratory studies. The surveys are approved by the Centers for Disease Control and Prevention (CDC) Institutional Review Board and include written informed consent.

# 2.1.2 Centers for Medicare & Medicaid Services Medicare 5% Sample

The CMS 5% Sample was created by CMS to establish a sample of Medicare beneficiaries that is sufficiently representative of the full Medicare population to allow population-level estimation of sufficient accuracy for most purposes. The beneficiaries included in this sample remain constant, to the extent possible, over time to allow for representative longitudinal analysis. For the study population in this kidney stone analysis, estimated numbers of beneficiaries, visits, and expenditures are the numbers observed in the CMS 5% Sample multiplied by 20. Estimated percentages are the computed percentages from the CMS 5% Sample.

#### A. Enrollment (Denominator) Data

The enrollment files in the CMS 5% Sample contain detailed demographic, geographic, Medicare entitlement, monthly enrollment status by program (Part A [Hospital Insurance], Part B [Supplemental Medical Insurance], and Part D [Prescription Drug Benefit]), and eligibility period information (enrollment date, death year, and death month) on all Medicare beneficiaries. Records in the files are at the individual level, and are linkable to claims and other Medicare data by the beneficiary unique identifier.

#### **B. Institutional Claims Files**

Institutional claims files in the dataset contain records summarizing final action on fee-for-service claims submitted by health care institutions for reimbursement of facility costs. A separate dataset exists for each of several types of institutional claims:

- hospital inpatient stays (IP)
- hospital outpatient services (OP)
- skilled nursing facilities (SN)
- home health agencies (HH)
- hospice care organizations (HS)

For each of these institutional claims sources, three related files were used for this kidney stone analysis:

- A "base claims" file contains one record per instance of institutional service. For example, there is one record for a given hospital stay, one record for a stay at a skilled nursing facility, and one record for an outpatient encounter at a hospital. A record in this file contains basic summary information on the medical encounter, including beneficiary unique identifier, beneficiary demographics, type of claim involved, principal diagnostic code, date(s) of service, and total payments for service covered by Medicare.
- A "code detail" file contains medical diagnostic and procedural codes detailing medical conditions and/or medical procedures related to a particular encounter. There may be multiple code records per service instance, which include at least one record specifying at least one medical diagnostic code, and any number of additional records specifying surgical or other medical procedures applied, and the number of supplies used. Each record in this file can be uniquely linked to a base claims file record through a Claim Number field. Diagnostic and procedure codes are from International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM).
- A "revenue detail" file contains line-item-level details of charge-related information connected to a claim. There may be multiple records related to each service instance, with the number depending on the number of specific items for which there were associated charges, such as a diagnostic procedure, a surgical or other treatment procedure, etc. As such, this file provides medical procedure information coded according to the Healthcare Common Procedure Coding System (HCPCS) administrative codes, which may be complementary to or redundant with medical procedure information provided in the code detail file.

#### **C. Non-Institutional Claims Files**

Non-institutional claims (also known as Physician/Supplier or PB claims) cover requests for reimbursement from health care professionals (e.g., physicians, clinical social workers, nurse practitioners) and for supplies and services provided in support of these services (e.g., laboratory tests, radiology services, medical supplies).

For each such claim, two related files were used for the kidney stone analysis:

- The "base claim" file contains one record per claim. Base claim file records provide summary information such as beneficiary unique identifier, beneficiary demographics, date(s) of service, ICD-9-CM medical diagnostic codes, and total payments for service.
- The "line-level detail" file provides details on specific services provided or supplies used in support of services. There is generally one record per chargeable service or supply, so the file typically contains several records per claim. Contents of a record in this file include a claim number to uniquely link records to the base claim file, provider type, type of service or supply provided, and HCPCS medical procedure codes for records detailing a charge for a medical procedure.

#### D. The Part D Events (PDE) Files

The PDE file contains all final action claims for prescription drugs submitted by pharmacies. The files contain information such as drug name, days and quantity of supply, drug dose and strength, etc.

#### 2.1.3 Clinformatics<sup>®</sup> Data Mart Database (CDM)

The CDM dataset consists of adjudicated administrative health claims for privately insured members of a large commercial managed care company affiliated with Optum. The population is comprised of national participants with geographic diversity. All members were covered for both medical services and prescription drugs. We purchased the data from OptumInsight<sup>™</sup> for the kidney stone analysis. In addition to the standard data elements detailed below, the year and month of death were also included in the database we used for the kidney stone analysis.

#### A. Member Eligibility Files

The member eligibility files in the CDM dataset contain year of birth, gender, race/ethnicity, state of residence, and eligibility period (eligibility and effective dates) information on each member. Records in the files are at the individual level, and are linkable to claims by the enrollee unique identifier.

#### **B. Inpatient Confinement Files**

Inpatient confinement files contain records summarizing each inpatient episode serviced in an acute care hospital or skilled nursing facility. A record in this file contains basic summary information on the hospitalization, including enrollee unique identifier, admission and discharge dates, up to five ICD-9-CM diagnostic codes, up to five ICD-9-CM procedure codes, place of service, and standardized cost.

#### **C. Medical Claims Files**

The Medical claims files cover requests for reimbursement from health care professional services provided in all places of services (e.g., inpatient hospital, outpatient facilities, physician office, and laboratory). Medical claims files contain "line-level detail" information, i.e., each claim may include multiple records for services rendered on one claim. Contents of a record in these files include enrollee unique identifier, a claim number, service date, up to five ICD-9-CM diagnostic codes, up to three ICD-9-CM procedure codes, one HCPCS medical procedure code, type of service, place of service, and standardized cost.

#### **D. Pharmacy Claims Files**

Pharmacy claims files contain all final action claims submitted by pharmacies for prescription drugs filled in an outpatient setting. The files contain information on the drug name, National Drug Code, days and quantity of supply, drug dose and strength, etc.

# 2.2 General Methods on NHANES Analyses

Two questions on kidney stones were included in the NHANES 2007–2008, 2009–2010, and 2011–2012 ("NHANES 2007–2012") cycles for participants 20 years old or older who were interviewed at home. The first question "Ever had kidney stones?" was used to estimate the lifetime prevalence of kidney stones. The follow-up question "How many times passed a kidney stone?" was used to describe the percentage of participants reporting having passed kidney stones one, two, or three or more times. Information on age, gender, race/ethnicity (non-Hispanic white, non-Hispanic black, Mexican American, other) was also obtained by self-report during the in-home interview.

All estimates and corresponding 95% confidence intervals (CI) were derived using the sampling weights provided by NCHS. We present national estimates of the lifetime prevalence of kidney stones in combined participants (NHANES 2007–2012) and in each specific cycle.

#### 2.3 General Methods for Claim Data Files

In this section, we describe how the following were defined in the kidney stone analysis: 1) kidney stone claim; 2) Evaluation & Management claim; 3) kidney stone patient; and 4) race and ethnicity using the CMS 5% Sample and CDM.

#### 2.3.1 Kidney Stone Claims

A claim was classified as being related to kidney stones if an ICD-9-CM diagnostic code indicative of kidney stones (Appendix A) appeared in any diagnostic code field.

#### 2.3.2 Evaluation & Management Claims

We examined coded prevalence and associated health care utilization related to Evaluation & Management (E-M) claims. Different criteria were used to identify a qualified E-M claim in the CMS 5% Sample and the CDM due to different data structures and data fields.

#### A. CMS 5% Sample

All claims in the IP, SN, HH, and HS files were classified as E-M claims. An institutional OP claim was considered an E-M claim if it met one of two criteria. The first was the presence in a claim of an indicative HCPCS code (99201-99205, 99211-99215, 99241-99245, 99271-99275, 99281-99285, 99288) for an office or other outpatient visit for the evaluation, management, and consultation of a new patient or an established patient. The second was the indication of a stone-related surgical procedure (Appendix B) in any of the revenue detail records associated with the claim. A noninstitutional claim was considered E-M if the Service Type field indicated "Medical care," "Surgery," or "Consultation" and the Service Place field did not indicate a pharmacy, an ambulance, a mass immunization center, or an independent laboratory.

#### B. CDM

All inpatient confinement claims were classified as E-M claims. A medical claim was considered E-M if the Service Type field indicated "Professional service: surgery," "Professional service: emergency room," "Professional service: office visits," "Professional service: consultation," or "Home health/hospice visits" and the Service Place field did not indicate a pharmacy, an ambulance, a mass immunization center, or an independent laboratory.

#### 2.3.3 The Definition of a Kidney Stone Patient

Since having a kidney stone was diagnosed by a physician's face-to-face evaluation rather than a laboratory test, a patient was considered a "kidney stone patient" in a given calendar year if he or she had at least one E-M claim with a qualifying ICD-9-CM diagnostic code indicative of kidney stones (Appendix A) at any time during that year.

#### 2.3.4 Race and Ethnicity

#### A. CMS 5% Sample

In the current available Medicare 5% Sample denominator files, we were unable to consider ethnicity separately from race. In addition, due to a potential bias in analyses from small sample sizes in

certain race groups, we use three categories, white, black, and other race, in this report.

#### B. CDM

The race information in CDM includes the rolled-up ethnic codes white, black, Hispanic, Asian, and unknown.

## 2.4 Specific Methods for Claim Data Files on Annual Analyses

For this report, we present 10 years' worth of annual data (2004–2013) from the CMS 5% Sample and CDM.

#### 2.4.1 Study Population

#### A. CMS 5% Sample

The study population in any given year covered by these analyses was the set of all Medicare beneficiaries in the CMS 5% Sample who:

- were 65 years old or older as of January 1 of that year (i.e., age-eligible beneficiaries);
- 2. resided in the 50 U.S. states or Washington, DC;
- were continuously and fully enrolled for Part A and Part B Medicare benefits throughout that year (or from the beginning of the year until time of death during the year); and
- were not enrolled at any time during that year for Health Maintenance Organization (HMO) benefits

#### B. CDM

The study population in any given year covered by these analyses was all privately insured enrollees in CDM who:

- were adults 18–64 years old as of January 1 of that year;
- 2. resided in the 50 U.S. states or Washington, DC; and
- were continuously enrolled throughout that year (or from the beginning of the year until time of death during the year).

#### 2.4.2 Coded Prevalence of Kidney Stones

Coded prevalence of kidney stones in a given year was estimated from the number and percentage of eligible beneficiaries in the CMS 5% Sample (defined in Section 2.4.1 A) who qualified as kidney stone patients (defined in Section 2.3.3), and of privately insured enrollees in CDM (defined in Section 2.4.1 B) who qualified as kidney stone patients during that year. Analyses were conducted for each year in 2004–2013, with results on all subjects as a whole, and separately by age group, gender, race, and geographic region of residence (Appendix C).

#### 2.4.3 Comorbid Conditions

Presence of comorbidity in kidney stone patients was examined for four comorbid conditions: osteoporosis, osteopenia, hypertension, and diabetes (see diagnostic codes in Appendix D). For all conditions, we estimated the number and percentage of kidney stone patients in a given year that experienced the comorbid condition during that year.

Consistent with a previous method for using Medicare claims to identify diabetic patients (Herbert et al., 1999), presence of osteoporosis, osteopenia, hypertension, and diabetes in the CMS 5% Sample files was defined as having at least one institutional claim in the IP, SN, HH, or HS data with at least one associated medical diagnostic code indicating the comorbid conditions, or at least two claims in the OP or PB data with at least one associated medical diagnostic code indicating the comorbid conditions. Similarly, in the CDM, the presence of osteoporosis, osteopenia, hypertension, and diabetes was defined as having at least one inpatient confinement claim with at least one associated medical diagnostic code indicating the comorbid conditions, or at least two medical claims with at least one associated medical diagnostic code indicating the comorbid conditions.

#### 2.4.4 Health Care Utilization

Health care utilization was measured among kidney stone patients by year, for kidney stone patients overall, and separately by age group, gender, race, and geographic region of residence. Analyses were performed separately for hospital inpatient stays, ambulatory E-M visits, surgical procedures, imaging use, and, especially, ER visits for kidney stone patients.

#### A. Health Care Utilization – Inpatient Hospitalizations

Since the same hospital stay could be charged by different claims in different files (such as the facility charge from a hospital and the professional service charge from a service provider), before counting the number of hospitalizations, we de-duplicated claims that matched on service date and place of service across data files (such as across IP and PB files in the CMS 5% Sample, and across confinement and medical claims files in CDM) to avoid double counting the same service. Number and percentage of kidney stone patients with an inpatient hospitalization for kidney stones were estimated for each year in 2004-2013. Only hospitalizations with a primary medical diagnostic code indicating kidney stones (Appendix A) were included. Results were provided for kidney stone patients overall, and separately by age group, gender, race, and geographic region of residence.

#### B. Health Care Utilization – Ambulatory E-M Visits

As with inpatient hospitalization claims, since the same E-M service could be charged by different claims in different files, before counting the number of services, we de-duplicated claims that matched on service date and place of service across data files (such as across OP and PB files in the CMS 5% Sample). In this report, we present the total number of ambulatory E-M visits for kidney stone patients for each year from 2004–2013. E-M claims with the presence of a medical diagnostic code in any position (i.e., not only primary) indicating kidney stones (Appendix A) were included. Ambulatory E-M visits include visits in hospital-based outpatient facilities and physician offices. We further calculated per-person per-year ambulatory E-M visits by dividing the total visits by the total number of kidney stone patients. Results were provided for kidney stone patients overall, and separately by age group, gender, race, and geographic region of residence.

#### C. Health Care Utilization – Surgical Procedures

Five surgery categories for kidney stones were examined:

- Open stone surgery
- Laparoscopic removal
- Percutaneous nephrolithotomy (PCNL)
- Ureteroscopy
- Extracorporeal shock wave lithotripsy (SWL)

The procedure code definitions of each surgery category are listed in Appendix B. Claims with surgical procedure codes and presence of a medical diagnostic code indicating kidney stones (Appendix A) in any position (i.e., not only primary) were included. As it is possible that different coding systems used for the same surgery (such as ICD-9-CM procedure codes in IP or confinement files, versus HCPCS codes in OP and PB and medical files) would result in claims of multiple surgeries, in the analyses of surgery count, we deduplicated claims that matched on service date and surgery category across data files.

The number of surgeries reported is the total number of surgeries among kidney stone patients in a given year. Since one patient may have multiple surgeries in different surgery categories per year (such as having an ureteroscopy first and then having **lithotripsy**), in the results for percentage of kidney stone patients with surgery, at most, one surgery per type per patient was counted.

In addition to the overall count of surgeries, we also present number and percentage of kidney stone patients with open stone surgery, laparoscopic removal, PCNL, ureteroscopy, and SWL, separately, overall, and by place of surgery (i.e., inpatient hospital or ambulatory setting).

#### D. Health Care Utilization – Imaging Uses

Seven categories of imaging uses for kidney stone evaluation were examined:

- Plain film/KUB
- Intravenous pyelography
- Ultrasound, abdomen/pelvis

- Computed tomography, abdomen/pelvis: without contrast
- Computed tomography, abdomen/pelvis: with contrast
- Computed tomography, abdomen/pelvis: without then with contrast
- Magnetic resonance imaging, abdomen/pelvis

The imaging procedure code definitions of each imaging category are shown in Appendix E. Claims with imaging procedure codes and a medical diagnostic code indicating kidney stones (Appendix A) in any position (i.e., not only primary) were included. In the analyses of imaging use, since one patient could have multiple imaging uses at different settings on the same day, we de-duplicated claims that matched on service date, place of service, and imaging procedure code across data files.

Similar to the presentation of surgeries, the number of imaging procedures and the percentage of kidney stone patients with imaging are presented overall, and by age group, gender, race, region of residence, and place of service (i.e., inpatient hospital or ambulatory setting).

# E. Health Care Utilization – Emergency Room (ER) Visits

Because kidney stone patients have many ER visits due to severe pain, we present the number of ER visits and percentage of kidney stone patients with ER visits, specifically, in this report. Results are presented for kidney stone patients overall, and separately by age group, gender, race, and geographic region of residence. ER claims with the presence of a medical diagnostic code in any position (i.e., not only primary) indicating kidney stones (Appendix A) were included. An ER claim was identified using different criteria in the CMS 5% Sample and CDM due to different data structures and data fields.

In CMS 5% Sample IP files, institutional revenue center codes were used to identify ER services if the patient was subsequently admitted to the hospital. For patients that went to an ER and were then admitted to the hospital on the same date, we counted the visit as

both an ER visit and an inpatient hospitalization. The revenue center codes in the IP files used to identify ER service were 0450, 0451, 0452, 0456, 0459, and 0981. The same revenue center codes were used in the OP files to identify ER services in hospital outpatient facilities. In PB files, the "place of service" field was used to identify ER services provided by health care professionals. We then de-duplicated claims that match on service date across IP, OP, and PB files to avoid double counting the same service.

In CDM, only medical files contained information indicating ER visits. A medical claim was identified as an ER service if the Service Type field indicated "Professional service: emergency room," or "Facility Outpatient: emergency room," or the Place of Service field indicated "emergency room."

#### 2.4.5 Insurer Expenditures for Kidney Stones

#### A. CMS 5% Sample

Medicare expenditures for kidney stones were estimated based on Medicare Part A and Part B fee-forservice expenditures on all kidney stone patients in the CMS 5% Sample.

We first included claims with a primary diagnostic code of kidney stones. The payments made by Medicare were aggregated for the year. Per-person per-year expenditures were also calculated by dividing total expenditures by the number of kidney stone patients for the year. In addition, annual expenditure estimates were derived separately for inpatient hospital stays, hospital-based outpatient services, physician office services, and all other services. Dollar value estimates from the CMS 5% Sample were multiplied by 20 to estimate total payment by Medicare in kidney stone patients. All dollar amounts were converted to 2013 dollar-equivalent values based on annual Gross Domestic Product Price Indexes from the U.S. Bureau of Economic Analysis:

#### (https://bea.gov/iTable/index\_nipa.cfm).

We also included all claims with a diagnostic code indicating kidney stones in any position (i.e., not only primary) for hospital-based outpatient services and for physician office services, separately, to sum up the total payments made by Medicare by calendar year for all kidney stone patients. Per-person per-year expenditures were also calculated by dividing the total expenditure amount by the number of kidney stone patients in a given year.

#### B. CDM

The same methods used in the CMS 5% Sample were used for the CDM to include claims for expenditure analysis. However, the payment made by the insurer in the CDM was an amount after standardization across plans and providers. In CDM, all expenditures were recalculated using specific pricing algorithms to account for differences in pricing across health plans and provider contracts. We also converted all dollar amounts to 2013 dollar-equivalent values based on the adjusting methods suggested by CDM (OptumInsight 2015).

To derive an estimated paid amount, we used the algorithm below in which the standardized price serves as an estimate of the allowed amount:

Estimated paid amount = Standardized amount -Coinsurance amount - Copay amount - Deductible amount

#### 2.4.6 Filled Prescription in Kidney Stone Patients

#### A. CMS 5% Sample

Since not every fee-for-service beneficiary was enrolled in Part D prescription drug coverage, we first identified kidney stone patients with full and continuous enrollment in a Part D plan. Therefore, the denominator for filled prescription analyses is limited to kidney stone patients who were continuously and fully enrolled in Medicare Part D during the entirety of the year being examined (or until time of death if it occurred during that year).

We first estimated the number and percentage of kidney stone patients who satisfied this criterion (i.e., full Part D enrollment) for each year from 2006 (the first year of the Part D benefit in Medicare) to 2013 for kidney stone patients overall, and separately by age

group, gender, race, and geographic region of residence.

We then estimated the number and percentage of Part D fully enrolled kidney stone patients who filled a prescription to treat kidney stones. The pharmacologic classes we considered, and the specific medications included in each, are summarized in Appendix F. Number and percentage of patients with at least one prescription in any of the classes were estimated, as were numbers and percentages for each prescription class individually. In all cases, each patient is counted at most once in the numerator, i.e., each patient either had or did not have at least one relevant prescription in the year.

#### B. CDM

In CDM, each enrollee was covered for both medical services and prescription drugs, so all enrollees were included in the filled prescription analyses. Similar to the methods used in the CMS 5% Sample, number and percentage of patients with at least one prescription in any of the classes were estimated, as were numbers and percentages for each prescription class individually. In all cases, each patient was counted at most once in the numerator, i.e., each patient either had or did not have at least one relevant prescription in the year.

## 2.5 Specific Methods for Claim Data Files on Longitudinal Analyses

#### 2.5.1 Study Population

#### A. CMS 5% Sample

The study population from the CMS 5% Sample was Medicare fee-for-service beneficiaries who were 65 years old or older as of January 1, 2009, and continuously and fully enrolled in Medicare Parts A, B, and D from January 2009 through December 2013 (5 years' enrollment).

#### B. CDM

The study population from CDM was privately insured adult enrollees who were ages 18–64 years as of

January 1, 2009, and continuously enrolled from January 2009 through December 2013.

#### 2.5.2 5-Year Prevalence of Kidney Stones

Since most kidney stones are asymptomatic, in order to have a better understanding of the health care utilization over time in kidney stone patients, we used a 5-year observation period to present the 5-year prevalence of kidney stones. A patient was considered a "kidney stone patient" if he or she had at least one E-M claim with a qualifying ICD-9-CM diagnosis code of kidney stones at any time during the 5-year observation period.

#### 2.5.3 Health Care Utilization within 5 Years

The numbers of imaging uses, ER visits, and kidney stone surgeries in kidney stone patients were counted within the 5-year observation period. All services involving a kidney stone diagnostic code in any diagnostic code field were considered in this analysis.

#### 2.5.4 Surgical Procedure in Kidney Stone Patients

Based on the date of service and the surgery procedure, we collapsed multiple surgery procedures on the same day into an unique "surgical episode" and assigned a surgery type to the surgical episode with multiple procedures based on the primary surgical type (for example, assigning "PCNL" for PCNL with an endoscopic adjunct). In the analysis of re-surgery, in order to have 120 days of follow-up, we limited initial surgeries to the period from January 1, 2009, to August 31, 2013. Number of re-surgeries and percentage of kidney stone patients with re-surgery were calculated. The distribution of the re-surgery type by initial surgical type was also tabulated.

# 2.5.5 Filled Prescriptions Before and After a Kidney Stone Procedure

Due to the lack of information on indication in prescription files in both the CMS 5% Sample and in CDM, it is difficult to identify whether a prescription was specific for kidney stone treatment. In the longitudinal analyses, we managed to focus on the filled prescriptions for which the medication was available up to 1 week before or up to 1 month after a surgical episode for kidney stone patients with any surgery in order to have a better understanding of the medication prescribed by a care provider in a symptomatic stone event. In order to have the defined medication data available, we limited data for surgeries to the period January 7, 2009, to November 30, 2013. Percentage of kidney stone surgical episodes with a filled prescription during the observation period (i.e., up to 1 week before or up to 1 month after a surgical episode) were calculated overall and for specific drug classes. Percentages of kidney stone patients who filled a prescription during the observation period, overall and for specific drug classes, were also calculated.

# 3.0 Prevalence and Comorbid Conditions

#### 3.1 Lifetime Prevalence of Kidney Stones

The NHANES datasets provide the broadest understanding of kidney stone experiences at a population level. As NHANES has, as its primary aim, a wide-ranging survey of health, kidney stones data are gathered from only two questions: (1) "Have you ever had a kidney stone?"; and (2) "How many times have you passed a kidney stones?". The responses can provide an understanding of the burden of kidney stone disease on the U.S. population. Table N1 provides an answer to the first question, which describes the prevalence of the disorder. From a total population standpoint, the lifetime prevalence of kidney stone disease remained static from 2007-2012. However, a sub-group analysis reveals more interesting trends. Among women, the prevalence of kidney stones rose from 6.5% in 2007–08 to 7.7% in 2009–10 and 8.9% in 2011–12. Over the same time interval, the prevalence among men declined from 11.5% in 2007-08 to 9.9% in 2009-10 and 8.1% in 2011-12. In fact, in 2011-12 females had a greater prevalence than males. Although it was non-significant, it may signal the beginnings of a reversal of the previously long-standing finding of male predominance.

It is not surprising that the lifetime prevalence was higher in older individuals; approximately 5% of persons of ages 25–34 years were affected, compared to prevalence rates that were double or almost triple that in populations age 35 years and older. These rates were fairly static across the three iterations of the NHANES that were studied. The prevalence of kidney stones was also significantly greater among Caucasians, with a rate of approximately 10%; this rate was almost double that of non-Caucasian groups (Table N1).

Kidney stones are a recurrent disease, with patients often suffering from repeated episodes in their lifetime. Table N2 explores these repeated episodes. Among those experiencing a kidney stone, approximately 59.3% suffered from a single stone event in their lifetime. Interestingly, although 17.5% of individuals experienced two stone events, a marked increase of 23.2% experienced three or more stone events. This pattern was true for sub-group analyses that examined the effect of age and gender, as well.

## **3.2 Claim-based Coded Prevalence in** Medicare Beneficiaries Age 65 Years and Older

The population within the Medicare beneficiary sample remained entirely stable over the study period, 2004-13 (Table M.3.1). The age distribution was similar among the 65–69, 70–74, and 75–79 cohorts, with each accounting for approximately 20-22% of the population. As expected, there were fewer subjects in the cohorts age 80 years or older. There were more females than males in the Medicare population, which was comprised of approximately 58% females, and 42% males. This distribution, too, remained stable over the study period. The Medicare study population is predominantly Caucasian, at approximately 88% of the population. Geographically, more subjects are from the Southern United States, with the Midwest, Northeast, and West comprising, in that order, the remaining locations.

The claim-based prevalence of kidney stones in the Medicare population from 2004–13 demonstrated that

kidney stones were less common among older individuals. In fact, only 1–2% of the Medicare population had a claim for a kidney stone each year (Table M.3.2). Claims for kidney stones were somewhat more common among the 65–69 and 70–74 cohorts, with prevalence declining among older age groups. It is notable, though, that over the study time period there was a steady increase in the prevalence of kidney stones. In 2004, the prevalence was 1.2%. It rose over the time period of the analysis, to 2.0% in 2013.

Males were approximately two times as likely to have a claim for a kidney stone as females over the time period of the study. For both males and females, prevalence rose at a similar rate. For men, the prevalence in 2004 was 1.8%; this rose to 2.9% in 2013. For women, the prevalence in 2004 was 0.8%; this rose to 1.3% in 2013.

Geographically, prevalence for kidney stones were distributed fairly evenly among the regions. The Northeast, Midwest, South, and West had similar prevalence rates of 1–2%.

Comorbid conditions that have been reported to be associated with kidney stones, such as osteoporosis, osteopenia, hypertension, and diabetes mellitus were studied in the Medicare population. Osteoporosis demonstrated an increase in prevalence among patients with kidney stone claims (Table M.3.3a). In 2004, 8% of kidney stone patients had a concomitant diagnosis of osteoporosis. This rate rose to 10.1% in 2012, and to 9.5% in 2013. As might be expected, older stone formers as well as female stone formers were more likely to claim a diagnosis of osteoporosis along with kidney stones. Osteopenia exhibited broadly similar patterns (Table M.3.3b). The rise in prevalence was somewhat more rapid, as it progressed from 2.4% in 2004 to 5.8% in 2013. In contrast to osteoporosis, however, there was no similar age effect, as older individuals did not have greater claims of osteopenia than younger individuals. Females were more commonly affected than males, but for both populations the prevalence increased similarly. Distribution across the different racial cohorts was similar, and no one group was affected to a greater extent than the others.

Hypertension was commonly seen among kidney stone formers (Table M.3.3c). Indeed, over two-thirds of kidney stone patients had a claim for it. The prevalence of hypertension increased over the time period of the study, with 67.7% of kidney stone patients diagnosed with hypertension in 2004 and 76.7% of kidney stone patients diagnosed with hypertension in 2013. Given the baseline association of hypertension with age, it is perhaps unsurprising that older kidney stone patients were also more commonly diagnosed with hypertension. Across all age cohorts, the prevalence for hypertension in the kidney stone population increased. Female stone formers were slightly more affected by hypertension than were males. However, the prevalence increased over the time of the study for both genders. Finally, among stone formers, hypertension was more commonly diagnosed in the black population than it was in whites.

Diabetes was encountered among stone formers, and its prevalence in this population also increased over time as seen with the other comorbid conditions (Table M.3.3d). In 2004, 28.5% of kidney stone patients had claims for diabetes mellitus. In 2013, this rate had increased to 36%. There was no meaningful effect of age or gender on this relationship. However, black kidney stone patients were more likely to be diagnosed with diabetes than were white kidney stone patients.

# 3.3 Claim-based Coded Prevalence in Privately Insured Enrollees Ages 18–64 Years

In contrast to the Medicare dataset, the population within the CDM dataset increased over the time period studied. In 2004, there were 5,259,394 enrollees. This increased such that, in 2013, there were 6,093,858 enrollees (Table O.3.1). Most enrollees were in the age 35–44 years cohort, followed by 45–54, then 25–34, with each accounting for approximately 20–25% of the population. Enrollees ages 18–24 and 55–64 accounted for a smaller proportion of the overall population. Importantly, the gender, race, and region distributions remained stable over the time period.

The claim-based prevalence of kidney stones in the privately insured population from 2004-13 demonstrated that kidney stones became more common as age increased, with the greatest percentage of enrollees with kidney stones in the 55-64 years cohort (Table 0.3.2). Over the years covered by the analysis, the prevalence increased. For the entire cohort, the percentage of enrollees with kidney stones increased from 0.8% in 2004 to 1.1% in 2012 and to 1.0% in 2013. A sub-group analysis, though, shows that the magnitude of increase was greatest among the 55-64 years cohort, as their percentage with kidney stones increased from 1.2% in 2004 to 1.6% in 2013. Males were more commonly affected than females, with a stable difference in prevalence between 2004 and 2013 as they both exhibited a similar rate of increase.

Geographically, the prevalence of kidney stones was distributed such that no dominant region was identified. The prevalence in the Northeast, Midwest, South, and West was similar, at 1–2%.

Comorbid conditions that have been reported to be associated with kidney stones, such as osteoporosis, osteopenia, hypertension, and diabetes mellitus were also studied in the privately insured population. As expected, in the younger CDM population, the prevalence of these disorders was overall lower. Osteoporosis did not increase over the time period studied among stone formers, remaining static at just over 2% (Table O.3.3a). Women were more commonly diagnosed with osteoporosis, but the prevalence did not increase for either men or women. However, there was an increase in the number of kidney stone patients diagnosed with osteopenia (Table O.3.3b). In 2004, 2.3% of kidney stone patients were diagnosed with osteopenia. This increased to 3.3% in 2013. Given the progressive nature of osteopenia to osteoporosis, it is not surprising that osteopenia was more commonly encountered in the CDM younger privately insured patients over the analytic period. Interestingly, the prevalence of osteopenia increased for both male and female enrollees.

The prevalence of hypertension among privately insured kidney stone patients increased over the

duration of the analysis (Table O.3.3c). In 2004, 31.6% of the kidney stone formers were diagnosed with hypertension; this increased to 37.1% in 2013. As expected, as the age of enrollees increased, the prevalence of hypertension increased as well. Males were more commonly affected than females, and this remained true from 2004 to 2013.

Diabetes was also noted to increase over the analytic period, progressing from 11.3% of stone patients with diabetes in 2004 to 15.1% in 2013 (Table O.3.3d). As would be expected, diabetes was more commonly observed with increasing age, and the prevalence was greatest for the oldest cohort. Males were affected to a slightly greater extent, as were blacks.

# 4.0 Annual Health Utilization

#### **4.1 Inpatient Hospitalizations**

There has been a migration of kidney stone management from an inpatient setting to an ambulatory setting, a phenomenon that was reflected in the Medicare dataset (Table M.4.1). In 2004, there were 24,680 inpatient hospitalizations for kidney stones in the Medicare population, with 7.1% of patients with stones requiring inpatient hospitalization. These values declined over the time period of the study to 22,640 inpatient hospitalizations for kidney stones and 4.0% of kidney stone patients experiencing an inpatient hospitalization. The utilization was similar across the various Medicare-age cohorts and race groupings. As far as gender, males were slightly less likely than females to have an inpatient hospitalization for a kidney stone.

The migration of kidney stone management to an ambulatory setting (Table O.4.1) was shown in the privately insured dataset as well. In 2004, there were 3,205 inpatient hospitalizations, with 6.8% of stone patients requiring an inpatient hospitalization. In 2013, these figures declined to 2,530 inpatient hospitalizations, with 3.7% of stone patients requiring inpatient hospitalization. This utilization was similar across all age cohorts, genders, and races.

#### 4.2 Ambulatory E-M Visits

Generally, the majority of kidney stone patients requiring health care services utilized the services on an ambulatory basis. The Medicare population demonstrated a marked increase in the utilization of ambulatory evaluation and management visits among kidney stone patients. In 2004, 617,280 visits were recorded; this increased to 1,079,680 in 2013 (Table M.4.2). The per-person per-year number, though, remained stable, at 1.9-2.0. As age increased in the Medicare population, claims for ambulatory evaluation and management visits declined. Males had much greater utilization than did females, a distribution that was present throughout all years of the analysis. Among the race groups, whites accounted for the vast majority of visits.

The privately insured dataset similarly demonstrated an increase in the utilization of ambulatory evaluation and management visits for kidney stones (Table O.4.2). In 2004, there were 99,713 visits, which increased to 144,218 in 2013. As in the Medicare dataset, perperson per-year visits in this dataset remained stable at 2.3. The number of visits increased as age increased, with the peak number of visits among the 45–54 years cohort. Whites accounted for the greatest number of visits across all years.

#### **4.3 Surgical Procedures**

The percentage of Medicare kidney stone patients undergoing surgery for a stone demonstrated a slight decline over the years of the analysis, from 19.8% in 2004 to 16.8% in 2013 (Table M.4.3). However, the absolute number of surgical procedures increased markedly, from 106,380 in 2004 to 144,320 in 2013. In each year, females were slightly more likely than males to undergo a surgical procedure, but this differential was modest. Similarly, whites were slight more likely than blacks to undergo a surgical procedure for a stone, but, again, these differences were small. Interestingly, there was a regional effect, with surgical procedures more commonly performed in the Midwest than in the other geographic regions (Northeast, South, West). Findings on surgical procedures (Table O.4.3) from analysis of the privately insured dataset were consistent with many of the results from the Medicare dataset. Although the number of surgical procedures increased between 2004 (16,549 surgeries) and 2013 (20,815 surgeries), the percentage of kidney stone patients undergoing surgery declined in that same time period, from 23.6% to 21.1%. Across all years, though, women were more likely to undergo a surgical procedure than were men, as was seen in the Medicare dataset. The regional effect seen in the Medicare dataset was also seen in the privately insured population, with the Midwest predominating.

Among the different surgical interventions in the Medicare kidney stone patients, open stone surgery (Table M.4.4) was exceedingly rare, accounting for 1,000 or fewer procedures each year, and laparoscopy (Table M.4.5) was even more rare, accounting for 20 or fewer procedures each year. Percutaneous nephrolithotomy (PCNL), although utilized to a greater extent than open or laparoscopic surgery, was still not commonly performed (Table M.4.6). However, its utilization did increase notably over the time period of the analysis. In 2004, there were 4,440 PCNL procedures performed, whereas in 2013, 6,480 PCNL procedures were performed. The majority of these procedures were performed in an inpatient setting. Overall, though, each annual analysis found that only 1-2% of kidney stone patients undergo a PCNL procedure.

Open and laparoscopic surgical procedures for stone were similarly rare among privately insured kidney stone patients (Tables O.4.4 and O.4.5). There was a slight increase in the absolute number of PCNL procedures performed, from 516 in 2004 to 639 in 2013 (Table O.4.6). However, the percentage of kidney stone patients undergoing PCNL was essentially static, from 0.9 in 2004 and 0.8 in 2013. Most PCNL procedures were performed in an inpatient setting, though there was a gradual transition away from an inpatient setting toward an ambulatory one.

Ureteroscopy (URS) demonstrated the greatest growth in terms of number of procedures performed each year

in the Medicare population (Table M.4.7). In 2004, there were 58,300 URS performed, which increased steadily over the analytic period to 91,300 URS performed in 2013. The majority of URS procedures are performed in an ambulatory setting, although a sizeable number of procedures are still performed in an inpatient setting. Age, gender, race, and region did not affect the utilization of URS for stone management.

The growth of URS was also seen in the privately insured population, with the absolute number of procedures performed growing from 8,748 URS procedures in 2004 to 12,152 URS procedures in 2013 (Table O.4.7). However, the percentage of kidney stone patients undergoing URS actually declined from 16.3% in 2004 to 15.2% in 2014. There was a strong migration over this period to URS being performed in the ambulatory setting rather than in the inpatient setting.

The utilization of extracorporeal shock wave lithotripsy (SWL) was remarkable (Table M.4.8), insofar as the number of SWL procedures remained fairly stable, but the percentage of kidney stone patients undergoing SWL declined in the Medicare population. In 2004, there were 42,540 SWL procedures performed, and 10.5% of kidney stone patients underwent the procedure. In 2013, there were 45,820 SWL procedures performed, but only 7.1% of kidney stone patients underwent the procedure. Overall, this trend would suggest that urologists are becoming less reliant on SWL for stone management. The vast majority of SWL procedures were performed in an ambulatory setting. The geographic region of service did affect utilization of SWL, with a greater utilization in the Midwest.

Interestingly, among privately insured patients, the number of SWL procedures increased slightly, form 7,154 in 2004 to 7,915 in 2013 (Table O.4.8). However, the percentage of kidney stone patients treated with this modality actually declined from 13.4% in 2004 to 10.4% in 2013. Again, the decreasing percentage of patients treated with SWL was consistent with the Medicare trend and likely suggests that urologists are becoming less reliant on this modality. SWL was most commonly performed in an ambulatory setting. Among

the privately insured, geographic region of service did not affect utilization.

#### 4.4 Imaging Uses

There has been a marked increase in imaging procedures performed for kidney stone patients (Table M.4.9). In part, this may be explained by the increase in prevalence of kidney stones in the NHANES dataset, but the percentage of kidney stone patients undergoing an imaging procedure did increase over the period of analysis. In 2004, there were 563,340 imaging procedures, and 61.6% of kidney stone patients underwent an imaging procedure that year. Both of those figures had increased by 2013, with 687,680 imaging procedures performed and 62.4% of kidney stone patients undergoing an imaging procedure. Utilization declined somewhat as age increased, and there was not a large effect by gender. White patients use imaging more frequently than black patients, and imaging utilization was greatest in the Midwest.

The findings on utilization of imaging procedures among privately insured kidney stone patients (Table O.4.9) was different from those in the Medicare dataset. There was a decline in the absolute number of imaging procedures (from 145,333 in 2004 to 121,890 in 2013), though the number of kidney stone patients with an imaging procedure actually increased (from 35,851 in 2004 to 49,300 in 2013). Overall, in this cohort, the percentage of kidney stone patients undergoing an imaging procedure between 2004 and 2013 decreased from to 82.5% to 77.7%. These findings may reflect a greater sensitivity to radiation exposure among younger individuals.

Among the various imaging modalities among the Medicare population, there were decreases in utilization of plain radiography (Table M.4.10) as well as intravenous pyelography (Table M.4.11). Intravenous pyelography experienced the greatest reduction, decreasing by almost an order of magnitude. In 2004, 7.1% of kidney stone patients underwent this imaging modality, and, in 2013, only 0.7% of kidney stone patients did. This decrease was likely due to the limited sensitivity of this modality, as well as its requirement of

an intravenous contrast agent. Renal ultrasound (Table M.4.12), in contrast, demonstrated a marked increase in utilization, both in terms of absolute number of studies performed (58,860 in 2004 to 127,560 in 2013) as well as percentage of kidney stone patients subjected to this modality (14.2% in 2004 to 17.9% in 2013). Although the former value could be explained by the increase in kidney stone prevalence, the latter value likely reflects the true increase in clinical utility of the imaging modality. Computed tomography (CT) utilization increased over the study period (e.g., numbers of CT procedures increased from 2004 to 2010 and from 2011 to 2013), but the rate of rise was not as great as that of renal ultrasound (Tables M.4.13, M.4.14, M.4.15, M.4.16). Of note, there was a code change starting for year 2011: Before 2011, abdomen CT and pelvis CT each had their own distinct HCPCS code. In 2011, one consolidated code for the two procedures was introduced and used from that year forward. Therefore, readers should be cautious with the interpretation of the trends of numbers of CT procedures over years. The majority of CT studies for the evaluation of stones were performed without contrast, which is consistent with clinical practice, as this modality provides the greatest sensitivity and specificity for stone detection. A regional effect was noted, with CT imaging more commonly utilized in the Midwest. Magnetic resonance imaging was seldom used for the evaluation of kidney stones (Table M.4.17).

Among the privately insured population, although plain radiography use remained fairly stable, ranging from 55,954 in 2004 to 54,828 in 2013, intravenous pyelography declined markedly (Table O.4.10, O.4.11). Renal ultrasound also demonstrated a great increase in utilization over the years studied, growing from 9,113 ultrasounds in 2004, with 14.3% of kidney stone patients undergoing ultrasound to 16,229 ultrasounds in 2013, with 17.5% of kidney stone patients undergoing ultrasound (Table O.4.12). The percentage of kidney stone patients with CT utilization increased gradually from 2004 through 2008, but fluctuated and then declined afterwards (Table O.4.13, O.4.14, O.4.15, O.4.16) among this population, suggesting a greater sensitivity to the utilization of ionizing radiation studies. Again, magnetic resonance imaging was seldom used for the evaluation of kidney stones (Table O.4.17).

#### 4.5 Emergency Room Visits

As would be expected from the increase in kidney stone prevalence, the analysis demonstrated an increase in emergency room (ER) utilization by Medicare patients with kidney stones (Table M.4.18). Importantly, too, kidney stone patients were at risk for multiple ER visits in a year. In 2004, there were 102,020 ER visits by 85,600 patients, which increased to 185,980 visits by 152,300 patients. A relatively large proportion of kidney stone patients utilized the ER each year, ranging from 26.7% in 2004 and increasing to 28.8% in 2013. Utilization rates were similar among the genders, as well as among the age cohorts. Black individuals utilized the ER to a greater extent than did white individuals.

Among privately insured patients, there was a consistent increase in the number of kidney stone patients utilizing the ER. In 2004, there were 19,436 ER visits by 15,835 patients, which increased to 28,622 visits by 24,166 patients in 2013 (Table O.4.18). However, the percentage of kidney stone patients utilizing the ER remained fairly stable, with a change from 36.4% to 38.1% in 2013. Interestingly, the percentage of kidney stone patients with ER visits was greatest among the youngest cohort, ages 18–24 years, and progressively declined to the oldest cohort, ages 55–64 years. The number of patients with ER visits, though, tended to increase as age increased.

# 5.0 Annual Insurer Expenditure on Health Utilization

Kidney stones account for a large consumption of health care expenditures. Overall, in 2004, expenditures for kidney stones totaled \$281,891,292. As would be expected, given the previously described increase in prevalence and resource utilization, this value increased in 2013 (to \$560,261,612) for claims with a primary diagnosis of kidney stone (Table M.5.1).

There has been a progressive increase in expenditures in the outpatient setting; this is consistent with the migration of inpatient procedures to an outpatient setting, as well as the increase in prevalence of the disease. In 2013, outpatient services was the greatest area of expenditure, followed by inpatient services. The per-patient-per-year expenditure was \$1,058 in 2013, which was a marked increase from \$881 in 2004. The expenditures in hospital-based outpatient visits with kidney stone diagnosis in any diagnostic field (i.e., claims with both primary and secondary kidney stone diagnosis) increased from \$159,977,022 in 2004 to \$404,405,816 in 2013, with an increase from \$500 to \$764, respectively, in the per-person per-year metric (Table M.5.2). It should be noted, too, that physician office services has demonstrated a fast rate of growth, from \$39,891,118 to \$90,897,159 (Table M.5.3). The per-person per-year metric for these values showed an increase from \$125 in 2004 to \$172 in 2013.

The proportion of insurer expenditures for privately insured patients was of a similar magnitude; in 2004, \$203,104,268 was spent, the vast majority for hospitalbased outpatient services (Table 0.5.1). This figure increased in 2013 to \$261,650,762 for claims with a primary diagnosis of kidney stone. The rate of growth in expenditures for hospital-based outpatient services outpaced overall growth, accounting for \$209,431,719 in 2013, whereas, in 2004 it was only \$141,589,687. Again, these increases likely reflect both an increase in prevalence rates as well as a migration of care to the The per-patient outpatient setting. per-year expenditure actually declined, though, from \$4,674 in 2004 to \$4,124 in 2013, suggesting, perhaps, a greater awareness of cost control. Similar trends were noted in expenditures in hospital-based outpatient visits and physician office services with a kidney stone code in any diagnostic field (Table 0.5.2 and 0.5.3). The per-patient per-year expenditure in hospital-based outpatient visits were relatively stable at \$3,518 in 2004 to \$3,646 in 2013, while the same metric for physician office visits decreased from \$314 to \$218, respectively.

Note that expenditures by the Medicare population were "real" dollar amounts made by Medicare while

expenditures for the privately insured population were re-calculated using specific pricing algorithms to account for differences in pricing across health plans and provider contracts (see section 2.4.5 for details). Readers should be cautious with the interpretation of the dollar amounts when making comparisons between the two populations.

# 6.0 Annual Filled Prescriptions

Medicare prescription drug data were determined from an analysis of beneficiaries with both Part A/B and Part D enrollment. In this analysis, a one-time shift in the sources of enrollment data resulted in poor matching of Part A/B enrollment with Part D enrollment in calendar year 2012. This in turn resulted in biased low estimates of pharmaceutical use in 2012. Other years were unaffected by the poor enrollment matching. Consequently, Medicare prescription drug data for 2012 were dropped from tables on prescription drug utilization in this report.

In 2006, a minority of kidney stone patients, 25.5%, were enrolled, but by 2013, a majority of kidney stone patients, 63.1%, were enrolled (Table M.6.0). Approximately three-fourths of kidney stone patients filled a prescription medication in the course of their treatment. Opioids account for a large proportion, almost half, of those prescriptions (Table M.6.1, M.6.2). Prescriptions for targeted medical therapy were utilized to a far smaller extent. Urinary alkalinization agents were utilized by approximately 5% of stone formers, a figure that remained static over the period of the analysis (Table M.6.3). In fact, alpha blockers and calcium channel blockers were the most commonly utilized class of non-narcotic agents; these medications target promotion of stone passage in the setting of a symptomatic stone event, and there may be some overlap with an indication for the treatment of benign prostatic hyperplasia.

In the privately insured dataset, prescription drug utilization data were more comprehensively available. All enrollees in the privately insured population had full drug coverage benefits, so there was not the gradual rise in adoption seen in the Medicare Part D program. To a large extent, the percentage of kidney stone patients who filled a prescription was similar to that in the Medicare cohort. When opioids were included in the analysis, the increase in prescription was particularly noticeable, with 41,276 stone patients (65.1% of patients) filling an opioid prescription in 2013 (Table 0.6.5). In 2004, in contrast, 28,730 patients, representing 66.1% of stone patients, filled a prescription for opioids (Table 0.6.5). Although some of this increase may be explained by the increasing prevalence of the underlying disorder, there was likely also a component of multiple prescriptions for a single patient. The data for use of alkalinizing agents, cystinuria-directed medications, and alpha blockers were similar to those observed in the Medicare cohort (Tables 0.6.3, 0.6.4, 0.6.6, and 0.6.7).

# 7.0 Longitudinal Follow-up

One of the most valuable features of the Medicare dataset is that it allows the creation of a longitudinal dataset which permits an analysis of repeated evaluations and treatments. These longitudinal metrics are of great value in an assessment of the effectiveness of kidney stone management (Table M.7.1, M.7.2).

Imaging studies are extensively utilized in the evaluation of kidney stone patients, and there are inherent health concerns in the repeated exposure of patients to ionizing radiation-based imaging modalities. To that end, then, the longitudinal assessment of imaging for kidney stone patients has great value. Between 2009 and 2013, approximately 70% of stone formers underwent at least one imaging procedure (Table M.7.3a). Interestingly, approximately 15% of stone formers underwent 2, 3-4, and 5-9 imaging procedures. Even 4.9% of stone patients underwent 10–19 imaging procedures. Although increased utilization of renal ultrasound may be undesirable from a health economics standpoint, there is little harm associated with repeated exposure to this modality. The same cannot be said of modalities that are associated with more intensive exposure to ionizing radiation, such as CT imaging. The analysis demonstrated that 9.4% of kidney stone patients

underwent 3–4 CT procedures between 2009 and 2013, and 4.7% of patients underwent 5 or more CT procedures (Table M.7.3d). This repeated exposure to ionizing radiation from CT imaging should be an important area of investigation to assess its appropriateness.

Health care that is repeatedly delivered in an ER setting is inefficient and costly. Although the majority (59.9%) of Medicare kidney stone patients did not utilize the ER during the 2009–2013 time period, 30% did have one visit to that service setting (Table M.7.4). Importantly, 7% of patients had two ER visits, and 3.1% had three or more visits.

Assessing kidney stone re-treatment is a complex issue; in some cases re-treatment may represent a failed initial treatment procedure, whereas in other cases it may represent a planned, staged minimally invasive treatment approach to a complex stone burden. In the period of longitudinal follow-up, 13.7% of kidney stone patients had one procedure, but 6.9% had two procedures, and 4.3% had three or more procedures (Table M.7.5). A second procedure was most likely following PCNL (36.4% undergoing a second procedure), but the rates for ureteroscopy (33.8% undergoing a second procedure), and SWL (31.9% undergoing a second procedure) were notable (Table M.7.6). For SWL, if the initial procedure was SWL, the repeat procedure was most likely to be SWL. For URS, if the initial procedure was URS, the repeat procedure was most likely to be URS (Table M.7.7). When there were 120 or fewer days between the index stone procedure and a second procedure, it suggested that both treatments targeted the same stone as it is unlikely a new stone would have developed in that short of an interval. Between 2009 and 2013, 38.5% of kidney stone patients required a second procedure within 120 days of their index treatment procedure (Table M.7.8).

There are certain types of kidney stones, those composed of uric acid, which may be dissolved through pH manipulation/alkalinization. Such clinical scenarios are not common, and indeed only 4.6% of stone procedures were accompanied by prescription of these

agents (Table M.7.9). Kidney stones are painful, and their treatment oftentimes is associated with pain, too. Opioids are commonly prescribed to kidney stone patients; in fact, 66% of kidney stone procedures were accompanied by an opioid prescription (Table M.7.10). Importantly, opioids were continued up to one month after a surgical episode in 75.6% of patients (Table M.7.14). Alpha blockers have been reported to improve the morbidity of certain stone treatment procedures, generally those that entail ureteral stent placement. Although not utilized in the majority of stone treatments, 30% of procedures were accompanied by an alpha blocker prescription (Table M.7.11).

The privately insured dataset provides a similar opportunity to generate a longitudinal dataset which permits an analysis of repeated evaluations and treatments. The dataset is robust, such that the longitudinal metrics provide a powerful assessment of the effectiveness of kidney stone management (Table 0.7.1, 0.7.2).

Kidney stone patients in the privately insured population also underwent a large number of imaging studies (Table 0.7.3a). Although 29.3% of patients did not undergo any imaging study in the study period, and 20.6% underwent a single imaging study, the remainder of the population, approximately half of the overall cohort, underwent multiple imaging studies. Over 15% underwent 3-4 imaging studies, and just over 13% underwent 5-9 studies. These are high utilization rates and, although these studies may be clinically indicated, a consensus on the optimal number of studies is presently an open issue. As was true with the Medicare dataset, assessment of imaging utilization in the privately insured database may be further investigated to optimize imaging practices. This kidney stone analysis demonstrated that 9.0% of kidney stone patients underwent 3-4 CT procedures between 2009 and 2013, and 4.9% of patients underwent 5 or more CT procedures (Table 0.7.3d). These values were remarkably similar to what was observed in the Medicare cohort, suggesting that imaging practice patterns are likely consistent among older and younger stone formers.

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ER utilization among the privately insured cohort remained stable for the population studied, with approximately 48% of kidney stone patients with ER visits over the time period of analysis (Table O.7.4). It is also notable that ER utilization was greater in the privately insured cohort, which is a younger, workingage population, than among the Medicare cohort (in which it was approximately 40%) (Table M.7.4). The societal implications of increased amounts of time lost to medical care in a younger population may merit future investigation.

Privately insured patients were at similar risk for requiring multiple surgical procedures during the time period of the study. Although the majority of kidney stone patients did not undergo a surgical procedure during the time period of the study, over 10% of the population underwent two or more surgical procedures (Table 0.7.5). Those having PCNL were at greatest risk of undergoing a repeat procedure within 120 days. However, 26.4% of SWL procedures and 32.0% of ureteroscopy procedures also were followed by repeat procedures in this time period (Table 0.7.6).

Following an initial SWL, patients underwent a second SWL or URS at similar rates (50.0% and 47.2%, respectively). Following an initial URS procedure, though, a second URS was performed more commonly than a second SWL (53.6% vs. 42.4%). Similarly, following an initial PCNL procedure, a second URS was the next most commonly utilized intervention (50.0%) (Table 0.7.7). Secondary procedures were performed at similar rates across age, gender, and race (Table 0.7.8).

Medication utilization among privately insured stone patients showed trends similar to those seen among the Medicare population. Alkalinizing agents were used at a rate of 5% (Table O.7.9). Alpha blockers were commonly utilized with SWL and URS, suggesting they were being leveraged to either promote stone fragment passage or provide pain relief from procedural morbidity (Table O.7.11). Opioids were utilized extensively—86% of patients undergoing surgical treatment received an opioid prescription perioperatively. This suggests that opioids were the mainstay of pain control in this setting (Table O.7.14).

# Appendix A. Diagnostic codes to identify claims of kidney stones

Codes	Descriptions
270.0	Disturbances of amino-acid transport
274.11	Uric acid nephrolithiasis
592	Calculus of kidney and ureter
592.0	Calculus of kidney
592.1	Calculus of ureter
592.9	Urinary calculus, unspecified

# Appendix B. Surgical procedure groups for kidney stones

Group	)	Coding system	Code	s Descriptions
Open stone su	irgery			
	ICD-9 procedu	ure codes	55.01	Nephrotomy; Nephrolithotomy
			55.11	Pyelotomy; Pyelolithotomy
			56.2	Ureterotomy; Incision of ureter for removal of calculus
	Current Procedural Terminology (CPT) procedure codes			Nephrolithotomy; removal of calculus
			50065	Nephrolithotomy; secondary surgical operation for calculus
			50070	Nephrolithotomy; complicated by congenital kidney abnormality
			50075	Nephrolithotomy; removal of large staghorn calculus filling renal pelvis and calyces
				(including anatrophic pyelolithotomy)
			50130	Pyelotomy; with removal of calculus (pyelolithotomy, pelviolithotomy, including
				coagulum pyelolithotomy)
			50135	Pyelotomy; complicated (e.g., secondary operation, congenital kidney
				abnormality)
			50610	Ureterolithotomy, upper one-third of ureter
			50620	Ureterolithotomy, middle one-third of ureter
			50630	Ureterolithotomy, lower one-third of ureter
			51060	Transvesical ureterolithotomy
			51065	Cystotomy, with calculus basket extraction and/or ultrasonic or electrohydraulic
				fragmentation of ureteral calculus
Laparoscopic r	removal			
	CPT procedur	re codes	50945	Laparoscopy, surgical; ureterolithotomy
Percutaneous	nephrolithoton	my (PCNL)		
	ICD-9 procedu	ure codes	55.03	Percutaneous nephrostomy without fragmentation
			55.04	Percutaneous nephrostomy with fragmentation
			55.92	Percutaneous aspiration of kidney (pelvis)
	CPT procedur	re codes	50080	Percutaneous nephrostolithotomy or pyelostolithotomy, with or without dilation,
				endoscopy, lithotripsy, stenting, or basket extraction; up to 2 cm
			50081	Percutaneous nephrostolithotomy or pyelostolithotomy, with or without dilation,
				endoscopy, lithotripsy, stenting, or basket extraction; over 2 cm
			50561	Renal endoscopy through established nephrostomy or pyelostomy, with or
				without irrigation, instillation, or ureteropyelography, exclusive of radiologic
				service; with removal of foreign body or calculus
			50580	Renal endoscopy through nephrotomy or pyelotomy, with or without irrigation,
				instillation, or ureteropyelography, exclusive of radiologic service; with removal of
				foreign body or calculus

Group	Coding system	Codes	s Descriptions
		50961	Ureteral endoscopy through established ureterostomy, with or without irrigation,
			instillation, or ureteropyelography, exclusive of radiologic service; with removal of
			foreign body or calculus
		50980	Ureteral endoscopy through ureterotomy, with or without irrigation, instillation,
			or ureteropyelography, exclusive of radiologic service; with removal of foreign
			body or calculus
		52334	Cystourethroscopy with insertion of ureteral guide wire through kidney to
			establish a percutaneous nephrostomy, retrograde
Ureteroscopy			
ICD-9 procedure coc	les	56.0	Transurethral removal of obstruction from ureter and renal pelvis
		59.8	Ureteral catheterization
	_	59.95	Ultrasonic fragmentation of urinary stones
CPT procedure code	S	52320	Cystourethroscopy (including ureteral catheterization); with removal of ureteral calculus
		52325	Cystourethroscopy (including ureteral catheterization); with fragmentation of ureteral calculus (e.g., ultrasonic or electro-hydraulic technique)
		52330	Cystourethroscopy (including ureteral catheterization); with manipulation, without removal of ureteral calculus
		52332	Cystourethroscopy, with insertion of indwelling ureteral stent (e.g., Gibbons or double-J type)
		52351	Cystourethroscopy, with ureteroscopy and/or pyeloscopy; diagnostic
			Cystourethroscopy, with ureteroscopy and/or pyeloscopy; with removal or
			manipulation of calculus (ureteral catheterization is included)
		52353	Cystourethroscopy, with ureteroscopy and/or pyeloscopy; with lithotripsy
			(ureteral catheterization is included)
		52356	Cystourethroscopy, with ureteroscopy and/or pyeloscopy; with lithotripsy
			including insertion of indwelling ureteral stent (e.g., Gibbons or double-J type)
Extracorporeal shock wave lithotrip	sy (SWL)		
ICD-9 procedure coo		98.51	Extracorporeal shockwave lithotripsy (SWL) of the kidney, ureter and/or bladder
CPT procedure code	S	50590	Lithotripsy, extracorporeal shock wave

# Appendix C. U.S. states by Census Bureau Regions

Region	States
Northeast	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, New Jersey, New York, Pennsylvania
Midwest	Illinois, Indiana, Michigan, Ohio, Wisconsin, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota
South	Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia, Alabama, Kentucky, Mississippi, Tennessee, Arkansas, Louisiana, Oklahoma, Texas
West	Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming, Alaska, California, Hawaii, Oregon, Washington

## Appendix D. Diagnostic codes to identify claims of osteoporosis, osteopenia, hypertension, and diabetes

Conditions	Diagnostic/procedure code	Codes	Descriptions
Osteoporosis	ICD-9 diagnosis codes	733.0	Osteoporosis
		733.00	Osteoporosis, unspecified
		733.01	Senile osteoporosis
		733.02	Idiopathic osteoporosis
		733.03	Disuse osteoporosis
		733.09	Other osteoporosis
Osteopenia	ICD-9 diagnosis codes	733.90	Disorder of bone and cartilage, unspecified
Hypertension*	ICD-9 diagnosis codes	401.X 402.XX 403.XX 404.XX 405.XX	
Diabetes*	ICD-9 diagnosis codes	250.XX	

\* HTN and DM were identified by three-digit ICD-9 diagnosis codes

# Appendix E. Imaging procedure groups for evaluation of kidney stones

Group	Coding system	Codes	Descriptions
Plain film/KUB			
	CPT codes	74000	Radiologic examination, abdomen; single anteroposterior view
		74010	Radiologic examination, abdomen; anteroposterior and additional oblique and cone views
		74020	Radiologic examination, abdomen; complete, including decubitus and/or erect views
Intravenous pyelo	ography		
	CPT codes	74400	Urography (pyelography), intravenous, with or without KUB, with or without tomography
		74410	Urography, infusion, drip technique and/or bolus technique
		74415	Urography, infusion, drip technique and/or bolus technique; with nephrotomography
		74455	Urethrocystography, voiding, radiological supervision and interpretation
Ultrasound, abdo	men/pelvis		
	CPT codes	76700	Ultrasound, abdominal, real time with image documentation; complete
		76770	Ultrasound, retroperitoneal (e.g., renal, aorta, nodes), real time with image documentation; complete
		76775	Ultrasound, retroperitoneal (e.g., renal, aorta, nodes), real time with image documentation; limited
		76776	Ultrasound, transplanted kidney, real time and duplex Doppler with image documentation
		76857	Ultrasound, pelvic (nonobstetric), real time with image documentation; limited or follow-up (e.g., for
			follicles)
Computed Tomog	graphy, abdomen/pelv	vis: without con	trast
		74150	Computed tomography, abdomen; without contrast material
		74176	Computed tomography, abdomen and pelvis; without contrast material
		72192	Computed tomography, pelvis; without contrast material
Computed Tomog	graphy, abdomen/pelv	vis: with contras	t
		74160	Computed tomography, abdomen; with contrast material(s)
		74177	Computed tomography, abdomen and pelvis; with contrast material(s)
		72193	Computed tomography, pelvis; with contrast material(s)
Computed Tomog	graphy, abdomen/pelv	vis: without the	n with contrast
		74170	Computed tomography, abdomen; without contrast material, followed by contrast material(s) and further
			sections
		74178	Computed tomography, abdomen and pelvis; without contrast material in one or both body regions,
			followed by contrast material(s) and further sections in one or both body regions
		72194	Computed tomography, pelvis; without contrast material, followed by contrast material(s) and further
			sections
Magnetic resonar	nce imaging, abdomen	/pelvis	
	CPT codes	74181	Magnetic resonance (e.g., proton) imaging, abdomen; without contrast material(s)

			25
Group	Coding system	Codes	Descriptions
		74182	Magnetic resonance (e.g., proton) imaging, abdomen; with contrast material(s)
		74183	Magnetic resonance (e.g., proton) imaging, abdomen; without contrast material(s), followed by with contrast material(s) and further sequences
		72195	Magnetic resonance (e.g., proton) imaging, pelvis; without contrast material(s)
		72197	Magnetic resonance (e.g., proton) imaging, pelvis; without contrast material(s), followed by contrast material(s) and further sequences

# Appendix F. Medications to treat kidney stones

Pharmacologic classes	Generic name
Alkalinization Agents	POTASSIUM CITRATE
	POTASSIUM CITRATE MONOHYDRATE
	POTASSIUM CITRATE/CITRIC ACID
	POTASSIUM CITRATE/SODIUM CIT
Ammonia Detoxicants	ACETOHYDROXAMIC ACID
Heavy Metal Antagonists	PENICILLAMINE
Other	TIOPRONIN
Opiate Agonists	ACETAMINOPHEN WITH CODEINE
	ALFENTANIL HCL
	ASPIRIN/CODEINE PHOSPHATE
	BUPRENORPHINE HCL
	BUTALBIT/ACETAMIN/CAFF/CODEINE
	COD/ASA/SAL-AMID/APAP/CAFFEINE
	CODEINE PHOS/ACETAMINOPHEN
	CODEINE PHOSPHATE
	CODEINE PHOSPHATE/APAP
	CODEINE PHOSPHATE/ASPIRIN
	CODEINE SULFATE
	CODEINE/BUTALBIT/ACETAMIN/CAFF
	CODEINE/BUTALBITAL/ASA/CAFFEIN
	DEZOCINE
	DHCODEINE BT/ACETAMINOPHN/CAFF
	DIHYDROCODEINE/ASPIRIN/CAFFEIN
	FENTANYL

Pharmacologic classes	Generic name
	FENTANYL CITRATE
	FENTANYL CITRATE/DROPERIDOL
	FENTANYL HCL
	FENTANYL/BUPIVACAINE
	FENTANYL/ROPIVACAINE
	HYDROCODONE BIT/ACETAMINOPHEN
	HYDROCODONE BITARTRATE
	HYDROCODONE BITARTRATE/APAP
	HYDROCODONE BITARTRATE/ASPIRIN
	HYDROCODONE/IBUPROFEN
	HYDROMORPH HCL/BUPIV HCL
	HYDROMORPHONE HCL
	HYDROMORPHONE/BUPIV
	HYDROMORPHONE/ROPIV/SOD CHL
	IBUPROFEN/HYDROCODONE BIT
	IBUPROFEN/OXYCODONE HCL
	LEVOMETHADYL ACETATE HCL
	LEVORPHANOL TARTRATE
	MEPERIDINE HCL
	MEPERIDINE HCL/PROMETH HCL
	METHADONE HCL
	MORPHINE SULFATE
	MORPHINE SULFATE LIPOSOMAL
	MORPHINE SULFATE/NALTREXONE
	OPIUM/ASPIRIN/CAFFEINE
	OPIUM/ASPIRIN/CAFFEINE/CAMPHOR

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Pharmacologic classes	Generic name
	OPIUM/BELLADONNA ALKALOIDS
	OXYCODONE HCL
	OXYCODONE HCL/ACETAMINOPHEN
	OXYCODONE HCL/ASPIRIN
	OXYCODONE HCL/OXYCODON TER/ASA
	OXYCODONE MYRISTATE
	OXYCODONE/ASPIRIN
	OXYMORPHONE HCL
	PROPOXYPHENE HCL
	PROPOXYPHENE HCL/ACETAMINOPHEN
	PROPOXYPHENE HCL/ASA/CAFFEINE
	PROPOXYPHENE NAP/ACETAMINOPHEN
	PROPOXYPHENE NAPSYL
	PROPOXYPHENE NAPSYLATE
	PROPOXYPHENE NAPSYLATE/APAP
	REMIFENTANIL HCL
	SUFENTANIL CITRATE
	SUFENTANIL/BUPIVACAINE
	TAPENTADOL HCL
	TRAMADOL HCL
	TRAMADOL HCL/ACETAMINOPHEN
	TRAMADOL/GLUCOSAMINE
Medical Expulsive Therapy: Alpha Blockers	ALFUZOSIN HCL
	DOXAZOSIN MESYLATE
	PRAZOSIN HCL
	PRAZOSIN HCL/POLYTHIAZIDE

Pharmacologic classes	Generic name				
	SILODOSIN				
	TAMSULOSIN HCL				
	TERAZOSIN HCL				
Medical Expulsive Therapy: Calcium Channel	AMLODIPINE BES/OLMESARTAN MED				
Blockers	AMLODIPINE BESYLATE				
	AMLODIPINE BESYLATE/BENAZEPRIL				
	AMLODIPINE/ATORVASTATIN				
	AMLODIPINE/VALSARTAN				
	AMLODIPINE/VALSARTAN/HCTHIAZID				
	DILTIAZEM HCL				
	DILTIAZEM MALATE				
	NIFEDIPINE				
	VERAPAMIL HCL				

Demographic Characteristics		2004		2005		2006		2007		2008	
		Number of beneficiaries	Percent of beneficiaries								
AGE	65 - 69	6,089,280	22.5	6,055,580	22.5	5,865,720	22.4	5,760,980	22.5	5,741,560	22.7
	70 - 74	6,446,100	23.8	6,352,320	23.6	6,156,440	23.5	6,043,260	23.6	6,020,840	23.8
	75 - 79	5,841,700	21.5	5,741,380	21.3	5,480,840	21.0	5,233,020	20.4	5,004,960	19.8
	80 - 84	4,586,300	16.9	4,544,820	16.9	4,380,440	16.8	4,289,480	16.8	4,175,680	16.5
	85+	4,158,740	15.3	4,255,420	15.8	4,266,880	16.3	4,272,340	16.7	4,311,860	17.1
GENDER	Male	11,192,320	41.3	11,145,940	41.4	10,870,780	41.6	10,686,760	41.7	10,596,180	42.0
	Female	15,929,800	58.7	15,803,580	58.6	15,279,540	58.4	14,912,320	58.3	14,658,720	58.0
RACE	White	23,867,720	88.0	23,677,080	87.9	23,002,720	88.0	22,506,340	87.9	22,182,120	87.8
	Black	2,114,720	7.8	2,075,880	7.7	1,972,120	7.5	1,886,220	7.4	1,847,560	7.3
	Other	1,104,300	4.1	1,163,960	4.3	1,146,800	4.4	1,180,760	4.6	1,201,400	4.8
	Unknown	35,380	0.1	32,600	0.1	28,680	0.1	25,760	0.1	23,820	0.1
REGION	Northeast	5,184,860	19.1	5,181,920	19.2	5,014,900	19.2	4,907,140	19.2	4,755,020	18.8
	Midwest	7,055,200	26.0	6,987,100	25.9	6,741,740	25.8	6,476,500	25.3	6,243,500	24.7
	South	10,566,100	39.0	10,419,940	38.7	10,143,220	38.8	9,952,720	38.9	9,949,640	39.4
	West	4,315,960	15.9	4,360,560	16.2	4,250,460	16.3	4,262,720	16.7	4,306,740	17.1
TOTAL		27,122,120	100.0	26,949,520	100.0	26,150,320	100.0	25,599,080	100.0	25,254,900	100.0

Data Source: Centers for Medicare and Medicaid Services, 5% Denominator File, 2004-2013

Beneficiaries are age 65 years and over with continous and full Parts A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

All percentages are rounded to one decimal place.

		200	)9	<b>20</b> 1	0	201	11	<b>20</b> 1	12	201	3
	mographic racteristics	Number of beneficiaries	Percent of beneficiaries								
AGE	65 - 69	5,817,760	23.1	5,954,320	23.5	6,051,480	23.7	6,218,640	24.2	6,792,540	25.5
	70 - 74	5,969,080	23.7	6,019,980	23.7	6,101,620	23.8	6,220,680	24.2	6,440,620	24.2
	75 - 79	4,909,840	19.5	4,882,080	19.2	4,898,380	19.1	4,880,940	19.0	4,940,140	18.6
	80 - 84	4,082,120	16.2	4,071,700	16.0	4,011,320	15.7	3,879,980	15.1	3,805,400	14.3
B	85+	4,374,700	17.4	4,460,960	17.6	4,522,760	17.7	4,516,260	17.6	4,629,120	17.4
GENDER	Male	10,591,740	42.1	10,736,400	42.3	10,873,720	42.5	10,987,080	42.7	11,535,620	43.4
	Female	14,561,760	57.9	14,652,640	57.7	14,711,840	57.5	14,729,420	57.3	15,072,200	56.6
RACE	White	22,009,000	87.5	22,137,600	87.2	22,241,240	86.9	22,299,420	86.7	22,990,660	86.4
	Black	1,878,480	7.5	1,927,440	7.6	1,966,340	7.7	1,976,880	7.7	2,035,400	7.6
	Other	1,242,980	4.9	1,292,080	5.1	1,325,180	5.2	1,350,320	5.3	1,421,400	5.3
	Unknown	23,040	0.1	31,920	0.1	52,800	0.2	89,880	0.3	160,360	0.6
REGION	Northeast	4,680,700	18.6	4,691,280	18.5	4,727,400	18.5	4,731,320	18.4	4,909,280	18.5
	Midwest	6,153,280	24.5	6,195,520	24.4	6,091,780	23.8	6,062,600	23.6	6,243,160	23.5
	South	9,995,420	39.7	10,094,460	39.8	10,251,880	40.1	10,313,200	40.1	10,560,720	39.7
	West	4,324,100	17.2	4,407,780	17.4	4,514,500	17.6	4,609,380	17.9	4,894,660	18.4
TOTAL		25,153,500	100.0	25,389,040	100.0	25,585,560	100.0	25,716,500	100.0	26,607,820	100.0

Data Source: Centers for Medicare and Medicaid Services, 5% Denominator File, 2004-2013

Beneficiaries are age 65 years and over with continous and full Parts A and B enrollment and no HMO enrollment during each year. Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table. All percentages are rounded to one decimal place.

Table M.3.2: Claim-based prevalence of kidney stones among fee-for-service, age-eligible Medicare beneficiaries (by age, gender, race, & region)

## 2004-2008

		200	4	200	)5	200	)6	200	)7	200	8
	nographic racteristics	Number of kidney stone patients	Percent of beneficiaries with kidney stones								
AGE	65 - 69	83,120	1.4	88,060	1.5	87,780	1.5	91,260	1.6	96,800	1.7
	70 - 74	89,700	1.4	91,160	1.4	92,220	1.5	94,140	1.6	100,360	1.7
	75 - 79	69,940	1.2	74,500	1.3	74,720	1.4	75,820	1.5	76,700	1.5
	80 - 84	46,720	1.0	51,040	1.1	50,140	1.1	53,680	1.3	56,960	1.4
	85+	30,660	0.7	32,200	0.8	33,860	0.8	35,240	0.8	39,260	0.9
GENDER	Male	197,480	1.8	208,740	1.9	207,960	1.9	216,300	2.0	226,380	2.1
	Female	122,660	0.8	128,220	0.8	130,760	0.9	133,840	0.9	143,700	1.0
RACE	White	289,420	1.2	306,420	1.3	308,260	1.3	318,300	1.4	336,740	1.5
	Black	17,980	0.9	18,060	0.9	16,960	0.9	17,200	0.9	17,980	1.0
	Other	12,480	1.1	12,220	1.1	13,260	1.2	14,420	1.2	15,180	1.3
	Unknown	260	0.7	260	0.8	240	0.8	220	0.9	180	0.8
REGION	Northeast	68,620	1.3	75,220	1.5	75,940	1.5	79,900	1.6	80,680	1.7
	Midwest	72,160	1.0	75,400	1.1	75,600	1.1	78,100	1.2	81,420	1.3
	South	134,780	1.3	140,360	1.4	141,740	1.4	145,020	1.5	156,720	1.6
	West	44,580	1.0	45,980	1.1	45,440	1.1	47,120	1.1	51,260	1.2
TOTAL		320,140	1.2	336,960	1.3	338,720	1.3	350,140	1.4	370,080	1.5

Data source: Centers for Medicare and Medicaid Services, 5% Denominator and Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Kidney stone patients were defined by one or more evaluation and management claim with kidney stone diagnostic codes during each year.

Table M.3.2: Claim-based prevalence of kidney stones among fee-for-service, age-eligible Medicare beneficiaries (by age, gender, race, & region)

## 2009-2013

		200	)9	<b>20</b> 1	0	201	11	201	12	<b>20</b> 1	3
	emographic aracteristics	Number of kidney stone patients	Percent of beneficiaries with kidney stones								
AGE	65 - 69	103,980	1.8	111,580	1.9	124,200	2.1	130,160	2.1	143,720	2.1
	70 - 74	106,960	1.8	113,900	1.9	123,680	2.0	135,680	2.2	144,360	2.2
	75 - 79	81,300	1.7	87,480	1.8	95,460	2.0	101,820	2.1	108,360	2.2
	80 - 84	58,260	1.4	61,020	1.5	65,980	1.6	67,940	1.8	70,680	1.9
	85+	41,520	1.0	45,180	1.0	52,040	1.2	57,420	1.3	62,240	1.3
GENDER	Male	241,980	2.3	261,900	2.4	284,420	2.6	304,520	2.8	329,200	2.9
	Female	150,040	1.0	157,260	1.1	176,940	1.2	188,500	1.3	200,160	1.3
RACE	White	355,000	1.6	380,420	1.7	418,080	1.9	446,440	2.0	479,360	2.1
	Black	21,040	1.1	21,760	1.1	23,520	1.2	25,080	1.3	25,260	1.2
	Other	15,840	1.3	16,620	1.3	18,860	1.4	19,200	1.4	20,960	1.5
	Unknown	140	0.6	360	1.1	900	1.7	2,300	2.6	3,780	2.4
REGION	Northeast	85,280	1.8	90,420	1.9	96,660	2.0	104,440	2.2	114,840	2.3
	Midwest	84,080	1.4	90,400	1.5	96,880	1.6	103,320	1.7	109,980	1.8
	South	167,300	1.7	179,180	1.8	198,080	1.9	212,020	2.1	222,940	2.1
	West	55,360	1.3	59,160	1.3	69,740	1.5	73,240	1.6	81,600	1.7
TOTAL		392,020	1.6	419,160	1.7	461,360	1.8	493,020	1.9	529,360	2.0

Data source: Centers for Medicare and Medicaid Services, 5% Denominator and Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Kidney stone patients were defined by one or more evaluation and management claim with kidney stone diagnostic codes during each year.

		200	4	20	05	20	06	200	)7	200	)8
	mographic aracteristics	Number of stone patients with osteopororsis	stone patients with	Number of stone patients with osteoporosis		Number of stone patients with osteoporosis	Percent of stone patients with osteoporosis	Number of stone patients with osteoporosis	Percent of stone patients with osteoporosis	Number of stone patients with osteoporosis	Percent of stone patients with osteoporosis
AGE	65 - 69	4,400	5.3	4,740	5.4	5,140	5.9	6,300	6.9	6,560	6.8
	70 - 74	5,920	6.6	6,420	7.0	6,340	6.9	7,100	7.5	7,760	7.7
	75 - 79	6,380	9.1	6,120	8.2	6,600	8.8	7,460	9.8	7,620	9.9
	80 - 84	4,840	10.4	5,440	10.7	5,540	11.1	6,220	11.6	7,380	13.0
	85+	3,940	12.9	4,000	12.4	4,720	13.9	5,180	14.7	6,240	15.9
GENDER	Male	4,160	2.1	5,160	2.5	5,980	2.9	6,520	3.0	7,800	3.5
	Female	21,320	17.4	21,560	16.8	22,360	17.1	25,740	19.2	27,760	19.3
RACE	White	22,800	7.9	23,880	7.8	25,580	8.3	28,840	9.1	31,800	9.4
	Black	1,020	5.7	1,180	6.5	1,000	5.9	1,260	7.3	1,220	6.8
	Other	1,600	12.8	1,620	13.3	1,700	12.8	2,160	15.0	2,520	16.6
	Unknown	60	23.1	40	15.4	60	25.0	0	0.0	20	11.1
TOTAL		25,480	8.0	26,720	7.9	28,340	8.4	32,260	9.2	35,560	9.6

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Osteoporosis was defined by one or more institutional or two or more non-institutional claims with diagnostic codes of osteoporosis during each year.

		20	09	20	10	20	11	<b>20</b> <sup>-</sup>	12	<b>20</b> <sup>2</sup>	13
	nographic racteristics	Number of stone patients with	stone patients with	Number of stone patients with	Percent of stone patients with	stone patients with	Percent of stone patients with				
		osteoporosis		•	osteoporosis	osteoporosis	osteoporosis	osteoporosis	osteoporosis		osteoporosis
AGE	65 - 69	7,480	7.2	7,680	6.9	8,840	7.1	9,180	7.1	9,960	6.9
	70 - 74	8,760	8.2	9,700	8.5	10,420	8.4	11,260	8.3	11,200	7.8
	75 - 79	8,140	10.0	9,080	10.4	9,800	10.3	10,360	10.2	10,180	9.4
	80 - 84	7,320	12.6	7,840	12.9	8,680	13.2	9,560	14.1	8,440	11.9
	85+	6,740	16.2	7,460	16.5	9,700	18.6	9,620	16.8	10,640	17.1
GENDER	Male	7,720	3.2	9,420	3.6	10,360	3.6	11,360	3.7	11,800	3.6
	Female	30,720	20.5	32,340	20.6	37,080	21.0	38,620	20.5	38,620	19.3
RACE	White	34,520	9.7	37,220	9.8	42,480	10.2	44,660	10.0	45,160	9.4
•	Black	1,460	6.9	1,800	8.3	1,660	7.1	1,880	7.5	1,920	7.6
•	Other	2,460	15.5	2,720	16.4	3,180	16.9	3,140	16.4	3,040	14.5
	Unknown	0	0.0	20	5.6	120	13.3	300	13.0	300	7.9
TOTAL		38,440	9.8	41,760	10.0	47,440	10.3	49,980	10.1	50,420	9.5

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Osteoporosis was defined by one or more institutional or two or more non-institutional claims with diagnostic codes of osteoporosis during each year.

		20	04	20	05	20	06	20	07	20	08
Demo	ographic	Number of							Percent of	Number of	Percent of
	cteristics	stone patients									
		with									
		osteopenia									
AGE	65 - 69	1,800	2.2	2,420	2.8	2,780	3.2	3,240	3.6	3,440	3.6
	70 - 74	2,380	2.7	2,460	2.7	2,880	3.1	3,200	3.4	3,980	4.0
	75 - 79	1,860	2.7	2,400	3.2	2,180	2.9	2,980	3.9	3,020	3.9
	80 - 84	1,100	2.4	1,680	3.3	1,500	3.0	1,920	3.6	2,440	4.3
	85+	680	2.2	1,000	3.1	1,020	3.0	1,080	3.1	1,420	3.6
GENDER	Male	2,180	1.1	3,120	1.5	3,040	1.5	3,600	1.7	3,840	1.7
	Female	5,640	4.6	6,840	5.3	7,320	5.6	8,820	6.6	10,460	7.3
RACE	White	7,160	2.5	9,080	3.0	9,720	3.2	11,460	3.6	13,120	3.9
	Black	380	2.1	520	2.9	340	2.0	500	2.9	620	3.5
	Other	280	2.2	340	2.8	300	2.3	460	3.2	560	3.7
	Unknown	0	0.0	20	7.7	0	0.0	0	0.0	0	0.0
TOTAL		7,820	2.4	9,960	3.0	10,360	3.1	12,420	3.6	14,300	3.9

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Osteopenia was defined by one or more institutional or two or more non-institutional claims with diagnostic codes of osteopenia during each year.

		20	09	20	10	20	11	20	12	20	13
	graphic teristics	Number of stone patients with		stone patients	Percent of stone patients with					Number of stone patients with	
		osteopenia	osteopenia	osteopenia	osteopenia	osteopenia	osteopenia	osteopenia	osteopenia	osteopenia	osteopenia
AGE	65 - 69	5,440	5.2	5,100	4.6	6,160	5.0	7,760	6.0	8,420	5.9
	70 - 74	4,980	4.7	5,880	5.2	6,860	5.6	7,840	5.8	8,720	6.0
	75 - 79	4,060	5.0	4,780	5.5	4,740	5.0	5,460	5.4	6,420	5.9
	80 - 84	2,840	4.9	3,160	5.2	3,460	5.2	3,900	5.7	3,960	5.6
	85+	1,680	4.1	2,080	4.6	2,940	5.7	3,280	5.7	3,400	5.5
GENDER	Male	5,620	2.3	6,400	2.4	7,380	2.6	7,580	2.5	9,980	3.0
	Female	13,380	8.9	14,600	9.3	16,780	9.5	20,660	11.0	20,940	10.5
RACE	White	17,520	4.9	19,180	5.0	22,180	5.3	25,720	5.8	28,260	5.9
	Black	920	4.4	1,040	4.8	920	3.9	1,420	5.7	1,060	4.2
	Other	560	3.5	780	4.7	1,020	5.4	1,000	5.2	1,360	6.5
	Unknown	0	0.0	0	0.0	40	4.4	100	4.4	240	6.4
TOTAL		19,000	4.9	21,000	5.0	24,160	5.2	28,240	5.7	30,920	5.8

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Osteopenia was defined by one or more institutional or two or more non-institutional claims with diagnostic codes of osteopenia during each year.

		20	04	20	05	20	06	20	07	20	08
Dem	ographic	Number of	Percent of								
	acteristics	stone patients									
		with									
		hypertension									
AGE	65 - 69	51,460	61.9	58,300	66.2	57,800	65.9	60,420	66.2	65,780	68.0
	70 - 74	60,260	67.2	61,200	67.1	64,000	69.4	65,220	69.3	72,640	72.4
	75 - 79	48,800	69.8	52,680	70.7	54,500	72.9	56,900	75.1	58,280	76.0
	80 - 84	33,480	71.7	37,640	73.8	38,080	76.0	41,540	77.4	44,960	78.9
	85+	22,840	74.5	24,200	75.2	26,400	78.0	27,580	78.3	31,380	79.9
GENDER	Male	127,340	64.5	138,960	66.6	143,040	68.8	148,360	68.6	162,260	71.7
	Female	89,500	73.0	95,060	74.1	97,740	74.8	103,300	77.2	110,780	77.1
RACE	White	191,840	66.3	208,740	68.1	215,480	69.9	225,160	70.7	244,580	72.6
	Black	15,100	84.0	15,280	84.6	14,520	85.6	14,920	86.7	16,040	89.2
	Other	9,700	77.7	9,780	80.0	10,580	79.8	11,420	79.2	12,280	80.9
	Unknown	200	76.9	220	84.6	200	83.3	160	72.7	140	77.8
TOTAL		216,840	67.7	234,020	69.5	240,780	71.1	251,660	71.9	273,040	73.8

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Hypertension was defined by one or more institutional or two or more non-institutional claims with diagnostic codes of hypertension during each year

		20	09	20	10	20	11	20	12	201	13
Domo	graphic	Number of	Percent of								
	cteristics	stone patients									
		with									
		hypertension									
AGE	65 - 69	71,560	68.8	77,040	69.0	85,220	68.6	90,700	69.7	99,400	69.2
	70 - 74	77,840	72.8	85,140	74.8	91,560	74.0	101,660	74.9	108,360	75.1
	75 - 79	62,120	76.4	67,740	77.4	75,340	78.9	80,520	79.1	86,240	79.6
	80 - 84	46,880	80.5	49,520	81.2	53,480	81.1	56,720	83.5	58,200	82.3
	85+	34,420	82.9	36,900	81.7	43,640	83.9	49,000	85.3	53,700	86.3
GENDER	Male	175,440	72.5	192,580	73.5	209,880	73.8	230,840	75.8	248,760	75.6
	Female	117,380	78.2	123,760	78.7	139,360	78.8	147,760	78.4	157,140	78.5
RACE	White	261,740	73.7	283,480	74.5	312,280	74.7	338,920	75.9	363,460	75.8
	Black	18,240	86.7	18,960	87.1	20,840	88.6	22,300	88.9	22,540	89.2
	Other	12,720	80.3	13,600	81.8	15,420	81.8	15,860	82.6	17,360	82.8
	Unknown	120	85.7	300	83.3	700	77.8	1,520	66.1	2,540	67.2
TOTAL		292,820	74.7	316,340	75.5	349,240	75.7	378,600	76.8	405,900	76.7

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Hypertension was defined by one or more institutional or two or more non-institutional claims with diagnostic codes of hypertension during each year

		20	04	20	05	20	06	200	)7	20	)8
Demo	ographic	Number of	Percent of								
Chara	cteristics	stone patients									
		with diabetes									
AGE	65 - 69	24,080	29.0	27,080	30.8	27,560	31.4	29,380	32.2	31,760	32.8
	70 - 74	25,820	28.8	27,300	30.0	28,780	31.2	30,300	32.2	34,420	34.3
	75 - 79	21,560	30.8	23,260	31.2	23,820	31.9	25,080	33.1	26,420	34.5
	80 - 84	13,220	28.3	14,240	27.9	14,960	29.8	17,120	31.9	18,760	32.9
	85+	6,480	21.1	7,440	23.1	7,980	23.6	8,960	25.4	11,200	28.5
GENDER	Male	54,560	27.6	60,480	29.0	62,380	30.0	67,260	31.1	74,540	32.9
	Female	36,600	29.8	38,840	30.3	40,720	31.1	43,580	32.6	48,020	33.4
RACE	White	78,580	27.2	86,540	28.2	89,920	29.2	96,880	30.4	107,600	32.0
	Black	7,640	42.5	7,920	43.9	7,560	44.6	7,740	45.0	8,480	47.2
	Other	4,780	38.3	4,760	39.0	5,540	41.8	6,160	42.7	6,380	42.0
	Unknown	160	61.5	100	38.5	80	33.3	60	27.3	100	55.6
TOTAL		91,160	28.5	99,320	29.5	103,100	30.4	110,840	31.7	122,560	33.1

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Diabetes was defined by one or more institutional or two or more non-institutional claims with diagnostic codes of diabetes during each year.

		20	09	20	10	20 <sup>.</sup>	11	201	12	20 <sup>-</sup>	13
Demo	ographic	Number of	Percent of	Number of	Percent of	Number of	Percent of	Number of	Percent of	of ts         Number of stone patients           stone patients         with diabetes           .1         51,040           .2         54,100           .7         39,220           .2         25,960           .4         20,280           .3         117,820	Percent of
Chara	cteristics	stone patients	stone patients	stone patients	stone patients	stone patients	stone patients				
		with diabetes	with diabetes	with diabetes	with diabetes	with diabetes	with diabetes				
AGE	65 - 69	34,620	33.3	37,780	33.9	44,220	35.6	45,700	35.1	51,040	35.5
	70 - 74	36,340	34.0	40,320	35.4	44,660	36.1	49,120	36.2	54,100	37.5
	75 - 79	27,740	34.1	31,000	35.4	36,060	37.8	36,380	35.7	39,220	36.2
	80 - 84	19,820	34.0	21,360	35.0	24,040	36.4	24,580	36.2	25,960	36.7
	85+	12,560	30.3	13,880	30.7	17,640	33.9	18,580	32.4	20,280	32.6
GENDER	Male	79,440	32.8	90,460	34.5	101,840	35.8	107,560	35.3	117,820	35.8
	Female	51,640	34.4	53,880	34.3	64,780	36.6	66,800	35.4	72,780	36.4
RACE	White	113,640	32.0	125,820	33.1	145,700	34.9	152,440	34.2	166,680	34.8
	Black	10,260	48.8	10,680	49.1	12,020	51.1	12,480	49.8	12,460	49.3
	Other	7,120	45.0	7,680	46.2	8,580	45.5	8,740	45.5	10,240	48.9
	Unknown	60	42.9	160	44.4	320	35.6	700	30.4	1,220	32.3
TOTAL		131,080	33.4	144,340	34.4	166,620	36.1	174,360	35.4	190,600	36.0

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Diabetes was defined by one or more institutional or two or more non-institutional claims with diagnostic codes of diabetes during each year.

Table M.4.1: Inpatient hospitalizations with a primary diagnosis of kidney stones in Medicare kidney stone patients (by age, gender, race, & region)

## 2004-2008

		20	)4	200	5	200	)6	200	)7	200	8
	nographic acteristics	Number of inpatient hospitalizations	stone natients	Number of inpatient hospitalizations	Percent of stone patients with inpatient hospitalization	Number of inpatient	stone natients	Number of inpatient	stone patients	inpatient	Percent of stone patients with inpatient hospitalization
AGE	65 - 69	6,160	6.8	6,580	6.9	5,960	6.0	5,640	5.7	5,680	5.5
	70 - 74	7,060	7.1	6,680	6.8	6,020	6.0	5,260	5.0	5,720	5.3
	75 - 79	5,800	7.7	5,720	6.9	4,740	5.8	4,380	5.5	4,420	5.2
	80 - 84	3,480	6.9	3,660	6.7	3,340	6.1	3,520	6.0	3,420	5.7
	85+	2,180	6.7	2,400	7.1	2,600	7.4	2,540	6.4	3,040	7.4
GENDER	Male	14,040	6.7	14,220	6.3	12,760	5.6	12,040	5.1	12,160	5.0
	Female	10,640	7.7	10,820	7.8	9,900	6.9	9,300	6.4	10,120	6.6
RACE	White	22,360	7.1	22,860	6.9	20,820	6.2	19,540	5.6	20,360	5.6
	Black	1,460	7.7	1,380	6.5	900	4.6	1,140	6.3	1,280	6.7
	Other	840	6.4	780	5.9	920	6.0	660	4.3	640	3.4
	Unknown	20	7.7	20	7.7	20	8.3	0	0.0	0	0.0
REGION	Northeast	4,280	5.7	4,600	5.7	4,580	5.6	4,520	5.2	5,040	5.7
	Midwest	7,160	9.2	7,760	9.5	7,080	8.3	6,720	7.8	6,620	7.6
	South	10,280	7.0	9,720	6.3	8,480	5.6	7,380	4.7	7,900	4.8
	West	2,960	6.1	2,960	6.0	2,520	4.8	2,720	5.3	2,720	4.8
TOTAL		24,680	7.1	25,040	6.8	22,660	6.1	21,340	5.6	22,280	5.6

Source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

		200	09	201	0	201	11	201	12	<b>20</b> 1	3
	ographic acteristics	Number of inpatient hospitalizations	stone patients	Number of inpatient	etono nationte	Number of inpatient hospitalizations	stone patients	Number of inpatient hospitalizations	stone patients	Number of inpatient hospitalizations	Percent of stone patients with inpatient hospitalization
AGE	65 - 69	5,300	4.7	5,320	4.4	5,780	4.5	6,060	4.2	5,820	3.7
	70 - 74	5,200	4.5	6,040	5.0	6,360	4.7	5,800	3.9	5,860	3.7
	75 - 79	4,100	4.7	4,860	5.2	4,560	4.5	4,200	4.0	4,460	3.9
	80 - 84	3,240	5.2	3,840	5.9	3,380	4.8	3,360	4.7	3,460	4.6
	85+	3,180	7.0	3,040	6.3	3,540	6.4	2,820	4.6	3,040	4.7
GENDER	Male	11,740	4.5	12,820	4.5	13,020	4.4	11,700	3.6	11,940	3.4
	Female	9,280	5.8	10,280	6.2	10,600	5.6	10,540	5.2	10,700	4.9
RACE	White	19,020	5.0	21,140	5.2	21,800	4.9	20,600	4.3	20,500	4.0
	Black	1,300	5.8	940	4.0	960	3.9	820	3.2	1,100	4.3
	Other	680	4.2	1,000	5.7	780	4.1	640	3.3	860	3.8
	Unknown	20	14.3	20	5.6	80	4.4	180	7.0	180	4.2
REGION	Northeast	4,380	4.6	4,780	4.9	4,900	4.6	5,140	4.5	5,380	4.2
	Midwest	6,300	6.9	6,700	6.9	6,800	6.5	6,560	5.9	6,540	5.6
	South	7,700	4.3	8,540	4.5	8,640	4.2	7,760	3.5	7,820	3.3
	West	2,640	4.6	3,080	4.9	3,280	4.5	2,780	3.5	2,900	3.4
TOTAL		21,020	5.0	23,100	5.1	23,620	4.8	22,240	4.2	22,640	4.0

Source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.4.2: Ambulatory evaluation and management visits with any diagnosis of kidney stones in Medicare kidney stone patients (by age, gender, race, & region)

#### 2004-2008

		20	04	20	05	20	06	20	07	20	08
GENDER RACE REGION REGION S	· ·	Number of ambulatory evaluation and management visits	per year ambulatory	Number of ambulatory evaluation and management	per year ambulatory evaluation and	management	per year ambulatory evaluation and	ambulatory evaluation and management	per year ambulatory evaluation and	Number of ambulatory evaluation and management	per year ambulatory evaluation and management
AGE	65 - 69	175,280	2.1	188,060	2.1	182,320	2.1	187,840	2.1	210,820	2.2
	70 - 74	177,260	2.0	188,020	2.1	187,860	2.0	186,880	2.0	204,340	2.0
	75 - 79	137,900	2.0	144,700	1.9	141,260	1.9	144,160	1.9	151,080	2.0
	80 - 84	80,520	1.7	86,340	1.7	90,240	1.8	95,340	1.8	100,940	1.8
	85+	46,320	1.5	47,940	1.5	50,520	1.5	51,280	1.5	57,800	1.5
GENDER	Male	390,360	2.0	416,220	2.0	405,360	2.0	419,540	1.9	452,400	2.0
	Female	226,920	1.9	238,840	1.9	246,840	1.9	245,960	1.8	272,580	
RACE	White	560,320	1.9	601,040	2.0	599,520	1.9	610,400	1.9	663,420	2.0
	Black	34,260	1.9	32,580	1.8	27,920	1.7	28,960	1.7	33,160	1.8
	Other	22,120	1.8	21,080	1.7	24,500		25,880	1.8	28,200	1.9
	Unknown	580	2.2	360	1.4	260	1.1	260	1.2	200	1.1
REGION	Northeast	130,840	1.9	140,060	1.9	147,800	2.0	150,680	1.9	156,760	1.9
	Midwest	138,540	1.9	147,640	2.0	143,540	1.9	149,000	1.9	154,040	1.9
	South	260,660	1.9	274,960	2.0	271,900	1.9	273,280	1.9	312,120	2.0
	West	87,240	2.0	92,400	2.0	88,960		92,540	2.0	102,060	2.0
TOTAL		617,280	1.9	655,060	1.9	652,200	1.9	665,500	1.9	724,980	2.0

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Ambulatory evaluation and management visits include visits in hospital-based outpatient facility and physician office.

Table M.4.2: Ambulatory evaluation and management visits with any diagnosis of kidney stones in Medicare kidney stone patients (by age, gender, race, & region)

## 2009-2013

		20	09	20	10	20	11	20	12	20	13
Characte AGE GENDER RACE REGION	graphic cteristics	Number of ambulatory evaluation and management visits	per year ambulatory evaluation and management	Number of ambulatory evaluation and management	per year ambulatory evaluation and	Number of ambulatory evaluation and management	per year ambulatory evaluation and	ambulatory evaluation and management	per year ambulatory evaluation and	Number of ambulatory evaluation and management	per year ambulatory evaluation and management
AGE	65 - 69	221,140	2.1	244,060	2.2	267,800	2.2	285,980	2.2	319,380	2.2
	70 - 74	217,380	2.0	238,680	2.1	257,400	2.1	282,560	2.1	308,960	2.1
	75 - 79	160,160	2.0	175,620	2.0	189,380	2.0	206,660	2.0	223,360	2.1
	80 - 84	107,380	1.8	114,280	1.9	120,360	1.8	124,820	1.8	131,840	1.9
	85+	63,440	1.5	65,120	1.4	74,540	1.4	85,800	1.5	96,140	1.5
GENDER	Male	485,680	2.0	532,380	2.0	571,040	2.0	617,420	2.0	672,360	2.0
	Female	283,820	1.9	305,380	1.9	338,440	1.9	368,400	2.0	407,320	2.0
RACE	White	702,100	2.0	769,180	2.0	834,680	2.0	901,160	2.0	984,260	2.1
	Black	35,280	1.7	36,560	1.7	38,740	1.7	41,720	1.7	44,280	1.8
	Other	31,820	2.0	31,160	1.9	33,780	1.8	38,580	2.0	41,700	2.0
	Unknown	300	2.1	860	2.4	2,280	2.5	4,360	1.9	9,440	2.5
REGION	Northeast	167,520	2.0	178,200	2.0	189,740	2.0	207,180	2.0	238,060	2.1
	Midwest	161,900	1.9	178,020	2.0	186,360	1.9	199,620	1.9	218,960	2.0
	South	329,720			2.0	394,000	2.0	429,020	2.0	451,240	2.0
	West	110,360	2.0	121,340	2.1	139,380	2.0	150,000	2.1	171,420	2.1
TOTAL		769,500	2.0	837,760	2.0	909,480	2.0	985,820	2.0	1,079,680	2.0

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Ambulatory evaluation and management visits include visits in hospital-based outpatient facility and physician office.

Table M.4.3: Number of surgical procedures for kidney stones and percent of Medicare kidney stone patients with any surgical procedure for kidney stones (by age, gender, race, & region)

## 2004-2008

		200	4	20	05	20	06	20	07	20	08
			Percent of								
Demograp	ohic Characteristics	Number of	stone								
		surgeries	patients with								
			surgery								
AGE	65 - 69	28,900	20.9	32,040	21.7	29,300	19.8	28,940	19.4	33,720	20.7
	70 - 74	29,820	20.0	32,020	20.5	29,680	19.7	27,020	18.0	31,080	18.7
	75 - 79	24,900	20.7	23,380	19.1	24,000	18.6	21,340	17.6	23,360	17.1
	80 - 84	14,460	18.4	14,240	17.4	14,440	17.6	14,920	16.3	15,580	16.1
	85+	8,300	15.9	8,860	16.9	8,580	16.4	8,360	14.6	9,460	15.1
GENDER	Male	63,760	19.4	69,120	19.8	62,740	18.2	60,180	17.1	67,360	17.8
	Female	42,620	20.3	41,420	19.6	43,260	19.7	40,400	18.5	45,840	18.7
RACE	White	97,040	20.0	102,960	20.1	98,520	19.2	93,480	18.0	105,440	18.6
	Black	6,260	19.6	5,600	18.6	4,040	14.6	4,180	15.4	5,020	15.6
	Other	3,060	14.1	1,920	10.8	3,420	15.4	2,920	12.3	2,740	10.3
	Unknown	20	7.7	60	23.1	20	8.3	0	0.0	0	0.0
REGION	Northeast	19,200	16.4	18,920	15.8	19,920	16.2	19,440	15.1	20,380	15.0
	Midwest	28,900	23.7	31,100	23.9	27,940	21.8	26,980	20.8	29,380	20.8
	South	45,060	20.0	47,320	20.0	44,820	19.1	41,180	17.9	49,280	18.9
	West	13,220	17.7	13,200	18.3	13,320	17.2	12,980	16.2	14,160	16.6
TOTAL		106,380	19.8	110,540	19.7	106,000	18.8	100,580	17.7	113,200	18.1

Source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Surgical procedures for kidney stones included open stone surgery, laparoscopic removal procedure, percutaneous nephrolithotomy, ureteroscopy, and extracorporeal shock wave lithotripsy.

Table M.4.3: Number of surgical procedures for kidney stones and percent of Medicare kidney stone patients with any surgical procedure for kidney stones (by age, gender, race, & region)

#### 2009-2013

		20	09	20	10	20	11	20	12	20	13
			Percent of								
Demogra	phic Characteristics	Number of	stone								
		surgeries	patients with								
			surgery								
AGE	65 - 69	32,680	18.7	35,580	18.9	38,660	19.1	40,880	18.8	43,560	18.8
	70 - 74	30,660	17.1	35,640	18.4	35,920	18.1	39,380	17.8	40,640	17.5
	75 - 79	21,940	16.9	26,300	17.4	27,660	17.4	27,920	16.3	29,540	16.5
	80 - 84	16,200	16.5	17,260	16.8	16,620	15.6	17,060	15.4	17,300	15.1
	85+	10,280	15.0	9,680	14.7	12,560	15.3	12,600	13.8	13,280	13.3
GENDER	Male	66,040	16.6	75,440	17.3	77,560	17.1	81,600	16.5	82,320	15.9
	Female	45,720	18.1	49,020	18.3	53,860	18.3	56,240	17.6	62,000	18.4
RACE	White	102,740	17.5	115,680	18.1	121,400	17.9	127,780	17.4	132,900	17.1
	Black	5,500	14.7	5,420	14.7	5,780	15.2	5,820	14.1	5,980	14.4
	Other	3,520	13.6	3,280	11.8	3,980	13.2	3,640	11.2	4,300	12.8
	Unknown	0	0.0	80	11.1	260	20.0	600	15.7	1,140	17.5
REGION	Northeast	20,740	14.6	22,040	15.2	23,420	15.3	23,980	14.5	27,380	14.8
	Midwest	29,860	20.7	32,200	20.4	31,740	20.0	35,940	20.7	37,660	19.9
	South	46,280	16.9	53,400	17.7	58,120	18.0	59,180	16.9	58,800	16.6
	West	14,880	16.5	16,820	17.2	18,140	15.9	18,740	15.4	20,480	16.2
TOTAL		111,760	17.2	124,460	17.7	131,420	17.6	137,840	17.0	144,320	16.8

Source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Surgical procedures for kidney stones included open stone surgery, laparoscopic removal procedure, percutaneous nephrolithotomy, ureteroscopy, and extracorporeal shock wave lithotripsy.

## 2004-2005

				20	04					20	05		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	atory
	mographic iracteristics	Number of open stone surgeries	patients with		Percent of stone patients with open stone surgery	Number of open stone surgeries	patients with	Number of open stone	patients with	Number of open stone	Percent of stone patients with open stone surgery	Number of open stone surgeries	patients with
AGE	65 - 69	240	0.3	200	0.2	40	0.0	220	0.2	180	0.2	40	0.0
	70 - 74	400	0.5	380	0.4	20	0.0	160	0.2	160	0.2	0	0.0
	75 - 79	240	0.3	220	0.3	20	0.0	220	0.3	200	0.3	20	0.0
	80 - 84	120	0.3	120	0.3	0	0.0	240	0.5	180	0.4	60	0.1
	85+	80	0.3	80	0.3	0	0.0	120	0.4	120	0.4	0	0.0
GENDER	Male	600	0.3	540	0.3	60	0.0	540	0.3	480	0.2	60	0.0
	Female	480	0.4	460	0.4	20	0.0	420	0.3	360	0.3	60	0.0
RACE	White	940	0.3	860	0.3	80	0.0	820	0.3	740	0.2	80	0.0
	Black	80	0.4	80	0.4	0	0.0	140	0.7	100	0.6	40	0.1
	Other	60	0.5	60	0.5	0	0.0	0	0.0	0	0.0	0	0.0
	Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0		0	0.0
REGION	Northeast	180	0.3	180	0.3	0	0.0	180	0.2	180	0.2	0	0.0
	Midwest	360	0.5	340	0.5	20	0.0	160	0.2	120	0.2	40	0.0
	South	440	0.3	400	0.3	40	0.0	480	0.3	400	0.3	80	0.1
	West	100	0.2	80	0.2	20	0.0	140	0.3	140	0.3	0	0.0
TOTAL		1,080	0.3	1,000	0.3	80	0.0	960	0.3	840	0.2	120	0.0

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

#### 2006-2007

				20	06					20	07		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	latory
	mographic racteristics	Number of											
		surgeries	patients with open stone surgery		patients with open stone surgery	surgeries	patients with open stone surgery						
AGE	65 - 69	200	0.2	200	0.2	0	0.0	220	0.2	200	0.2	20	0.0
	70 - 74	260	0.3	260	0.3	0	0.0	160	0.2	140	0.1	20	0.0
	75 - 79	220	0.3	220	0.3	0	0.0	300	0.4	280	0.3	20	0.0
	80 - 84	120	0.2	80	0.2	40	0.1	120	0.2	80	0.1	40	0.1
	85+	80	0.2	80	0.2	0	0.0	80	0.2	80	0.2	0	0.0
GENDER	Male	540	0.3	520	0.3	20	0.0	540	0.2	480	0.2	60	0.0
	Female	340	0.2	320	0.2	20	0.0	340	0.2	300	0.2	40	0.0
RACE	White	780	0.3	740	0.2	40	0.0	840	0.3	740		100	0.0
	Black	40	0.2	40	0.2	0	0.0	20	0.1	20		0	0.0
	Other	60	0.3	60	0.3	0	0.0	20	0.1	20	0.1	0	0.0
	Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
REGION	Northeast	60	0.1	60	0.1	0	0.0	220	0.3	200	0.3	20	0.0
	Midwest	300	0.4	300	0.4	0	0.0	240	0.3	240	0.3	0	0.0
	South	320	0.2	280	0.2	40	0.0	360	0.2	300	0.2	60	0.0
	West	200	0.4	200	0.4	0	0.0	60	0.1	40		20	0.0
TOTAL		880	0.3	840	0.2	40	0.0	880	0.2	780	0.2	100	0.0

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

#### 2008-2009

				20	08					20	09		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	latory
De	mographic	Number of	Percent of stone	Number of	Percent of stone	Number of	Percent of stone	Number of	Percent of stone	Number of	Percent of stone	Number of	Percent of stone
Cha	racteristics	open stone			patients with								
		surgeries		surgeries				surgeries		surgeries		surgeries	
		Surgenes	surgery	Surgeries	surgery	Surgenes	surgery	Surgenes	surgery	Surgeneo	surgery	Surgeries	surgery
AGE	65 - 69	380	0.4	360	0.4	20	0.0	300	0.2	220	0.2	80	0.1
	70 - 74	160	0.2	140	0.1	20	0.0	240	0.2	220	0.2	20	0.0
	75 - 79	180	0.2	180	0.2	0	0.0	220	0.3	180	0.2	40	0.0
	80 - 84	160	0.3	160	0.2	0	0.0	120	0.2	120	0.2	0	0.0
	85+	100	0.3	100	0.3	0	0.0	60	0.1	60	0.1	0	0.0
GENDER	Male	520	0.2	500	0.2	20	0.0	460	0.2	400	0.1	60	0.0
	Female	460	0.3	440	0.3	20	0.0	480	0.3	400	0.3	80	0.0
RACE	White	920	0.3	880	0.3	40	0.0	740	0.2	680	0.2	60	0.0
	Black	60	0.3	60	0.3	0	0.0	100	0.5	80		20	0.1
	Other	0	0.0	0	0.0	0	0.0	100	0.5	40	0.3	60	0.3
	Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
REGION	Northeast	120	0.2	100	0.1	20	0.0	140	0.1	140	0.1	0	0.0
	Midwest	440	0.5	420	0.5	20	0.0	280	0.3	280	0.3	0	0.0
	South	380	0.2	380	0.2	0	0.0	300	0.2	260	0.1	40	0.0
	West	40	0.1	40	0.1	0	0.0	220	0.4	120	0.2	100	0.1
TOTAL		980	0.3	940	0.2	40	0.0	940	0.2	800	0.2	140	0.0

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

#### 2010-2011

				20	10					20	11		
		To	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	latory
	mographic racteristics	Number of open stone surgeries	patients with	·	Percent of stone patients with open stone surgery	Number of open stone surgeries	patients with	Number of	patients with		Percent of stone patients with open stone surgery	Number of open stone surgeries	patients with
AGE	65 - 69	280	0.2	280	0.2	0	0.0	160	0.1	140	0.1	20	0.0
	70 - 74	240	0.2	220	0.2	20	0.0	260	0.2	240	0.2	20	0.0
	75 - 79	180	0.2	160	0.2	20	0.0	200	0.2	180	0.2	20	0.0
	80 - 84	120	0.2	120	0.2	0	0.0	120	0.2	100	0.2	20	0.0
	85+	40	0.1	40	0.1	0	0.0	60	0.1	60	0.1	0	0.0
GENDER	Male	440	0.2	420	0.2	20	0.0	400	0.1	360	0.1	40	0.0
	Female	420	0.3	400	0.2	20	0.0	400	0.2	360	0.2	40	0.0
RACE	White	780	0.2	760	0.2	20	0.0	700	0.2	620	0.1	80	0.0
	Black	60	0.3	40	0.2	20	0.1	60	0.3	60	0.3	0	0.0
	Other	20	0.1	20	0.1	0	0.0	40	0.2	40	0.2	0	0.0
	Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
REGION	Northeast	120	0.1	120	0.1	0	0.0	200	0.2	200	0.2	0	0.0
	Midwest	300	0.3	300	0.3	0	0.0	120	0.1	120	0.1	0	0.0
	South	300	0.2	300	0.1	0	0.0	360	0.2	300	0.2	60	0.0
	West	140		100	0.2	40	0.1	120	0.2	100	0.1	20	0.0
TOTAL		860	0.2	820	0.2	40	0.0	800	0.2	720	0.2	80	0.0

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

#### 2012-2013

				20	12					20	13		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	latory
	nographic racteristics	Number of open stone surgeries	patients with	Number of open stone surgeries	patients with	Number of	patients with	Number of	patients with	Number of open stone surgeries	tient Ambulator Percent of stone patients with open stone surgery 0.1 0 0.2 0 0.0 0 0.1 0 0.2 0 0.1 0 0.1 0 0.2 0 0.1 0 0.1 0 0.2 0 0.1 0 0.1 0 0.2 0 0.1 0 0.1 0 0.1 0 0.1 0 0.2 0 0.1 0		patients with
AGE	65 - 69	80	0.1	80	0.1	0	0.0	180	0.1	180	0.1	0	0.0
	70 - 74	160	0.1	160	0.1	0	0.0	200	0.1	180	0.1	20	0.0
	75 - 79	160	0.2	120	0.1	40	0.0	220	0.2	220	0.2	0	0.0
	80 - 84	100	0.2	80	0.1	20	0.0	0	0.0	0	0.0	0	0.0
	85+	40	0.1	40	0.1	0	0.0	80	0.1	80	0.1	0	0.0
GENDER	Male	340	0.1	340	0.1	0	0.0	320	0.1	320	0.1	0	0.0
	Female	200	0.1	140	0.1	60	0.0	360	0.2	340	0.2	20	0.0
RACE	White	500	0.1	440	0.1	60	0.0	600	0.1	580	0.1	20	0.0
	Black	20	0.1	20	0.1	0	0.0	40	0.2	40	0.2	0	0.0
	Other	20	0.1	20	0.1	0	0.0	40	0.2	40	0.2	0	0.0
	Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
REGION	Northeast	140	0.1	140	0.1	0	0.0	200	0.2	200	0.2	0	0.0
	Midwest	80	0.1	80	0.1	0	0.0	220	0.2	220	0.2	0	0.0
	South	280	0.1	240	0.1	40	0.0	140	0.1	120	0.1	20	0.0
	West	40	0.1	20	0.0	20	0.0	120	0.2	120	0.2	0	0.0
TOTAL		540	0.1	480	0.1	60	0.0	680	0.1	660	0.1	20	0.0

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.4.5: Number of laparoscopic removal procedures for kidney stones and percent of Medicare kidney stone patients with laparoscopic removal procedure for kidney stones (by age, gender, race, & region)

## 2004-2005

				20	04					20	05		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	atory
Domographia	Characteristics		Percent of										
Demographic	Characteristics	Number of	stone										
		procedures	patients with										
			procedure										
AGE	65 - 69	20	0.0	0	0.0	20	0.0	20	0.0	0	0.0	20	0.0
	70 - 74	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	75 - 79	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	80 - 84	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	85+	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
GENDER	Male	20	0.0	0	0.0	20	0.0	20	0.0	0	0.0	20	0.0
	Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
RACE	White	20	0.0	0	0.0	20	0.0	20	0.0	0	0.0	20	0.0
	Black	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Other	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
REGION	Northeast	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Midwest	20	0.0	0	0.0	20	0.0	0	0.0	0	0.0	0	0.0
	South	0	0.0	0	0.0	0	0.0	20	0.0	0	0.0	20	0.0
	West	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTAL		20	0.0	0	0.0	20	0.0	20	0.0	0	0.0	20	0.0

Source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.4.5: Number of laparoscopic removal procedures for kidney stones and percent of Medicare kidney stone patients with laparoscopic removal procedure for kidney stones (by age, gender, race & region)

#### 2006-2007

				20	06					20	07		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	latory
Dem	nographic		Percent of										
Char	acteristics	Number of	stone										
		procedures	patients with										
			procedure										
AGE	65 - 69	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	70 - 74	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	75 - 79	0	0.0	0	0.0	0	0.0	20	0.0	20	0.0	0	0.0
	80 - 84	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	85+	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
GENDER	Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Female	0	0.0	0	0.0	0	0.0	20	0.0	20	0.0	0	0.0
RACE	White	0	0.0	0	0.0	0	0.0	20	0.0	20	0.0	0	0.0
	Black	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Other	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
REGION	Northeast	0	0.0	0	0.0	0	0.0	20	0.0	20	0.0	0	0.0
	Midwest	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	South	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	West	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTAL		0	0.0	0	0.0	0	0.0	20	0.0	20	0.0	0	0.0

Source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.4.5: Number of laparoscopic removal procedures for kidney stones and percent of Medicare kidney stone patients with laparoscopic removal procedure for kidney stones (by age, gender, race & region)

#### 2008-2009

				20	08					20	09		
		То	tal	Inpa	tient	Ambu	latory	To	tal	Inpa	tient	Ambu	latory
Dem	nographic		Percent of										
Chara	acteristics	Number of	stone										
		procedures	patients with										
			procedure										
AGE	65 - 69	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	70 - 74	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	75 - 79	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	80 - 84	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	85+	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
GENDER	Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
RACE	White	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Black	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Other	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
REGION	Northeast	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Midwest	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	South	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	West	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTAL		0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

Source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.4.5: Number of laparoscopic removal procedures for kidney stones and percent of Medicare kidney stone patients with laparoscopic removal procedure for kidney stones (by age, gender, race & region)

### 2010-2011

				20	10					20	11		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	latory
Der	nographic		Percent of										
Char	racteristics	Number of	stone										
		procedures	patients with										
			procedure										
AGE	65 - 69	0	0.0	0	0.0	0	0.0	20	0.0	0	0.0	20	0.0
	70 - 74	0	0.0	0	0.0	0	0.0	20	0.0	20	0.0	0	0.0
	75 - 79	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	80 - 84	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	85+	0	0.0	0	0.0	0	0.0	40	0.1	20	0.0	20	0.0
GENDER	Male	0	0.0	0	0.0	0	0.0	40	0.0	20	0.0	20	0.0
	Female	0	0.0	0	0.0	0	0.0	40	0.0	20	0.0	20	0.0
RACE	White	0	0.0	0	0.0	0	0.0	40	0.0	20	0.0	20	0.0
	Black	0	0.0	0	0.0	0	0.0	20	0.1	0	0.0	20	0.1
	Other	0	0.0	0	0.0	0	0.0	20	0.1	20	0.1	0	0.0
	Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
REGION	Northeast	0	0.0	0	0.0	0	0.0	40	0.0	20	0.0	20	0.0
	Midwest	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	South	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	West	0	0.0	0	0.0	0	0.0	40	0.1	20	0.0	20	0.0
TOTAL		0	0.0	0	0.0	0	0.0	80	0.0	40	0.0	40	0.0

Source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.4.5: Number of laparoscopic removal procedures for kidney stones and percent of Medicare kidney stone patients with laparoscopic removal procedure for kidney stones (by age, gender, race & region)

### 2012-2013

				20	12					20	13		
		То	otal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	latory
Den	nographic		Percent of										
Char	acteristics	Number of	stone										
		procedures	patients with										
			procedure										
AGE	65 - 69	40	0.0	40	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	70 - 74	0	0.0	0	0.0	0	0.0	40	0.0	20	0.0	20	0.0
	75 - 79	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	80 - 84	20	0.0	0	0.0	20	0.0	0	0.0	0	0.0	0	0.0
	85+	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
GENDER	Male	60	0.0	40	0.0	20	0.0	0	0.0	0	0.0	0	0.0
	Female	0	0.0	0	0.0	0	0.0	40	0.0	20	0.0	20	0.0
RACE	White	40	0.0	20	0.0	20	0.0	40	0.0	20	0.0	20	0.0
	Black	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Other	20	0.1	20	0.1	0	0.0	0	0.0	0	0.0	0	0.0
	Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
REGION	Northeast	20	0.0	20	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Midwest	0	0.0	0	0.0	0	0.0	40	0.0	20	0.0	20	0.0
	South	40	0.0	20	0.0	20	0.0	0	0.0	0	0.0	0	0.0
	West	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTAL		60	0.0	40	0.0	20	0.0	40	0.0	20	0.0	20	0.0

Source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

### 2004-2005

				20	04					20	05		
		То	tal	Inpa	tient	Ambu	atory	То	tal	Inpa	tient	Ambu	latory
Dem	nographic		Percent of										
Char	acteristics	Number of	stone										
		PCNLs	patients with										
			PCNL										
AGE	65 - 69	1,060	1.1	940	1.1	120	0.1	1,200	1.2	1,000	1.0	200	0.2
	70 - 74	1,320	1.2	1,080	1.1	240	0.2	1,320	1.2	1,120	1.1	200	0.2
	75 - 79	1,140	1.4	1,040	1.2	100	0.1	940	1.1	900	1.1	40	0.1
	80 - 84	460	0.9	420	0.9	40	0.1	500	0.9	440	0.8	60	0.1
	85+	460	1.4	380	1.2	80	0.3	340	1.1	320	1.0	20	0.1
GENDER	Male	2,400	1.1	2,120	1.0	280	0.1	2,520	1.1	2,240	1.0	280	0.1
	Female	2,040	1.4	1,740	1.3	300	0.2	1,780	1.2	1,540	1.1	240	0.2
RACE	White	3,820	1.1	3,340	1.0	480	0.2	3,960	1.1	3,460	1.0	500	0.1
	Black	460	2.3	400	2.2	60	0.3	200	1.1	180	1.0	20	0.1
	Other	160	1.1	120	1.0	40	0.3	120	1.0	120	1.0	0	0.0
	Unknown	0	0.0	0	0.0	0	0.0	20	7.7	20	7.7	0	0.0
REGION	Northeast	880	1.1	820	1.1	60	0.1	980	1.2	920	1.1	60	0.1
	Midwest	1,240	1.4	1,100	1.3	140	0.2	1,180	1.4	960	1.2	220	0.2
	South	1,800	1.2	1,520	1.0	280	0.2	1,520	0.9	1,360	0.8	160	0.1
	West	520	1.1	420	0.9	100	0.2	620	1.3	540	1.1	80	0.2
TOTAL		4,440	1.2	3,860	1.1	580	0.2	4,300	1.1	3,780	1.0	520	0.1

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Ambulatory surgical procedures include procedures serviced in hospital-based outpatient facility and physician office.

#### 2006-2007

				20	06					20	07		
		То	tal	Inpa	tient	Ambu	atory	То	otal	Inpa	tient	Ambul	latory
Dem	ographic		Percent of										
Chara	acteristics	Number of	stone										
		PCNLs	patients with										
			PCNL										
AGE	65 - 69	1,280	1.2	1,140	1.1	140	0.1	1,480		1,260	1.2	220	0.2
	70 - 74	1,440	1.3	1,260	1.2	180	0.2	940	0.8	800	0.7	140	0.1
	75 - 79	1,280	1.3	1,120	1.2	160	0.2	1,000	1.2	860	1.1	140	0.2
	80 - 84	580	1.2	540	1.1	40	0.1	820	1.2	760	1.2	60	0.1
	85+	440	1.2	420	1.1	20	0.1	520	1.4	480	1.3	40	0.1
GENDER	Male	2,500	1.0	2,320	0.9	180	0.1	2,400	1.0	2,060	0.9	340	0.2
	Female	2,520	1.6	2,160	1.5	360	0.3	2,360	1.5	2,100	1.3	260	0.2
RACE	White	4,500	1.2	3,980	1.1	520	0.2	4,440	1.2	3,840	1.1	600	0.2
	Black	360	1.8	340	1.8	20	0.1	260	1.3	260	1.3	0	0.0
	Other	160	0.9	160	0.9	0	0.0	60	0.4	60	0.4	0	0.0
	Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
REGION	Northeast	880	1.0	820	1.0	60	0.1	1,060	1.2	1,040	1.2	20	0.0
	Midwest	1,620	1.9	1,420	1.7	200	0.3	1,520	1.7	1,260	1.5	260	0.3
	South	1,740	1.0	1,520	0.9	220	0.1	1,700	1.0	1,440	0.8	260	0.2
	West	780	1.2	720	1.1	60	0.1	480	0.9	420	0.8	60	0.1
TOTAL		5,020	1.2	4,480	1.1	540	0.2	4,760	1.2	4,160	1.1	600	0.2

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Ambulatory surgical procedures include procedures serviced in hospital-based outpatient facility and physician office.

#### 2008-2009

				20	08					20	09		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	atory
Dem	ographic		Percent of										
Chara	acteristics	Number of	stone										
		PCNLs	patients with										
			PCNL										
AGE	65 - 69	1,440	1.2	1,180	1.0	260	0.2	1,480	1.2	1,100	0.9	380	0.4
	70 - 74	1,340	1.2	1,020	1.0	320	0.3	1,500	1.1	1,240	1.0	260	0.2
	75 - 79	1,140	1.2	900	1.0	240	0.3	840	0.9	720	0.8	120	0.1
	80 - 84	960	1.4	900	1.4	60	0.1	920	1.4	880	1.3	40	0.1
	85+	360	0.9	340	0.9	20	0.1	560	1.3	460	1.1	100	0.2
GENDER	Male	2,860	1.1	2,280	0.9	580	0.2	2,940	1.0	2,360	0.8	580	0.2
	Female	2,380	1.4	2,060	1.3	320	0.2	2,360	1.4	2,040	1.2	320	0.2
RACE	White	4,820	1.2	3,980	1.1	840	0.2	4,740	1.1	3,920	1.0	820	0.2
	Black	260	1.1	240	1.1	20	0.1	440	1.8	380	1.5	60	0.3
	Other	160	0.8	120	0.8	40	0.1	120	0.8	100	0.6	20	0.1
	Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
REGION	Northeast	1,520	1.6	1,320	1.4	200	0.2	940	0.9	840	0.8	100	0.1
	Midwest	1,320	1.5	1,140	1.3	180	0.2	1,400	1.4	1,220	1.2	180	0.2
	South	1,760	0.9	1,320	0.8	440	0.2	2,040	1.0	1,600	0.8	440	0.3
	West	640	1.1	560	1.0	80	0.2	920	1.5	740	1.3	180	0.3
TOTAL		5,240	1.2	4,340	1.1	900	0.2	5,300	1.2	4,400	1.0	900	0.2

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Ambulatory surgical procedures include procedures serviced in hospital-based outpatient facility and physician office.

### 2010-2011

				20	10					20	11		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambul	latory
Dem	nographic		Percent of										
Char	acteristics	Number of	stone										
		PCNLs	patients with										
			PCNL										
AGE	65 - 69	1,340	1.0	1,040	0.8	300	0.2	1,980	1.4	1,500	1.1	480	0.4
	70 - 74	1,560	1.1	1,200	1.0	360	0.3	1,780	1.2	1,320	1.0	460	0.3
	75 - 79	1,140	1.1	880	0.9	260	0.3	1,440	1.4	1,120	1.1	320	0.3
	80 - 84	920	1.2	720	1.0	200	0.3	860	1.2	720	1.0	140	0.2
	85+	660	1.3	660	1.3	0	0.0	1,020	1.8	1,000	1.8	20	0.0
GENDER	Male	3,000	1.0	2,320	0.8	680	0.2	3,420	1.1	2,580	0.9	840	0.3
	Female	2,620	1.4	2,180	1.2	440	0.3	3,660	1.8	3,080	1.6	580	0.3
RACE	White	5,100	1.1	4,000	0.9	1,100	0.3	6,500	1.4	5,160	1.1	1,340	0.3
	Black	280	1.2	280	1.2	0	0.0	340	1.5	280	1.2	60	0.3
	Other	240	1.2	220	1.1	20	0.1	240	1.2	220	1.1	20	0.1
	Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
REGION	Northeast	1,140	1.1	1,000	1.0	140	0.2	1,460	1.3	1,340	1.2	120	0.1
	Midwest	1,560	1.4	1,300	1.3	260	0.2	1,840	1.7	1,460	1.4	380	0.3
	South	2,020	1.0	1,420	0.7	600	0.3	2,960	1.3	2,140	1.0	820	0.4
	West	900	1.3	780	1.1	120	0.2	820	1.2	720	1.0	100	0.1
TOTAL		5,620	1.1	4,500	0.9	1,120	0.2	7,080	1.4	5,660	1.1	1,420	0.3

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Ambulatory surgical procedures include procedures serviced in hospital-based outpatient facility and physician office.

### 2012-2013

				20	12					20	13		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	latory
Dem	nographic		Percent of										
Char	acteristics	Number of	stone										
		PCNLs	patients with										
			PCNL										
AGE	65 - 69	1,940	1.2	1,420	1.0	520	0.4	1,920	1.2	1,280	0.8	640	0.4
	70 - 74	1,720	1.1	1,340	0.9	380	0.3	1,740	1.1	1,260	0.9	480	0.3
	75 - 79	1,100	0.9	840	0.8	260	0.2	1,120	1.0	760	0.7	360	0.3
	80 - 84	1,040	1.3	800	1.1	240	0.4	840	1.0	740	0.9	100	0.1
	85+	760	1.3	700	1.2	60	0.1	860	1.3	760	1.2	100	0.2
GENDER	Male	3,260	0.9	2,500	0.7	760	0.2	2,660	0.7	1,960	0.5	700	0.2
	Female	3,300	1.5	2,600	1.3	700	0.4	3,820	1.7	2,840	1.4	980	0.5
RACE	White	5,960	1.2	4,660	1.0	1,300	0.3	5,860	1.1	4,240	0.8	1,620	0.3
	Black	380	1.4	220	0.9	160	0.6	280	1.0	220	0.9	60	0.2
	Other	140	0.6	140	0.6	0	0.0	300	1.4	300	1.4	0	0.0
	Unknown	80	2.6	80	2.6	0	0.0	40	1.1	40	1.1	0	0.0
REGION	Northeast	1,540	1.3	1,380	1.2	160	0.1	1,540	1.2	1,260	1.1	280	0.2
	Midwest	1,600	1.4	1,240	1.1	360	0.3	1,780	1.5	1,300	1.1	480	0.4
	South	2,520	1.0	1,760	0.8	760	0.3	2,100	0.8	1,400	0.6	700	0.3
	West	900	1.1	720	0.8	180	0.2	1,060	1.1	840	0.9	220	0.2
TOTAL		6,560	1.2	5,100	0.9	1,460	0.3	6,480	1.1	4,800	0.9	1,680	0.3

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Ambulatory surgical procedures include procedures serviced in hospital-based outpatient facility and physician office.

## 2004-2005

				20	04					20	05		
		То	tal	Inpa	tient	Ambu	atory	То	tal	Inpa	tient	Ambu	latory
Demog Charact	raphic eristics	Number of procedures		Number of procedures		Number of	Percent of stone patients with procedure	Number of procedures		Number of	Percent of stone patients with procedure	Number of procedures	
AGE	65 - 69	15,500	14.9	5,580	6.1	9,920	10.3	16,300	14.7	5,820	6.1	10,480	
	70 - 74	15,740	14.2	6,120	6.1	9,620	9.3	16,900	14.6	6,340	6.5	10,560	9.8
	75 - 79	13,500	15.3	5,480	7.1	8,020	9.5	13,180	14.0	5,080	6.3	8,100	9.0
	80 - 84	8,620	14.5	4,220	7.7	4,400	8.3	8,380	13.4	4,020	7.2	4,360	7.3
	85+	4,940	12.5	2,640	7.8	2,300	6.4	5,720	13.9	2,700	8.0	3,020	7.5
GENDER	Male	33,940	13.8	13,040	6.0	20,900	9.0	37,140	14.1	13,140	5.9	24,000	9.6
	Female	24,360	15.6	11,000	7.9	13,360	9.4	23,340	14.5	10,820	7.7	12,520	
RACE	White	53,240	14.7	21,940	6.8	31,300	9.3	56,580	14.7	21,920	6.6	34,660	9.5
	Black	3,300	14.4	1,280	6.5	2,020	9.5	2,780	12.0	1,400	7.1	1,380	
	Other	1,740	10.9	820	5.9	920	5.9	1,100	7.7	620	4.7	480	
	Unkno	20	7.7	0	0.0	20	7.7	20	7.7	20	7.7	0	0.0
REGION	Northe	10,280	11.8	4,580	5.9	5,700	7.1	9,960	10.6	4,420	5.3	5,540	6.3
	Midwes	16,480	17.9	6,900	8.6	9,580	11.3	18,100	18.4	7,120	8.8	10,980	11.8
	South	24,280	14.6	9,460	6.4	14,820	9.5	25,320	14.5	9,660	6.4	15,660	
	West	7,260	13.0	3,100	6.0	4,160	8.1	7,100	13.0	2,760	5.7	4,340	8.2
TOTAL		58,300	14.5	24,040	6.7	34,260	9.2	60,480	14.3	23,960	6.6	36,520	9.1

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

#### 2006-2007

				20	06					20	07		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	latory
	ographic acteristics	Number of procedures	Percent of stone patients with procedure	Number of procedures	Percent of stone patients with procedure	Number of procedures	Percent of stone patients with procedure	Number of		Number of procedures		Number of procedures	
AGE	65 - 69	15,420	13.7	6,060	6.1	9,360	9.1	15,600	13.7	5,480	5.5	10,120	9.5
	70 - 74	16,180	14.0	5,880	5.9	10,300	9.5	14,960	12.9	5,360	5.2	9,600	8.8
	75 - 79	13,620	14.1	5,660	6.7	7,960	9.0	12,320	13.1	4,700	5.7	7,620	8.4
	80 - 84	8,960	13.8	4,040	7.3	4,920	8.3	9,340	13.1	4,100	6.9	5,240	7.9
	85+	5,680	13.3	3,260	8.9	2,420	6.1	6,040	12.7	2,940	7.3	3,100	7.2
GENDER	Male	34,160	12.9	12,880	5.6	21,280	8.7	34,140	12.5	11,860	4.9	22,280	8.7
	Female	25,700	15.3	12,020	8.2	13,680	8.9	24,120	14.2	10,720	7.3	13,400	8.4
RACE	White	55,460	14.1	22,540	6.6	32,920	9.1	53,960	13.5	20,500	5.9	33,460	8.9
	Black	2,440	11.1	1,480	7.4	960	4.8	2,480	10.7	1,180	6.2	1,300	6.2
	Other	1,940	11.2	880	6.2	1,060	6.6	1,820	9.6	900	5.5	920	5.0
	Unknown	20	8.3	0	0.0	20	8.3	0	0.0	0	0.0	0	0.0
REGION	Northeast	11,600	11.8	5,920	6.8	5,680	6.5	11,220	11.0	5,080	5.9	6,140	6.6
	Midwest	16,080	16.5	6,660	7.9	9,420	10.5	16,280	16.3	6,380	7.3	9,900	10.8
	South	24,940	13.9	9,460	6.1	15,480	9.2	23,240	12.9	8,360	5.3	14,880	8.7
	West	7,240	12.6	2,860	5.9	4,380	8.3	7,520	12.1	2,760	5.3	4,760	7.9
TOTAL		59,860	13.8	24,900	6.6	34,960	8.8	58,260	13.1	22,580	5.9	35,680	8.6

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

#### 2008-2009

				20	08					20	09		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	latory
	ographic acteristics	Number of procedures		Number of procedures	Percent of stone patients with procedure	Number of procedures	Percent of stone patients with procedure	Number of procedures		Number of procedures		Number of procedures	
AGE	65 - 69	18,320	14.5	6,120	5.7	12,200	10.4	18,060	13.6	5,640	4.8	12,420	10.2
	70 - 74	17,020	13.6	5,940	5.4	11,080	9.4	16,860	12.2	5,740	4.9	11,120	8.7
	75 - 79	13,320	13.3	4,840	5.8	8,480	9.0	13,000	12.8	5,120	5.6	7,880	8.6
	80 - 84	9,480	12.7	4,280	6.7	5,200	7.8	9,980	13.1	4,220	6.6	5,760	8.4
	85+	6,460	12.8	3,400	7.6	3,060	6.5	6,620	12.5	3,760	7.9	2,860	6.0
GENDER	Male	37,660	13.0	12,360	4.9	25,300	9.3	37,280	12.2	12,920	4.8	24,360	8.6
	Female	26,940	14.4	12,220	7.6	14,720	8.6	27,240	14.1	11,560	6.9	15,680	9.0
RACE	White	59,920	13.9	22,860	6.1	37,060	9.2	59,360	13.1	22,200	5.6	37,160	9.0
	Black	3,020	12.2	1,080	5.3	1,940	8.1	3,100	10.7	1,460	6.0	1,640	6.4
	Other	1,660	8.2	640	3.8	1,020	5.5	2,060	10.4	820	4.7	1,240	6.6
	Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
REGION	Northeast	10,940	10.4	5,060	5.5	5,880	6.2	11,800	10.4	4,860	4.9	6,940	6.6
	Midwest	17,480	16.4	6,780	7.5	10,700	11.1	17,780	16.1	7,220	7.8	10,560	10.6
	South	28,200	14.1	9,860	5.7	18,340	9.6	26,300	12.7	9,120	4.9	17,180	9.0
	West	7,980	12.3	2,880	5.1	5,100	8.7	8,640	12.3	3,280	5.5	5,360	8.3
TOTAL		64,600	13.6	24,580	6.0	40,020	9.0	64,520	12.9	24,480	5.6	40,040	8.7

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

### 2010-2011

				20	10					20	11		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	latory
	ographic acteristics	Number of procedures		Number of procedures		Number of procedures		Number of procedures	Percent of stone patients with procedure	Number of procedures	Percent of stone patients with procedure	Number of procedures	Percent of stone patients with procedure
AGE	65 - 69	20,300	13.8	6,020	4.8	14,280	10.6	21,980	13.8	6,880	5.1	15,100	10.4
	70 - 74	20,280	13.7	6,740	5.4	13,540	9.9	20,980	13.3	7,220	5.4	13,760	9.3
	75 - 79	14,920	12.7	5,740	6.0	9,180	8.6	16,500	13.3	6,180	5.8	10,320	9.2
	80 - 84	10,800	13.2	4,680	6.9	6,120	8.3	10,820	12.5	4,800	6.3	6,020	7.8
	85+	6,880	12.7	3,980	8.0	2,900	5.6	9,020	13.1	5,240	9.0	3,780	6.1
GENDER	Male	43,340	12.7	14,040	4.9	29,300	9.2	45,640	12.7	15,740	5.1	29,900	9.0
	Female	29,840	14.4	13,120	7.5	16,720	8.9	33,660	14.3	14,580	7.3	19,080	9.0
RACE	White	67,900	13.6	24,860	5.9	43,040	9.4	73,440	13.6	27,700	6.0	45,740	9.3
	Black	3,180	10.9	1,320	5.3	1,860	7.2	3,560	11.2	1,520	6.0	2,040	6.8
	Other	2,040	9.5	960	5.1	1,080	5.8	2,160	9.1	1,000	4.7	1,160	5.6
	Unknown	60	11.1	20	5.6	40	5.6	140	11.1	100	8.9	40	4.4
REGION	Northeast	12,460	10.6	5,600	5.8	6,860	6.3	13,960	11.1	6,240	5.9	7,720	6.9
	Midwest	19,980	16.3	7,880	7.7	12,100	11.1	20,100	16.0	7,900	7.3	12,200	10.5
	South	30,720	13.3	10,240	5.2	20,480	9.5	34,880	13.6	12,260	5.6	22,620	9.6
	West	10,020	13.2	3,440	5.3	6,580	9.3	10,360	11.9	3,920	5.0	6,440	8.0
TOTAL		73,180	13.3	27,160	5.9	46,020	9.1	79,300	13.3	30,320	5.9	48,980	9.0

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

### 2012-2013

				20	12					20	13		
		То	tal	Inpa	tient	Ambu	latory	To	tal	Inpa	tient	Ambu	latory
	ographic cteristics	Number of procedures		Number of procedures	Percent of stone patients with procedure	Number of procedures		Number of procedures		Number of procedures		Number of	Percent of stone patients with procedure
AGE	65 - 69	23,480	13.6	7,520	5.0	15,960	10.2	26,520	13.8	8,100	5.1	18,420	10.4
	70 - 74	23,180	12.9	7,180	4.8	16,000	9.5	25,000	13.0	7,360	4.7	17,640	9.8
	75 - 79	17,100	12.2	5,900	5.4	11,200	8.8	18,620	12.9	6,640	5.5	11,980	9.2
	80 - 84	11,080	12.2	4,380	5.8	6,700	7.9	11,680	12.2	4,960	6.4	6,720	7.9
	85+	8,920	11.7	4,680	7.3	4,240	6.1	9,480	11.6	4,820	7.0	4,660	6.3
GENDER	Male	48,460	12.1	15,480	4.6	32,980	8.9	51,420	12.0	15,940	4.4	35,480	8.8
	Female	35,300	13.6	14,180	6.7	21,120	9.0	39,880	14.5	15,940	7.1	23,940	9.8
RACE	White	77,600	13.0	27,100	5.5	50,500	9.2	84,160	13.2	28,860	5.4	55,300	
	Black	3,600	10.5	1,560	5.3	2,040	6.7	3,780	11.1	1,680	6.0	2,100	7.1
	Other	2,200	8.2	840		1,360	5.9	2,740	9.6	1,140	5.2	1,600	
	Unknown	360	13.0	160	5.2	200	7.8	620	10.1	200	3.2	420	
REGION	Northeast	14,440	10.4	6,260	5.4	8,180	6.4	16,940	11.0	6,920	5.4	10,020	7.1
	Midwest	22,820	16.3	8,420	7.4	14,400	11.3	23,680	15.5	8,520	6.8	15,160	11.0
	South	35,660	12.4	11,400	4.9	24,260	9.2	37,620	12.9	12,040	5.0	25,580	
	West	10,840	11.6	3,580	4.2	7,260	8.5	13,060	12.5	4,400	4.9	8,660	
TOTAL		83,760	12.7	29,660	5.4	54,100	9.0	91,300	12.9	31,880	5.4	59,420	9.2

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

#### 2004-2005

				2(	)04					20	)05		
		Tc	otal	Inpa	itient	Ambı	ulatory	Т	otal	Inpa	itient	Ambı	llatory
Demo	graphic		Percent of										
Charac	cteristics	Number of	stone										
		ESWLs	patients with										
			ESWL										
AGE	65 - 69	12,080	11.2	760	0.9	11,320	10.7	14,300	13.0	940	1.0	13,360	12.2
	70 - 74	12,360	10.9	740	0.8	11,620	10.4	13,640	12.1	940	1.0	12,700	11.2
	75 - 79	10,020	11.4	760	1.0	9,260	10.5	9,040	10.1	700	0.9	8,340	9.4
	80 - 84	5,260	9.0	440	0.9	4,820	8.3	5,120	8.0	620	1.1	4,500	7.1
	85+	2,820	7.5	420	1.2	2,400	6.5	2,680	6.9	340	1.0	2,340	6.0
GENDER	Male	26,800	10.6	1,740	0.8	25,060	10.0	28,900	11.1	2,420	1.1	26,480	10.2
	Female	15,740	10.3	1,380	1.0	14,360	9.5	15,880	10.2	1,120	0.8	14,760	9.5
RACE	White	39,020	10.7	2,800	0.9	36,220	10.0	41,580	11.0	3,240	1.0	38,340	10.1
	Black	2,420	9.5	180	0.9	2,240	8.9	2,480	10.9	260	1.3	2,220	9.7
	Other	1,100	6.6	140	1.0	960	5.9	700	5.1	40	0.3	660	4.9
	Unknown	0	0.0	0	0.0	0	0.0	20	7.7	0	0.0	20	7.7
REGION	Northeast	7,860	8.8	720	1.0	7,140	8.1	7,800	8.5	600	0.8	7,200	7.8
	Midwest	10,800	12.1	520	0.7	10,280	11.6	11,660	12.3	640	0.8	11,020	11.7
	South	18,540	10.7	1,240	0.9	17,300	10.0	19,980	11.4	1,740	1.1	18,240	10.4
	West	5,340	9.6	640	1.3	4,700	8.7	5,340	10.0	560	1.2	4,780	9.0
TOTAL		42,540	10.5	3,120	0.9	39,420	9.8	44,780	10.8	3,540	1.0	41,240	9.9

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Ambulatory surgical procedures include procedures serviced in hospital-based outpatient facility and physician office.

#### 2006-2007

				2(	)06					20	)07		
		Тс	otal	Inpa	itient	Ambı	ulatory	Т	otal	Inpa	itient	Ambu	ılatory
Demo	ographic		Percent of										
Charao	cteristics	Number of	stone										
		ESWLs	patients with										
			ESWL										
AGE	65 - 69	12,400	11.3	800	0.9	11,600	10.5	11,640	10.6	640	0.7	11,000	10.0
	70 - 74	11,800	10.4	580	0.6	11,220	9.9	10,960	9.7	760	0.8	10,200	9.1
	75 - 79	8,880	9.8	440	0.5	8,440	9.3	7,700	8.5	640	0.8	7,060	7.8
	80 - 84	4,780	7.7	420	0.8	4,360	7.0	4,640	7.0	340	0.6	4,300	6.5
	85+	2,380	6.0	220	0.6	2,160	5.4	1,720	4.4	260	0.7	1,460	3.7
GENDER	Male	25,540	9.9	1,540	0.7	24,000	9.3	23,100	8.8	1,620	0.7	21,480	8.2
	Female	14,700	9.2	920	0.7	13,780	8.6	13,560	8.6	1,020	0.7	12,540	7.9
RACE	White	37,780	9.9	2,220	0.7	35,560	9.3	34,220	8.9	2,420	0.7	31,800	8.3
	Black	1,200	6.5	80	0.5	1,120	6.0	1,420	7.7	60	0.3	1,360	7.3
	Other	1,260	8.1	160	1.2	1,100	7.1	1,020	6.4	160	1.0	860	5.4
	Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
REGION	Northeast	7,380	7.7	280	0.3	7,100	7.4	6,920	7.3	500	0.6	6,420	6.7
	Midwest	9,940	11.0	480	0.6	9,460	10.5	8,940	9.5	280	0.4	8,660	9.1
	South	17,820	10.2	1,200	0.8	16,620	9.5	15,880	9.2	1,520	1.0	14,360	8.4
	West	5,100	9.1	500	1.0	4,600	8.2	4,920	8.5	340	0.7	4,580	7.9
TOTAL		40,240	9.6	2,460	0.7	37,780	9.1	36,660	8.7	2,640	0.7	34,020	8.1

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Ambulatory surgical procedures include procedures serviced in hospital-based outpatient facility and physician office.

#### 2008-2009

				2(	008					2(	009		
		Тс	otal	Inpa	itient	Ambı	ulatory	Тс	otal	Inpa	itient	Ambı	latory
Demo	graphic		Percent of										
Charac	teristics	Number of	stone										
		ESWLs	patients with										
			ESWL										
AGE	65 - 69	13,580	11.0	600	0.6	12,980	10.5	12,840	9.7	440	0.4	12,400	9.4
	70 - 74	12,560	10.0	580	0.6	11,980	9.6	12,060	8.8	680	0.6	11,380	8.4
	75 - 79	8,720	8.6	480	0.5	8,240	8.2	7,880	7.8	460	0.6	7,420	7.3
	80 - 84	4,980	6.8	360	0.6	4,620	6.3	5,180	7.2	320	0.5	4,860	6.8
	85+	2,540	4.9	320	0.8	2,220	4.3	3,040	5.9	280	0.7	2,760	5.4
GENDER	Male	26,320	9.1	1,300	0.5	25,020	8.7	25,360	8.1	1,160	0.5	24,200	7.8
	Female	16,060	8.8	1,040	0.7	15,020	8.2	15,640	8.6	1,020	0.7	14,620	8.0
RACE	White	39,780	9.2	2,180	0.6	37,600	8.7	37,900	8.5	2,020	0.6	35,880	8.0
	Black	1,680	7.6	100	0.6	1,580	7.0	1,860	6.7	120	0.5	1,740	6.3
	Other	920	5.0	60	0.4	860	4.7	1,240	6.8	40	0.3	1,200	6.6
	Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
REGION	Northeast	7,800	7.4	340	0.4	7,460	7.1	7,860	7.2	300	0.3	7,560	6.9
	Midwest	10,140	9.6	420	0.5	9,720	9.2	10,400	9.4	500	0.6	9,900	9.0
	South	18,940	9.5	1,040	0.6	17,900	9.0	17,640	8.4	1,100	0.6	16,540	7.9
	West	5,500	8.9	540	1.1	4,960	8.0	5,100	8.1	280	0.5	4,820	7.6
TOTAL		42,380	9.0	2,340	0.6	40,040	8.5	41,000	8.3	2,180	0.5	38,820	7.9

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

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Ambulatory surgical procedures include procedures serviced in hospital-based outpatient facility and physician office.

#### 2010-2011

				20	10					20	11		
		То	tal	Inpa	tient	Ambu	atory	То	tal	Inpa	tient	Ambu	latory
Dem	nographic		Percent of										
Chara	acteristics	Number of	stone										
		ESWLs	patients with	ESWL	patients with								
			ESWL										
AGE	65 - 69	13,660	9.9	460	0.4	13,200	9.6	14,520	9.7	620	0.5	13,900	9.4
	70 - 74	13,560	9.3	700	0.6	12,860	8.9	12,880	8.6	540	0.4	12,340	8.3
	75 - 79	10,060	9.0	480	0.5	9,580	8.6	9,520	8.1	360	0.4	9,160	7.8
	80 - 84	5,420	7.3	320	0.5	5,100	6.9	4,820	6.0	320	0.5	4,500	5.6
	85+	2,100	4.2	220	0.5	1,880	3.7	2,420	3.9	220	0.4	2,200	3.6
GENDER	Male	28,660	8.8	1,120	0.4	27,540	8.5	28,060	8.1	1,200	0.4	26,860	7.9
	Female	16,140	8.2	1,060	0.6	15,080	7.7	16,100	7.5	860	0.5	15,240	7.1
RACE	White	41,900	8.8	1,960	0.5	39,940	8.5	40,720	8.0	1,820	0.4	38,900	7.7
	Black	1,900	6.6	160	0.7	1,740	6.0	1,800	6.6	100	0.3	1,700	6.3
	Other	980	5.2	60	0.4	920	4.8	1,520	7.2	140	0.6	1,380	6.7
	Unknown	20	5.6	0	0.0	20	5.6	120	13.3	0	0.0	120	13.3
REGION	Northeast	8,320	7.2	220	0.2	8,100	7.0	7,760	6.5	340	0.3	7,420	6.3
	Midwest	10,360	9.1	440	0.5	9,920	8.9	9,680	8.2	400	0.4	9,280	7.9
	South	20,360	9.1	1,040	0.5	19,320	8.6	19,920	8.3	900	0.4	19,020	8.0
	West	5,760	8.4	480	0.7	5,280	7.7	6,800	8.3	420	0.6	6,380	7.8
TOTAL		44,800	8.6	2,180	0.5	42,620	8.2	44,160	7.9	2,060	0.4	42,100	7.6

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

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Ambulatory surgical procedures include procedures serviced in hospital-based outpatient facility and physician office.

#### 2012-2013

				20	12					20	13		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	latory
Dem	nographic		Percent of										
Char	acteristics	Number of	stone										
		ESWL	patients with	ESWLs	patients with	ESWLs	patients with						
			ESWL										
AGE	65 - 69	15,340	9.2	660	0.4	14,680	8.9	14,940	8.8	460	0.3	14,480	8.5
	70 - 74	14,320	8.7	420	0.3	13,900	8.4	13,660	7.7	320	0.2	13,340	7.6
	75 - 79	9,560	7.6	320	0.3	9,240	7.4	9,580	7.3	540	0.5	9,040	6.9
	80 - 84	4,820	5.9	280	0.4	4,540	5.5	4,780	5.4	160	0.2	4,620	5.2
	85+	2,880	4.2	380	0.5	2,500	3.8	2,860	3.9	320	0.5	2,540	3.4
GENDER	Male	29,480	7.9	1,100	0.3	28,380	7.6	27,920	7.0	980	0.3	26,940	6.8
	Female	17,440	7.4	960	0.5	16,480	7.1	17,900	7.3	820	0.4	17,080	7.0
RACE	White	43,680	8.0	1,860	0.4	41,820	7.6	42,240	7.3	1,580	0.3	40,660	7.0
	Black	1,820	5.5	120	0.5	1,700	5.2	1,880	6.6	180	0.7	1,700	5.9
	Other	1,260	5.1	80	0.4	1,180	4.7	1,220	5.0	40	0.2	1,180	4.9
	Unknown	160	6.1	0	0.0	160	6.1	480	10.1	0	0.0	480	10.1
REGION	Northeast	7,840	6.0	200	0.2	7,640	5.8	8,700	6.2	220	0.2	8,480	6.0
	Midwest	11,440	8.9	580	0.5	10,860	8.5	11,940	8.7	380	0.3	11,560	8.4
	South	20,680	8.0	860	0.4	19,820	7.7	18,940	7.1	840	0.3	18,100	6.8
	West	6,960	7.8	420	0.5	6,540	7.3	6,240	6.6	360	0.4	5,880	6.3
TOTAL		46,920	7.7	2,060	0.4	44,860	7.4	45,820	7.1	1800	0.3	44,020	6.9

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Ambulatory surgical procedures include procedures serviced in hospital-based outpatient facility and physician office.

#### 2004-2005

			2004			2005	
Demograp	ohic Characteristics	Number of imaging procedures	Number of stone patients with imaging	Percent of stone patients with imaging	Number of imaging procedures	Number of stone patients with imaging	Percent of stone patients with imaging
		procedures	procedure	procedure	procedures	procedure	procedure
AGE	65 - 69	158,840	53,620	64.5	176,540	58,020	65.9
	70 - 74	161,060	56,000	62.4	171,960	58,420	64.1
	75 - 79	126,760	43,940	62.8	133,680	46,540	62.5
	80 - 84	74,300	27,720	59.3	82,580	30,420	59.6
	85+	42,380	15,900	51.9	47,240	17,980	55.8
GENDER	Male	352,960	122,560	62.1	381,080	130,740	62.6
	Female	210,380	74,620	60.8	230,920	80,640	62.9
RACE	White	515,140	179,660	62.1	564,260	193,300	63.1
	Black	30,920	10,680	59.4	31,080	10,820	59.9
	Other	16,980	6,700	53.7	16,380	7,180	58.8
	Unknown	300	140	53.9	280	80	30.8
REGION	Northeast	112,080	40,880	59.6	119,240	44,540	59.2
	Midwest	142,900	46,620	64.6	157,220	49,780	66.0
	South	236,460	84,160	62.4	258,080	89,200	63.6
	West	71,900	25,520	57.3	77,460	27,860	60.6
TOTAL		563,340	197,180	61.6	612,000	211,380	62.7

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Imaging procedures for kidney stone evaluation included plain film/Kidney, Ureter, Bladder X-ray, intravenous pyelography, ultrasound, computed tomography, and magnetic resonance imaging.

### 2006-2007

			2006			2007	
Demograp	hic Characteristics	Number of imaging	Number of stone patients with imaging	Percent of stone patients with imaging	Number of imaging	Number of stone patients with imaging	Percent of stone patients with imaging
		procedures	procedure	procedure	procedures	procedure	procedure
AGE	65 - 69	174,020	57,940	66.0	182,360	59,100	64.8
	70 - 74	174,980	60,260	65.3	173,940	59,680	63.4
	75 - 79	137,960	47,320	63.3	132,720	47,100	62.1
	80 - 84	85,820	30,140	60.1	92,740	32,480	60.5
	85+	49,800	18,080	53.4	51,120	19,440	55.2
GENDER	Male	383,340	130,520	62.8	391,560	134,780	62.3
	Female	239,240	83,220	63.6	241,320	83,020	62.0
RACE	White	577,160	196,360	63.7	586,640	199,600	62.7
	Black	24,260	9,560	56.4	26,600	10,040	58.4
•	Other	20,780	7,720	58.2	19,320	8,040	55.8
•	Unknown	380	100	41.7	320	120	54.6
REGION	Northeast	126,820	46,140	60.8	129,920	47,040	58.9
	Midwest	155,460	49,240	65.1	157,400	51,140	65.5
	South	261,720	91,060	64.2	264,420	91,740	63.3
	West	78,580	27,300	60.1	81,140	27,880	59.2
TOTAL		622,580	213,740	63.1	632,880	217,800	62.2

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Imaging procedures for kidney stone evaluation included plain film/Kidney, Ureter, Bladder X-ray, intravenous pyelography, ultrasound, computed tomography, and magnetic resonance imaging.

#### 2008-2009

			2008			2009	
Demogra	phic Characteristics	Number of imaging procedures	patients with imaging	Percent of stone patients with imaging	Number of imaging procedures	Number of stone patients with imaging	Percent of stone patients with imaging
AGE	65 - 69	203,820	procedure 64,760	procedure 66.9	211,960	procedure 69,140	procedure 66.5
AGE	70 - 74	191,980	64,720	64.5	205,980	68,920	64.4
	75 - 79	139,820	47,640	62.1	144,580	51,100	62.9
	80 - 84	94,400	33,520	58.9	99,380	34,900	59.9
	85+	56,780	21,300	54.3	63,800	22,440	54.1
GENDER	Male	422,560	142,220	62.8	446,180	151,120	62.5
	Female	264,240	89,720	62.4	279,520	95,380	63.6
RACE	White	634,460	212,840	63.2	667,460	225,500	63.5
-	Black	30,100	10,400	57.8	34,040	11,720	55.7
	Other	22,080	8,620	56.8	24,100	9,220	58.2
	Unknown	160	80	44.4	100	60	42.9
REGION	Northeast	132,320	48,100	59.6	145,840	51,680	60.6
	Midwest	163,220	52,740	64.8	174,000	54,600	64.9
	South	302,240	100,380	64.1	309,940	106,160	63.5
	West	89,020	30,720	59.9	95,920	34,060	61.5
TOTAL		686,800	231,940	62.7	725,700	246,500	62.9

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Imaging procedures for kidney stone evaluation included plain film/Kidney, Ureter, Bladder X-ray, intravenous pyelography, ultrasound, computed tomography, and magnetic resonance imaging.

			2010			2011	
Domograp	his Characteristics	Number of imaging	Number of stone	Percent of stone	Number of imaging	Number of stone	Percent of stone
Demograp	hic Characteristics	Number of imaging	patients with imaging	patients with imaging	Number of imaging	patients with imaging	patients with imaging
		procedures	procedure	procedure	procedures	procedure	procedure
AGE	65 - 69	228,840	74,620	66.9	181,540	82,140	66.1
	70 - 74	216,920	73,160	64.2	173,620	79,520	64.3
	75 - 79	159,520	54,800	62.6	130,120	60,440	63.3
-	80 - 84	106,560	38,020	62.3	79,580	38,320	58.1
	85+	64,240	24,860	55.0	54,220	28,180	54.2
GENDER	Male	487,860	165,340	63.1	380,220	177,200	62.3
	Female	288,220	100,120	63.7	238,860	111,400	63.0
RACE	White	715,440	242,720	63.8	569,800	263,380	63.0
	Black	35,800	12,920	59.4	27,960	14,240	60.5
	Other	24,540	9,680	58.2	20,040	10,380	55.0
	Unknown	300	140	38.9	1,280	600	66.7
REGION	Northeast	150,000	54,580	60.4	117,840	57,460	59.5
	Midwest	181,420	58,580	64.8	140,380	63,400	65.4
	South	342,240	116,720	65.1	273,060	125,840	63.5
	West	102,420	35,580	60.1	87,800	41,900	60.1
TOTAL		776,080	265,460	63.3	619,080	288,600	62.6

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

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Imaging procedures for kidney stone evaluation included plain film/Kidney, Ureter, Bladder X-ray, intravenous pyelography, ultrasound, computed tomography, and magnetic resonance imaging.

## 2012-2013

			2012			2013	
Demograp	ohic Characteristics	Number of imaging procedures	Number of stone patients with imaging procedure	Percent of stone patients with imaging procedure	Number of imaging procedures	Number of stone patients with imaging procedure	Percent of stone patients with imaging procedure
AGE	65 - 69	187,720	85,340	65.6	202,760	94,200	65.5
	70 - 74	189,760	87,920	64.8	193,680	91,260	63.2
	75 - 79	133,940	62,880	61.8	140,260	67,240	62.1
	80 - 84	82,780	40,160	59.1	83,600	42,520	60.2
	85+	57,320	31,120	54.2	67,380	34,820	55.9
GENDER	Male	401,760	188,480	61.9	421,140	202,200	61.4
	Female	249,760	118,940	63.1	266,540	127,840	63.9
RACE	White	599,560	280,560	62.8	633,000	300,760	62.7
	Black	28,300	14,900	59.4	28,520	15,100	59.8
	Other	20,640	10,460	54.5	21,140	11,780	56.2
	Unknown	3,020	1,500	65.2	5,020	2,400	63.5
REGION	Northeast	130,500	62,760	60.1	147,340	70,660	61.5
	Midwest	144,360	65,620	63.5	150,620	69,860	63.5
	South	286,020	135,360	63.8	293,880	140,800	63.2
	West	90,640	43,680	59.6	95,840	48,720	59.7
TOTAL		651,520	307,420	62.4	687,680	330,040	62.4

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Imaging procedures for kidney stone evaluation included plain film/Kidney, Ureter, Bladder X-ray, intravenous pyelography, ultrasound, computed tomography, and magnetic resonance imaging.

## 2004-2005

			2004			2005	
Demog	raphic Characteristics	Number of plain film/KUB procedures	Number of stone patients with plain film/KUB	Percent of stone patients with plain film/KUB	Number of plain film/KUB procedures	Number of stone patients with plain film/KUB	Percent of stone patients with plain film/KUB
AGE	65 - 69	65,460	33,020	39.7	68,160	34,540	39.2
	70 - 74	65,720	34,840	38.8	68,520	34,780	38.2
	75 - 79	51,860	26,940	38.5	50,340	27,020	36.3
	80 - 84	30,420	16,360	35.0	29,600	16,640	32.6
	85+	14,640	8,500	27.7	16,080	9,300	28.9
GENDER	Male	145,800	75,780	38.4	148,960	77,180	37.0
	Female	82,300	43,880	35.8	83,740	45,100	35.2
RACE	White	211,580	110,600	38.2	218,220	114,020	37.2
	Black	10,960	5,640	31.4	10,020	5,380	29.8
	Other	5,400	3,320	26.6	4,320	2,820	23.1
	Unknown	160	100	38.5	140	60	23.1
REGION	Northeast	39,040	21,460	31.3	37,700	21,120	28.1
	Midwest	58,120	29,100	40.3	62,320	31,060	41.2
	South	103,760	54,580	40.5	106,460	55,340	39.4
	West	27,180	14,520	32.6	26,220	14,760	32.1
TOTAL		228,100	119,660	37.4	232,700	122,280	36.3

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

### 2006-2007

			2006		2007			
Demogr	aphic Characteristics	Number of plain film/KUB procedures	Number of stone patients with plain film/KUB	Percent of stone patients with plain film/KUB	Number of plain	Number of stone patients with plain film/KUB	Percent of stone patients with plain film/KUB	
AGE	65 - 69	63,440	33,340	38.0	61,260	32,780	35.9	
	70 - 74	63,080	33,800	36.7	61,560	33,920	36.0	
	75 - 79	50,560	26,840	35.9	44,720	24,520	32.3	
	80 - 84	29,160	16,120	32.2	29,100	16,680	31.1	
	85+	14,520	8,760	25.9	14,820	8,680	24.6	
GENDER	Male	140,160	74,160	35.7	134,500	74,000	34.2	
	Female	80,600	44,700	34.2	76,960	42,580	31.8	
RACE	White	208,160	111,360	36.1	199,640	109,160	34.3	
	Black	6,560	4,060	23.9	7,380	4,580	26.6	
	Other	5,960	3,400	25.6	4,400	2,800	19.4	
	Unknown	80	40	16.7	40	40	18.2	
REGION	Northeast	38,440	21,260	28.0	37,060	21,260	26.6	
	Midwest	57,840	29,300	38.8	54,900	28,660	36.7	
	South	98,200	54,020	38.1	94,240	52,800	36.4	
	West	26,280	14,280	31.4	25,260	13,860	29.4	
TOTAL		220,760	118,860	35.1	211,460	116,580	33.3	

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

### 2008-2009

			2008			2009	
Demog	raphic Characteristics	Number of plain film/KUB procedures	Number of stone patients with plain film/KUB	Percent of stone patients with plain film/KUB	Number of plain	Number of stone patients with plain film/KUB	Percent of stone patients with plain film/KUB
AGE	65 - 69	71,000	35,500	36.7	69,620	36,800	35.4
	70 - 74	65,440	34,800	34.7	69,220	36,960	34.6
-	75 - 79	47,560	25,360	33.1	46,880	26,600	32.7
	80 - 84	30,240	17,180	30.2	30,820	17,100	29.4
	85+	15,480	9,280	23.6	17,340	9,980	24.0
GENDER	Male	146,880	77,500	34.2	146,840	79,460	32.8
	Female	82,840	44,620	31.1	87,040	47,980	32.0
RACE	White	216,060	114,580	34.0	220,140	119,260	33.6
	Black	8,620	4,600	25.6	7,700	4,600	21.9
	Other	5,040	2,940	19.4	6,040	3,580	22.6
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0
REGION	Northeast	38,220	21,060	26.1	41,020	22,120	25.9
	Midwest	57,500	29,800	36.6	58,940	30,340	36.1
	South	106,480	56,040	35.8	104,960	58,640	35.1
	West	27,520	15,220	29.7	28,960	16,340	29.5
TOTAL		229,720	122,120	33.0	233,880	127,440	32.5

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

# 2010-2011

			2010		2011			
Demo	graphic Characteristics	Number of plain film/KUB procedures	Number of stone patients with plain film/KUB	Percent of stone patients with plain film/KUB	Number of plain film/KUB procedures	Number of stone patients with plain film/KUB	Percent of stone patients with plain film/KUB	
AGE	65 - 69	77,160	40,020	35.9	81,320	43,440	35.0	
	70 - 74	75,620	39,880	35.0	78,840	42,100	34.0	
	75 - 79	55,140	28,840	33.0	56,380	30,380	31.8	
	80 - 84	33,780	18,480	30.3	32,100	18,060	27.4	
	85+	15,120	10,060	22.3	18,700	11,580	22.3	
GENDER	Male	167,920	88,620	33.8	167,760	92,080	32.4	
	Female	88,900	48,660	30.9	99,580	53,480	30.2	
RACE	White	242,080	128,420	33.8	249,800	135,760	32.5	
	Black	8,780	5,360	24.6	10,080	5,860	24.9	
	Other	5,900	3,460	20.8	6,940	3,660	19.4	
	Unknown	60	40	11.1	520	280	31.1	
REGION	Northeast	42,540	23,360	25.8	40,700	23,160	24.0	
	Midwest	62,720	32,540	36.0	65,340	34,240	35.3	
	South	119,260	64,080	35.8	125,340	68,200	34.4	
	West	32,300	17,300	29.2	35,960	19,960	28.6	
TOTAL		256,820	137,280	32.8	267,340	145,560	31.6	

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

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# 2012-2013

			2012			2013	
Demo	graphic Characteristics	Number of plain film/KUB procedures	Number of stone patients with plain film/KUB	Percent of stone patients with plain film/KUB	Number of plain film/KUB procedures	Number of stone patients with plain film/KUB	Percent of stone patients with plain film/KUB
AGE	65 - 69	83,180	43,580	33.5	90,880	49,140	34.2
	70 - 74	86,000	46,580	34.3	84,740	46,800	32.4
	75 - 79	58,740	31,680	31.1	59,980	33,940	31.3
	80 - 84	34,260	18,840	27.7	31,540	19,060	27.0
	85+	19,700	12,420	21.6	22,800	13,640	21.9
GENDER	Male	179,360	96,620	31.7	181,820	101,840	30.9
	Female	102,520	56,480	30.0	108,120	60,740	30.4
RACE	White	265,280	142,920	32.0	271,860	151,940	31.7
	Black	9,300	5,700	22.7	9,580	5,680	22.5
	Other	6,220	3,880	20.2	6,420	3,980	19.0
	Unknown	1,080	600	26.1	2,080	980	25.9
REGION	Northeast	45,420	25,000	23.9	49,520	28,120	24.5
	Midwest	69,380	35,980	34.8	71,440	37,620	34.2
	South	130,240	71,940	33.9	132,080	74,280	33.3
	West	36,840	20,180	27.6	36,900	22,560	27.7
TOTAL		281,880	153,100	31.1	289,940	162,580	30.7

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

# 2004-2005

			2004		2005			
Demographic Characteristics		Number of intravenous pyelography procedures	natients with intravenous	Percent of stone patients with intravenous pyelography procedure	Number of intravenous pyelography procedures	nationte with intravonous		
AGE	65 - 69	8,140	6,820	8.2	7,060	5,820	6.6	
	70 - 74	8,220	7,040	7.9	5,660	5,120	5.6	
	75 - 79	5,920	5,020	7.2	5,040	4,200	5.6	
	80 - 84	2,880	2,560	5.5	2,740	2,340	4.6	
	85+	1,600	1,380	4.5	940	840	2.6	
GENDER	Male	16,500	14,040	7.1	12,660	10,760	5.2	
	Female	10,260	8,780	7.2	8,780	7,560	5.9	
RACE	White	24,680	21,120	7.3	19,500	16,720	5.5	
	Black	1,440	1,140	6.3	1,420	1,120	6.2	
	Other	620	540	4.3	520	480	3.9	
	Unknown	20	20	7.7	0	0	0.0	
REGION	Northeast	3,100	2,740	4.0	2,160	2,000	2.7	
	Midwest	7,820	6,440	8.9	5,340	4,440	5.9	
	South	13,460	11,560	8.6	11,880	10,120	7.2	
	West	2,380	2,080	4.7	2060	1760	3.8	
TOTAL		26,760	22,820	7.1	21,440	18,320	5.4	

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

## 2006-2007

			2006		2007			
Demographic Characteristics		Number of intravenous pyelography procedures	natients with intravenous	Percent of stone patients with intravenous pyelography procedure	Number of intravenous pyelography procedures	patients with intravenous	Percent of stone patients with intravenous pyelography procedure	
AGE	65 - 69	4,840	4,240	4.8	3,320	2,880	3.2	
	70 - 74	5,400	4,520	4.9	3,500	2,940	3.1	
	75 - 79	3,640	3,080	4.1	2,420	2,100	2.8	
	80 - 84	1,800	1,580	3.2	1,400	1,260	2.4	
	85+	740	660	2.0	580	520	1.5	
GENDER	Male	10,380	8,780	4.2	6,500	5,760	2.7	
	Female	6,040	5,300	4.1	4,720	3,940	2.9	
RACE	White	15,200	13,100	4.3	10,500	9,080	2.9	
	Black	600	520	3.1	360	320	1.9	
	Other	560	440	3.3	360	300	2.1	
	Unknown	60	20	8.3	0	0	0.0	
REGION	Northeast	1,600	1,420	1.9	1,260	1,040	1.3	
	Midwest	4,620	3,960	5.2	2,860	2,540	3.3	
	South	8,660	7,380	5.2	6,260	5,340	3.7	
	West	1,540	1,320	2.9	840	780	1.7	
TOTAL		16,420	14,080	4.2	11,220	9,700	2.8	

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

### 2008-2009

			2008		2009			
Demographic Characteristics		Number of intravenous pyelography procedures	patients with intravenous	Percent of stone patients with intravenous pyelography procedure	Number of infravenous	patients with intravenous	Percent of stone patients with intravenous pyelography procedure	
AGE	65 - 69	3,200	2,700	2.8	2,740	2,280	2.2	
	70 - 74	3,200	2,480	2.5	1,980	1,740	1.6	
	75 - 79	1,540	1,360	1.8	1,680	1,580	1.9	
	80 - 84	1,040	980	1.7	1,220	1,060	1.8	
	85+	440	420	1.1	400	320	0.8	
GENDER	Male	5,440	4,560	2.0	5,000	4,300	1.8	
	Female	3,980	3,380	2.4	3,020	2,680	1.8	
RACE	White	8,620	7,280	2.2	7,560	6,580	1.9	
	Black	380	340	1.9	300	280	1.3	
	Other	420	320	2.1	160	120	0.8	
	Unknown	0	0	0.0	0	0	0.0	
REGION	Northeast	920	900	1.1	740	580	0.7	
	Midwest	2,040	1,660	2.0	2,000	1,720	2.1	
	South	5,300	4,360	2.8	4,380	3,840	2.3	
	West	1,160	1,020	2.0	900	840	1.5	
TOTAL		9,420	7,940	2.2	8,020	6,980	1.8	

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

# 2010-2011

			2010		2011			
Demographic Characteristics		Number of intravenous pyelography procedures	natients with intravenous		Number of infravenous	nationts with intravenous		
AGE	65 - 69	2,740	2,420	2.2	1,900	1,620	1.3	
	70 - 74	2,180	1,900	1.7	2,320	1,920	1.6	
	75 - 79	1,400	1,280	1.5	1,420	1,240	1.3	
	80 - 84	580	520	0.9	640	620	0.9	
	85+	320	320	0.7	340	320	0.6	
GENDER	Male	4,400	3,880	1.5	4,260	3,660	1.3	
	Female	2,820	2,560	1.6	2,360	2,060	1.2	
RACE	White	6,840	6,100	1.6	6,200	5,360	1.3	
	Black	260	220	1.0	260	240	1.0	
	Other	100	100	0.6	160	120	0.6	
	Unknown	20	20	5.6	0	0	0.0	
REGION	Northeast	500	460	0.5	660	580	0.6	
	Midwest	1,720	1,580	1.8	1,620	1,340	1.4	
	South	4,160	3,660	2.0	3,680	3,180	1.6	
	West	840	740	1.3	660	620	0.9	
TOTAL		7,220	6,440	1.5	6,620	5,720	1.2	

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

## 2012-2013

			2012		2013			
Demographic Characteristics		Number of intravenous pyelography procedures	patients with intravenous	Percent of stone patients with intravenous pyelography procedure	Number of intravenous pyelography procedures	natients with intravenous		
AGE	65 - 69	1,600	1,440	1.1	1,640	1,340	0.9	
	70 - 74	1,660	1,420	1.1	1,400	1,300	0.9	
	75 - 79	1,040	840	0.8	820	760	0.7	
	80 - 84	560	520	0.8	420	260	0.4	
	85+	360	300	0.5	220	200	0.3	
GENDER	Male	2,980	2,560	0.8	2,560	2,180	0.7	
	Female	2,240	1,960	1.0	1,940	1,680	0.8	
RACE	White	4,880	4,180	0.9	4,220	3,600	0.8	
	Black	200	200	0.8	160	140	0.6	
	Other	100	100	0.5	60	60	0.3	
	Unknown	40	40	1.7	60	60	1.6	
REGION	Northeast	600	540	0.5	320	220	0.2	
	Midwest	1,200	1,060	1.0	1,360	1,180	1.1	
	South	2,880	2,420	1.1	2,340	2,020	0.9	
	West	540	500	0.7	480	440	0.5	
TOTAL		5,220	4,520	0.9	4,500	3,860	0.7	

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

			2004		2005			
Demographic Characteristics		Number of ultrasounds	Number of stone patients with ultrasound	Percent of stone patients with ultrasound	Number of ultrasounds	Number of stone patients with ultrasound	Percent of stone patients with ultrasound	
AGE	65 - 69	13,280	10,160	12.2	16,500	12,280	14.0	
	70 - 74	15,580	11,960	13.3	16,200	12,600	13.8	
	75 - 79	14,220	11,200	16.0	14,080	10,580	14.2	
	80 - 84	9,780	7,500	16.1	10,700	8,060	15.8	
	85+	6,000	4,660	15.2	7,000	5,360	16.7	
GENDER	Male	36,220	27,620	14.0	39,380	29,480	14.1	
	Female	22,640	17,860	14.6	25,100	19,400	15.1	
RACE	White	50,580	39,560	13.7	57,220	43,520	14.2	
	Black	4,420	3,280	18.2	3,720	2,740	15.2	
	Other	3,820	2,620	21.0	3,520	2,600	21.3	
	Unknown	40	20	7.7	20	20	7.7	
REGION	Northeast	18,800	14,240	20.8	23,960	17,160	22.8	
	Midwest	9,080	7,220	10.0	9,340	7,580	10.1	
	South	22,880	18,220	13.5	22,300	17,580	12.5	
	West	8,100	5,800	13.0	8,880	6,560	14.3	
TOTAL		58,860	45,480	14.2	64,480	48,880	14.5	

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution.

			2006		2007			
Demographic Characteristics		Number of ultrasounds	Number of stone patients with ultrasound	Percent of stone patients with ultrasound	Number of ultrasounds	Number of stone patients with ultrasound	Percent of stone patients with ultrasound	
AGE	65 - 69	16,020	12,040	13.7	16,080	11,920	13.1	
	70 - 74	17,580	13,280	14.4	16,980	12,960	13.8	
	75 - 79	15,200	11,800	15.8	14,380	11,280	14.9	
	80 - 84	10,560	7,880	15.7	11,240	8,100	15.1	
	85+	6,360	4,720	13.9	6,000	4,780	13.6	
GENDER	Male	39,200	29,340	14.1	38,860	29,500	13.6	
	Female	26,520	20,380	15.6	25,820	19,540	14.6	
RACE	White	58,420	43,720	14.2	56,820	42,840	13.5	
	Black	3,440	2,960	17.5	3,420	2,780	16.2	
	Other	3,860	3,040	22.9	4,400	3,380	23.4	
-	Unknown	0	0	0.0	40	40	18.2	
REGION	Northeast	23,600	16,920	22.3	25,260	17,640	22.1	
	Midwest	9,260	7,720	10.2	9,260	7,520	9.6	
	South	23,940	18,540	13.1	22,680	17,960	12.4	
	West	8,920	6,540	14.4	7,480	5,920	12.6	
TOTAL		65,720	49,720	14.7	64,680	49,040	14.0	

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution.

			2008			2009	
Demographic Characteristics		Number of ultrasounds	Number of stone patients with ultrasound	Percent of stone patients with ultrasound	Number of ultrasounds	Number of stone patients with ultrasound	Percent of stone patients with ultrasound
AGE	65 - 69	17,480	12,960	13.4	18,220	13,600	13.1
	70 - 74	21,780	16,540	16.5	22,940	16,580	15.5
	75 - 79	16,000	11,880	15.5	17,960	13,440	16.5
	80 - 84	11,740	9,000	15.8	12,900	9,640	16.6
	85+	7,640	6,300	16.1	7,840	6,240	15.0
GENDER	Male	45,520	34,320	15.2	47,520	35,360	14.6
	Female	29,120	22,360	15.6	32,340	24,140	16.1
RACE	White	66,740	50,500	15.0	70,400	52,700	14.9
	Black	3,120	2,480	13.8	4,460	3,240	15.4
	Other	4,700	3,660	24.1	4,980	3,540	22.4
	Unknown	80	40	22.2	20	20	14.3
REGION	Northeast	26,900	19,040	23.6	29,800	21,260	24.9
	Midwest	10,600	8,660	10.6	10,560	8,560	10.2
	South	27,600	21,720	13.9	27,400	21,060	12.6
	West	9,540	7,260	14.2	12,100	8,620	15.6
TOTAL		74,640	56,680	15.3	79,860	59,500	15.2

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution.

			2010		2011			
Demographic Characteristics		Number of ultrasounds	Number of stone patients with ultrasound	Percent of stone patients with ultrasound	Number of ultrasounds	Number of stone patients with ultrasound		
AGE	65 - 69	22,920	16,940	15.2	26,120	19,960	16.1	
	70 - 74	24,160	18,560	16.3	28,120	20,640	16.7	
	75 - 79	19,240	14,600	16.7	23,600	17,280	18.1	
	80 - 84	13,960	10,740	17.6	15,820	12,060	18.3	
	85+	9,320	7,120	15.8	10,720	7,880	15.1	
GENDER	Male	54,380	40,740	15.6	63,900	47,620	16.7	
	Female	35,220	27,220	17.3	40,480	30,200	17.1	
RACE	White	79,560	60,380	15.9	92,820	69,160	16.5	
	Black	4,840	3,660	16.8	5,560	4,360	18.5	
	Other	5,100	3,840	23.1	5,720	4,100	21.7	
	Unknown	100	80	22.2	280	200	22.2	
REGION	Northeast	32,740	23,640	26.1	36,760	25,880	26.8	
	Midwest	13,660	10,920	12.1	15,440	12,100	12.5	
	South	31,580	24,920	13.9	36,480	28,020	14.2	
	West	11,620	8,480	14.3	15,700	11,820	17.0	
TOTAL		89,600	67,960	16.2	104,380	77,820	16.9	

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution.

			2012		2013			
Demographic Characteristics		Number of ultrasounds	Number of stone patients with ultrasound	Percent of stone patients with ultrasound	Number of ultrasounds	Number of stone patients with ultrasound	Percent of stone patients with ultrasound	
AGE	65 - 69	29,900	22,120	17.0	33,900	25,460	17.7	
	70 - 74	31,920	24,100	17.8	34,440	25,500	17.7	
	75 - 79	24,740	18,360	18.0	26,620	19,060	17.6	
	80 - 84	16,440	12,360	18.2	18,240	13,680	19.4	
	85+	11,680	9,160	16.0	14,360	10,960	17.6	
GENDER	Male	69,740	51,760	17.0	77,560	56,880	17.3	
	Female	44,940	34,340	18.2	50,000	37,780	18.9	
RACE	White	102,120	76,960	17.2	114,480	84,660	17.7	
	Black	5,780	4,400	17.5	5,560	4,220	16.7	
	Other	6,100	4,280	22.3	6,400	4,900	23.4	
	Unknown	680	460	20.0	1,120	880	23.3	
REGION	Northeast	40,740	29,320	28.1	48,520	34,020	29.6	
	Midwest	16,320	12,760	12.4	17,940	14,040	12.8	
	South	41,120	31,740	15.0	44,080	33,800	15.2	
	West	16,500	12,280	16.8	17,020	12,800	15.7	
TOTAL		114,680	86,100	17.5	127,560	94,660	17.9	

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution.

#### 2004-2005

			2004			2005	
Demographic Characteristics		Number of CTs	Number of stone patients with CT	Percent of stone patients with CT	Number of CTs	Number of stone patients with CT	Percent of stone patients with CT
AGE	65 - 69	71,820	29,880	36.0	84,620	34,160	38.8
	70 - 74	71,420	29,320	32.7	81,520	32,920	36.1
	75 - 79	54,640	22,800	32.6	63,940	25,600	34.4
	80 - 84	31,120	13,280	28.4	39,400	16,140	31.6
	85+	20,120	8,660	28.3	23,180	9,940	30.9
GENDER	Male	154,300	64,420	32.6	179,640	72,800	34.9
	Female	94,820	39,520	32.2	113,020	45,960	35.8
RACE	White	227,860	95,020	32.8	268,620	108,580	35.4
	Black	14,060	5,820	32.4	15,920	6,560	36.3
	Other	7,120	3,060	24.5	8,000	3,560	29.1
	Unknown	80	40	15.4	120	60	23.1
REGION	Northeast	51,060	20,520	29.9	55,220	22,220	29.5
	Midwest	67,780	27,580	38.2	80,040	31,140	41.3
	South	96,060	41,120	30.5	117,180	48,740	34.7
	West	34,220	14,720	33.0	40,220	16,660	36.2
TOTAL		249,120	103,940	32.5	292,660	118,760	35.2

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

A code change in CT starting for year 2011: Before 2011, abdomen CT and pelvis CT each had their own distinct HCPCS code. In 2011, one

consolidated code for the two procedures was introduced and used from that year forward.

## 2006-2007

			2006			2007	
Demographic Characteristics		Number of CTs	Number of stone patients with CT	Percent of stone patients with CT	Number of CTs	Number of stone patients with CT	Percent of stone patients with CT
AGE	65 - 69	89,520	35,140	40.0	101,500	38,460	42.1
	70 - 74	88,780	35,480	38.5	91,660	36,200	38.5
	75 - 79	68,500	27,300	36.5	71,080	28,180	37.2
n	80 - 84	44,260	17,340	34.6	50,980	19,600	36.5
	85+	28,120	11,300	33.4	29,680	12,500	35.5
GENDER	Male	193,220	76,360	36.7	211,240	82,420	38.1
	Female	125,960	50,200	38.4	133,660	52,520	39.2
RACE	White	294,980	116,720	37.9	319,160	124,340	39.1
	Black	13,600	5,600	33.0	15,360	6,500	37.8
n	Other	10,360	4,160	31.4	10,140	4,000	27.7
	Unknown	240	80	33.3	240	100	45.5
REGION	Northeast	63,040	24,580	32.4	66,140	25,680	32.1
	Midwest	83,620	32,480	43.0	90,260	34,960	44.8
	South	130,780	52,960	37.4	141,000	55,980	38.6
	West	41,740	16,540	36.4	47,500	18,320	38.9
TOTAL		319,180	126,560	37.4	344,900	134,940	38.5

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

A code change in CT starting for year 2011: Before 2011, abdomen CT and pelvis CT each had their own distinct HCPCS code. In 2011, one

consolidated code for the two procedures was introduced and used from that year forward.

### 2008-2009

			2008			2009	
Demographic Characteristics		Number of CTs	Number of stone patients with CT	Percent of stone patients with CT	Number of CTs	Number of stone patients with CT	Percent of stone patients with CT
AGE	65 - 69	111,960	42,440	43.8	121,180	46,140	44.4
	70 - 74	101,420	38,880	38.7	111,820	42,280	39.5
	75 - 79	74,540	28,540	37.2	77,920	31,040	38.2
•	80 - 84	51,280	20,200	35.5	54,360	20,980	36.0
	85+	33,200	13,500	34.4	38,200	15,040	36.2
GENDER	Male	224,420	86,260	38.1	246,540	94,740	39.2
	Female	147,980	57,300	39.9	156,940	60,740	40.5
RACE	White	342,520	131,960	39.2	368,960	142,360	40.1
	Black	17,960	6,920	38.5	21,560	8,100	38.5
	Other	11,840	4,640	30.6	12,880	4,980	31.4
	Unknown	80	40	22.2	80	40	28.6
REGION	Northeast	66,180	25,740	31.9	74,080	28,900	33.9
	Midwest	92,880	35,600	43.7	102,460	37,620	44.7
	South	162,640	62,760	40.1	173,040	67,820	40.5
	West	50,700	19,460	38.0	53,900	21,140	38.2
TOTAL		372,400	143,560	38.8	403,480	155,480	39.7

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

A code change in CT starting for year 2011: Before 2011, abdomen CT and pelvis CT each had their own distinct HCPCS code. In 2011, one

consolidated code for the two procedures was introduced and used from that year forward.

# 2010-2011

			2010			2011	
Demographic Characteristics		Number of CTs	Number of stone patients with CT	Percent of stone patients with CT	Number of CTs	Number of stone patients with CT	Percent of stone patients with CT
AGE	65 - 69	125,680	48,300	43.3	71,880	52,120	42.0
•	70 - 74	114,720	44,000	38.6	64,120	47,360	38.3
	75 - 79	83,600	32,660	37.3	48,580	35,980	37.7
•	80 - 84	58,160	22,840	37.4	30,860	22,580	34.2
	85+	39,420	16,060	35.6	24,420	18,600	35.7
GENDER	Male	260,660	100,880	38.5	143,800	106,400	37.4
	Female	160,920	62,980	40.1	96,060	70,240	39.7
RACE	White	386,160	150,020	39.4	220,120	161,600	38.7
	Black	21,900	8,440	38.8	12,040	8,960	38.1
6	Other	13,400	5,340	32.1	7,220	5,700	30.2
	Unknown	120	60	16.7	480	380	42.2
REGION	Northeast	73,960	29,220	32.3	39,560	30,200	31.2
	Midwest	103,120	38,760	42.9	57,840	41,820	43.2
	South	186,880	73,320	40.9	107,060	78,680	39.7
	West	57,620	22,560	38.1	35,400	25,940	37.2
TOTAL		421,580	163,860	39.1	239,860	176,640	38.3

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

A code change in CT starting for year 2011: Before 2011, abdomen CT and pelvis CT each had their own distinct HCPCS code. In 2011, one

consolidated code for the two procedures was introduced and used from that year forward.

# 2012-2013

			2012			2013	
Demographic Characteristics		Number of CTs	Number of stone patients with CT	Percent of stone patients with CT	Number of CTs	Number of stone patients with CT	Percent of stone patients with CT
AGE	65 - 69	72,780	54,320	41.7	76,220	58,420	40.7
•	70 - 74	69,900	52,900	39.0	72,780	55,440	38.4
	75 - 79	49,260	37,460	36.8	52,740	40,300	37.2
	80 - 84	31,400	24,240	35.7	33,280	25,540	36.1
	85+	25,500	20,080	35.0	29,940	22,900	36.8
GENDER	Male	149,200	114,080	37.5	158,780	122,240	37.1
	Female	99,640	74,920	39.8	106,180	80,360	40.2
RACE	White	226,580	172,200	38.6	241,860	184,620	38.5
	Black	12,960	9,780	39.0	13,120	10,280	40.7
	Other	8,100	6,080	31.7	8,220	6,380	30.4
	Unknown	1,200	940	40.9	1,760	1,320	34.9
REGION	Northeast	43,560	33,660	32.2	48,840	37,700	32.8
	Midwest	57,260	42,800	41.4	59,740	45,100	41.0
	South	111,420	85,100	40.1	115,040	88,460	39.7
	West	36,600	27,440	37.5	41,340	31,340	38.4
TOTAL		248,840	189,000	38.3	264,960	202,600	38.3

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

A code change in CT starting for year 2011: Before 2011, abdomen CT and pelvis CT each had their own distinct HCPCS code. In 2011, one

consolidated code for the two procedures was introduced and used from that year forward.

## 2004-2005

			2004		2005			
Demographic Characteristics		Number of CT without contrast procedures	Number of stone patients with CT without contrast procedures	Percent of stone patients with CT without contrast procedures	Number of CT without contrast procedures	nationts with CT without	patients with CT without	
AGE	65 - 69	58,000	25,020	30.1	67,460	28,500	32.4	
	70 - 74	57,800	24,780	27.6	64,220	27,120	29.8	
	75 - 79	42,560	18,660	26.7	49,660	21,100	28.3	
	80 - 84	24,480	10,620	22.7	28,540	12,560	24.6	
	85+	15,840	7,020	22.9	17,100	7,440	23.1	
GENDER	Male	123,680	53,460	27.1	140,440	59,660	28.6	
	Female	75,000	32,640	26.6	86,540	37,060	28.9	
RACE	White	182,500	78,840	27.2	209,020	88,720	29.0	
	Black	10,840	4,740	26.4	11,540	5,060	28.0	
	Other	5,300	2,500	20.0	6,340	2,900	23.7	
	Unknown	40	20	7.7	80	40	15.4	
REGION	Northeast	42,020	17,220	25.1	43,900	18,180	24.2	
	Midwest	51,760	21,920	30.4	62,140	25,580	33.9	
	South	77,440	34,460	25.6	89,140	39,000	27.8	
	West	27,460	12,500	28.0	31,800	13,960	30.4	
TOTAL		198,680	86,100	26.9	226,980	96,720	28.7	

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

A code change in CT starting for year 2011: Before 2011, abdomen CT and pelvis CT each had their own distinct HCPCS code. In 2011, one consolidated

code for the two procedures was introduced and used from that year forward.

## 2006-2007

			2006		2007			
Demographic Characteristics		Number of CT without contrast procedures	Number of stone patients with CT without contrast procedures	Percent of stone patients with CT without contrast procedures	Number of CT without contrast procedures	Inatients with (1) without	patients with CT without	
AGE	65 - 69	69,940	28,680	32.7	81,120	31,440	34.5	
	70 - 74	69,000	28,260	30.6	71,900	29,480	31.3	
	75 - 79	51,340	21,100	28.2	54,360	22,300	29.4	
	80 - 84	34,640	13,880	27.7	39,720	15,560	29.0	
	85+	21,560	8,920	26.3	22,520	9,860	28.0	
GENDER	Male	150,240	61,180	29.4	165,680	66,680	30.8	
	Female	96,240	39,660	30.3	103,940	41,960	31.4	
RACE	White	228,380	93,080	30.2	249,700	100,220	31.5	
	Black	10,120	4,340	25.6	11,500	4,900	28.5	
	Other	7,740	3,340	25.2	8,220	3,440	23.9	
	Unknown	240	80	33.3	200	80	36.4	
REGION	Northeast	50,180	20,020	26.4	51,780	20,780	26.0	
	Midwest	63,800	25,440	33.7	69,220	27,680	35.4	
	South	101,060	42,160	29.7	111,640	45,400	31.3	
	West	31,440	13,220	29.1	36,980	14,780	31.4	
TOTAL		246,480	100,840	29.8	269,620	108,640	31.0	

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

A code change in CT starting for year 2011: Before 2011, abdomen CT and pelvis CT each had their own distinct HCPCS code. In 2011, one consolidated

code for the two procedures was introduced and used from that year forward.

## 2008-2009

			2008		2009			
Demographic Characteristics		Number of CT without contrast procedures	nationts with (1) without	Percent of stone patients with CT without contrast procedures	Number of CT without contrast procedures	Inatients with (1) without	patients with CT without	
AGE	65 - 69	87,640	34,800	36.0	95,020	37,400	36.0	
	70 - 74	78,200	31,020	30.9	85,820	33,760	31.6	
	75 - 79	57,000	22,780	29.7	59,720	24,480	30.1	
	80 - 84	39,860	16,140	28.3	41,340	16,640	28.6	
	85+	25,480	10,880	27.7	29,920	12,260	29.5	
GENDER	Male	175,440	69,880	30.9	190,720	76,040	31.4	
	Female	112,740	45,740	31.8	121,100	48,500	32.3	
RACE	White	265,160	106,260	31.6	285,880	114,200	32.2	
	Black	13,900	5,600	31.2	16,440	6,540	31.1	
	Other	9,080	3,740	24.6	9,420	3,760	23.7	
	Unknown	40	20	11.1	80	40	28.6	
REGION	Northeast	51,120	20,780	25.8	57,700	23,300	27.3	
	Midwest	69,960	27,700	34.0	78,340	30,160	35.9	
	South	128,240	51,560	32.9	135,240	54,380	32.5	
	West	38,860	15,580	30.4	40,540	16,700	30.2	
TOTAL		288,180	115,620	31.2	311,820	124,540	31.8	

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

A code change in CT starting for year 2011: Before 2011, abdomen CT and pelvis CT each had their own distinct HCPCS code. In 2011, one consolidated

code for the two procedures was introduced and used from that year forward.

# 2010-2011

			2010		2011			
Demographic Characteristics		Number of CT without contrast procedures	Number of stone patients with CT without contrast procedures	Percent of stone patients with CT without contrast procedures	Number of CT without contrast procedures	Inatients with (1) without	patients with CT without	
AGE	65 - 69	98,660	39,160	35.1	55,620	41,840	33.7	
	70 - 74	87,940	34,780	30.5	47,400	36,780	29.7	
	75 - 79	63,340	25,480	29.1	36,420	27,680	29.0	
	80 - 84	43,800	17,740	29.1	23,320	17,820	27.0	
	85+	30,540	12,740	28.2	19,520	15,240	29.3	
GENDER	Male	202,060	80,180	30.6	109,660	84,000	29.5	
	Female	122,220	49,720	31.6	72,620	55,360	31.3	
RACE	White	297,140	118,840	31.2	167,800	127,960	30.6	
	Black	16,860	6,800	31.3	8,780	6,800	28.9	
	Other	10,200	4,220	25.4	5,300	4,280	22.7	
	Unknown	80	40	11.1	400	320	35.6	
REGION	Northeast	57,140	23,020	25.5	30,080	23,460	24.3	
	Midwest	78,580	30,680	33.9	43,400	32,840	33.9	
	South	144,680	58,300	32.5	81,860	62,680	31.6	
	West	43,880	17,900	30.3	26,940	20,380	29.2	
TOTAL		324,280	129,900	31.0	182,280	139,360	30.2	

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

A code change in CT starting for year 2011: Before 2011, abdomen CT and pelvis CT each had their own distinct HCPCS code. In 2011, one consolidated

code for the two procedures was introduced and used from that year forward.

# 2012-2013

			2012		2013			
Demographic Characteristics		Number of CT without contrast procedures	Number of stone patients with CT without contrast procedures	patients with CT without	Number of CT without contrast procedures	nationts with (1) without	patients with CT without	
AGE	65 - 69	55,540	43,300	33.3	58,480	46,620	32.4	
	70 - 74	51,680	40,600	29.9	53,760	42,140	29.2	
	75 - 79	36,940	29,020	28.5	39,160	31,020	28.6	
	80 - 84	23,840	18,900	27.8	25,120	19,920	28.2	
	85+	19,540	15,900	27.7	23,000	17,920	28.8	
GENDER	Male	112,040	88,840	29.2	119,000	94,680	28.8	
	Female	75,500	58,880	31.2	80,520	62,940	31.4	
RACE	White	171,480	135,080	30.3	182,300	143,760	30.0	
	Black	9,620	7,540	30.1	10,080	8,120	32.2	
	Other	5,680	4,500	23.4	5,780	4,660	22.2	
	Unknown	760	600	26.1	1,360	1,080	28.6	
REGION	Northeast	32,820	26,340	25.2	37,300	29,280	25.5	
	Midwest	43,180	33,340	32.3	44,660	34,780	31.6	
	South	84,900	67,280	31.7	87,640	69,760	31.3	
	West	26,640	20,760	28.4	29,920	23,800	29.2	
TOTAL		187,540	147,720	30.0	199,520	157,620	29.8	

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

A code change in CT starting for year 2011: Before 2011, abdomen CT and pelvis CT each had their own distinct HCPCS code. In 2011, one consolidated

code for the two procedures was introduced and used from that year forward.

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Table M.4.15: Use of computed tomography (with contrast) in Medicare kidney stone patients for evaluation of kidney stones (by age, gender, race, & region)

#### 2004-2005

			2004		2005			
Demographic Characteristics		Number of CT with contrast procedures	Number of stone patients with CT with contrast procedure	Percent of stone patients with CT with contrast procedure	Number of CT with contrast procedures	Number of stone patients with CT with contrast procedure	Percent of stone patients with CT with contrast procedure	
AGE	65 - 69	7,340	4,300	5.2	9,040	5,300	6.0	
	70 - 74	6,920	4,160	4.6	8,760	5,300	5.8	
	75 - 79	6,380	3,680	5.3	7,480	4,120	5.5	
	80 - 84	4,020	2,400	5.1	6,420	3,400	6.7	
	85+	2,700	1,540	5.0	3,740	2,040	6.3	
GENDER	Male	15,920	9,640	4.9	20,360	11,660	5.6	
	Female	11,440	6,440	5.3	15,080	8,500	6.6	
RACE	White	24,340	14,420	5.0	32,320	18,420	6.0	
	Black	1,960	1,060	5.9	2,580	1,360	7.5	
	Other	1,020	580	4.7	520	360	3.0	
	Unknown	40	20	7.7	20	20	7.7	
REGION	Northeast	5,180	3,040	4.4	5,900	3,340	4.4	
	Midwest	8,020	4,760	6.6	10,700	5,760	7.6	
	South	10,040	5,940	4.4	14,200	8,420	6.0	
	West	4,120	2,340	5.3	4,640	2,640	5.7	
TOTAL		27,360	16,080	5.0	35,440	20,160	6.0	

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

A code change in CT starting for year 2011: Before 2011, abdomen CT and pelvis CT each had their own distinct HCPCS code. In 2011, one consolidated code for the two procedures was introduced and used from that year forward.

### 2006-2007

			2006		2007			
Demographic Characteristics		Number of CT with contrast procedures	Number of stone patients with CT with contrast procedure	Percent of stone patients with CT with contrast procedure	Number of CT with contrast procedures	Number of stone patients with CT with contrast procedure	Percent of stone patients with CT with contrast procedure	
AGE	65 - 69	9,720	5,440	6.2	9,740	5,520	6.1	
	70 - 74	9,020	5,160	5.6	9,280	5,200	5.5	
	75 - 79	8,080	4,660	6.2	8,580	4,560	6.0	
	80 - 84	4,840	2,900	5.8	5,660	3,000	5.6	
	85+	4,060	2,260	6.7	4,620	2,420	6.9	
GENDER	Male	19,860	11,540	5.6	21,860	12,040	5.6	
	Female	15,860	8,880	6.8	16,020	8,660	6.5	
RACE	White	32,380	18,580	6.0	34,560	18,980	6.0	
	Black	2,140	1,100	6.5	2,300	1,200	7.0	
	Other	1,200	740	5.6	980	500	3.5	
•	Unknown	0	0	0.0	40	20	9.1	
REGION	Northeast	6,680	3,860	5.1	7,740	4,260	5.3	
	Midwest	10,020	5,700	7.5	10,820	5,620	7.2	
	South	13,940	8,200	5.8	14,400	8,020	5.5	
	West	5,080	2,660	5.9	4,920	2,800	5.9	
TOTAL		35,720	20,420	6.0	37,880	20,700	5.9	

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

A code change in CT starting for year 2011: Before 2011, abdomen CT and pelvis CT each had their own distinct HCPCS code. In 2011, one consolidated code for the two procedures was introduced and used from that year forward.

#### 2008-2009

			2008			2009	
Demographic Characteristics		Number of CT with contrast procedures	Number of stone patients with CT with contrast procedure	Percent of stone patients with CT with contrast procedure	Number of CT with contrast procedures	Number of stone patients with CT with contrast procedure	Percent of stone patients with CT with contrast procedure
AGE	65 - 69	11,320	6,080	6.3	13,200	7,260	7.0
	70 - 74	10,960	5,800	5.8	12,220	6,400	6.0
	75 - 79	8,020	4,440	5.8	9,140	4,660	5.7
	80 - 84	6,280	3,380	5.9	6,940	3,540	6.1
	85+	4,580	2,280	5.8	4,760	2,600	6.3
GENDER	Male	22,340	12,060	5.3	27,580	14,740	6.1
	Female	18,820	9,920	6.9	18,680	9,720	6.5
RACE	White	37,780	20,200	6.0	41,460	22,040	6.2
	Black	2,360	1,220	6.8	3,080	1,520	7.2
	Other	980	540	3.6	1,720	900	5.7
	Unknown	40	20	11.1	0	0	0.0
REGION	Northeast	7,280	3,940	4.9	8,780	4,580	5.4
	Midwest	12,080	6,260	7.7	12,740	6,540	7.8
	South	15,800	8,640	5.5	18,560	9,960	6.0
	West	6,000	3,140	6.1	6,180	3,380	6.1
TOTAL		41,160	21,980	5.9	46,260	24,460	6.2

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

A code change in CT starting for year 2011: Before 2011, abdomen CT and pelvis CT each had their own distinct HCPCS code. In 2011, one consolidated code for the two procedures was introduced and used from that year forward.

## 2010-2011

			2010			2011	
Demographic Characteristics		Number of CT with contrast procedures	Number of stone patients with CT with contrast procedure	Percent of stone patients with CT with contrast procedure	Number of CT with contrast procedures	Number of stone patients with CT with contrast procedure	Percent of stone patients with CT with contrast procedure
AGE	65 - 69	12,400	6,380	5.7	7,980	7,060	5.7
	70 - 74	13,220	6,860	6.0	8,140	7,100	5.7
	75 - 79	10,840	5,520	6.3	6,000	5,460	5.7
	80 - 84	7,540	3,860	6.3	4,040	3,460	5.2
	85+	5,740	2,900	6.4	3,280	3,020	5.8
GENDER	Male	29,120	14,940	5.7	16,300	14,580	5.1
	Female	20,620	10,580	6.7	13,140	11,520	6.5
RACE	White	45,220	23,320	6.1	26,540	23,620	5.7
	Black	2,780	1,340	6.2	2,180	1,860	7.9
	Other	1,740	860	5.2	700	600	3.2
	Unknown	0	0	0.0	20	20	2.2
REGION	Northeast	9,840	4,960	5.5	4,540	4,140	4.3
	Midwest	13,360	6,560	7.3	7,700	6,700	6.9
	South	20,380	10,720	6.0	12,940	11,500	5.8
	West	6,160	3,280	5.5	4,260	3,760	5.4
TOTAL		49,740	25,520	6.1	29,440	26,100	5.7

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

A code change in CT starting for year 2011: Before 2011, abdomen CT and pelvis CT each had their own distinct HCPCS code. In 2011, one consolidated code for the two procedures was introduced and used from that year forward.

# 2012-2013

			2012		2013			
Demographic Characteristics		Number of CT with contrast procedures	Number of stone patients with CT with contrast procedure	Percent of stone patients with CT with contrast procedure	Number of CT with contrast procedures	Number of stone patients with CT with contrast procedure	Percent of stone patients with CT with contrast procedure	
AGE	65 - 69	8,440	7,740	6.0	8,840	7,880	5.5	
	70 - 74	9,400	8,460	6.2	9,080	8,240	5.7	
	75 - 79	6,300	5,620	5.5	6,920	6,160	5.7	
	80 - 84	4,320	3,980	5.9	4,760	4,240	6.0	
	85+	4,100	3,800	6.6	4,820	4,340	7.0	
GENDER	Male	18,920	17,360	5.7	19,620	17,600	5.4	
	Female	13,640	12,240	6.5	14,800	13,260	6.6	
RACE	White	29,180	26,580	6.0	31,140	27,900	5.8	
	Black	1,920	1,720	6.9	1,880	1,780	7.1	
	Other	1,240	1,100	5.7	1,300	1,100	5.3	
	Unknown	220	200	8.7	100	80	2.1	
REGION	Northeast	5,980	5,460	5.2	5,940	5,540	4.8	
	Midwest	8,060	7,400	7.2	8,180	7,540	6.9	
	South	13,020	11,820	5.6	14,020	12,260	5.5	
	West	5,500	4,920	6.7	6,280	5,520	6.8	
TOTAL		32,560	29,600	6.0	34,420	30,860	5.8	

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

A code change in CT starting for year 2011: Before 2011, abdomen CT and pelvis CT each had their own distinct HCPCS code. In 2011, one consolidated code for the two procedures was introduced and used from that year forward.

## 2004-2005

			2004			2005	
Demographic Characteristics		Number of CT without then with contrast procedures	Number of stone patients with CT without then with contrast procedure	Percent of stone patients with CT without then with contrast procedure	Number of CT without then with contrast procedures	Number of stone patients with CT without then with contrast procedure	Percent of stone patients with CT without then with contrast procedure
AGE	65 - 69	6,480	4,180	5.0	8,120	4,920	5.6
	70 - 74	6,700	4,160	4.6	8,540	5,380	5.9
	75 - 79	5,700	3,680	5.3	6,800	4,040	5.4
	80 - 84	2,620	1,740	3.7	4,440	2,600	5.1
	85+	1,580	1,040	3.4	2,340	1,400	4.4
GENDER	Male	14,700	9,440	4.8	18,840	11,380	5.5
	Female	8,380	5,360	4.4	11,400	6,960	5.4
RACE	White	21,020	13,440	4.6	27,280	16,620	5.4
	Black	1,260	820	4.6	1,800	1,040	5.8
	Other	800	540	4.3	1,140	660	5.4
	Unknown	0	0	0.0	20	20	7.7
REGION	Northeast	3,860	2,480	3.6	5,420	3,220	4.3
	Midwest	8,000	4,940	6.9	7,200	4,320	5.7
	South	8,580	5,580	4.1	13,840	8,400	6.0
	West	2,640	1,800	4.0	3,780	2,400	5.2
TOTAL		23,080	14,800	4.6	30,240	18,340	5.4

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

A code change in CT starting for year 2011: Before 2011, abdomen CT and pelvis CT each had their own distinct HCPCS code. In 2011, one consolidated

code for the two procedures was introduced and used from that year forward.

#### 2006-2007

			2006			2007	
Demographic Characteristics		Number of CT without then with contrast procedures	Number of stone patients with CT without then with contrast procedure	Percent of stone patients with CT without then with contrast procedure	Number of CT without then with contrast procedures	Number of stone patients with CT without then with contrast procedure	Percent of stone patients with CT without then with contrast procedure
AGE	65 - 69	9,860	5,740	6.5	10,640	6,160	6.8
-	70 - 74	10,760	6,060	6.6	10,480	6,040	6.4
-	75 - 79	9,080	5,100	6.8	8,140	4,580	6.0
	80 - 84	4,780	2,700	5.4	5,600	3,140	5.9
	85+	2,500	1,520	4.5	2,540	1,520	4.3
GENDER	Male	23,120	13,120	6.3	23,700	13,440	6.2
	Female	13,860	8,000	6.1	13,700	8,000	6.0
RACE	White	34,220	19,640	6.4	34,900	20,000	6.3
	Black	1,340	760	4.5	1,560	880	5.1
	Other	1,420	720	5.4	940	560	3.9
	Unknown	0	0	0.0	0	0	0.0
REGION	Northeast	6,180	3,540	4.7	6,620	3,800	4.8
	Midwest	9,800	5,620	7.4	10,220	5,700	7.3
	South	15,780	9,180	6.5	14,960	8,680	6.0
	West	5,220	2,780	6.1	5,600	3,260	6.9
TOTAL		36,980	21,120	6.2	37,400	21,440	6.1

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

A code change in CT starting for year 2011: Before 2011, abdomen CT and pelvis CT each had their own distinct HCPCS code. In 2011, one consolidated

code for the two procedures was introduced and used from that year forward.

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Table M.4.16: Use of computed tomography (without/with contrast) in Medicare kidney stone patients for evaluation of kidney stones (by age, gender, race & region)

#### 2008-2009

			2008			2009	
Demographic Characteristics		Number of CT without then with contrast procedures	Number of stone patients with CT without then with contrast procedure	Percent of stone patients with CT without then with contrast procedure	Number of CT without then with contrast procedures	Number of stone patients with CT without then with contrast procedure	Percent of stone patients with CT without then with contrast procedure
AGE	65 - 69	13,000	7,320	7.6	12,960	7,300	7.0
	70 - 74	12,260	6,660	6.6	13,780	7,320	6.8
-	75 - 79	9,520	5,120	6.7	9,060	4,860	6.0
	80 - 84	5,140	2,980	5.2	6,080	3,300	5.7
	85+	3,140	1,700	4.3	3,520	2,040	4.9
GENDER	Male	26,640	14,560	6.4	28,240	15,500	6.4
	Female	16,420	9,220	6.4	17,160	9,320	6.2
RACE	White	39,580	21,880	6.5	41,620	22,660	6.4
	Black	1,700	960	5.3	2,040	1,160	5.5
	Other	1,780	940	6.2	1,740	1,000	6.3
	Unknown	0	0	0.0	0	0	0.0
REGION	Northeast	7,780	4,420	5.5	7,600	4,160	4.9
	Midwest	10,840	5,900	7.3	11,380	5,940	7.1
	South	18,600	10,400	6.6	19,240	10,700	6.4
	West	5,840	3,060	6.0	7,180	4,020	7.3
TOTAL		43,060	23,780	6.4	45,400	24,820	6.3

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

A code change in CT starting for year 2011: Before 2011, abdomen CT and pelvis CT each had their own distinct HCPCS code. In 2011, one consolidated

code for the two procedures was introduced and used from that year forward.

## 2010-2011

			2010			2011	
Demographic Characteristics		Number of CT without then with contrast procedures	Number of stone patients with CT without then with contrast procedure	Percent of stone patients with CT without then with contrast procedure	Number of CT without then with contrast procedures	Number of stone patients with CT without then with contrast procedure	Percent of stone patients with CT without then with contrast procedure
AGE	65 - 69	14,620	8,040	7.2	8,280	7,360	5.9
	70 - 74	13,560	7,300	6.4	8,580	7,780	6.3
-	75 - 79	9,420	5,160	5.9	6,160	5,760	6.0
-	80 - 84	6,820	3,760	6.2	3,500	3,300	5.0
	85+	3,140	1,780	3.9	1,620	1,440	2.8
GENDER	Male	29,480	16,120	6.2	17,840	16,240	5.7
	Female	18,080	9,920	6.3	10,300	9,400	5.3
RACE	White	43,800	24,000	6.3	25,780	23,540	5.6
-	Black	2,260	1,240	5.7	1,080	920	3.9
-	Other	1,460	780	4.7	1,220	1,120	5.9
	Unknown	40	20	5.6	60	60	6.7
REGION	Northeast	6,980	3,980	4.4	4,940	4,640	4.8
	Midwest	11,180	6,040	6.7	6,740	6,060	6.3
	South	21,820	11,980	6.7	12,260	11,200	5.7
	West	7,580	4,040	6.8	4,200	3,740	5.4
TOTAL		47,560	26,040	6.2	28,140	25,640	5.6

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

A code change in CT starting for year 2011: Before 2011, abdomen CT and pelvis CT each had their own distinct HCPCS code. In 2011, one consolidated

code for the two procedures was introduced and used from that year forward.

# 2012-2013

			2012			2013	
Demographic Characteristics		Number of CT without then with contrast procedures	Number of stone patients with CT without then with contrast procedure	Percent of stone patients with CT without then with contrast procedure	Number of CT without then with contrast procedures	Number of stone patients with CT without then with contrast procedure	Percent of stone patients with CT without then with contrast procedure
AGE	65 - 69	8,800	8,380	6.4	8,900	8,280	5.8
	70 - 74	8,820	8,320	6.1	9,940	9,420	6.5
	75 - 79	6,020	5,560	5.5	6,660	6,340	5.9
	80 - 84	3,240	3,140	4.6	3,400	3,300	4.7
	85+	1,860	1,780	3.1	2,120	2,000	3.2
GENDER	Male	18,240	17,100	5.6	20,160	18,980	5.8
	Female	10,500	10,080	5.4	10,860	10,360	5.2
RACE	White	25,920	24,580	5.5	28,420	26,840	5.6
	Black	1,420	1,340	5.3	1,160	1,120	4.4
	Other	1,180	1,040	5.4	1,140	1,100	5.3
	Unknown	220	220	9.6	300	280	7.4
REGION	Northeast	4,760	4,560	4.4	5,600	5,480	4.8
	Midwest	6,020	5,600	5.4	6,900	6,320	5.8
	South	13,500	12,800	6.0	13,380	12,720	5.7
	West	4,460	4,220	5.8	5,140	4,820	5.9
TOTAL		28,740	27,180	5.5	31,020	29,340	5.5

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

A code change in CT starting for year 2011: Before 2011, abdomen CT and pelvis CT each had their own distinct HCPCS code. In 2011, one consolidated

code for the two procedures was introduced and used from that year forward.

## 2004-2005

			2004		2005			
Demograpi	nic Characteristics	Number of MRIs	Number of stone patients with MRI	Percent of stone patients with MRI	Number of MRIs	Number of stone patients with MRI	Percent of stone patients with MRI	
AGE	65 - 69	140	120	0.1	200	160	0.2	
	70 - 74	120	80	0.1	60	60	0.1	
	75 - 79	120	120	0.2	280	200	0.3	
	80 - 84	100	60	0.1	140	100	0.2	
	85+	20	20	0.1	40	40	0.1	
GENDER	Male	140	140	0.1	440	320	0.2	
	Female	360	260	0.2	280	240	0.2	
RACE	White	440	360	0.1	700	540	0.2	
	Black	40	20	0.1	0	0	0.0	
	Other	20	20	0.2	20	20	0.2	
	Unknown	0	0	0.0	0	0	0.0	
REGION	Northeast	80	60	0.1	200	120	0.2	
	Midwest	100	100	0.1	180	160	0.2	
	South	300	220	0.2	260	200	0.1	
	West	20	20	0.0	80	80	0.2	
TOTAL		500	400	0.1	720	560	0.2	

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

### 2006-2007

			2006		2007			
Demograp	nic Characteristics	Number of MRIs	Number of stone patients with MRI	Percent of stone patients with MRI	Number of MRIs	Number of stone patients with MRI	Percent of stone patients with MRI	
AGE	65 - 69	200	180	0.2	200	140	0.2	
	70 - 74	140	120	0.1	240	240	0.3	
	75 - 79	60	40	0.1	120	120	0.2	
	80 - 84	40	40	0.1	20	20	0.0	
	85+	60	60	0.2	40	40	0.1	
GENDER	Male	380	360	0.2	460	400	0.2	
	Female	120	80	0.1	160	160	0.1	
RACE	White	400	340	0.1	520	460	0.1	
	Black	60	60	0.4	80	80	0.5	
	Other	40	40	0.3	20	20	0.1	
	Unknown	0	0	0.0	0	0	0.0	
REGION	Northeast	140	120	0.2	200	160	0.2	
	Midwest	120	100	0.1	120	120	0.2	
	South	140	140	0.1	240	220	0.2	
	West	100	80	0.2	60	60	0.1	
TOTAL		500	440	0.1	620	560	0.2	

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

#### 2008-2009

			2008			2009	
Demograp	hic Characteristics	Number of MRIs	Number of stone patients with MRI	Percent of stone patients with MRI	Number of MRIs	Number of stone patients with MRI	Percent of stone patients with MRI
AGE	65 - 69	180	120	0.1	200	180	0.2
	70 - 74	140	140	0.1	20	20	0.0
	75 - 79	180	180	0.2	140	140	0.2
	80 - 84	100	80	0.1	80	60	0.1
	85+	20	20	0.1	20	20	0.1
GENDER	Male	300	260	0.1	280	240	0.1
	Female	320	280	0.2	180	180	0.1
RACE	White	520	460	0.1	400	360	0.1
	Black	20	20	0.1	20	20	0.1
	Other	80	60	0.4	40	40	0.3
	Unknown	0	0	0.0	0	0	0.0
REGION	Northeast	100	100	0.1	200	180	0.2
	Midwest	200	160	0.2	40	40	0.1
	South	220	220	0.1	160	140	0.1
	West	100	60	0.1	60	60	0.1
TOTAL		620	540	0.2	460	420	0.1

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

## 2010-2011

			2010		2011			
Demograp	hic Characteristics	Number of MRIs	Number of stone patients with MRI	Percent of stone patients with MRI	Number of MRIs	Number of stone patients with MRI	Percent of stone patients with MRI	
AGE	65 - 69	340	300	0.3	320	260	0.2	
	70 - 74	240	200	0.2	220	200	0.2	
	75 - 79	140	100	0.1	140	140	0.2	
	80 - 84	80	60	0.1	160	140	0.2	
	85+	60	40	0.1	40	40	0.1	
GENDER	Male	500	400	0.2	500	440	0.2	
	Female	360	300	0.2	380	340	0.2	
RACE	White	800	640	0.2	860	760	0.2	
	Black	20	20	0.1	20	20	0.1	
	Other	40	40	0.2	0	0	0.0	
	Unknown	0	0	0.0	0	0	0.0	
REGION	Northeast	260	240	0.3	160	160	0.2	
	Midwest	200	140	0.2	140	140	0.1	
	South	360	280	0.2	500	420	0.2	
	West	40	40	0.1	80	60	0.1	
TOTAL		860	700	0.2	880	780	0.2	

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

## 2012-2013

			2012		2013		
Demograp	hic Characteristics	Number of MRIs	Number of stone patients with MRI	Percent of stone patients with MRI	Number of MRIs	Number of stone patients with MRI	Percent of stone patients with MRI
AGE	65 - 69	260	200	0.2	120	100	0.1
	70 - 74	280	260	0.2	320	200	0.1
	75 - 79	160	160	0.2	100	80	0.1
	80 - 84	120	120	0.2	120	100	0.1
	85+	80	60	0.1	60	60	0.1
GENDER	Male	480	420	0.1	420	260	0.1
	Female	420	380	0.2	300	280	0.1
RACE	White	700	620	0.1	580	400	0.1
	Black	60	60	0.2	100	100	0.4
	Other	120	100	0.5	40	40	0.2
	Unknown	20	20	0.9	0	0	0.0
REGION	Northeast	180	160	0.2	140	140	0.1
	Midwest	200	160	0.2	140	100	0.1
	South	360	360	0.2	340	200	0.1
	West	160	120	0.2	100	100	0.1
TOTAL		900	800	0.2	720	540	0.1

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.4.18: Emergency room visits with any diagnosis of kidney stones in Medicare kidney stone patients (by age, gender, race, & region)

# 2004-2005

			2004		2005			
Demograph	ic Characteristics	Number of ER visits	Number of stone patients with ER visits	Percent of stone patients with ER visits	Number of ER visits	Number of stone patients with ER visits	Percent of stone patients with ER visits	
AGE	65 - 69	27,980	23,740	28.6	30,460	25,740	29.2	
	70 - 74	28,000	23,160	25.8	27,600	23,320	25.6	
	75 - 79	21,620	17,980	25.7	22,400	19,060	25.6	
	80 - 84	13,360	11,340	24.3	15,620	13,260	26.0	
	85+	11,060	9,380	30.6	11,660	10,240	31.8	
GENDER	Male	62,140	51,940	26.3	63,140	53,400	25.6	
	Female	39,880	33,660	27.4	44,600	38,220	29.8	
RACE	White	92,260	77,580	26.8	97,860	83,220	27.2	
	Black	6,460	5,180	28.8	6,600	5,780	32.0	
	Other	3,260	2,800	22.4	3,160	2,540	20.8	
	Unknown	40	40	15.4	120	80	30.8	
REGION	Northeast	18,680	15,380	22.4	20,060	17,320	23.0	
	Midwest	26,820	22,120	30.7	27,700	23,460	31.1	
	South	42,220	35,880	26.6	45,060	38,460	27.4	
	West	14,300	12,220	27.4	14,920	12,380	26.9	
TOTAL		102,020	85,600	26.7	107,740	91,620	27.2	

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

			2006		2007			
Demograp	hic Characteristics	Number of ER visits	Number of stone patients with ER visits	Percent of stone patients with ER visits	Number of ER visits	Number of stone patients with ER visits	Percent of stone patients with ER visits	
AGE	65 - 69	29,400	24,000	27.3	30,580	25,120	27.5	
	70 - 74	27,520	23,080	25.0	27,120	22,740	24.2	
	75 - 79	21,800	18,520	24.8	21,720	18,940	25.0	
	80 - 84	15,360	13,160	26.3	16,820	14,320	26.7	
	85+	12,760	10,600	31.3	12,640	10,960	31.1	
GENDER	Male	62,300	52,160	25.1	66,260	55,760	25.8	
	Female	44,540	37,200	28.5	42,620	36,320	27.1	
RACE	White	97,520	81,460	26.4	99,300	83,920	26.4	
	Black	5,400	4,480	26.4	5,960	5,120	29.8	
	Other	3,820	3,340	25.2	3,540	2,980	20.7	
	Unknown	100	80	33.3	80	60	27.3	
REGION	Northeast	21,080	17,540	23.1	21,120	17,860	22.4	
	Midwest	28,040	23,060	30.5	29,720	24,620	31.5	
	South	43,780	36,900	26.0	43,320	37,080	25.6	
	West	13,940	11,860	26.1	14,720	12,520	26.6	
TOTAL		106,840	89,360	26.4	108,880	92,080	26.3	

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

			2008		2009		
Demograp	hic Characteristics	Number of ER visits	Number of stone patients with ER visits	Percent of stone patients with ER visits	Number of ER visits	Number of stone patients with ER visits	Percent of stone patients with ER visits
AGE	65 - 69	34,060	28,280	29.2	35,240	29,000	27.9
	70 - 74	29,980	24,960	24.9	33,160	27,460	25.7
	75 - 79	23,020	19,220	25.1	22,480	19,500	24.0
	80 - 84	18,480	15,540	27.3	18,020	15,020	25.8
	85+	15,220	12,760	32.5	16,680	13,540	32.6
GENDER	Male	70,060	57,760	25.5	73,560	61,160	25.3
	Female	50,700	43,000	29.9	52,020	43,360	28.9
RACE	White	110,300	92,060	27.3	113,040	94,100	26.5
	Black	6,500	5,420	30.1	8,200	6,780	32.2
	Other	3,940	3,260	21.5	4,280	3,580	22.6
	Unknown	20	20	11.1	60	60	42.9
REGION	Northeast	22,360	18,440	22.9	23,980	20,000	23.5
	Midwest	31,220	26,020	32.0	31,160	25,620	30.5
	South	50,320	42,420	27.1	52,380	43,760	26.2
	West	16,860	13,880	27.1	18,060	15,140	27.4
TOTAL		120,760	100,760	27.2	125,580	104,520	26.7

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

			2010		2011			
Demograph	nic Characteristics	Number of ER visits	Number of stone patients with ER visits	Percent of stone patients with ER visits	Number of ER visits	Number of stone patients with ER visits	Percent of stone patients with ER visits	
AGE	65 - 69	37,960	31,340	28.1	45,580	37,100	29.9	
	70 - 74	35,480	29,340	25.8	40,060	33,140	26.8	
	75 - 79	25,840	21,400	24.5	31,260	26,060	27.3	
	80 - 84	20,120	16,460	27.0	22,960	19,060	28.9	
	85+	17,460	14,760	32.7	23,940	20,100	38.6	
GENDER	Male	80,200	66,920	25.6	94,780	78,820	27.7	
	Female	56,660	46,380	29.5	69,020	56,640	32.0	
RACE	White	123,420	101,900	26.8	146,800	121,760	29.1	
	Black	8,380	7,020	32.3	10,680	8,580	36.5	
	Other	4,980	4,300	25.9	5,860	4,820	25.6	
	Unknown	80	80	22.2	460	300	33.3	
REGION	Northeast	25,780	20,840	23.1	29,680	24,540	25.4	
	Midwest	34,460	27,900	30.9	40,500	33,380	34.5	
	South	57,460	48,880	27.3	68,180	56,660	28.6	
	West	19,160	15,680	26.5	25,440	20,880	29.9	
TOTAL		136,860	113,300	27.0	163,800	135,460	29.4	

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

			2012		2013		
Demograp	hic Characteristics	Number of ER visits	Number of stone patients with ER visits	Percent of stone patients with ER visits	Number of ER visits	Number of stone patients with ER visits	Percent of stone patients with ER visits
AGE	65 - 69	47,700	38,880	29.9	50,460	40,700	28.3
	70 - 74	45,300	36,740	27.1	46,820	38,180	26.5
	75 - 79	32,880	27,060	26.6	34,720	28,360	26.2
	80 - 84	25,060	20,820	30.6	25,540	21,060	29.8
	85+	24,780	20,840	36.3	28,440	24,000	38.6
GENDER	Male	102,160	84,320	27.7	106,860	87,760	26.7
	Female	73,560	60,020	31.8	79,120	64,540	32.2
RACE	White	157,200	129,600	29.0	167,380	136,960	28.6
	Black	11,400	9,120	36.4	11,200	9,480	37.5
	Other	6,260	5,000	26.0	6,280	4,980	23.8
	Unknown	860	620	27.0	1,120	880	23.3
REGION	Northeast	33,520	27,400	26.2	36,180	29,180	25.4
	Midwest	42,580	33,940	32.9	42,660	35,240	32.0
	South	73,160	61,620	29.1	76,900	63,460	28.5
	West	26,460	21,380	29.2	30,240	24,420	29.9
TOTAL		175,720	144,340	29.3	185,980	152,300	28.8

Data source: Centers for Medicare and Medicaid Services, 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

#### 2004

				200	)4		
Demographi	c Characteristics	Total expenditures	Per patient per year expenditures	Expenditures for inpatient hospital stays	Expenditures for hospital-based outpatient services	Expenditures for physician office services	Expenditures for all other services
AGE	65 - 69	\$76,990,935	\$926	\$28,414,639	\$41,048,549	\$6,618,924	\$908,823
	70 - 74	\$80,030,388	\$892	\$30,352,391	\$41,753,135	\$6,618,143	\$1,306,718
	75 - 79	\$65,981,438	\$943	\$27,894,982	\$31,470,054	\$5,348,971	\$1,267,432
	80 - 84	\$36,478,254	\$781	\$15,377,756	\$17,064,075	\$3,078,768	\$957,654
	85+	\$22,410,277	\$731	\$11,043,803	\$8,723,349	\$1,614,493	\$1,028,631
GENDER	Male	\$168,180,193	\$852	\$62,569,101	\$88,231,000	\$14,350,325	\$3,029,767
	Female	\$113,711,099	\$927	\$50,514,471	\$51,828,163	\$8,928,974	\$2,439,491
RACE	White	\$253,578,950	\$876	\$99,394,079	\$127,936,093	\$21,245,562	\$5,003,215
	Black	\$18,605,977	\$1,035	\$8,732,551	\$8,404,155	\$1,126,786	\$342,485
	Other	\$9,656,077	\$774	\$4,944,816	\$3,694,975	\$892,728	\$123,558
	Unknown	\$50,289	\$193	\$12,126	\$23,940	\$14,223	\$0
REGION	Northeast	\$56,765,395	\$827	\$24,170,076	\$25,718,102	\$5,438,671	\$1,438,546
	Midwest	\$75,193,383	\$1,042	\$31,057,601	\$37,591,911	\$4,563,134	\$1,980,736
	South	\$111,475,891	\$827	\$42,949,563	\$57,400,565	\$9,666,521	\$1,459,242
	West	\$38,456,624	\$863	\$14,906,332	\$19,348,584	\$3,610,974	\$590,734
TOTAL		\$281,891,292	\$881	\$113,083,572	\$140,059,163	\$23,279,300	\$5,469,258

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution.

2005

				200	5		
Demograp	hic Characteristics	Total expenditures	Per patient per year expenditures	Expenditures for inpatient hospital stays	Expenditures for hospital-based outpatient services	Expenditures for physician office services	Expenditures for all other services
AGE	65 - 69	\$90,384,025	\$1,026	\$29,925,954	\$51,379,118	\$7,878,596	\$1,200,357
	70 - 74	\$90,853,979	\$997	\$32,051,114	\$49,575,921	\$7,853,459	\$1,373,486
	75 - 79	\$72,750,706	\$977	\$29,240,042	\$34,774,818	\$6,498,825	\$2,237,022
	80 - 84	\$41,932,513	\$822	\$19,040,571	\$18,143,232	\$3,752,117	\$996,594
	85+	\$25,998,517	\$807	\$12,336,159	\$10,231,041	\$1,940,072	\$1,491,245
GENDER	Male	\$195,174,857	\$935	\$67,579,919	\$106,861,264	\$17,089,307	\$3,644,367
	Female	\$126,744,883	\$989	\$55,013,922	\$57,242,865	\$10,833,761	\$3,654,335
RACE	White	\$296,371,110	\$967	\$110,966,483	\$153,416,122	\$25,762,783	\$6,225,721
	Black	\$16,793,282	\$930	\$6,824,288	\$7,904,469	\$1,176,926	\$887,599
	Other	\$8,564,509	\$701	\$4,693,068	\$2,728,477	\$960,440	\$182,523
	Unknown	\$190,839	\$734	\$110,001	\$55,060	\$22,919	\$2,859
REGION	Northeast	\$64,066,755	\$852	\$27,375,096	\$28,829,530	\$6,169,204	\$1,692,925
	Midwest	\$89,556,152	\$1,188	\$35,573,892	\$46,948,119	\$5,427,422	\$1,606,718
	South	\$125,342,758	\$893	\$43,361,042	\$66,892,941	\$11,710,761	\$3,378,014
	West	\$42,954,075	\$934	\$16,283,810	\$21,433,539	\$4,615,681	\$621,045
TOTAL		\$321,919,740	\$955	\$122,593,840	\$164,104,129	\$27,923,068	\$7,298,702

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution.

2006

				200	6		
Demographic Characteristics		Total expenditures	Per patient per year expenditures	Expenditures for inpatient hospital stays	Expenditures for hospital-based outpatient services	Expenditures for physician office services	Expenditures for all other services
AGE	65 - 69	\$87,352,206	\$995	\$31,353,813	\$46,556,099	\$8,176,994	\$1,265,300
	70 - 74	\$91,665,130	\$994	\$31,296,935	\$49,844,717	\$8,561,007	\$1,962,471
	75 - 79	\$70,900,403	\$949	\$26,469,207	\$36,119,617	\$6,611,782	\$1,699,797
	80 - 84	\$43,278,312	\$863	\$16,845,043	\$21,290,824	\$4,056,014	\$1,086,432
	85+	\$28,884,455	\$853	\$13,916,893	\$10,263,434	\$2,189,652	\$2,514,476
GENDER	Male	\$192,469,048	\$926	\$66,885,712	\$102,872,428	\$18,010,914	\$4,699,995
	Female	\$129,611,459	\$991	\$52,996,180	\$61,202,264	\$11,584,535	\$3,828,480
RACE	White	\$295,970,087	\$960	\$107,886,600	\$153,433,369	\$27,397,835	\$7,252,283
	Black	\$12,121,464	\$715	\$5,252,122	\$5,215,241	\$1,074,201	\$579,900
	Other	\$13,840,041	\$1,044	\$6,671,637	\$5,351,380	\$1,120,914	\$696,110
	Unknown	\$148,914	\$620	\$71,532	\$74,701	\$2,499	\$182
REGION	Northeast	\$65,671,311	\$865	\$25,286,631	\$30,944,868	\$7,313,261	\$2,126,551
	Midwest	\$87,227,411	\$1,154	\$36,312,130	\$42,520,048	\$5,784,757	\$2,610,475
	South	\$123,103,516	\$869	\$41,460,326	\$67,436,846	\$11,897,864	\$2,308,479
	West	\$46,078,270	\$1,014	\$16,822,804	\$23,172,929	\$4,599,567	\$1,482,970
TOTAL		\$322,080,507	\$951	\$119,881,892	\$164,074,691	\$29,595,448	\$8,528,475

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution.

2007

				200	7		
Demograpi	nic Characteristics	Total expenditures	Per patient per year expenditures	Expenditures for inpatient hospital stays	Expenditures for hospital-based outpatient services	Expenditures for physician office services	Expenditures for all other services
AGE	65 - 69	\$94,436,489	\$1,035	\$32,170,862	\$51,620,784	\$9,186,030	\$1,458,814
	70 - 74	\$88,932,781	\$945	\$29,539,908	\$48,530,174	\$9,448,565	\$1,414,134
	75 - 79	\$72,440,930	\$955	\$27,689,574	\$35,869,690	\$6,994,834	\$1,886,832
	80 - 84	\$50,799,194	\$946	\$21,450,642	\$22,810,756	\$4,528,667	\$2,009,129
	85+	\$28,747,286	\$816	\$14,287,905	\$10,015,556	\$2,175,274	\$2,268,551
GENDER	Male	\$196,376,326	\$908	\$66,568,539	\$105,713,591	\$19,829,217	\$4,264,979
	Female	\$138,980,355	\$1,038	\$58,570,351	\$63,133,370	\$12,504,153	\$4,772,480
RACE	White	\$309,486,460	\$972	\$113,398,048	\$158,139,469	\$29,792,921	\$8,156,022
	Black	\$15,895,557	\$924	\$7,574,550	\$6,442,725	\$1,275,123	\$603,160
	Other	\$9,946,108	\$690	\$4,166,293	\$4,252,661	\$1,248,877	\$278,276
	Unknown	\$28,556	\$130	\$0	\$12,106	\$16,449	\$0
REGION	Northeast	\$72,989,472	\$914	\$30,034,824	\$32,800,707	\$7,997,383	\$2,156,558
	Midwest	\$90,376,282	\$1,157	\$36,522,991	\$45,701,953	\$6,205,444	\$1,945,895
	South	\$122,614,428	\$846	\$40,099,580	\$65,837,926	\$13,242,788	\$3,434,134
	West	\$49,376,499	\$1,048	\$18,481,495	\$24,506,376	\$4,887,755	\$1,500,873
TOTAL		\$335,356,681	\$958	\$125,138,890	\$168,846,962	\$32,333,370	\$9,037,459

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution.

2008

				200	8		
Demograp	hic Characteristics	Total expenditures	Per patient per year expenditures	Expenditures for inpatient hospital stays	Expenditures for hospital-based outpatient services	Expenditures for physician office services	Expenditures for all other services
AGE	65 - 69	\$112,852,999	\$1,166	\$35,937,228	\$63,844,440	\$11,204,282	\$1,867,049
	70 - 74	\$106,135,115	\$1,058	\$35,683,286	\$57,782,477	\$10,330,233	\$2,339,120
	75 - 79	\$82,995,378	\$1,082	\$30,087,365	\$43,008,658	\$7,416,072	\$2,483,282
	80 - 84	\$52,578,562	\$923	\$21,847,403	\$24,628,987	\$4,678,557	\$1,423,615
	85+	\$38,500,544	\$981	\$20,970,707	\$13,046,210	\$2,509,578	\$1,974,049
GENDER	Male	\$231,123,995	\$1,021	\$75,646,283	\$128,339,901	\$21,869,016	\$5,268,795
	Female	\$161,938,603	\$1,127	\$68,879,707	\$73,970,870	\$14,269,706	\$4,818,320
RACE	White	\$361,216,052	\$1,073	\$130,727,966	\$188,414,586	\$33,322,330	\$8,751,171
	Black	\$20,084,555	\$1,117	\$9,079,457	\$8,678,626	\$1,291,133	\$1,035,339
	Other	\$11,728,728	\$773	\$4,718,566	\$5,186,921	\$1,522,635	\$300,605
	Unknown	\$33,262	\$185	\$0	\$30,639	\$2,623	\$0
REGION	Northeast	\$85,494,548	\$1,060	\$38,477,320	\$36,027,685	\$8,349,832	\$2,639,711
	Midwest	\$100,221,061	\$1,231	\$39,391,601	\$52,522,356	\$6,192,186	\$2,114,918
	South	\$149,217,995	\$952	\$44,772,138	\$85,082,537	\$15,928,027	\$3,435,293
	West	\$58,128,994	\$1,134	\$21,884,930	\$28,678,194	\$5,668,677	\$1,897,193
TOTAL		\$393,062,598	\$1,062	\$144,525,989	\$202,310,772	\$36,138,722	\$10,087,115

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution.

2009

				200	9		
Demograp	hic Characteristics	Total expenditures	Per patient per year expenditures	Expenditures for inpatient hospital stays	Expenditures for hospital-based outpatient services	Expenditures for physician office services	Expenditures for all other services
AGE	65 - 69	\$117,519,788	\$1,130	\$33,737,168	\$70,763,651	\$11,088,101	\$1,930,868
	70 - 74	\$115,715,799	\$1,082	\$37,723,741	\$64,903,166	\$11,119,000	\$1,969,892
	75 - 79	\$82,680,972	\$1,017	\$28,037,507	\$44,102,004	\$8,204,743	\$2,336,719
	80 - 84	\$59,615,664	\$1,023	\$23,610,349	\$28,213,923	\$4,979,467	\$2,811,925
	85+	\$44,568,979	\$1,073	\$21,908,732	\$16,366,020	\$2,611,931	\$3,682,297
GENDER	Male	\$246,408,886	\$1,018	\$78,767,606	\$138,904,491	\$23,200,493	\$5,536,295
	Female	\$173,692,316	\$1,158	\$66,249,890	\$85,444,272	\$14,802,749	\$7,195,406
RACE	White	\$383,727,907	\$1,081	\$129,719,183	\$207,527,087	\$34,804,592	\$11,677,044
	Black	\$21,369,785	\$1,016	\$10,174,538	\$9,058,272	\$1,622,407	\$514,568
	Other	\$14,930,520	\$943	\$5,063,213	\$7,763,404	\$1,567,747	\$536,155
	Unknown	\$72,991	\$521	\$60,562	\$0	\$8,496	\$3,933
REGION	Northeast	\$95,219,948	\$1,117	\$37,687,142	\$43,806,943	\$9,015,842	\$4,710,022
	Midwest	\$106,214,401	\$1,263	\$39,777,286	\$57,326,656	\$6,564,188	\$2,546,270
	South	\$158,147,852	\$945	\$46,839,969	\$90,537,081	\$16,608,496	\$4,162,306
	West	\$60,519,001	\$1,093	\$20,713,099	\$32,678,084	\$5,814,716	\$1,313,102
TOTAL		\$420,101,202	\$1,072	\$145,017,496	\$224,348,763	\$38,003,242	\$12,731,701

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution.

2010

				201	0		
Demograp	hic Characteristics	Total expenditures	Per patient per year expenditures	Expenditures for inpatient hospital stays	Expenditures for hospital-based outpatient services	Expenditures for physician office services	Expenditures for all other services
AGE	65 - 69	\$130,164,202	\$1,167	\$35,502,384	\$80,458,922	\$11,909,413	\$2,293,483
	70 - 74	\$130,338,823	\$1,144	\$39,408,627	\$76,450,395	\$11,254,230	\$3,225,571
	75 - 79	\$98,985,546	\$1,132	\$34,163,754	\$54,528,456	\$8,081,547	\$2,211,790
	80 - 84	\$68,018,583	\$1,115	\$27,607,682	\$33,262,873	\$5,179,656	\$1,968,371
	85+	\$44,947,839	\$995	\$24,576,921	\$14,686,014	\$2,569,262	\$3,115,643
GENDER	Male	\$287,722,498	\$1,099	\$89,000,671	\$167,233,076	\$24,080,049	\$7,408,702
	Female	\$184,732,496	\$1,175	\$72,258,696	\$92,153,584	\$14,914,058	\$5,406,157
RACE	White	\$436,267,585	\$1,147	\$145,887,498	\$242,957,340	\$35,942,320	\$11,480,427
	Black	\$20,914,949	\$961	\$7,891,724	\$10,196,831	\$1,621,149	\$1,205,245
	Other	\$15,055,444	\$906	\$7,382,350	\$6,131,860	\$1,412,077	\$129,156
	Unknown	\$217,016	\$603	\$97,796	\$100,628	\$18,561	\$31
REGION	Northeast	\$96,186,900	\$1,064	\$37,029,552	\$45,993,694	\$9,130,755	\$4,032,900
	Midwest	\$120,686,909	\$1,335	\$45,744,115	\$65,775,039	\$6,734,824	\$2,432,931
	South	\$184,742,486	\$1,031	\$53,970,514	\$108,619,206	\$17,061,584	\$5,091,182
	West	\$70,838,699	\$1,197	\$24,515,188	\$38,998,721	\$6,066,944	\$1,257,847
TOTAL		\$472,454,994	\$1,127	\$161,259,368	\$259,386,660	\$38,994,107	\$12,814,859

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution.

2011

				201	1		
Demograp	hic Characteristics	Total expenditures	Per patient per year expenditures	Expenditures for inpatient hospital stays	Expenditures for hospital-based outpatient services	Expenditures for physician office services	Expenditures for all other services
AGE	65 - 69	\$142,614,343	\$1,148	\$41,810,663	\$86,489,325	\$11,527,861	\$2,786,495
	70 - 74	\$136,712,664	\$1,105	\$44,862,144	\$76,897,147	\$11,671,799	\$3,281,575
	75 - 79	\$99,293,290	\$1,040	\$34,774,071	\$53,866,393	\$8,257,127	\$2,395,700
	80 - 84	\$65,155,717	\$988	\$26,747,640	\$30,830,073	\$4,984,885	\$2,593,119
	85+	\$55,148,094	\$1,060	\$27,211,054	\$18,775,615	\$2,875,994	\$6,285,431
GENDER	Male	\$287,944,061	\$1,012	\$92,697,113	\$165,099,799	\$23,624,492	\$6,522,657
	Female	\$210,980,048	\$1,192	\$82,708,458	\$101,758,754	\$15,693,173	\$10,819,662
RACE	White	\$457,503,281	\$1,094	\$159,287,389	\$246,973,229	\$36,199,591	\$15,043,073
	Black	\$21,707,247	\$923	\$7,838,847	\$11,026,305	\$1,590,211	\$1,251,884
	Other	\$18,395,858	\$975	\$7,720,382	\$8,213,101	\$1,430,960	\$1,031,414
	Unknown	\$1,317,722	\$1,464	\$558,953	\$645,917	\$96,904	\$15,948
REGION	Northeast	\$98,501,134	\$1,019	\$39,064,303	\$47,259,235	\$8,749,663	\$3,427,933
	Midwest	\$123,808,254	\$1,278	\$46,513,181	\$66,256,490	\$6,598,507	\$4,440,076
	South	\$199,502,815	\$1,007	\$61,617,338	\$113,000,173	\$17,246,399	\$7,638,905
	West	\$77,111,906	\$1,106	\$28,210,750	\$40,342,656	\$6,723,096	\$1,835,404
TOTAL		\$498,924,109	\$1,081	\$175,405,572	\$266,858,553	\$39,317,665	\$17,342,319

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution.

2012

				201	2		
Demograp	hic Characteristics	Total expenditures	Per patient per year expenditures	Expenditures for inpatient hospital stays	Expenditures for hospital-based outpatient services	Expenditures for physician office services	Expenditures for all other services
AGE	65 - 69	\$165,249,498	\$1,270	\$47,950,487	\$101,955,975	\$12,258,143	\$3,084,892
	70 - 74	\$152,439,291	\$1,124	\$42,196,506	\$94,939,659	\$12,093,702	\$3,209,424
	75 - 79	\$107,396,297	\$1,055	\$31,883,078	\$64,813,762	\$8,488,072	\$2,211,385
	80 - 84	\$70,364,657	\$1,036	\$27,995,050	\$34,794,399	\$5,177,784	\$2,397,424
	85+	\$48,963,056	\$853	\$21,794,159	\$21,215,237	\$3,136,860	\$2,816,799
GENDER	Male	\$321,338,291	\$1,055	\$92,848,888	\$197,428,706	\$24,702,923	\$6,357,775
	Female	\$223,074,507	\$1,183	\$78,970,393	\$120,290,327	\$16,451,638	\$7,362,149
RACE	White	\$501,105,225	\$1,122	\$155,995,756	\$295,140,249	\$37,777,428	\$12,191,792
	Black	\$22,982,331	\$916	\$8,154,193	\$11,899,484	\$1,620,532	\$1,308,122
	Other	\$17,673,857	\$921	\$6,510,314	\$9,426,442	\$1,562,447	\$174,655
	Unknown	\$2,651,385	\$1,153	\$1,159,017	\$1,252,859	\$194,154	\$45,355
REGION	Northeast	\$114,429,076	\$1,096	\$45,565,836	\$55,201,999	\$9,380,370	\$4,280,871
	Midwest	\$137,521,980	\$1,331	\$45,968,840	\$82,104,441	\$6,971,287	\$2,477,412
	South	\$211,923,141	\$1,000	\$55,562,699	\$132,595,515	\$18,028,953	\$5,735,974
	West	\$80,538,602	\$1,100	\$24,721,907	\$47,817,078	\$6,773,951	\$1,225,666
TOTAL		\$544,412,799	\$1,104	\$171,819,281	\$317,719,033	\$41,154,561	\$13,719,924

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution.

2013

				201	3		
Demograp	hic Characteristics	Total expenditures	Per patient per year expenditures	Expenditures for inpatient hospital stays	Expenditures for hospital-based outpatient services	Expenditures for physician office services	Expenditures for all other services
AGE	65 - 69	\$162,996,399	\$1,134	\$41,252,355	\$104,726,996	\$13,673,652	\$3,343,396
	70 - 74	\$158,652,770	\$1,099	\$43,011,723	\$98,435,823	\$13,176,530	\$4,028,694
	75 - 79	\$113,068,853	\$1,043	\$32,696,607	\$68,299,677	\$9,593,984	\$2,478,585
	80 - 84	\$69,807,363	\$988	\$26,189,511	\$35,905,061	\$5,384,171	\$2,328,621
	85+	\$55,736,227	\$896	\$25,456,072	\$24,319,389	\$3,679,379	\$2,281,387
GENDER	Male	\$320,475,934	\$974	\$85,319,975	\$201,445,560	\$27,220,650	\$6,489,748
	Female	\$239,785,678	\$1,198	\$83,286,293	\$130,241,385	\$18,287,066	\$7,970,934
RACE	White	\$513,009,533	\$1,070	\$149,553,109	\$308,755,071	\$41,674,543	\$13,026,810
	Black	\$23,887,090	\$946	\$10,252,981	\$11,483,703	\$1,706,884	\$443,522
	Other	\$19,180,494	\$915	\$7,708,503	\$8,809,288	\$1,737,439	\$925,264
	Unknown	\$4,184,496	\$1,107	\$1,091,675	\$2,638,883	\$388,851	\$65,087
REGION	Northeast	\$121,619,137	\$1,059	\$43,728,010	\$62,792,984	\$10,882,998	\$4,215,145
	Midwest	\$142,201,656	\$1,293	\$46,830,709	\$85,669,616	\$7,565,280	\$2,136,052
	South	\$207,563,386	\$931	\$51,987,469	\$131,231,876	\$19,184,847	\$5,159,194
	West	\$88,877,433	\$1,089	\$26,060,080	\$51,992,470	\$7,874,592	\$2,950,291
TOTAL		\$560,261,612	\$1,058	\$168,606,268	\$331,686,945	\$45,507,716	\$14,460,683

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution.

Table M.5.2: Medicare fee-for-service expenditures on kidney stone patients for hospital-based outpatient services with any diagnosis of kidney stones (by age, gender, race, & region)

## 2004-2008

		200	4	200	5	200	)6	200	)7	200	8
	Demographic Characteristics		Per person per year expenditures	Total expenditures	Per person per year expenditures	Total expenditures	Per person per year expenditures	I OTAI expenditures	Per person per year expenditures	i otai expenditures	Per person per year expenditures
AGE	65 - 69	\$45,847,749	\$552	\$57,588,367	\$654	\$52,636,911	\$600	\$59,102,498	\$648	\$73,257,937	\$757
	70 - 74	\$48,044,731	\$536	\$55,261,544	\$606	\$56,510,676	\$613	\$56,535,770	\$601	\$66,766,573	\$665
	75 - 79	\$35,850,793	\$513	\$40,553,018	\$544	\$41,708,849	\$558	\$42,835,264	\$565	\$50,563,356	\$659
	80 - 84	\$19,801,439	\$424	\$21,627,482	\$424	\$25,323,912	\$505	\$27,734,632	\$517	\$30,742,944	\$540
	85+	\$10,432,309	\$340	\$12,667,261	\$393	\$13,142,213	\$388	\$13,390,211	\$380	\$17,166,024	\$437
GENDER	Male	\$101,288,551	\$513	\$121,401,793	\$582	\$118,201,712	\$568	\$125,288,219	\$579	\$150,149,281	\$663
	Female	\$58,688,470	\$478	\$66,295,880	\$517	\$71,120,850	\$544	\$74,310,155	\$555	\$88,347,553	\$615
RACE	White	\$145,742,102	\$504	\$174,578,167	\$570	\$176,889,705	\$574	\$186,847,641	\$587	\$221,386,288	\$657
	Black	\$9,799,275	\$545	\$9,352,052	\$518	\$6,318,335	\$373	\$7,715,545	\$449	\$10,799,582	\$601
	Other	\$4,402,949	\$353	\$3,709,548	\$304	\$6,020,465	\$454	\$5,014,842	\$348	\$6,280,325	\$414
	Unknown	\$32,696	\$126	\$57,906	\$223	\$94,057	\$392	\$20,346	\$92	\$30,639	\$170
REGION	Northeast	\$29,730,077	\$433	\$33,981,784	\$452	\$35,883,532	\$473	\$39,706,019	\$497	\$42,883,411	\$532
	Midwest	\$43,205,204	\$599	\$53,455,605	\$709	\$49,860,166	\$660	\$53,925,046	\$690	\$63,277,733	\$777
	South	\$64,467,548	\$478	\$75,850,871	\$540	\$77,425,918	\$546	\$76,921,524	\$530	\$98,945,051	\$631
	West	\$22,574,193	\$506	\$24,409,413	\$531	\$26,152,946	\$576	\$29,045,785	\$616	\$33,390,639	\$651
TOTAL		\$159,977,022	\$500	\$187,697,672	\$557	\$189,322,562	\$559	\$199,598,374	\$570	\$238,496,834	\$644

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution.

Table M.5.2: Medicare fee-for-service expenditures on kidney stone patients for hospital-based outpatient services with any diagnosis of kidney stones (by age, gender, race, & region)

## 2009-2013

		200	9	201	0	<b>20</b> 1	1	<b>20</b> 1	2	201	3
	Demographic Characteristics		Per person per year expenditures	Total expenditures	Per person per year expenditures	i otai expenditures	Per person per year expenditures	Total expenditures	Per person per year expenditures	Total expenditures	Per person per year expenditures
AGE	65 - 69	\$84,694,630	\$815	\$93,830,328	\$841	\$99,798,359	\$804	\$119,278,173	\$916	\$123,716,245	\$861
	70 - 74	\$77,269,997	\$722	\$89,385,308	\$785	\$91,085,642	\$736	\$114,627,207	\$845	\$116,775,544	\$809
	75 - 79	\$52,220,494	\$642	\$63,826,673	\$730	\$65,666,484	\$688	\$79,985,656	\$786	\$82,668,719	\$763
	80 - 84	\$35,486,396	\$609	\$40,862,476	\$670	\$37,569,582	\$569	\$44,387,954	\$653	\$46,186,179	\$653
	85+	\$20,848,243	\$502	\$20,877,934	\$462	\$24,364,386	\$468	\$29,595,715	\$515	\$35,059,130	\$563
GENDER	Male	\$166,486,014	\$688	\$197,476,087	\$754	\$196,375,072	\$690	\$241,062,103	\$792	\$245,474,228	\$746
	Female	\$104,033,747	\$693	\$111,306,632	\$708	\$122,109,381	\$690	\$146,812,601	\$779	\$158,931,588	\$794
RACE	White	\$249,942,526	\$704	\$288,188,672	\$758	\$294,554,920	\$705	\$359,231,259	\$805	\$374,568,205	\$781
	Black	\$11,430,903	\$543	\$12,888,250	\$592	\$13,410,562	\$570	\$15,760,595	\$628	\$15,729,733	\$623
	Other	\$9,143,587	\$577	\$7,593,830	\$457	\$9,785,126	\$519	\$11,458,229	\$597	\$11,123,544	\$531
	Unknown	\$2,745	\$20	\$111,967	\$311	\$733,845	\$815	\$1,424,622	\$619	\$2,984,334	\$790
REGION	Northeast	\$52,392,557	\$614	\$55,834,860	\$618	\$57,025,418	\$590	\$68,964,668	\$660	\$76,800,831	\$669
	Midwest	\$70,459,684	\$838	\$78,860,732	\$872	\$80,184,807	\$828	\$98,886,601	\$957	\$103,785,529	\$944
	South	\$109,167,321	\$653	\$128,322,525	\$716	\$133,357,732	\$673	\$161,150,634	\$760	\$159,755,816	\$717
	West	\$38,500,198	\$695	\$45,764,602	\$774	\$47,916,495	\$687	\$58,872,802	\$804	\$64,063,641	\$785
TOTAL		\$270,519,761	\$690	\$308,782,718	\$737	\$318,484,453	\$690	\$387,874,705	\$787	\$404,405,816	\$764

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution.

## 2004-2008

		20	)4	200	05	20	06	200	)7	200	)8
	Demographic Characteristics		Per person per year expenditures	Total expenditures	Per person per year expenditures						
AGE	65 - 69	\$10,393,192	\$125	\$12,443,315	\$141	\$13,096,900	\$149	\$14,514,774	\$159	\$17,580,059	\$182
	70 - 74	\$10,996,263	\$123	\$12,652,346	\$139	\$14,143,788	\$153	\$15,416,592	\$164	\$17,462,991	\$174
	75 - 79	\$9,455,268	\$135	\$10,618,964	\$143	\$11,056,184	\$148	\$12,017,681	\$159	\$13,088,284	\$171
	80 - 84	\$5,787,530	\$124	\$6,593,199	\$129	\$7,030,765	\$140	\$8,080,363	\$151	\$8,708,396	\$153
	85+	\$3,258,864	\$106	\$3,500,526	\$109	\$3,961,280	\$117	\$4,074,486	\$116	\$4,971,840	\$127
GENDER	Male	\$26,271,282	\$133	\$29,483,389	\$141	\$31,359,542	\$151	\$34,727,138	\$161	\$39,427,946	\$174
	Female	\$13,619,836	\$111	\$16,324,960	\$127	\$17,929,374	\$137	\$19,376,757	\$145	\$22,383,623	\$156
RACE	White	\$35,975,850	\$124	\$41,907,637	\$137	\$44,736,520	\$145	\$49,433,964	\$155	\$56,533,783	\$168
	Black	\$2,070,314	\$115	\$2,043,039	\$113	\$2,139,210	\$126	\$2,218,716	\$129	\$2,426,007	\$135
	Other	\$1,747,183	\$140	\$1,817,250	\$149	\$2,400,461	\$181	\$2,420,974	\$168	\$2,835,545	\$187
	Unknown	\$97,771	\$376	\$40,423	\$155	\$12,725	\$53	\$30,241	\$137	\$16,234	\$90
REGION	Northeast	\$10,314,123	\$150	\$11,986,242	\$159	\$13,308,881	\$175	\$14,948,607	\$187	\$16,026,436	\$199
	Midwest	\$7,569,841	\$105	\$8,428,147	\$112	\$8,805,648	\$116	\$9,552,092	\$122	\$10,046,165	\$123
	South	\$15,900,647	\$118	\$18,316,890	\$131	\$19,886,823	\$140	\$21,633,458	\$149	\$26,229,339	\$167
	West	\$6,106,507	\$137	\$7,077,070	\$154	\$7,287,564	\$160	\$7,969,737	\$169	\$9,509,629	\$186
TOTAL		\$39,891,118	\$125	\$45,808,349	\$136	\$49,288,916	\$146	\$54,103,895	\$155	\$61,811,569	\$167

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution.

## 2009-2013

		200	9	201	0	201	11	20	12	201	3
	Demographic Characteristics		Per person per year expenditures	Total expenditures	Per person per year expenditures						
AGE	65 - 69	\$18,341,516	\$176	\$19,902,476	\$178	\$20,605,934	\$166	\$22,450,694	\$172	\$25,472,281	\$177
	70 - 74	\$19,329,131	\$181	\$19,900,605	\$175	\$21,437,783	\$173	\$23,227,160	\$171	\$25,711,521	\$178
	75 - 79	\$14,562,919	\$179	\$15,126,286	\$173	\$16,245,103	\$170	\$17,626,373	\$173	\$19,746,233	\$182
	80 - 84	\$9,265,347	\$159	\$9,729,724	\$159	\$10,203,812	\$155	\$11,134,852	\$164	\$11,732,837	\$166
	85+	\$5,289,914	\$127	\$5,306,225	\$117	\$6,124,145	\$118	\$7,120,376	\$124	\$8,234,286	\$132
GENDER	Male	\$42,918,138	\$177	\$45,586,974	\$174	\$48,031,343	\$169	\$52,994,721	\$174	\$58,268,734	\$177
	Female	\$23,870,688	\$159	\$24,378,342	\$155	\$26,585,434	\$150	\$28,564,734	\$152	\$32,628,425	\$163
RACE	White	\$60,485,382	\$170	\$64,076,001	\$168	\$68,346,376	\$163	\$74,139,325	\$166	\$82,700,546	\$173
	Black	\$3,065,820	\$146	\$2,903,992	\$133	\$2,935,739	\$125	\$3,526,410	\$141	\$3,563,874	\$141
	Other	\$3,200,078	\$202	\$2,906,411	\$175	\$3,154,649	\$167	\$3,544,996	\$185	\$3,872,947	\$185
	Unknown	\$37,546	\$268	\$78,912	\$219	\$180,014	\$200	\$348,724	\$152	\$759,792	\$201
REGION	Northeast	\$17,731,754	\$208	\$17,381,962	\$192	\$18,242,657	\$189	\$19,711,454	\$189	\$23,558,977	\$205
	Midwest	\$10,717,512	\$127	\$11,903,233	\$132	\$12,171,859	\$126	\$13,272,055	\$128	\$14,520,123	\$132
	South	\$27,977,117	\$167	\$29,941,156	\$167	\$31,598,650	\$160	\$35,036,188	\$165	\$37,179,904	\$167
	West	\$10,362,443	\$187	\$10,738,964	\$182	\$12,603,610	\$181	\$13,539,758	\$185	\$15,638,155	\$192
TOTAL		\$66,788,826	\$170	\$69,965,316	\$167	\$74,616,777	\$162	\$81,559,455	\$165	\$90,897,159	\$172

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File, 2004-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution.

## 2006-2009

	_		06	20	07	20	08	20	09
		Number of stone	Percent of stone	Number of	Percent of stone	Number of	Percent of stone	Number of	Percent of stone
Demograp	ohic Characteristics	patients with full	patients with full	stone patients	patients with full	stone patients	patients with full	stone patients	patients with full
		Part D	Part D	with full Part D	Part D	with full Part D	Part D	with full Part D	Part D
		enrollment	enrollment	enrollment	enrollment	enrollment	enrollment	enrollment	enrollment
AGE	65 - 69	22,280	25.4	40,640	44.5	45,160	46.7	51,000	49.0
	70 - 74	23,020	25.0	41,480	44.1	46,400	46.2	50,500	47.2
	75 - 79	18,560	24.8	33,840	44.6	34,620	45.1	37,260	45.8
	80 - 84	12,900	25.7	24,220	45.1	27,200	47.8	28,140	48.3
	85+	9,740	28.8	17,000	48.2	19,520	49.7	20,060	48.3
GENDER	Male	45,440	21.9	85,220	39.4	94,080	41.6	104,300	43.1
	Female	41,060	31.4	71,960	53.8	78,820	54.9	82,660	55.1
RACE	White	71,960	23.3	137,640	43.2	152,000	45.1	164,320	46.3
	Black	6,540	38.6	8,580	49.9	9,560	53.2	11,120	52.9
	Other	7,860	59.3	10,800	74.9	11,200	73.8	11,380	71.8
	Unknown	140	58.3	160	72.7	140	77.8	140	100.0
REGION	Northeast	19,840	26.1	34,520	43.2	37,500	46.5	40,720	47.7
	Midwest	18,380	24.3	33,400	42.8	37,500	46.1	39,280	46.7
	South	35,960	25.4	66,560	45.9	72,740	46.4	79,020	47.2
	West	12,320	27.1	22,700	48.2	25,160	49.1	27,940	50.5
TOTAL		86,500	25.5	157,180	44.9	172,900	46.7	186,960	47.7

Data source: Centers for Medicare and Medicaid Services, 5% Part D Denominator File, 2006-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

## 2010-2013

		201	10	20	11	2013		
Demographic Characteristics		Number of stone patients with full Part D enrollment	Percent of stone patients with full Part D enrollment	Number of stone patients with full Part D enrollment	•		Percent of stone patients with full Part D enrollment	
AGE	65 - 69	55,800	50.0	63,580	51.2	89,800	62.5	
-	70 - 74	55,940	49.1	63,580	51.4	94,980	65.8	
	75 - 79	40,860	46.7	48,180	50.5	67,780	62.6	
	80 - 84	29,340	48.1	33,880	51.3	43,580	61.7	
	85+	22,880	50.6	26,920	51.7	37,800	60.7	
GENDER	Male	116,600	44.5	133,700	47.0	197,140	59.9	
	Female	88,220	56.1	102,440	57.9	136,800	68.3	
RACE	White	180,840	47.5	208,840	50.0	298,100	62.2	
	Black	11,500	52.8	12,300	52.3	16,820	66.6	
	Other	12,220	73.5	14,440	76.6	16,200	77.3	
	Unknown	260	72.2	560	62.2	2,820	74.6	
REGION	Northeast	43,560	48.2	49,780	51.5	77,740	67.7	
	Midwest	44,840	49.6	50,320	51.9	72,120	65.6	
	South	87,060	48.6	99,060	50.0	135,660	60.9	
	West	29,360	49.6	36,980	53.0	48,420	59.3	
TOTAL		204,820	48.9	236,140	51.2	333,940	63.1	

Data source: Centers for Medicare and Medicaid Services, 5% Part D Denominator File, 2006-2013

Beneficiaries are age 65 years and over with continuous and full Part A and B enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.6.1: Percent of Medicare kidney stone patients with full Part D enrollment who filled a prescription of any drug classes (including opioids) for kidney stones treatment (by age, gender, race, & region)

#### 2006-2009

		20	06	200	07	20	08	200	)9
Demographic Characteristics		Number of stone patients who filled a stones prescription for treatment	Percent of stone patients who filled a stones prescription for treatment	Number of stone patients who filled a stones prescription for treatment	Percent of stone patients who filled a stones prescription for treatment	Number of stone patients who filled a stones prescription for treatment	Percent of stone patients who filled a stones prescription for treatment	Number of stone patients who filled a stones prescription for treatment	Percent of stone patients who filled a stones prescription for treatment
AGE	65 - 69	17,220	77.3	30,200	74.3	34,260	75.9	38,940	76.4
	70 - 74	17,020	73.9	30,140	72.7	34,900	75.2	38,140	75.5
	75 - 79	14,220	76.6	25,260	74.6	26,480	76.5	28,580	76.7
	80 - 84	9,360	72.6	17,400	71.8	20,120	74.0	20,740	73.7
	85+	7,360	75.6	11,880	69.9	14,020	71.8	14,500	72.3
GENDER	Male	34,640	76.2	62,780	73.7	71,380	75.9	79,100	75.8
GENDER	Female	30,540	74.4	52,100	72.4	58,400	74.1	61,800	74.8
RACE	White	54,140	75.2	100,000	72.7	113,460	74.6	122,840	74.8
	Black	5,240	80.1	6,820	79.5	7,860	82.2	9,220	82.9
	Other	5,680	72.3	7,940	73.5	8,340	74.5	8,720	76.6
	Unknown	120	85.7	120	75.0	120	85.7	120	85.7
REGION	Northeast	14,300	72.1	24,020	69.6	26,440	70.5	29,300	72.0
	Midwest	13,860	75.4	24,120	72.2	27,900	74.4	29,480	75.1
	South	28,100	78.1	50,120	75.3	57,060	78.4	61,280	77.5
	West	8,920	72.4	16,620	73.2	18,380	73.1	20,840	74.6
TOTAL		65,180	75.4	114,880	73.1	129,780	75.1	140,900	75.4

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Prescription Events File, 2006-2013

Drug classes for kidney stone treatment included alkalinization agents, ammonia detoxicants, heavy metal antagonists, TIOPRONIN, alpha blockers,

calcium channel blockers, and opiate agonists.

Beneficiaries are age 65 years and over with continuous and full Parts A, B, and D enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.6.1: Percent of Medicare kidney stone patients with full Part D enrollment who filled a prescription of any drug classes (including opioids) for kidney stones treatment (by age, gender, race, & region)

## 2010-2013

		20	10	20	11	20	13
Demographic Characteristics		Number of stone patients who filled a stones prescription for treatment	patients who filled a stones prescription for				
AGE	65 - 69	43,960	78.8	48,560	76.4	68,040	75.8
	70 - 74	43,640	78.0	48,440	76.2	72,700	76.5
	75 - 79	31,340	76.7	37,480	77.8	52,820	77.9
	80 - 84	21,820	74.4	25,300	74.7	33,040	75.8
	85+	16,680	72.9	19,720	73.3	27,900	73.8
GENDER	Male	91,180	78.2	102,700	76.8	153,080	77.7
	Female	66,260	75.1	76,800	75.0	101,420	74.1
RACE	White	138,120	76.4	158,120	75.7	226,600	76.0
	Black	9,700	84.3	10,180	82.8	13,680	81.3
	Other	9,440	77.3	10,760	74.5	12,140	74.9
	Unknown	180	69.2	440	78.6	2,080	73.8
REGION	Northeast	31,180	71.6	35,940	72.2	55,840	71.8
	Midwest	34,400	76.7	38,540	76.6	55,460	76.9
	South	69,060	79.3	76,920	77.6	105,720	77.9
	West	22,800	77.7	28,100	76.0	37,480	77.4
TOTAL		157,440	76.9	179,500	76.0	254,500	76.2

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Prescription Events File, 2006-2013

Drug classes for kidney stone treatment included alkalinization agents, ammonia detoxicants, heavy metal antagonists, TIOPRONIN, alpha blockers,

calcium channel blockers, and opiate agonists.

Beneficiaries are age 65 years and over with continuous and full Parts A, B, and D enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.6.2: Percent of Medicare kidney stone patients with full Part D enrollment who filled a prescription of any drug classes for kidney stone treatment (by age, gender, race, & region)

## 2006-2009

		200	)6	20	07	20	08	200	)9
Demographic Characteristics		Number of stone patients who filled a stones prescription for	Percent of stone patients who filled a stones prescription for	Number of stone patients who filled a stones prescription for	patients who filled	Number of stone patients who filled a stones prescription for	Percent of stone patients who filled a stones prescription for		Percent of stone patients who filled a stones prescription for
		treatment	treatment		treatment	treatment	treatment		treatment
AGE	65 - 69	9,380	42.1	16,560	40.7	18,600	41.2	22,760	44.6
	70 - 74	10,400	45.2	17,480	42.1	20,940	45.1	24,140	47.8
	75 - 79	8,840	47.6	15,900	47.0	16,780	48.5	19,440	52.2
	80 - 84	6,000	46.5	11,560	47.7	13,120	48.2	13,660	48.5
	85+	4,580	47.0	7,600	44.7	9,060	46.4	10,080	50.2
GENDER	Male	23,780	52.3	42,920	50.4	49,260	52.4	56,800	54.5
	Female	15,420	37.6	26,180	36.4	29,240	37.1	33,280	40.3
RACE	White	32,200	44.7	58,920	42.8	67,740	44.6	76,900	46.8
	Black	3,240	49.5	4,700	54.8	5,220	54.6	6,780	61.0
	Other	3,720	47.3	5,400	50.0	5,460	48.8	6,320	55.5
	Unknown	40	28.6	80	50.0	80	57.1	80	57.1
REGION	Northeast	9,260	46.7	15,520	45.0	17,780	47.4	20,560	50.5
	Midwest	8,500	46.2	14,220	42.6	16,460	43.9	18,120	46.1
	South	15,780	43.9	29,200	43.9	33,180	45.6	38,260	48.4
	West	5,660	45.9	10,160	44.8	11,080	44.0	13,140	47.0
TOTAL		39,200	45.3	69,100	44.0	78,500	45.4	90,080	48.2

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Prescription Events File, 2006-2013

Drug classes for kidney stone treatment included alkalinization agents, ammonia detoxicants, heavy metal antagonists, TIOPRONIN

alpha blockers, and calcium channel blockers.

Beneficiaries are age 65 years and over with continuous and full Parts A, B, and D enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.6.2: Percent of Medicare kidney stone patients with full Part D enrollment who filled a prescription of any drug classes for kidney stone treatment (by age, gender, race, & region)

## 2010-2013

		20'	10	20 <sup>-</sup>	11	20 <sup>-</sup>	13
Demographic Characteristics		Number of stone patients who filled a stones prescription for treatment	Percent of stone patients who filled a stones prescription for treatment	Number of stone patients who filled a stones prescription for treatment	Percent of stone patients who filled a stones prescription for treatment	Number of stone patients who filled a stones prescription for treatment	Percent of stone patients who filled a stones prescription for treatment
AGE	65 - 69	26,460	47.4	29,980	47.2	44,440	49.5
	70 - 74	28,940	51.7	32,120	50.5	49,980	52.6
-	75 - 79	20,940	51.2	25,820	53.6	37,780	55.7
	80 - 84	14,040	47.9	17,020	50.2	23,640	54.2
	85+	11,080	48.4	13,700	50.9	19,700	52.1
GENDER	Male	65,400	56.1	75,420	56.4	118,180	59.9
	Female	36,060	40.9	43,220	42.2	57,360	41.9
RACE	White	87,880	48.6	103,100	49.4	154,660	51.9
	Black	6,640	57.7	7,560	61.5	10,140	60.3
	Other	6,860	56.1	7,720	53.5	9,140	56.4
	Unknown	80	30.8	260	46.4	1,600	56.7
REGION	Northeast	21,260	48.8	25,620	51.5	41,180	53.0
	Midwest	21,880	48.8	24,980	49.6	38,100	52.8
	South	43,420	49.9	49,220	49.7	70,420	51.9
	West	14,900	50.7	18,820	50.9	25,840	53.4
TOTAL		101,460	49.5	118,640	50.2	175,540	52.6

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Prescription Events File, 2006-2013

Drug classes for kidney stone treatment included alkalinization agents, ammonia detoxicants, heavy metal antagonists, TIOPRONIN

alpha blockers, and calcium channel blockers.

Beneficiaries are age 65 years and over with continuous and full Parts A, B, and D enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.6.3: Percent of Medicare kidney stone patients with full Part D enrollment who filled a prescription of alkalinization agents (by age, gender, race, & region)

#### 2006-2009

		20	06	20	07	20	08	20	)9
Demographic Characteristics		Number of stone patients who filled a stones prescription for treatment	patients who filled a stones prescription	stones prescription					
AGE	65 - 69	1,480	6.6	2,360	5.8	2,960	6.6	3,380	6.6
	70 - 74	1,400	6.1	2,540	6.1	2,780	6.0	3,360	6.7
	75 - 79	840	4.5	1,880	5.6	1,960	5.7	2,400	6.4
	80 - 84	480	3.7	1,180	4.9	1,220	4.5	1,180	4.2
	85+	300	3.1	360	2.1	500	2.6	580	2.9
GENDER	Male	2,700	5.9	5,280	6.2	5,860	6.2	6,740	6.5
	Female	1,800	4.4	3,040	4.2	3,560	4.5	4,160	5.0
RACE	White	4,020	5.6	7,620	5.5	8,680	5.7	9,740	5.9
	Black	220	3.4	380	4.4	380	4.0	420	3.8
	Other	240	3.1	300	2.8	360	3.2	720	6.3
	Unknown	20	14.3	20	12.5	0	0.0	20	14.3
REGION	Northeast	980	4.9	2,040	5.9	2,480	6.6	2,680	6.6
	Midwest	1,020	5.5	1,920	5.7	1,900	5.1	2,440	6.2
	South	1,780	4.9	3,100	4.7	3,620	5.0	4,340	5.5
	West	720	5.8	1,260	5.6	1,420	5.6	1,440	5.2
TOTAL		4,500	5.2	8,320	5.3	9,420	5.4	10,900	5.8

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Prescription Events File, 2006-2013

Beneficiaries are age 65 years and over with continuous and full Parts A, B, and D enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.6.3: Percent of Medicare kidney stone patients with full Part D enrollment who filled a prescription of alkalinization agents (by age, gender, race, & region)

## 2010-2013

		201	10	20	11	20	13
Demographic Characteristics		Number of stone patients who filled a stones prescription for treatment	Percent of stone patients who filled a stones prescription for treatment	Number of stone patients who filled a stones prescription for treatment	stones prescription for	Number of stone patients who filled a stones prescription for treatment	Percent of stone patients who filled a stones prescription for treatment
AGE	65 - 69	4,120	7.4	4,140	6.5	6,720	7.5
	70 - 74	3,360	6.0	4,260	6.7	6,040	6.4
	75 - 79	2,480	6.1	2,720	5.6	3,760	5.5
	80 - 84	1,180	4.0	1,180	3.5	2,060	4.7
	85+	620	2.7	500	1.9	900	2.4
GENDER	Male	7,560	6.5	8,440	6.3	12,800	6.5
	Female	4,200	4.8	4,360	4.3	6,680	4.9
RACE	White	10,780	6.0	11,580	5.5	18,020	6.0
	Black	440	3.8	380	3.1	580	3.4
	Other	500	4.1	760	5.3	680	4.2
	Unknown	40	15.4	80	14.3	200	7.1
REGION	Northeast	2,680	6.2	3,040	6.1	4,920	6.3
	Midwest	2,800	6.2	3,180	6.3	4,380	6.1
	South	4,480	5.1	4,600	4.6	7,280	5.4
	West	1,800	6.1	1,980	5.4	2,900	6.0
TOTAL		11,760	5.7	12,800	5.4	19,480	5.8

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Prescription Events File, 2006-2013

Beneficiaries are age 65 years and over with continuous and full Parts A, B, and D enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.6.4: Percent of Medicare kidney stone patients with full Part D enrollment who filled a prescription of TIOPRONIN (by age, gender, race, & region)

## 2006-2009

		20	06	20	07	20	08	20	09
Demograph	nic Characteristics	Number of stone patients who filled a stones prescription for treatment	· ·	patients who filled a stones prescription					
AGE	65 - 69	0	0.0	0	0.0	20	0.0	0	0.0
	70 - 74	0	0.0	0	0.0	0	0.0	20	0.0
	75 - 79	0	0.0	0	0.0	0	0.0	0	0.0
	80 - 84	0	0.0	0	0.0	0	0.0	0	0.0
	85+	0	0.0	0	0.0	0	0.0	0	0.0
GENDER	Male	0	0.0	0	0.0	0	0.0	0	0.0
	Female	0	0.0	0	0.0	20	0.0	20	0.0
RACE	White	0	0.0	0	0.0	20	0.0	20	0.0
	Black	0	0.0	0	0.0	0	0.0	0	0.0
	Other	0	0.0	0	0.0	0	0.0	0	0.0
	Unknown	0	0.0	0	0.0	0	0.0	0	0.0
REGION	Northeast	0	0.0	0	0.0	0	0.0	0	0.0
	Midwest	0	0.0	0	0.0	0	0.0	0	0.0
	South	0	0.0	0	0.0	20	0.0	20	0.0
	West	0	0.0	0	0.0	0	0.0	0	0.0
TOTAL		0	0.0	0	0.0	20	0.0	20	0.0

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Prescription Events File, 2006-2013

Beneficiaries are age 65 years and over with continuous and full Parts A, B, and D enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.6.4: Percent of Medicare kidney stone patients with full Part D enrollment who filled a prescription of TIOPRONIN (by age, gender, race, & region)

## 2010-2013

		20	10	20	11	20	13
Demographic Characteristics		who filled a stones	who filled a stones	Number of stone patients who filled a stones prescription for treatment	who filled a stones	who filled a stones	who filled a stones
AGE	65 - 69	20	0.0	0	0.0	20	0.0
	70 - 74	20	0.0	0	0.0	0	0.0
	75 - 79	0	0.0	0	0.0	0	0.0
	80 - 84	0	0.0	0	0.0	0	0.0
	85+	0	0.0	0	0.0	0	0.0
GENDER	Male	20	0.0	0	0.0	20	0.0
	Female	20	0.0	0	0.0	0	0.0
RACE	White	40	0.0	0	0.0	20	0.0
	Black	0	0.0	0	0.0	0	0.0
	Other	0	0.0	0	0.0	0	0.0
	Unknown	0	0.0	0	0.0	0	0.0
REGION	Northeast	0	0.0	0	0.0	0	0.0
	Midwest	0	0.0	0	0.0	0	0.0
	South	20	0.0	0	0.0	20	0.0
	West	20	0.1	0	0.0	0	0.0
TOTAL		40	0.0	0	0.0	20	0.0

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Prescription Events File, 2006-2013

Beneficiaries are age 65 years and over with continuous and full Parts A, B, and D enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.6.5: Percent of Medicare kidney stone patients with full Part D enrollment who filled a prescription of opiate agonists (by age, gender, race, & region)

## 2006-2009

		20	06	20	07	20	08	200	)9
Demographic Characteristics		Number of stone patients who filled a stones prescription for treatment	a stones prescription for	Number of stone patients who filled a prescription for treatment	Percent of stone patients who filled a stones prescription for treatment	Number of stone patients who filled a stones prescription for treatment	Percent of stone patients who filled a stones prescription for treatment	patients who filled a stones prescription for treatment	Percent of stone patients who filled a stones prescription for treatment
AGE	65 - 69	13,820	62.0	24,000	59.1	27,760	61.5	31,040	60.9
	70 - 74	12,940	56.2	22,960	55.4	26,280	56.6	28,740	56.9
	75 - 79	10,180	54.8	18,680	55.2	19,580	56.6	20,740	55.7
	80 - 84	6,700	51.9	12,340	50.9	14,300	52.6	15,160	53.9
	85+	5,260	54.0	7,820	46.0	9,460	48.5	9,820	49.0
GENDER	Male	24,180	53.2	43,820	51.4	50,380	53.6	55,340	53.1
	Female	24,720	60.2	41,980	58.3	47,000	59.6	50,160	60.7
RACE	White	40,600	56.4	75,320	54.7	85,880	56.5	93,300	56.8
	Black	4,240	64.8	5,160	60.1	6,020	63.0	6,720	60.4
	Other	3,960	50.4	5,240	48.5	5,360	47.9	5,400	47.5
	Unknown	100	71.4	80	50.0	120	85.7	80	57.1
REGION	Northeast	9,640	48.6	16,240	47.0	17,620	47.0	19,380	47.6
	Midwest	10,500	57.1	18,120	54.3	21,200	56.5	22,480	57.2
	South	22,400	62.3	39,060	58.7	44,940	61.8	48,020	60.8
	West	6,360	51.6	12,380	54.5	13,620	54.1	15,620	55.9
TOTAL		48,900	56.5	85,800	54.6	97,380	56.3	105,500	56.4

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Prescription Events File, 2006-2013

Beneficiaries are age 65 years and over with continuous and full Parts A, B, and D enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.6.5: Percent of Medicare kidney stone patients with full Part D enrollment who filled a prescription of opiate agonists (by age, gender, race, & region)

## 2010-2013

		20	10	20	11	20	13
Demographic Characteristics		who filled a stones	who filled a stones	Number of stone patients who filled a stones prescription for treatment	who filled a stones	who filled a stones	who filled a stones
AGE	65 - 69	35,640	63.9	39,260	61.7	52,840	58.8
	70 - 74	32,580	58.2	36,280	57.1	53,700	56.5
	75 - 79	22,900	56.0	27,320	56.7	37,080	54.7
	80 - 84	16,080	54.8	17,840	52.7	22,240	51.0
	85+	11,640	50.9	12,860	47.8	18,600	49.2
GENDER	Male	65,060	55.8	71,960	53.8	104,380	52.9
	Female	53,780	61.0	61,600	60.1	80,080	58.5
RACE	White	105,540	58.4	118,900	56.9	165,820	55.6
	Black	7,300	63.5	7,440	60.5	10,000	59.5
	Other	5,860	48.0	6,860	47.5	7,340	45.3
	Unknown	140	53.8	360	64.3	1,300	46.1
REGION	Northeast	20,500	47.1	22,960	46.1	33,600	43.2
	Midwest	26,160	58.3	29,240	58.1	41,320	57.3
	South	54,940	63.1	60,660	61.2	81,840	60.3
	West	17,240	58.7	20,700	56.0	27,700	57.2
TOTAL		118,840	58.0	133,560	56.6	184,460	55.2

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Prescription Events File, 2006-2013

Beneficiaries are age 65 years and over with continuous and full Parts A, B, and D enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

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Table M.6.6: Percent of Medicare kidney stone patients with full Part D enrollment who filled a prescription of alpha blockers (by age, gender, race, & region)

## 2006-2009

		20	06	20	07	20	08	20	09
	nographic acteristics	Number of stone patients who filled a stones prescription for treatment	patients who filled a stones prescription	Number of stone patients who filled a stones prescription for treatment	Percent of stone patients who filled a stones prescription for treatment	Number of stone patients who filled a stones prescription for treatment	stones prescription		patients who filled a
AGE	65 - 69	3,800	17.1	7,540	18.6	8,800	19.5	11,140	21.8
	70 - 74	4,520	19.6	7,840	18.9	9,980	21.5	11,820	23.4
	75 - 79	3,540	19.1	6,820	20.2	7,220	20.9	9,240	24.8
	80 - 84	2,520	19.5	4,840	20.0	5,760	21.2	5,960	21.2
	85+	1,660	17.0	2,780	16.4	3,720	19.1	4,080	20.3
GENDER	Male	14,720	32.4	27,200	31.9	32,420	34.5	37,880	36.3
	Female	1,320	3.2	2,620	3.6	3,060	3.9	4,360	5.3
RACE	White	13,700	19.0	26,240	19.1	31,460	20.7	37,060	22.6
	Black	720	11.0	1,260	14.7	1,400	14.6	2,000	18.0
	Other	1,580	20.1	2,240	20.7	2,560	22.9	3,120	27.4
	Unknown	40	28.6	80	50.0	60	42.9	60	42.9
REGION	Northeast	4,220	21.3	7,220	20.9	8,360	22.3	10,120	24.9
	Midwest	3,300	18.0	6,040	18.1	7,500	20.0	7,580	19.3
	South	5,900	16.4	11,980	18.0	14,420	19.8	17,600	22.3
	West	2,620	21.3	4,580	20.2	5,200	20.7	6,940	24.8
TOTAL		16,040	18.5	29,820	19.0	35,480	20.5	42,240	22.6

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Prescription Events File, 2006-2013

Beneficiaries are age 65 years and over with continuous and full Parts A, B, and D enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.6.6: Percent of Medicare kidney stone patients with full Part D enrollment who filled a prescription of alpha blockers (by age, gender, race, & region)

## 2010-2013

		20	10	20	11	20	13
Demographic Characteristics		who filled a stones	who filled a stones	Number of stone patients who filled a stones prescription for treatment	who filled a stones	who filled a stones	who filled a stones
AGE	65 - 69	14,180	25.4	16,580	26.1	25,480	28.4
	70 - 74	14,280	25.5	16,680	26.2	28,280	29.8
	75 - 79	10,700	26.2	13,480	28.0	21,400	31.6
	80 - 84	6,020	20.5	8,080	23.8	12,460	28.6
	85+	4,600	20.1	5,820	21.6	8,860	23.4
GENDER	Male	43,880	37.6	51,920	38.8	82,560	41.9
	Female	5,900	6.7	8,720	8.5	13,920	10.2
RACE	White	44,300	24.5	53,760	25.7	87,160	29.2
	Black	2,140	18.6	2,780	22.6	3,700	22.0
	Other	3,320	27.2	3,880	26.9	4,620	28.5
	Unknown	20	7.7	220	39.3	1,000	35.5
REGION	Northeast	10,820	24.8	13,060	26.2	22,280	28.7
	Midwest	10,720	23.9	12,620	25.1	21,920	30.4
	South	20,760	23.8	24,820	25.1	37,440	27.6
	West	7,480	25.5	10,140	27.4	14,840	30.6
TOTAL		49,780	24.3	60,640	25.7	96,480	28.9

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Prescription Events File, 2006-2013

Beneficiaries are age 65 years and over with continuous and full Parts A, B, and D enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

# Table M.6.7: Percent of Medicare kidney stone patients with full Part D enrollment who filled a prescription of calcium channel blockers (by age, gender, race, & region)

## 2006-2009

		20	06	20	)7	20	08	2009		
Demograph	nic Characteristics	Number of stone patients who filled a stones prescription for treatment	patients who filled a stones prescription for	patients who filled a		patients who filled a stones prescription for	patients who filled a stones prescription for	patients who filled a stones prescription for	Percent of stone patients who filled a stones prescription for treatment	
AGE	65 - 69	5,660	25.4	9,500	23.4	9,900	21.9	12,660	24.8	
	70 - 74	6,120	26.6	9,900	23.9	12,060	26.0	13,240	26.2	
	75 - 79	6,160	33.2	10,200	30.1	10,440	30.2	11,740	31.5	
	80 - 84	4,260	33.0	7,580	31.3	8,600	31.6	9,060	32.2	
	85+	3,240	33.3	5,360	31.5	6,260	32.1	7,000	34.9	
GENDER	Male	11,940	26.3	20,120	23.6	22,500	23.9	25,800	24.7	
	Female	13,500	32.9	22,420	31.2	24,760	31.4	27,900	33.8	
RACE	White	20,020	27.8	34,980	25.4	39,140	25.8	44,260	26.9	
	Black	2,800	42.8	3,740	43.6	4,400	46.0	5,560	50.0	
	Other	2,600	33.1	3,760	34.8	3,660	32.7	3,800	33.4	
	Unknown	20	14.3	60	37.5	60	42.9	80	57.1	
REGION	Northeast	6,040	30.4	9,360	27.1	10,180	27.1	11,880	29.2	
	Midwest	5,480	29.8	8,600	25.7	9,740	26.0	11,240	28.6	
	South	10,420	29.0	18,520	27.8	20,660	28.4	23,180	29.3	
	West	3,500	28.4	6,060	26.7	6,680	26.6	7,400	26.5	
TOTAL		25,440	29.4	42,540	27.1	47,260	27.3	53,700	28.7	

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Prescription Events File, 2006-2013

Beneficiaries are age 65 years and over with continuous and full Parts A, B, and D enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

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Table M.6.7: Percent of Medicare kidney stone patients with full Part D enrollment who filled a prescription of calcium channel blockers (by age, gender, race, & region)

## 2010-2013

		20	10	20	11	2013		
Demogra	phic Characteristics	who filled a stones	Percent of stone patients who filled a stones prescription for treatment	who filled a stones				
AGE	65 - 69	13,740	24.6	15,300	24.1	22,320	24.9	
	70 - 74	16,480	29.5	17,740	27.9	27,220	28.7	
	75 - 79	12,140	29.7	14,740	30.6	21,220	31.3	
	80 - 84	9,480	32.3	10,660	31.5	14,740	33.8	
	85+	7,660	33.5	9,740	36.2	13,420	35.5	
GENDER	Male	30,060	25.8	33,660	25.2	54,840	27.8	
	Female	29,440	33.4	34,520	33.7	44,080	32.2	
RACE	White	49,760	27.5	57,540	27.6	84,240	28.3	
	Black	5,220	45.4	5,800	47.2	8,140	48.4	
	Other	4,480	36.7	4,740	32.8	5,720	35.3	
	Unknown	40	15.4	100	17.9	820	29.1	
REGION	Northeast	12,060	27.7	14,520	29.2	23,260	29.9	
	Midwest	12,660	28.2	13,840	27.5	20,320	28.2	
	South	26,100	30.0	29,160	29.4	41,720	30.8	
	West	8,680	29.6	10,660	28.8	13,620	28.1	
TOTAL		59,500	29.0	68,180	28.9	98,920	29.6	

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Prescription Events File, 2006-2013

Beneficiaries are age 65 years and over with continuous and full Parts A, B, and D enrollment and no HMO enrollment during each year.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

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Table M.7.1: Total number of fee-for-service, age-eligible Medicare beneficiaries who were continuously and fully enrolled in Medicare Part AB and D from Jan 2009 through Dec 2013 (by age, gender, race, & region)

Demographi	c Characteristics	Number of beneficiaries	Percent of beneficiaries
AGE AT YEAR 2009	65 - 69	1,752,820	28.3
	70 - 74	1,765,900	28.5
	75 - 79	1,233,200	19.9
	80 - 84	859,900	13.9
	85+	579,540	9.4
GENDER	Male	2,559,800	41.3
	Female	3,631,560	58.7
RACE	White	5,470,240	88.4
	Black	393,020	6.4
	Other	324,360	5.2
	Unknown	3,740	0.1
REGION	Northeast	1,125,420	18.2
	Midwest	1,589,340	25.7
	South	2,416,080	39.0
	West	1,060,520	17.1
TOTAL		6,191,360	100.0

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Part AB and D Denominator Files, 2009-2013

Beneficiaries are age 65 years and over with continuous and full Part AB and D enrollment and no HMO enrollment from January 2009 through December 2013.

Unweighted counts have been multiplied by 20 to arrive at the counts displayed in this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.7.2: Claim-based 5-year prevalence of kidney stones among fee-for-service, age-eligible Medicare beneficiaries who were continuously and fully enrolled in Medicare Part AB and D from Jan 2009 through Dec 2013 (by age, gender, race, & region)

Demograph	ic Characteristics	Beneficiaries with at least one evaluation and management visit for kidney stones	Claim-based prevalence
AGE AT YEAR 2009	65 - 69	107,480	6.1
	70 - 74	104,100	5.9
	75 - 79	67,840	5.5
	80 - 84	39,580	4.6
	85+	19,960	3.4
SEX	Male	203,680	8.0
	Female	135,280	3.7
RACE	White	307,660	5.6
	Black	15,680	4.0
	Other	15,520	4.8
	Unknown	100	2.7
REGION	Northeast	65,400	5.8
	Midwest	79,680	5.0
	South	142,180	5.9
	West	51,700	4.9
TOTAL		338,960	5.5

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File, 2009-2013

Beneficiaries are age 65 years and over with continuous and full Part AB and D enrollment and no HMO enrollment from January 2009 through December 2013. Unweighted counts have been multiplied by 20 to arrive at the counts displayed in this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.7.3a: Number of kidney stone imaging procedures among fee-for-service, age-eligible Medicare kidney stone patients from Jan 2009 through Dec 2013 (by age, gender, race, & region)

## 0-4 Imaging Procedures

Demographic Cl	Demographic Characteristics		All kidney stone patients		Kidney stone patients with 0 imaging procedure		1 imaging procedure				oatients with procedures
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AGE AT YEAR 2009	65 - 69	107,480	100.0	30,340	28.2	19,320	18.0	16,680	15.5	17,480	16.3
	70 - 74	104,100	100.0	30,760	29.5	19,780	19.0	15,680	15.1	15,940	15.3
	75 - 79	67,840	100.0	21,080	31.1	13,820	20.4	10,220	15.1	9,920	14.6
	80 - 84	39,580	100.0	13,600	34.4	8,100	20.5	6,360	16.1	5,120	12.9
	85+	19,960	100.0	8,420	42.2	4,120	20.6	2,840	14.2	2,440	12.2
SEX	Male	203,680	100.0	60,700	29.8	37,640	18.5	30,880	15.2	31,760	15.6
	Female	135,280	100.0	43,500	32.2	27,500	20.3	20,900	15.4	19,140	14.1
RACE	White	307,660	100.0	92,800	30.2	58,220	18.9	47,220	15.3	46,460	15.1
	Black	15,680	100.0	5,620	35.8	3,380	21.6	2,460	15.7	2,040	13.0
	Other	15,520	100.0	5,720	36.9	3,540	22.8	2,060	13.3	2,400	15.5
	Unknown	100	100.0	60	60.0	0	0.0	40	40.0	0	0.0
REGION	Northeast	65,400	100.0	21,820	33.4	12,620	19.3	10,120	15.5	9,720	14.9
	Midwest	79,680	100.0	23,200	29.1	14,680	18.4	13,280	16.7	11,940	15.0
	South	142,180	100.0	42,000	29.5	26,980	19.0	21,020	14.8	21,060	14.8
	West	51,700	100.0	17,180	33.2	10,860	21.0	7,360	14.2	8,180	15.8
TOTAL		338,960	100.0	104,200	30.7	65,140	19.2	51,780	15.3	50,900	15.0

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File, 2009-2013

Beneficiaries are kidney stones patients age 65 years and over with continuous and full Part AB and D enrollment and no HMO enrollment from January 2009 through December 2013.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Imaging procedures for kidney stone evaluation included plain film/Kidney, Ureter, Bladder X-ray, intravenous pyelography, ultrasound, computed tomography, and magnetic resonance imaging.

Table M.7.3a: Number of kidney stone imaging procedures among fee-for-service, age-eligible Medicare kidney stone patients from Jan 2009 through Dec 2013 (by age, gender, race, & region)

## 5-20+ Imaging Procedures

Demographic C	haracteristics	All kidney s	tone patients		patients with g procedures	Kidney stone 10-19 imaging				
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	
AGE AT YEAR 2009	65 - 69	107,480	100.0	16,900	15.7	5,940	5.5	820	0.8	
	70 - 74	104,100	100.0	15,740	15.1	5,760	5.5	440	0.4	
	75 - 79	67,840	100.0	9,280	13.7	3,040	4.5	480	0.7	
	80 - 84	39,580	100.0	4,700	11.9	1,500	3.8	200	0.5	
	85+	19,960	100.0	1,800	9.0	340	1.7	0	0.0	
SEX	Male	203,680	100.0	30,780	15.1	10,680	5.2	1,240	0.6	
	Female	135,280	100.0	17,640	13.0	5,900	4.4	700	0.5	
RACE	White	307,660	100.0	45,500	14.8	15,620	5.1	1,840	0.6	
	Black	15,680	100.0	1,720	11.0	420	2.7	40	0.3	
	Other	15,520	100.0	1,200	7.7	540	3.5	60	0.4	
	Unknown	100	100.0	0	0.0	0	0.0	0	0.0	
REGION	Northeast	65,400	100.0	7,500	11.5	3,140	4.8	480	0.7	
	Midwest	79,680	100.0	11,920	15.0	4,280	5.4	380	0.5	
	South	142,180	100.0	22,880	16.1	7,340	5.2	900	0.6	
	West	51,700	100.0	6,120	11.8	1,820	3.5	180	0.3	
TOTAL		338,960	100.0	48,420	14.3	16,580	4.9	1,940	0.6	

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File, 2009-2013

Beneficiaries are kidney stones patients age 65 years and over with continuous and full Part AB and D enrollment and no HMO enrollment from January 2009 through December 2013. Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Imaging procedures for kidney stone evaluation included plain film/Kidney, Ureter, Bladder X-ray, intravenous pyelography, ultrasound, computed tomography, and magnetic resonance imaging.

Table M.7.3b: Number of plain film/KUB procedures among fee-for-service, age-eligible Medicare kidney stone patients from Jan 2009 through Dec 2013 (by age, gender, race, & region)

Demographic Char	acteristics	All kidney stor	ne patients	Kidney stone pati 0 plain film/KUB p		Kidney stone pati 1 plain film/KUB p		Kidney stone pati 2 plain film/KUB pr		Kidney stone patients with 3-4 plain film/KUB procedures		Kidney stone patients with 5+ plain film/KUB procedures	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AGE AT YEAR 2009	65 - 69	107,480	100.0	64,580	60.1	16,020	14.9	8,820	8.2	9,840	9.2	8,220	7.6
	70 - 74	104,100	100.0	65,700	63.1	14,340	13.8	7,400	7.1	9,140	8.8	7,520	7.2
	75 - 79	67,840	100.0	44,520	65.6	9,380	13.8	4,440	6.5	4,880	7.2	4,620	6.8
	80 - 84	39,580	100.0	27,100	68.5	5,480	13.8	2,360	6.0	2,720	6.9	1,920	4.9
	85+	19,960	100.0	14,860	74.4	2,800	14.0	960	4.8	860	4.3	480	2.4
SEX	Male	203,680	100.0	126,540	62.1	29,480	14.5	15,100	7.4	18,180	8.9	14,380	7.1
	Female	135,280	100.0	90,220	66.7	18,540	13.7	8,880	6.6	9,260	6.8	8,380	6.2
RACE	White	307,660	100.0	193,580	62.9	43,840	14.2	22,460	7.3	25,940	8.4	21,840	7.1
	Black	15,680	100.0	11,540	73.6	1,960	12.5	900	5.7	840	5.4	440	2.8
	Other	15,520	100.0	11,540	74.4	2,220	14.3	620	4.0	660	4.3	480	3.1
	Unknown	100	100.0	100	100.0	0	0.0	0	0.0	0	0.0	0	0.0
REGION	Northeast	65,400	100.0	46,300	70.8	8,520	13.0	3,860	5.9	3,500	5.4	3,220	4.9
	Midwest	79,680	100.0	49,120	61.6	11,460	14.4	5,720	7.2	7,380	9.3	6,000	7.5
	South	142,180	100.0	86,300	60.7	20,940	14.7	11,040	7.8	12,860	9.0	11,040	7.8
	West	51,700	100.0	35,040	67.8	7,100	13.7	3,360	6.5	3,700	7.2	2,500	4.8
TOTAL		338,960	100.0	216,760	63.9	48,020	14.2	23,980	7.1	27,440	8.1	22,760	6.7

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File, 2009-2013

Beneficiaries are kidney stones patients age 65 years and over with continuous and full Part AB and D enrollment and no HMO enrollment from January 2009 through December 2013.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

KUB, Kidney, Ureter, Bladder X-ray

Table M.7.3c: Number of ultrasound procedures among fee-for-service, age-eligible Medicare kidney stone patients from Jan 2009 through Dec 2013 (by age, gender, race, & region)

Demographic Cha	Demographic Characteristics		e patients	procedure		Kidney stone patients with 1 ultrasound procedure		Kidney stone patients with 2 ultrasound procedures		with 3-4 ultrasound		with 5+ ultrasound	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AGE AT YEAR 2009	65 - 69	107,480	100.0	86,760	80.7	12,920	12.0	4,280	4.0	2,060	1.9	1,460	1.4
	70 - 74	104,100	100.0	81,880	78.7	13,360	12.8	4,380	4.2	3,080	3.0	1,400	1.3
	75 - 79	67,840	100.0	53,580	79.0	8,440	12.4	2,920	4.3	1,880	2.8	1,020	1.5
	80 - 84	39,580	100.0	31,240	78.9	5,200	13.1	1,560	3.9	1,000	2.5	580	1.5
	85+	19,960	100.0	16,240	81.4	2,420	12.1	780	3.9	420	2.1	100	0.5
SEX	Male	203,680	100.0	162,220	79.6	25,200	12.4	7,960	3.9	5,140	2.5	3,160	1.6
	Female	135,280	100.0	107,480	79.5	17,140	12.7	5,960	4.4	3,300	2.4	1,400	1.0
RACE	White	307,660	100.0	245,640	79.8	38,200	12.4	12,100	3.9	7,460	2.4	4,260	1.4
	Black	15,680	100.0	12,560	80.1	1,900	12.1	760	4.8	380	2.4	80	0.5
	Other	15,520	100.0	11,420	73.6	2,220	14.3	1,060	6.8	600	3.9	220	1.4
	Unknown	100	100.0	80	80.0	20	20.0	0	0.0	0	0.0	0	0.0
REGION	Northeast	65,400	100.0	45,260	69.2	11,040	16.9	4,100	6.3	3,060	4.7	1,940	3.0
	Midwest	79,680	100.0	67,340	84.5	8,220	10.3	2,360	3.0	1,280	1.6	480	0.6
	South	142,180	100.0	116,020	81.6	16,200	11.4	5,360	3.8	3,020	2.1	1,580	1.1
	West	51,700	100.0	41,080	79.5	6,880	13.3	2,100	4.1	1,080	2.1	560	1.1
TOTAL		338,960	100.0	269,700	79.6	42,340	12.5	13,920	4.1	8,440	2.5	4,560	1.3

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File, 2009-2013

Beneficiaries are kidney stones patients age 65 years and over with continuous and full Part AB and D enrollment and no HMO enrollment from January 2009 through December 2013.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.7.3d: Number of CT procedures among fee-for-service, age-eligible Medicare kidney stone patients from Jan 2009 through Dec 2013 (by age, gender, race, & region)

Demographic Cha	Demographic Characteristics		All kidney stone patients		0 C I procedure		Kidney stone patients with 1 CT procedure						Kidney stone patients with 5+ CT procedures	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
AGE AT YEAR 2009	65 - 69	107,480	100.0	45,700	42.5	23,400	21.8	21,280	19.8	11,100	10.3	6,000	5.6	
	70 - 74	104,100	100.0	47,520	45.6	22,740	21.8	18,300	17.6	10,540	10.1	5,000	4.8	
	75 - 79	67,840	100.0	32,220	47.5	13,960	20.6	12,760	18.8	6,000	8.8	2,900	4.3	
	80 - 84	39,580	100.0	20,460	51.7	7,860	19.9	6,580	16.6	3,100	7.8	1,580	4.0	
	85+	19,960	100.0	11,580	58.0	3,760	18.8	3,080	15.4	1,180	5.9	360	1.8	
SEX	Male	203,680	100.0	93,100	45.7	42,480	20.9	37,380	18.4	20,520	10.1	10,200	5.0	
	Female	135,280	100.0	64,380	47.6	29,240	21.6	24,620	18.2	11,400	8.4	5,640	4.2	
RACE	White	307,660	100.0	140,520	45.7	65,660	21.3	56,920	18.5	29,840	9.7	14,720	4.8	
	Black	15,680	100.0	7,800	49.7	3,320	21.2	2,820	18.0	1,000	6.4	740	4.7	
	Other	15,520	100.0	9,100	58.6	2,720	17.5	2,240	14.4	1,080	7.0	380	2.4	
	Unknown	100	100.0	60	60.0	20	20.0	20	20.0	0	0.0	0	0.0	
REGION	Northeast	65,400	100.0	34,800	53.2	11,680	17.9	11,380	17.4	4,980	7.6	2,560	3.9	
	Midwest	79,680	100.0	33,520	42.1	17,860	22.4	15,960	20.0	8,360	10.5	3,980	5.0	
	South	142,180	100.0	63,560	44.7	31,140	21.9	25,920	18.2	13,900	9.8	7,660	5.4	
	West	51,700	100.0	25,600	49.5	11,040	21.4	8,740	16.9	4,680	9.1	1,640	3.2	
TOTAL		338,960	100.0	157,480	46.5	71,720	21.2	62,000	18.3	31,920	9.4	15,840	4.7	

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File, 2009-2013

Beneficiaries are kidney stones patients age 65 years and over with continuous and full Part AB and D enrollment and no HMO enrollment from January 2009 through December 2013.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

CT, computed tomography

Table M.7.4: Number of kidney stone emergency room visits among fee-for-service, age-eligible Medicare kidney stone patients from Jan 2009 through Dec 2013

Demographic Char	Demographic Characteristics		All kidney stone patients		Kidney stone patients with 0 emergemcy room visits		ne patients with mcy room visits		ne patients with mcy room visits			
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
AGE AT YEAR 2009	65 - 69	107,480	100.0	63,200	58.8	32,760	30.5	8,020	7.5	3,500	3.3	
	70 - 74	104,100	100.0	63,480	61.0	30,320	29.1	7,260	7.0	3,040	2.9	
	75 - 79	67,840	100.0	41,540	61.2	19,760	29.1	4,240	6.3	2,300	3.4	
	80 - 84	39,580	100.0	23,660	59.8	12,060	30.5	2,600	6.6	1,260	3.2	
	85+	19,960	100.0	11,140	55.8	6,880	34.5	1,460	7.3	480	2.4	
SEX	Male	203,680	100.0	122,580	60.2	60,420	29.7	14,080	6.9	6,600	3.2	
	Female	135,280	100.0	80,440	59.5	41,360	30.6	9,500	7.0	3,980	2.9	
RACE	White	307,660	100.0	183,480	59.6	93,000	30.2	21,520	7.0	9,660	3.1	
	Black	15,680	100.0	8,620	55.0	5,440	34.7	1,120	7.1	500	3.2	
	Other	15,520	100.0	10,900	70.2	3,280	21.1	920	5.9	420	2.7	
	Unknown	100	100.0	20	20.0	60	60.0	20	20.0	0	0.0	
REGION	Northeast	65,400	100.0	41,440	63.4	17,520	26.8	4,320	6.6	2,120	3.2	
	Midwest	79,680	100.0	44,440	55.8	25,940	32.6	6,660	8.4	2,640	3.3	
	South	142,180	100.0	85,400	60.1	43,380	30.5	9,200	6.5	4,200	3.0	
	West	51,700	100.0	31,740	61.4	14,940	28.9	3,400	6.6	1,620	3.1	
TOTAL		338,960	100.0	203,020	59.9	101,780	30.0	23,580	7.0	10,580	3.1	

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File, 2009-2013

Beneficiaries are kidney stones patients age 65 years and over with continuous and full Part AB and D enrollment and no HMO enrollment from January 2009 through December 2013.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.7.5: Number of kidney stone surgical episodes among fee-for-service, age-eligible Medicare kidney stone patients from Jan 2009 through Dec 2013 (by age, gender, race, & region)

Demographic Ch	Demographic Characteristics		All kidney stone patients		patients with 0 surgery	Kidney stone	patients with 1 surgery	Kidney stone	patients with 2 surgeries	Kidney stone patients with 3+ surgeries	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AGE AT YEAR 2009	65 - 69	107,480	100.0	77,620	72.2	16,740	15.6	7,860	7.3	5,260	4.9
	70 - 74	104,100	100.0	77,580	74.5	14,940	14.4	7,300	7.0	4,280	4.1
	75 - 79	67,840	100.0	51,360	75.7	8,800	13.0	4,800	7.1	2,880	4.2
	80 - 84	39,580	100.0	31,320	79.1	4,040	10.2	2,500	6.3	1,720	4.3
	85+	19,960	100.0	16,840	84.4	1,800	9.0	900	4.5	420	2.1
SEX	Male	203,680	100.0	152,240	74.7	29,340	14.4	13,360	6.6	8,740	4.3
	Female	135,280	100.0	102,480	75.8	16,980	12.6	10,000	7.4	5,820	4.3
RACE	White	307,660	100.0	228,500	74.3	43,620	14.2	22,060	7.2	13,480	4.4
	Black	15,680	100.0	12,860	82.0	1,340	8.5	800	5.1	680	4.3
	Other	15,520	100.0	13,280	85.6	1,340	8.6	500	3.2	400	2.6
	Unknown	100	100.0	80	80.0	20	20.0	0	0.0	0	0.0
REGION	Northeast	65,400	100.0	51,820	79.2	7,020	10.7	3,860	5.9	2,700	4.1
	Midwest	79,680	100.0	57,560	72.2	10,920	13.7	7,140	9.0	4,060	5.1
	South	142,180	100.0	105,760	74.4	20,620	14.5	9,400	6.6	6,400	4.5
	West	51,700	100.0	39,580	76.6	7,760	15.0	2,960	5.7	1,400	2.7
TOTAL		338,960	100.0	254,720	75.2	46,320	13.7	23,360	6.9	14,560	4.3

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File, 2009-2013

Beneficiaries are kidney stones patients age 65 years and over with continuous and full Part AB and D enrollment and no HMO enrollment from January 2009 through December 2013. Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Surgical procedures for kidney stones included open stone surgery, laparoscopic removal procedure, percutaneous nephrolithotomy, ureteroscopy, and extracorporeal shock wave lithotripsy.

Table M.7.6: Number and percent of re-surgeries within 120 days after a kidney stone surgical episode among fee-for-service, age-eligible Medicare kidney stone patients (by surgery type)

Initial surgery type	Number of surgeries	Number of surgeries with re-surgery*	Percent of re-surgeries*
ESWL	50,220	16,040	31.9
Ureteroscopy	80,620	27,280	33.8
PCNL	6,760	2,460	36.4
Open/Laparoscopy	960	260	27.1
Any	138,560	46,040	33.2

\* A re-surgery was defined by another surgical procedure performed from 1 day to 119 days after an initial surgical procedure.

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File, 2009-2013

Beneficiaries are kidney stones patients age 65 years and over with continuous and full Part AB and D enrollment and no HMO enrollment from January 2009 through December 2013.

Only surgeries during the period January 1, 2009, to August 31, 2013 are included.

One patient may have multiple episodes of initial surgery that is tracked for re-surgery.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

ESWL, extracorporeal shock wave lithotripsy; PCNL, percutaneous nephrolithotomy

Table M.7.7: Distribution of re-surgery type within 120 days after a kidney stone surgical episode among fee-for-service, age-eligible Medicare kidney stone patients (by surgery type)

Initial Surgery Type	Re-surgery* type	Number of surgeries	Percent of surgeries
ESWL	ESWL	9,360	58.4
	Ureteroscopy	6,060	37.8
	PCNL	480	3.0
	Open/Laparoscopy	140	0.9
	Total	16,040	100.0
Ureteroscopy	ESWL	10,820	39.7
	Ureteroscopy	15,320	56.2
	PCNL	1,020	3.7
	Open/Laparoscopy	120	0.4
	Total	27,280	100.0
PCNL	ESWL	560	22.8
	Ureteroscopy	1,000	40.7
	PCNL	800	32.5
	Open/Laparoscopy	100	4.1
	Total	2,460	100.0
Open/Laparoscopy	ESWL	80	30.8
	Ureteroscopy	120	46.2
	PCNL	60	23.1
	Open/Laparoscopy	0	0.0
	Total	260	100.0

\* A re-surgery was defined by another surgical procedure performed from 1 day to 119 days after an initial surgical procedure.

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File, 2009-2013

Beneficiaries are kidney stones patients age 65 years and over with continuous and full Part AB and D enrollment and no HMO enrollment from January 2009 through December 2013.

Only surgeries during the period January 1, 2009, to August 31, 2013 are included.

One patient may have multiple episodes of initial surgery that is tracked for re-surgery.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.7.8: Number and percent of Medicare kidney stone patients with re-surgery within 120 days after a kidney stone surgical episode

Demographic Characteristics		Number of kidney stone patients with surgery during the period January 1, 2009, to August 31, 2013	Number of kidney stone patients with re- surgery*	Percent of kidney stone patients with re- surgery*
AGE AT YEAR 2009	65 - 69	27,600	10,180	36.9
	70 - 74	24,600	9,180	37.3
	75 - 79	15,680	6,380	40.7
	80 - 84	7,780	3,520	45.2
	85+	2,900	1,020	35.2
SEX	Male	48,240	17,800	36.9
	Female	30,320	12,480	41.2
RACE	White	73,780	28,360	38.4
	Black	2,680	1,180	44.0
	Other	2,080	740	35.6
	Unknown	20	0	0.0
REGION	Northeast	12,660	5,060	40.0
	Midwest	20,560	9,340	45.4
	South	34,300	12,420	36.2
	West	11,040	3,460	31.3
TOTAL		78,560	30,280	38.5

\* A re-surgery was defined by another surgical procedure performed from 1 day to 119 days after an initial surgical procedure.

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File, 2009-2013

Beneficiaries are kidney stones patients age 65 years and over with continuous and full Part AB and D enrollment and no HMO enrollment from Janurary 2009 through December 2013.

Only patients with surgery during the period January 1, 2009, to August 31, 2013 are included.

One patient may have multiple episodes of initial surgery that is tracked for re-surgery.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Table M.7.9: Number and percent of kidney stone surgical episodes with a prescription of alkalinization agents one week before or up to one month after a surgical episode among fee-for-service, age-eligible Medicare kidney stone patients (by surgery type)

Surgery	Number of surgeries	Number of surgeries with prescription	Percent of surgeries with prescription
ESWL	57,160	2,920	5.1
Ureteroscopy	81,620	3,400	4.2
PCNL	6,920	360	5.2
Open/Laparoscopy	1,080	60	5.6
Any	146,780	6,740	4.6

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File and 5% Prescription Event File, 2009-2013 Beneficiaries are kidney stones patients age 65 years and over with continuous and full Part AB and D enrollment and no HMO enrollment from Janurary 2009 through December 2013.

One patient may have multiple episodes of surgeries.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.7.10: Number and percent of kidney stone surgical episodes with a prescription of opiate agonists one week before or up to one month after a surgical episode among fee-for-service, age-eligible Medicare kidney stone patients (by surgery type)

Surgery	Number of surgeries	Number of surgeries with prescription	Percent of surgeries with prescription
ESWL	57,160	38,040	66.6
Ureteroscopy	81,620	53,980	66.1
PCNL	6,920	4,220	61.0
Open/Laparoscopy	1,080	680	63.0
Any	146,780	96,920	66.0

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File and 5% Prescription Event File, 2009-2013

Beneficiaries are age 65 years and over with continuous and full Part AB and D enrollment and no HMO enrollment from January 2009 through December 2013

Only surgeries during the period January 7, 2009, to November 30, 2013 are included.

One patient may have multiple episodes of surgeries.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.7.11: Number and percent of kidney stone surgical episodes with a prescription of alpha blockers one week before or up to one month after a surgical episode among fee-for-service, age-eligible Medicare kidney stone patients (by surgery type)

Surgery	Number of surgeries	Number of surgeries with prescription	Percent of surgeries with prescription
ESWL	57,160	16,540	28.9
Ureteroscopy	81,620	26,100	32.0
PCNL	6,920	1,160	16.8
Open/Laparoscopy	1,080	180	16.7
Any	146,780	43,980	30.0

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File and 5% Prescription Event File, 2009-2013

Beneficiaries are age 65 years and over with continuous and full Part AB and D enrollment and no HMO enrollment from January 2009 through December 2013

Only surgeries during the period January 7, 2009, to November 30, 2013 are included.

One patient may have multiple episodes of surgeries.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.7.12: Number and percent of kidney stone surgical episodes with a prescription of calcium channel blockers one week before or up to one month after a surgical episode among fee-for-service, age-eligible Medicare kidney stone patients (by surgery type)

Surgery	Number of surgeries	Number of surgeries with	Percent of surgeries with
		prescription	prescription
ESWL	57,160	13,120	23.0
Ureteroscopy	81,620	19,480	23.9
PCNL	6,920	2,100	30.4
Open/Laparoscopy	1,080	320	29.6
Any	146,780	35,020	23.9

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File and 5% Prescription Event File, 2009-2013

Beneficiaries are age 65 years and over with continuous and full Part AB and D enrollment and no HMO enrollment from January 2009 through December 2013

Only surgeries during the period January 7, 2009, to November 30, 2013 are included.

One patient may have multiple episodes of surgeries.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Counts less than 600 should be interpreted with caution; all percentages are rounded to one decimal place.

Table M.7.13: Number and percent of Medicare kidney stone patients who filled a prescription of alkalinization agents one week before or up to one month after a surgical episode (by age, gender, race, & region)

Demographic Characteristics		Number of kidney stone patients	Number of kidney stone patients with prescription	Percent of kidney stone patients with prescription	
AGE AT YEAR 2009	65 - 69	29,200	1,820	6.2	
	70 - 74	26,060	1,320	5.1	
	75 - 79	16,200	780	4.8	
	80 - 84	8,080	400	5.0	
	85+	3,040	80	2.6	
SEX	Male	50,340	2,860	5.7	
	Female	32,240	1,540	4.8	
RACE	White	77,620	4,260	5.5	
	Black	2,780	100	3.6	
	Other	2,160	40	1.9	
	Unknown	20	0	0.0	
REGION	Northeast	13,320	980	7.4	
	Midwest	21,540	1,080	5.0	
	South	35,900	1,760	4.9	
	West	11,820	580	4.9	
TOTAL		82,580	4,400	5.3	

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File and 5% Prescription Event File, 2009-2013

Beneficiaries are age 65 years and over with continuous and full Part AB and D enrollment and no HMO enrollment from January 2009 through December 2013. Only patients with surgery during the period January 7, 2009, to November 30, 2013 are included.

One patient may have multiple episodes of surgeries; the medication may not be prescribed for all episodes in patients with prescription.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Table M.7.14: Number and percent of Medicare kidney stone patients who filled a prescription of opiate agonists one week before or up to one month after a surgical episode (by age, gender, race, & region)

Demographic	Characteristics	Number of kidney stone patients	Number of kidney stone patients with prescription	
AGE AT YEAR 2009	65 - 69	29,200	23,400	80.1
	70 - 74	26,060	20,000	76.8
	75 - 79	16,200	12,020	74.2
	80 - 84	8,080	5,340	66.1
	85+	3,040	1,660	54.6
SEX	Male	50,340	38,100	75.7
	Female	32,240	24,320	75.4
RACE	White	77,620	58,740	75.7
	Black	2,780	2,060	74.1
	Other	2,160	1,600	74.1
	Unknown	20	20	100.0
REGION	Northeast	13,320	8,780	65.9
	Midwest	21,540	16,400	76.1
	South	35,900	28,420	79.2
	West	11,820	8,820	74.6
TOTAL		82,580	62,420	75.6

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File and 5% Prescription Event File, 2009-2013

Beneficiaries are age 65 years and over with continuous and full Part AB and D enrollment and no HMO enrollment from January 2009 through December 2013.

Only patients with surgery during the period January 7, 2009, to November 30, 2013 are included.

One patient may have multiple episodes of surgeries; the medication may not be prescribed for all episodes in patients with prescription.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Table M.7.15: Number and percent of Medicare kidney stone patients who filled a prescription of alpha blockers one week before or up to one month after a surgical episode (by age, gender, race, & region)

Demographic Characteristics		Number of kidney stone patients	Number of kidney stone patients with prescription	Percent of kidney stone patients with prescription
AGE AT YEAR 2009	65 - 69	29,200	10,760	36.9
	70 - 74	26,060	9,520	36.5
	75 - 79	16,200	5,700	35.2
	80 - 84	8,080	2,440	30.2
	85+	3,040	840	27.6
SEX	Male	50,340	23,800	47.3
	Female	32,240	5,460	16.9
RACE	White	77,620	27,900	35.9
	Black	2,780	680	24.5
	Other	2,160	680	31.5
	Unknown	20	0	0.0
REGION	Northeast	13,320	4,500	33.8
	Midwest	21,540	7,640	35.5
	South	35,900	12,640	35.2
	West	11,820	4,480	37.9
TOTAL		82,580	29,260	35.4

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File and 5% Prescription Event File, 2009-2013

Beneficiaries are age 65 years and over with continuous and full Part AB and D enrollment and no HMO enrollment from January 2009 through December 2013.

Only patients with surgery during the period January 7, 2009, to November 30, 2013 are included.

One patient may have multiple episodes of surgeries; the medication may not be prescribed for all episodes in patients with prescription.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

Table M.7.16: Number and percent of Medicare kidney stone patients who filled a prescription of calcium channel blockers one week before or up to one month after a surgical episode (by age, gender, race, & region)

Demographic Characteristics		Number of kidney stone patients	Number of kidney stone patients with prescription	Percent of kidney stone patients with prescription
AGE AT YEAR 2009	65 - 69	29,200	6,420	22.0
	70 - 74	26,060	6,760	25.9
	75 - 79	16,200	4,360	26.9
	80 - 84	8,080	2,360	29.2
	85+	3,040	3,040	30.9
SEX	Male	50,340	11,480	22.8
	Female	32,240	9,360	29.0
RACE	White	77,620	19,120	24.6
	Black	2,780	1,220	43.9
	Other	2,160	500	23.2
	Unknown	20	0	0.0
REGION	Northeast	13,320	3,400	25.5
	Midwest	21,540	5,580	25.9
	South	35,900	9,100	25.4
	West	11,820	2,760	23.4
TOTAL		82,580	20,840	25.2

Data source: Centers for Medicare and Medicaid Services, Medicare 5% Claims File and 5% Prescription Event File, 2009-2013

Beneficiaries are age 65 years and over with continuous and full Part AB and D enrollment and no HMO enrollment from January 2009 through December 2013.

Only patients with surgery during the period January 7, 2009, to November 30, 2013 are included.

One patient may have multiple episodes of surgeries; the medication may not be prescribed for all episodes in patients with prescription.

Unweighted counts have been multiplied by 20 to arrive at the number of counts for this table.

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Table N1: Lifetime Prevalence of Kidney Stones by Survey Years in the National Health and Nutrition Examination Survey, 2007-2012 (by age, gender, & race)

		2007	/-2012	2007-2008		2009-2010		2011-2012	
Lifetime Prevalence of Kic Years in the National Heal Examination Survey. 2007	th and Nutrition	prevalence	95% CI	prevalence	95% CI	prevalence	95% CI	prevalence	95% CI
AGE GROUP	20-24	2.9	(2.0 – 4.3)	-	-	-	-	-	-
	25-34	5	(4.2 – 5.9)	4.4	(3.1 – 6.2)	5.1	(3.7 – 7.2)	5.4	(4.5 – 6.6)
	35-44	7.8	(6.6 – 9.3)	8.1	(6.0 – 10.9)	6.3	(5.0 – 8.0)	9.2	(6.8 – 12.2)
	45-54	9.9	(8.7 – 11.3)	10.6	(8.5 – 13.1)	11	(8.6 – 13.9)	8.1	(6.5 – 10.0)
	55-64	11.5	(10.0 – 13.1)	11.7	(8.9 – 15.2)	11.4	(9.4 – 13.8)	11.3	(8.8 – 14.4)
	65-69	12.1	(9.5 – 15.3)	14.9	(10.6 – 20.4)	12.9	(8.3 – 19.6)	8.9	(5.5 – 14.1)
	70-74	12.2	(9.1 – 16.2)	11.1	(7.8 – 15.5)	11.6	(9.2 – 14.5)	-	-
	75-79	14	(11.6 – 16.8)	14.9	(11.7 – 18.8)	15.9	(11.5 – 21.6)	11	(7.2 – 16.5)
	80+	13.6	(11.4 – 16.2)	12.5	(9.6 – 16.1)	14.8	(10.8 – 20.1)	13.6	(9.8 – 18.6)
GENDER	Male	9.8	(8.9 – 10.9)	11.5	(9.8 – 13.4)	9.9	(8.4 – 11.7)	8.1	(6.7 – 9.9)
	Female	7.7	(6.9 – 8.6)	6.5	(5.5 – 7.6)	7.7	(6.8 – 8.7)	8.9	(7.1 – 11.0)
RACE AND ETHNICITY	Non-Hispanic white	10	(9.2 – 10.9)	10.2	(8.9 – 11.8)	10.4	(9.4 – 11.4)	9.4	(7.7 – 11.4)
	Non-Hispanic black	4.4	(3.7 – 5.1)	4.3	(3.0 – 6.1)	4.4	(3.4 – 5.7)	4.3	(3.4 – 5.5)
	Mexican American	6.4	(5.3 – 7.6)	5.7	(4.5 – 7.2)	5.2	(3.4 – 7.7)	8.5	(6.3 – 11.3)
	Other	7.2	(6.1 – 8.6)	7.2	(5.1 – 10.0)	6.7	(5.2 – 8.7)	7.7	(5.8 – 10.1)
TOTAL		8.7	(8.1 – 9.4)	8.9	(7.8 – 10.1)	8.8	(8.0 – 9.7)	8.5	(7.3 – 9.9)

Data source: National Health and Nutrition Examination Survey 2007-2012

Data showed as prevalence (95% confidence interval)

Data not shown do not meet standards of reliability (relative standard error  $\geq 30\%$ )

CI, confidence interval

Table N2: Number of Times Kidney Stones Passed, among Those Reporting Having Had Kidney Stones in the National Health and Nutrition Examination Survey, 2007-2012 (by age, gender, & race)

Number of Times Kidney Stones Passed, among Those Reporting Having Had Kidney Stones in the National Health and Nutrition Examination Survey, 2007-2012		1 tii	ne	2 times		3+ times	
		percent	95% CI	percent	95% CI	percent	95% CI
AGE GROUP	20-24	69.3	(47.7 – 84.8)	-	-	-	-
	25-34	55	(45.3 – 64.3)	17.4	(11.4 – 25.6)	27.6	(20.4 – 36.1)
	35-44	59.7	(51.8 – 67.2)	15.3	(9.2 – 24.4)	25	(17.1 – 34.9)
	45-54	56.7	(49.1 – 64.1)	19.1	(13.2 – 27.0)	24.1	(17.8 – 31.8)
	55-64	62.1	(52.8 – 70.5)	17.2	(11.4 – 25.0)	20.8	(14.9 – 28.2)
	65-69	49.8	(38.8 – 60.9)	20.3	(11.4 – 33.6)	29.8	(20.1 – 41.8)
	70-74	54.5	(39.9 – 68.4)	21.7	(13.1 – 33.7)	23.8	(16.4 – 33.3)
	75-79	67.4	(55.4 – 77.4)	16.2	(8.9 – 27.7)	16.4	(11.4 – 23.1)
	80+	68.9	(58.3 – 77.8)	19.6	(12.5 – 29.3)	-	-
GENDER	Male	58	(54.1 – 61.8)	19.4	(15.6 – 23.8)	22.7	(19.1 – 26.6)
	Female	60.9	(55.0 - 66.4)	15.2	(11.4 – 19.8)	24	(19.6 – 29.0)
RACE AND ETHNICITY	Non-Hispanic white	57.7	(53.7 – 61.5)	16.8	(13.7 – 20.3)	25.6	(22.0 – 29.5)
	Non-Hispanic black	72.4	(64.6 – 79.0)	16.1	(10.3 – 24.2)	11.6	(7.3 – 17.8)
	Mexican American	69.8	(60.6 – 77.7)	17.3	(12.8 – 22.9)	12.9	(7.0 – 22.6)
	Other	59.4	(49.9 – 68.3)	23.6	(16.3 – 32.9)	17	(11.2 – 24.9)
TOTAL		59.3	(55.8 – 62.6)	17.5	(14.7 – 20.7)	23.2	(20.2–26.6)

Data source: National Health and Nutrition Examination Survey 2007-2012

Data showed as percent (95% confidence interval)

Data not shown do not meet standards of reliability (relative standard error  $\geq 30\%$ )

CI, confidence interval

		2004		2005		2006		2007		2008	
	nographic racteristics	Number of enrollees	Percent of enrollees	Number of enrollees	Percent of enrollees	Number of enrollees	Percent of enrollees	Number of enrollees	Percent of enrollees	Number of enrollees	Percent of enrollees
AGE	18 - 24	590,112	11.2	626,294	11.2	642,908	11.3	660,141	11.2	701,460	11.4
	25 - 34	1,058,647	20.1	1,063,866	19.1	1,072,193	18.9	1,106,101	18.8	1,175,867	19.2
	35 - 44	1,430,604	27.2	1,466,284	26.3	1,451,875	25.6	1,459,939	24.8	1,476,011	24.1
	45 - 54	1,325,535	25.2	1,439,103	25.8	1,465,992	25.9	1,516,933	25.8	1,563,374	25.5
	55 - 64	854,496	16.2	980,558	17.6	1,037,301	18.3	1,144,661	19.4	1,219,501	19.9
GENDER	Male	2,565,983	48.8	2,714,048	48.7	2,759,503	48.7	2,856,685	48.5	2,985,195	48.6
	Female	2,693,411	51.2	2,862,057	51.3	2,910,766	51.3	3,031,090	51.5	3,151,018	51.4
RACE	White	3,676,796	69.9	3,936,889	70.6	4,052,890	71.5	4,181,353	71.0	4,303,329	70.1
	Black	349,416	6.6	388,743	7.0	429,822	7.6	507,343	8.6	577,084	9.4
	Hispanic	426,111	8.1	468,047	8.4	508,883	9.0	542,640	9.2	576,180	9.4
	Asian	172,675	3.3	184,236	3.3	196,955	3.5	215,609	3.7	244,565	4.0
	Unknown	634,396	12.1	598,190	10.7	481,719	8.5	440,830	7.5	435,055	7.1
REGION	Northeast	585,605	11.1	580,637	10.4	604,542	10.7	632,584	10.7	646,525	10.5
	Midwest	1,630,247	31.0	1,674,160	30.0	1,676,763	29.6	1,618,196	27.5	1,612,969	26.3
	South	2,300,119	43.7	2,473,214	44.4	2,502,938	44.1	2,764,985	47.0	2,935,803	47.8
	West	743,423	14.1	848,094	15.2	886,026	15.6	872,010	14.8	940,916	15.3
TOTAL		5,259,394	100.0	5,576,105	100.0	5,670,269	100.0	5,887,775	100.0	6,136,213	100.0

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. All percentages are rounded to one decimal place.

		200	9	201	0	201	1	201	2	201	3
	mographic iracteristics	Number of enrollees	Percent of enrollees								
AGE	18 - 24	704,094	11.4	674,345	11.4	778,536	12.8	804,648	13.2	815,039	13.4
	25 - 34	1,188,652	19.2	1,110,351	18.8	1,125,940	18.5	1,140,209	18.6	1,143,021	18.8
	35 - 44	1,471,058	23.8	1,388,505	23.5	1,374,174	22.6	1,368,630	22.4	1,347,167	22.1
	45 - 54	1,571,323	25.4	1,504,198	25.4	1,508,597	24.8	1,486,633	24.3	1,464,679	24.0
	55 - 64	1,251,635	20.2	1,238,005	20.9	1,305,183	21.4	1,313,726	21.5	1,323,952	21.7
GENDER	Male	3,005,442	48.6	2,878,212	48.7	2,982,537	49.0	3,015,330	49.3	3,012,514	49.4
	Female	3,181,320	51.4	3,037,192	51.3	3,109,893	51.0	3,098,516	50.7	3,081,344	50.6
RACE	White	4,307,214	69.6	4,124,780	69.7	4,242,369	69.6	4,252,881	69.6	4,214,249	69.2
	Black	616,021	10.0	590,367	10.0	605,300	9.9	589,993	9.7	584,593	9.6
	Hispanic	582,461	9.4	551,219	9.3	583,958	9.6	585,389	9.6	600,684	9.9
	Asian	256,452	4.1	252,929	4.3	259,083	4.3	279,742	4.6	287,703	4.7
	Unknown	424,614	6.9	396,109	6.7	401,720	6.6	405,841	6.6	406,629	6.7
REGION	Northeast	647,004	10.5	609,599	10.3	612,996	10.1	619,148	10.1	604,335	9.9
	Midwest	1,557,153	25.2	1,504,775	25.4	1,577,513	25.9	1,652,933	27.0	1,679,308	27.6
	South	3,026,404	48.9	2,867,335	48.5	2,919,300	47.9	2,793,247	45.7	2,727,911	44.8
	West	956,201	15.5	933,695	15.8	982,621	16.1	1,048,518	17.1	1,082,304	17.8
TOTAL		6,186,762	100.0	5,915,404	100.0	6,092,430	100.0	6,113,846	100.0	6,093,858	100.0

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. All percentages are rounded to one decimal place.

		200	)4	20	05	20	06	20	07	20	08
	emographic naracteristics	Number of kidney stone patients	Percent of enrollees with kidney stones	stone natients	Percent of enrollees with kidney stones	stone natients	Percent of enrollees with kidney stones		Percent of enrollees with kidney stones	I etono nationte l	Percent of enrollees with kidney stones
AGE	18 - 24	1,914	0.3	2,218	0.4	2,366	0.4	2,412	0.4	2,620	0.4
	25 - 34	6,832	0.6	7,398	0.7	7,528	0.7	7,943	0.7	8,489	0.7
	35 - 44	11,368	0.8	12,854	0.9	13,223	0.9	13,576	0.9	14,038	1.0
	45 - 54	12,795	1.0	14,932	1.0	15,944	1.1	16,863	1.1	17,734	1.1
	55 - 64	10,547	1.2	12,841	1.3	14,418	1.4	16,412	1.4	17,905	1.5
GENDER	Male	26,318	1.0	30,048	1.1	31,764	1.2	33,865	1.2	35,582	1.2
	Female	17,138	0.6	20,195	0.7	21,715	0.7	23,341	0.8	25,204	0.8
RACE	White	32,003	0.9	37,330	0.9	40,448	1.0	43,225	1.0	45,351	1.1
	Black	2,218	0.6	2,689	0.7	3,166	0.7	3,913	0.8	4,607	0.8
	Hispanic	3,458	0.8	4,136	0.9	4,762	0.9	5,181	1.0	5,717	1.0
	Asian	932	0.5	1,074	0.6	1,171	0.6	1,284	0.6	1,477	0.6
	Unknown	4,845	0.8	5,014	0.8	3,932	0.8	3,603	0.8	3,634	0.8
REGION	Northeast	4,553	0.8	4,980	0.9	5,588	0.9	5,996	0.9	6,341	1.0
	Midwest	12,493	0.8	13,963	0.8	14,383	0.9	14,134	0.9	14,139	0.9
	South	21,274	0.9	24,938	1.0	26,601	1.1	30,132	1.1	32,529	1.1
	West	5,136	0.7	6,362	0.8	6,907	0.8	6,944	0.8	7,777	0.8
TOTAL		43,456	0.8	50,243	0.9	53,479	0.9	57,206	1.0	60,786	1.0

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year.

Kidney stone patients were defined by one or more evaluation and management claim with kidney stone diagnostic codes during each

year. All percentages are rounded to one decimal place.

		200	9	20	10	20	11	20	12	20	13
	ographic acteristics	Number of kidney stone patients	Percent of enrollees with kidney stones	stone natients i	Percent of enrollees with kidney stones	stone natients	Percent of enrollees with kidney stones	i stone natients	Percent of enrollees with kidney stones	I STONE NATIENTS I	Percent of enrollees with kidney stones
AGE	18 - 24	2,606	0.4	2,643	0.4	3,210	0.4	3,283	0.4	3,205	0.4
	25 - 34	8,591	0.7	8,033	0.7	8,005	0.7	7,992	0.7	7,608	0.7
	35 - 44	14,851	1.0	14,025	1.0	14,221	1.0	13,917	1.0	13,443	1.0
	45 - 54	18,458	1.2	17,807	1.2	18,474	1.2	18,572	1.2	18,060	1.2
	55 - 64	18,846	1.5	18,977	1.5	20,435	1.6	20,650	1.6	21,130	1.6
GENDER	Male	37,258	1.2	36,057	1.3	37,873	1.3	37,678	1.2	36,818	1.2
	Female	26,094	0.8	25,428	0.8	26,472	0.9	26,736	0.9	26,628	0.9
RACE	White	47,027	1.1	46,084	1.1	48,114	1.1	48,228	1.1	47,182	1.1
	Black	5,044	0.8	5,084	0.9	5,236	0.9	5,174	0.9	5,126	0.9
	Hispanic	5,999	1.0	5,356	1.0	5,806	1.0	5,838	1.0	5,822	1.0
	Asian	1,667	0.7	1,570	0.6	1,719	0.7	1,778	0.6	1,966	0.7
	Unknown	3,615	0.9	3,391	0.9	3,470	0.9	3,396	0.8	3,350	0.8
REGION	Northeast	6,508	1.0	6,156	1.0	6,294	1.0	6,527	1.1	6,319	1.0
	Midwest	13,860	0.9	13,937	0.9	15,188	1.0	15,974	1.0	16,096	1.0
	South	34,957	1.2	33,685	1.2	34,572	1.2	33,258	1.2		1.2
	West	8,027	0.8	7,707	0.8	8,291	0.8	8,655	0.8		0.8
TOTAL		63,352	1.0	61,485	1.0	64,345	1.1	64,414	1.1	63,446	1.0

Data source: De-identified Optum Clinformatics® Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

Kidney stone patients were defined by one or more evaluation and management claim with kidney stone diagnostic codes during each

year. All percentages are rounded to one decimal place.

		20	04	20	05	20	06	20	07	20	08
	ographic acteristics	Number of stone patients with osteoporosis	Percent of stone patients with osteoporosis	patients with	Percent of stone patients with osteoporosis	Number of stone patients with osteoporosis	Percent of stone patients with osteoporosis	Number of stone patients with osteoporosis	Percent of stone patients with osteoporosis	Number of stone patients with osteoporosis	Percent of stone patients with osteoporosis
AGE	18 - 24	8	0.4	8	0.4	10	0.4	12	0.5	8	0.3
	25 - 34	23	0.3	25	0.3	34	0.5	40	0.5	37	0.4
	35 - 44	93	0.8	98	0.8	95	0.7	107	0.8	96	0.7
	45 - 54	295	2.3	349	2.3	408	2.6	437	2.6	432	2.4
	55 - 64	496	4.7	592	4.6	700	4.9	862	5.3	966	5.4
GENDER	Male	173	0.7	208	0.7	244	0.8	271	0.8	276	0.8
	Female	742	4.3	864	4.3	1,003	4.6	1,187	5.1	1,263	5.0
RACE	White	679	2.1	788	2.1	932	2.3	1,102	2.6	1,154	2.5
	Black	39	1.8	53	2.0	70	2.2	97	2.5	107	2.3
	Hispanic	68	2.0	102	2.5	126	2.7	141	2.7	145	2.5
	Asian	23	2.5	30	2.8	37	3.2	36	2.8	53	3.6
	Unknown	106	2.2	99	2.0	82	2.1	82	2.3	80	2.2
REGION	Northeast	152	3.3	172	3.5	197	3.5	210	3.5	227	3.6
	Midwest	213	1.7	236	1.7	271	1.9	291	2.1	270	1.9
	South	445	2.1	512	2.1	619	2.3	770	2.6	855	2.6
	West	105	2.0	152	2.4	160	2.3	187	2.7	187	2.4
TOTAL		915	2.1	1,072	2.1	1,247	2.3	1,458	2.6	1,539	2.5

Data source: De-identified Optum Clinformatics® Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

Osteoporosis was defined by one or more institutional or two or more non-institutional claims with diagnostic codes of osteoporosis during each year.

All percentages are rounded to one decimal place.

		20	09	20	10	20	11	<b>20</b> '	12	20	13
	nographic acteristics	Number of stone patients with osteoporosis	Percent of stone patients with osteoporosis	patients with	Percent of stone patients with osteoporosis	Number of stone patients with osteoporosis	Percent of stone patients with osteoporosis	Number of stone patients with osteoporosis	Percent of stone patients with osteoporosis	Number of stone patients with osteoporosis	Percent of stone patients with osteoporosis
AGE	18 - 24	10	0.4	8	0.3	16	0.5	10	0.3	17	0.5
	25 - 34	26	0.3	35	0.4	30	0.4	17	0.2	36	0.5
	35 - 44	114	0.8	112	0.8	89	0.6	81	0.6	76	0.6
	45 - 54	447	2.4	405	2.3	374	2.0	303	1.6	330	1.8
	55 - 64	1,030	5.5	933	4.9	964	4.7	929	4.5	900	4.3
GENDER	Male	318	0.9	274	0.8	290	0.8	271	0.7	270	0.7
	Female	1,309	5.0	1,219	4.8	1,183	4.5	1,069	4.0	1,089	4.1
RACE	White	1,208	2.6	1,130	2.5	1,106	2.3	1,028	2.1	1,042	2.2
	Black	129	2.6	99	2.0	108	2.1	115	2.2	91	1.8
	Hispanic	154	2.6	126	2.4	125	2.2	103	1.8	108	1.9
	Asian	38	2.3	44	2.8	46	2.7	39	2.2	47	2.4
	Unknown	98	2.7	94	2.8	88	2.5	55	1.6	71	2.1
REGION	Northeast	225	3.5	204	3.3	208	3.3	181	2.8	201	3.2
	Midwest	286	2.1	283	2.0	299	2.0	279	1.8	270	1.7
	South	912	2.6	817	2.4	766	2.2	687	2.1	675	2.1
	West	204	2.5	189	2.5	200	2.4	193	2.2	213	2.4
TOTAL		1,627	2.6	1,493	2.4	1,473	2.3	1,340	2.1	1,359	2.1

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

Osteoporosis was defined by one or more institutional or two or more non-institutional claims with diagnostic codes of osteoporosis during each

year. All percentages are rounded to one decimal place.

		20	04	20	05	20	06	20	07	20	08
	ographic cteristics	Number of stone patients with osteopenia	Percent of stone patients with osteopenia	Number of stone patients with osteopenia	Percent of stone patients with osteopenia		Percent of stone patients with osteopenia	Number of stone patients with osteopenia	Percent of stone patients with osteopenia	patients with	Percent of stone patients with osteopenia
AGE	18 - 24	9	0.5	13	0.6	16	0.7	20	0.8	12	0.5
	25 - 34	40	0.6	36	0.5	73	1.0	55	0.7	62	0.7
	35 - 44	123	1.1	151	1.2	163	1.2	168	1.2	187	1.3
	45 - 54	353	2.8	488	3.3	565	3.5	561	3.3	641	3.6
	55 - 64	467	4.4	598	4.7	780	5.4	930	5.7	1,183	6.6
GENDER	Male	208	0.8	272	0.9	383	1.2	358	1.1	437	1.2
	Female	784	4.6	1,014	5.0	1,214	5.6	1,376	5.9	1,648	6.5
RACE	White	760	2.4	988	2.7	1,226	3.0	1,351	3.1	1,633	3.6
	Black	39	1.8	48	1.8	66	2.1	103	2.6	125	2.7
	Hispanic	65	1.9	93	2.3	143	3.0	149	2.9	166	2.9
	Asian	17	1.8	29	2.7	32	2.7	30	2.3	43	2.9
	Unknown	111	2.3	128	2.6	130	3.3	101	2.8	118	3.3
REGION	Northeast	108	2.4	152	3.1	196	3.5	192	3.2	246	3.9
	Midwest	297	2.4	350	2.5	439	3.1	400	2.8	440	3.1
	South	470	2.2	599	2.4	720	2.7	896	3.0	1,136	3.5
	West	117	2.3	185	2.9	242	3.5	246	3.5	263	3.4
TOTAL		992	2.3	1,286	2.6	1,597	3.0	1,734	3.0	2,085	3.4

Data source: De-identified Optum Clinformatics® Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

Osteopenia was defined by one or more institutional or two or more non-institutional claims with diagnostic codes of osteopenia during each

year. All percentages are rounded to one decimal place.

		20	09	20	10	20	11	<b>20</b> <sup>-</sup>	12	20	13
	ographic acteristics	Number of stone patients with osteopenia	Percent of stone patients with osteopenia	Number of stone patients with osteopenia	Percent of stone patients with osteopenia		Percent of stone patients with osteopenia	Number of stone patients with osteopenia	Percent of stone patients with osteopenia	Number of stone patients with osteopenia	Percent of stone patients with osteopenia
AGE	18 - 24	24	0.9	12	0.5	12	0.4	24	0.7	18	0.6
	25 - 34	60	0.7	69	0.9	57	0.7	42	0.5	60	0.8
	35 - 44	196	1.3	173	1.2	196	1.4	171	1.2	144	1.1
	45 - 54	647	3.5	646	3.6	620	3.4	567	3.1	553	3.1
	55 - 64	1,282	6.8	1,296	6.8	1,362	6.7	1,306	6.3	1,286	6.1
GENDER	Male	444	1.2	472	1.3	490	1.3	466	1.2	473	1.3
	Female	1,765	6.8	1,724	6.8	1,757	6.6	1,644	6.2	1,588	6.0
RACE	White	1,682	3.6	1,688	3.7	1,747	3.6	1,660	3.4	1,623	3.4
	Black	159	3.2	143	2.8	162	3.1	157	3.0	133	2.6
	Hispanic	182	3.0	165	3.1	179	3.1	155	2.7	154	2.7
	Asian	52	3.1	49	3.1	42	2.4	45	2.5	39	2.0
	Unknown	134	3.7	151	4.5	117	3.4	93	2.7	112	3.3
REGION	Northeast	250	3.8	244	4.0	234	3.7	252	3.9	246	3.9
	Midwest	458	3.3	483	3.5	467	3.1	460	2.9	490	3.0
	South	1,208	3.5	1,174	3.5	1,228	3.6	1,083	3.3	1,032	3.2
	West	293	3.7	295	3.8	318	3.8	315	3.6	293	3.3
TOTAL		2,209	3.5	2,196	3.6	2,247	3.5	2,110	3.3	2,061	3.3

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year.

Osteopenia was defined by one or more institutional or two or more non-institutional claims with diagnostic codes of osteopenia during each year.

All percentages are rounded to one decimal place.

	Demographic	20	04	20	05	20	06	20	07	20	08
	mographic iracteristics	Number of stone patients with hypertension	Percent of stone patients with hypertension	Number of stone patients with hypertension	Percent of stone patients with hypertension	Number of stone patients with hypertension	Percent of stone patients with hypertension	Number of stone patients with hypertension	Percent of stone patients with hypertension		Percent of stone patients with hypertension
AGE	18 - 24	92	4.8	105	4.7	89	3.8	98	4.1	124	4.7
	25 - 34	645	9.4	794	10.7	836	11.1	985	12.4	1,013	11.9
	35 - 44	2,376	20.9	2,844	22.1	2,958	22.4	3,154	23.2	3,439	24.5
	45 - 54	4,783	37.4	5,740	38.4	6,291	39.5	6,930	41.1	7,223	40.7
	55 - 64	5,813	55.1	7,146	55.7	8,170	56.7	9,555	58.2	10,546	58.9
GENDER	Male	9,103	34.6	10,941	36.4	12,038	37.9	13,543	40.0	14,453	40.6
	Female	4,606	26.9	5,688	28.2	6,306	29.0	7,179	30.8	7,892	31.3
RACE	White	10,067	31.5	12,451	33.4	13,880	34.3	15,733	36.4	16,695	36.8
	Black	867	39.1	1,072	39.9	1,312	41.4	1,724	44.1	2,075	45.0
	Hispanic	1,044	30.2	1,215	29.4	1,519	31.9	1,671	32.3	1,869	32.7
	Asian	274	29.4	331	30.8	342	29.2	352	27.4	445	30.1
	Unknown	1,457	30.1	1,560	31.1	1,291	32.8	1,242	34.5	1,261	34.7
REGION	Northeast	1,558	34.2	1,746	35.1	2,074	37.1	2,307	38.5	2,392	37.7
	Midwest	3,816	30.6	4,453	31.9	4,778	33.2	4,833	34.2	4,846	34.3
	South	6,932	32.6	8,562	34.3	9,465	35.6	11,451	38.0	12,634	38.8
	West	1,403	27.3	1,868	29.4	2,027	29.4	2,131	30.7	2,473	31.8
TOTAL		13,709	31.6	16,629	33.1	18,344	34.3	20,722	36.2	22,345	36.8

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

Hypertension was defined by one or more institutional or two or more non-institutional claims with diagnostic codes of hypertension during each

year All percentages are rounded to one decimal place.

		20	09	20	10	20	11	20	12	20	13
	nographic racteristics	Number of stone patients with hypertension	Percent of stone patients with hypertension	Number of stone patients with hypertension	Percent of stone patients with hypertension	Number of stone patients with hypertension	Percent of stone patients with hypertension	Number of stone patients with hypertension	Percent of stone patients with hypertension	Number of stone patients with hypertension	Percent of stone patients with hypertension
AGE	18 - 24	123	4.7	109	4.1	149	4.6	148	4.5	130	4.1
	25 - 34	1,038	12.1	1,003	12.5	958	12.0	932	11.7	837	11.0
	35 - 44	3,698	24.9	3,626	25.9	3,477	24.5	3,449	24.8	3,258	24.2
	45 - 54	7,616	41.3	7,402	41.6	7,639	41.4	7,514	40.5	7,229	40.0
	55 - 64	11,255	59.7	11,323	59.7	11,977	58.6	11,971	58.0	12,112	57.3
GENDER	Male	15,372	41.3	15,244	42.3	15,737	41.6	15,580	41.4	15,169	41.2
	Female	8,358	32.0	8,219	32.3	8,463	32.0	8,434	31.6	8,397	31.5
RACE	White	17,689	37.6	17,607	38.2	18,271	38.0	18,046	37.4	17,600	37.3
	Black	2,259	44.8	2,310	45.4	2,300	43.9	2,290	44.3	2,292	44.7
	Hispanic	2,040	34.0	1,845	34.5	1,967	33.9	1,977	33.9	1,941	33.3
	Asian	476	28.6	479	30.5	479	27.9	528	29.7	597	30.4
	Unknown	1,266	35.0	1,222	36.0	1,183	34.1	1,173	34.5	1,136	33.9
REGION	Northeast	2,414	37.1	2,324	37.8	2,379	37.8	2,457	37.6	2,371	37.5
	Midwest	4,858	35.1	5,024	36.1	5,333	35.1	5,670	35.5	5,719	35.5
	South	13,891	39.7	13,663	40.6	13,903	40.2	13,187	39.7	12,723	39.7
	West	2,567	32.0	2,452	31.8	2,585	31.2	2,700	31.2	2,753	30.6
TOTAL		23,730	37.5	23,463	38.2	24,200	37.6	24,014	37.3	23,566	37.1

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year.

Hypertension was defined by one or more institutional or two or more non-institutional claims with diagnostic codes of hypertension during each

year All percentages are rounded to one decimal place.

		20	04	20	05	20	06	20	07	20	08
	nographic acteristics	Number of stone patients with diabetes	Percent of stone patients with diabetes	Number of stone patients with diabetes	Percent of stone patients with diabetes	Number of stone patients with diabetes	Percent of stone patients with diabetes	Number of stone patients with diabetes	Percent of stone patients with diabetes	patients with	Percent of stone patients with diabetes
AGE	18 - 24	44	2.3	49	2.2	38	1.6	39	1.6	50	1.9
	25 - 34	210	3.1	244	3.3	297	4.0	319	4.0	323	3.8
	35 - 44	714	6.3	868	6.8	1,003	7.6	1,038	7.7	1,088	7.8
	45 - 54	1,678	13.1	2,030	13.6	2,298	14.4	2,515	14.9	2,616	14.8
	55 - 64	2,274	21.6	2,830	22.0	3,354	23.3	4,003	24.4	4,390	24.5
GENDER	Male	3,125	11.9	3,872	12.9	4,510	14.2	5,053	14.9	5,384	15.1
	Female	1,795	10.5	2,149	10.6	2,480	11.4	2,861	12.3	3,083	12.2
RACE	White	3,532	11.0	4,378	11.7	5,144	12.7	5,795	13.4	6,109	13.5
	Black	329	14.8	415	15.4	485	15.3	668	17.1	802	17.4
	Hispanic	449	13.0	544	13.2	710	14.9	834	16.1	849	14.9
	Asian	104	11.2	128	11.9	146	12.5	179	13.9	218	14.8
	Unknown	506	10.4	556	11.1	505	12.8	438	12.2	489	13.5
REGION	Northeast	574	12.6	660	13.3	827	14.8	908	15.1	996	15.7
	Midwest	1,362	10.9	1,589	11.4	1,778	12.4	1,792	12.7	1,795	12.7
	South	2,503	11.8	3,066	12.3	3,591	13.5	4,369	14.5	4,693	14.4
	West	481	9.4	706	11.1	794	11.5	845	12.2	983	12.6
TOTAL		4,920	11.3	6,021	12.0	6,990	13.1	7,914	13.8	8,467	13.9

Data source: De-identified Optum Clinformatics® Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

Diabetes was defined by one or more institutional or two or more non-institutional claims with diagnostic codes of diabetes during each

year. All percentages are rounded to one decimal place.

		20	09	20	10	20	11	20	12	20	13
	ographic acteristics	Number of stone patients with diabetes	Percent of stone patients with diabetes	Number of stone patients with diabetes	Percent of stone patients with diabetes	patients with	Percent of stone patients with diabetes	Number of stone patients with diabetes	Percent of stone patients with diabetes	patients with	Percent of stone patients with diabetes
AGE	18 - 24	43	1.7	43	1.6	75	2.3	68	2.1	41	1.3
	25 - 34	324	3.8	319	4.0	312	3.9	293	3.7	287	3.8
	35 - 44	1,206	8.1	1,208	8.6	1,207	8.5	1,202	8.6	1,162	8.6
	45 - 54	2,783	15.1	2,822	15.9	2,890	15.6	2,871	15.5	2,844	15.8
	55 - 64	4,668	24.8	4,806	25.3	5,206	25.5	5,064	24.5	5,269	24.9
GENDER	Male	5,743	15.4	5,808	16.1	6,149	16.2	6,057	16.1	6,138	16.7
	Female	3,281	12.6	3,390	13.3	3,541	13.4	3,441	12.9	3,465	13.0
RACE	White	6,474	13.8	6,645	14.4	7,052	14.7	6,838	14.2	6,901	14.6
	Black	864	17.1	910	17.9	961	18.4	958	18.5	939	18.3
	Hispanic	976	16.3	869	16.2	934	16.1	945	16.2	961	16.5
	Asian	263	15.8	269	17.1	260	15.1	274	15.4	305	15.5
	Unknown	447	12.4	505	14.9	483	13.9	483	14.2	497	14.8
REGION	Northeast	1,004	15.4	935	15.2	992	15.8	1,053	16.1	1,048	16.6
	Midwest	1,830	13.2	2,010	14.4	2,198	14.5	2,299	14.4	2,364	14.7
	South	5,189	14.8	5,213	15.5	5,419	15.7	5,081	15.3	5,027	15.7
	West	1,001	12.5	1,040	13.5	1,081	13.0	1,065	12.3	1,164	12.9
TOTAL		9,024	14.2	9,198	15.0	9,690	15.1	9,498	14.8	9,603	15.1

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

Diabetes was defined by one or more institutional or two or more non-institutional claims with diagnostic codes of diabetes during each

year. All percentages are rounded to one decimal place.

Table O.4.1: Inpatient hospitalization with a primary diagnosis of kidney stones in privately insured kidney stone patients (by age, gender, race, & region)

## 2004-2008

		200	4	200	5	200	6	200	)7	200	)8
	nographic acteristics	Number of inpatient hospitalizations	Percent of stone patients with inpatient hospitalization	Number of inpatient hospitalizations	Percent of stone patients with inpatient hospitalization	Number of inpatient hospitalizations	Percent of stone patients with inpatient hospitalization	Number of inpatient hospitalizations	Percent of stone patients with inpatient hospitalization	Number of inpatient hospitalizations	Percent of stone patients with inpatient hospitalization
AGE	18 - 24	134	6.4	159	6.9	160	6.3	151	5.9	134	4.8
	25 - 34	501	6.8	505	5.9	445	5.2	394	4.6	386	4.3
	35 - 44	827	6.6	821	5.9	785	5.4	730	4.9	699	4.5
	45 - 54	981	7.0	1,016	6.3	944	5.5	992	5.4	908	4.7
	55 - 64	762	6.7	829	6.1	876	5.6	890	5.1	900	4.6
GENDER	Male	1,772	6.2	1,874	5.8	1,779	5.1	1,744	4.8	1,596	4.2
	Female	1,433	7.7	1,456	6.5	1,431	6.0	1,413	5.5	1,431	5.1
RACE	White	2,364	6.7	2,451	6.0	2,391	5.4	2,340	5.0	2,268	4.6
	Black	163	6.9	189	6.2	185	5.4	200	4.7	213	4.3
	Hispanic	268	7.3	314	6.9	329	6.3	369	6.6	297	4.8
	Asian	54	4.9	50	4.4	53	4.1	49	3.5	44	2.7
	Unknown	356	6.8	326	6.0	252	5.8	199	5.1	205	5.2
REGION	Northeast	336	6.8	341	6.4	340	5.6	341	5.3	338	5.0
	Midwest	1,077	8.0	1,148	7.5	1,103	7.0	999	6.5	891	5.8
	South	1,502	6.4	1,532	5.6	1,423	4.9	1,493	4.6	1,419	4.0
	West	290	5.1	309	4.5	344	4.6	324	4.2	379	4.5
TOTAL		3,205	6.8	3,330	6.1	3,210	5.5	3,157	5.1	3,027	4.6

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. All percentages are rounded to one decimal place. Table O.4.1: Inpatient hospitalization with a primary diagnosis of kidney stones in privately insured kidney stone patients (by age, gender, race, & region)

## 2009-2013

		200	9	201	0	201	11	201	2	201	3
	graphic steristics	Number of inpatient hospitalizations	Percent of stone patients with inpatient hospitalization	Number of inpatient hospitalizations	Percent of stone patients with inpatient hospitalization	Number of inpatient hospitalizations	Percent of stone patients with inpatient hospitalization	Number of inpatient bospitalizations	Percent of stone patients with inpatient hospitalization	Number of inpatient hospitalizations	Percent of stone patients with inpatient hospitalization
AGE	18 - 24	142	5.1	109	3.8	122	3.4	155	4.0	102	3.2
	25 - 34	352	3.7	313	3.6	289	3.1	316	3.7	281	3.3
	35 - 44	711	4.4	557	3.7	533	3.5	586	4.0	520	3.6
	45 - 54	899	4.6	790	4.1	782	3.7	988	4.5	709	3.6
	55 - 64	885	4.4	800	3.9	840	3.6	998	4.3	918	4.0
GENDER	Male	1,568	3.9	1,388	3.6	1,340	3.2	1,682	3.9	1,321	3.3
	Female	1,421	5.0	1,181	4.3	1,226	4.0	1,361	4.7	1,209	4.2
RACE	White	2,181	4.3	1,947	3.9	1,878	3.5	2,245	4.2	1,834	3.6
	Black	261	4.6	204	3.6	208	3.3	247	4.1	217	3.9
	Hispanic	309	4.7	241	4.4	271	4.1	330	5.2	261	4.2
	Asian	55	3.2	44	2.7	36	2.0	60	2.9	65	3.1
	Unknown	183	4.8	133	3.6	173	4.6	161	3.9	153	4.0
REGION	Northeast	362	5.2	278	4.3	290	4.2	308	4.5	278	4.1
	Midwest	835	5.6	779	5.2	753	4.6	990	5.6	810	4.6
	South	1,446	3.8	1,163	3.2	1,138	2.9	1,306	3.5	1,077	3.1
	West	346	4.0	349	4.2	385	3.6	439	4.4	365	3.8
TOTAL		2,989	4.4	2,569	3.9	2,566	3.5	3,043	4.2	2,530	3.7

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. All percentages are rounded to one decimal place. Table O.4.2: Ambulatory evaluation and management visits with any diagnosis of kidney stones in privately insured kidney stone patients (by age, gender, race, & region)

### 2004-2008

		20	04	20	05	20	06	20	07	20	08
	nographic acteristics	Number of ambulatory evaluation and management visits	Per person per year ambulatory evaluation and management visits	Number of ambulatory evaluation and management visits	Per person per year ambulatory evaluation and management visits	Number of ambulatory evaluation and management visits	Per person per year ambulatory evaluation and management visits	Number of ambulatory evaluation and management visits	Per person per year ambulatory evaluation and management visits	Number of ambulatory evaluation and management visits	Per person per year ambulatory evaluation and management visits
AGE	18 - 24	4,093	2.1	4,736	2.1	5,219	2.2	5,135	2.1	5,523	2.1
	25 - 34	15,210	2.2	16,425	2.2	16,191	2.2	17,250	2.2	18,278	2.2
	35 - 44	25,850	2.3	29,012	2.3	28,986	2.2	29,756	2.2	30,977	2.2
	45 - 54	30,160	2.4	34,601	2.3	36,103	2.3	37,669	2.2	40,012	2.3
	55 - 64	24,400	2.3	29,003	2.3	32,555	2.3	36,518	2.2	40,272	2.2
GENDER	Male	60,666	2.3	68,096	2.3	71,069	2.2	74,695	2.2	78,810	2.2
	Female	39,047	2.3	45,681	2.3	47,985	2.2	51,633	2.2	56,252	2.2
RACE	White	73,861	2.3	84,962	2.3	90,804	2.2	96,065	2.2	101,955	2.2
	Black	5,036	2.3	6,066	2.3	7,022	2.2	8,368	2.1	9,956	2.2
	Hispanic	7,558	2.2	8,925	2.2	9,908	2.1	11,081	2.1	11,973	2.1
	Asian	2,062	2.2	2,344	2.2	2,487	2.1	2,712	2.1	3,128	2.1
	Unknown	11,196	2.3	11,480	2.3	8,833	2.2	8,102	2.2	8,050	2.2
REGION	Northeast	10,161	2.2	10,824	2.2	11,892	2.1	12,717	2.1	13,428	2.1
	Midwest	28,890	2.3	32,185	2.3	32,724	2.3	32,001	2.3	32,193	2.3
	South	48,805	2.3	56,569	2.3	59,102	2.2	66,353	2.2	71,986	2.2
	West	11,857	2.3	14,199	2.2	15,336	2.2	15,257	2.2	17,455	2.2
TOTAL		99,713	2.3	113,777	2.3	119,054	2.2	126,328	2.2	135,062	2.2

Data source: De-identified Optum Clinformatics® Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

Ambulatory evaluation and management visits include visits in hospital-based outpatient facility and physician

office All percentages are rounded to one decimal place.

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Table O.4.2: Ambulatory evaluation and management visits with any diagnosis of kidney stones in privately insured kidney stone patients (by age, gender, race, & region)

## 2009-2013

		20	09	20	10	20	11	20	12	20	13
	nographic racteristics	Number of ambulatory evaluation and management visits	Per person per year ambulatory evaluation and management visits	Number of ambulatory evaluation and management visits	Per person per year ambulatory evaluation and management visits	Number of ambulatory evaluation and management visits	Per person per year ambulatory evaluation and management visits	Number of ambulatory evaluation and management visits	Per person per year ambulatory evaluation and management visits	Number of ambulatory evaluation and management visits	Per person per year ambulatory evaluation and management visits
AGE	18 - 24	5,616	2.2	5,516	2.1	6,560	2.0	6,733	2.1	6,575	2.1
	25 - 34	18,373	2.1	17,097	2.1	17,168	2.1	17,384	2.2	16,475	2.2
	35 - 44	32,974	2.2	31,027	2.2	31,207	2.2	30,758	2.2	29,960	2.2
	45 - 54	41,253	2.2	40,419	2.3	41,927	2.3	41,963	2.3	41,878	2.3
	55 - 64	42,405	2.3	43,545	2.3	47,120	2.3	47,255	2.3	49,330	2.3
GENDER	Male	82,593	2.2	80,394	2.2	84,349	2.2	83,862	2.2	83,199	2.3
	Female	58,028	2.2	57,210	2.2	59,633	2.3	60,231	2.3	61,019	2.3
RACE	White	105,558	2.2	104,315	2.3	108,758	2.3	108,595	2.3	108,151	2.3
	Black	11,085	2.2	11,189	2.2	11,391	2.2	11,631	2.2	11,542	2.3
	Hispanic	12,489	2.1	11,097	2.1	12,334	2.1	12,426	2.1	12,528	2.2
	Asian	3,433	2.1	3,477	2.2	3,650	2.1	3,879	2.2	4,381	2.2
	Unknown	8,056	2.2	7,526	2.2	7,849	2.3	7,562	2.2	7,616	2.3
REGION	Northeast	14,061	2.2	13,567	2.2	13,836	2.2	14,361	2.2	14,017	2.2
	Midwest	31,163	2.2	31,747	2.3	34,650	2.3	36,690	2.3	37,535	2.3
	South	77,643	2.2	75,237	2.2	77,242	2.2	73,934	2.2	72,451	2.3
	West	17,754	2.2	17,053	2.2	18,254	2.2	19,108	2.2	20,215	2.2
TOTAL		140,621	2.2	137,604	2.2	143,982	2.2	144,093	2.2	144,218	2.3

Data source: De-identified Optum Clinformatics® Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

Ambulatory evaluation and management visits include visits in hospital-based outpatient facility and physician

office All percentages are rounded to one decimal place.

Table O.4.3: Number of surgical procedures for kidney stones and percent of privately insured kidney stone patients with any surgical procedure for kidney stones (by age, gender, race, & region)

### 2004-2008

		20	04	20	05	20	06	20	07	20	08
	Demographic Characteristics	Number of surgeries	Percent of stone patients with surgery	i Nii imnar at ci iraariac i	Percent of stone patients with surgery	I NITIMPAL OF CITRATIAC	Percent of stone patients with surgery	Number of surgeries	Percent of stone patients with surgery	Number of surgeries	Percent of stone patients with surgery
AGE	18 - 24	561	20.9	598	20.2	678	19.2	607	18.1	627	17.8
	25 - 34	2,397	22.7	2,358	21.4	2,314	20.9	2,398	20.7	2,484	20.3
	35 - 44	4,085	23.0	4,503	23.2	4,398	21.9	4,529	21.7	4,554	21.4
	45 - 54	5,214	24.7	5,909	24.2	5,889	23.4	6,188	23.0	6,421	22.7
	55 - 64	4,292	24.1	5,090	24.1	5,530	23.2	5,879	22.2	6,424	22.3
GENDE	R Male	9,695	22.9	10,768	22.7	10,955	21.9	11,306	21.2	11,650	21.0
	Female	6,854	24.9	7,690	24.2	7,854	23.3	8,295	23.0	8,860	22.8
RACE	White	12,460		14,029	23.9	14,507	22.9	15,103	22.4	15,885	22.5
	Black	855	23.4	1,035	23.6	1,200	24.1	1,368	22.6	1,526	21.5
	Hispanic	1,114	20.8	1,211	18.4	1,378		1,556	18.8	1,516	17.1
	Asian	309	26.0	320	19.9	334	18.4	359	17.7	421	19.0
	Unknown	1,811	23.0	1,863	23.7	1,390	23.0	1,215	21.7	1,162	21.0
REGION	Northeast	1,560	21.3	1,522	20.0	1,627	18.8	1,673	18.8	1,755	18.4
	Midwest	5,117	25.3	5,643	25.6	5,671	24.8	5,323	23.8	5,366	24.2
	South	8,154	23.6	9,291	23.4	9,408	22.5	10,540	22.4	10,984	21.7
	West	1,718	22.0	2,002	20.5	2,103	20.2	2,065	19.1	2,405	20.3
TOTAL		16,549	23.6	18,458	23.3	18,809	22.4	19,601	21.9	20,510	21.7

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year.

Surgical procedures for kidney stones included open stone surgery, laparoscopic removal procedure, percutaneous nephrolithotomy, ureteroscopy, and extracorporeal

shock wave lithotripsy.

All percentages are rounded to one decimal place.

Table O.4.3: Number of surgical procedures for kidney stones and percent of privately insured kidney stone patients with any surgical procedure for kidney stones (by age, gender, race, & region)

#### 2009-2013

		20	09	20	10	20	11	20	12	20	13
	graphic cteristics	Number of surgeries	Percent of stone patients with surgery	Number of surgeries	Percent of stone patients with surgery		Percent of stone patients with surgery		Percent of stone patients with surgery	Number of surgeries	Percent of stone patients with surgery
AGE	18 - 24	701	19.5	659	17.1	745	16.4	768	16.7	701	15.8
	25 - 34	2,405	19.0	2,314	19.6	2,155	19.0	2,303	19.8	2,145	19.0
	35 - 44	4,758	21.1	4,428	21.0	4,513	21.1	4,440	21.2	4,158	20.7
	45 - 54	6,280	22.0	6,310	22.3	6,504	22.4	6,246	21.8	6,313	22.0
	55 - 64	6,723	22.2	6,818	22.1	7,353	22.1	7,283	21.9	7,498	22.1
GENDER	Male	11,846	20.7	11,596	20.5	12,026	20.4	11,781	20.4	11,550	20.3
	Female	9,021	22.2	8,933	22.5	9,244	22.5	9,259	22.3	9,265	22.1
RACE	White	15,985	22.1	15,927	22.1	16,309	21.9	16,113	21.9	15,928	21.7
	Black	1,774	21.9	1,783	21.7	1,828	21.8	1,839	21.9	1,728	21.0
	Hispanic	1,561	16.7	1,353	16.9	1,514	16.7	1,555	16.9	1,575	17.3
	Asian	413	16.8	436	17.6	435	16.9	494	18.1	529	17.6
	Unknown	1,134	20.6	1,030	19.8	1,184	21.4	1,039	19.6	1,055	20.6
REGION	Northeast	1,807	18.5	1,721	17.8	1,678	17.6	1,743	17.7	1,646	17.3
	Midwest	5,067	23.6	5,370	24.1	5,727	23.9	6,101	24.4	6,102	24.0
	South	11,643	21.4	11,114	21.3	11,436	21.2	10,625	20.7	10,421	20.8
	West	2,350	19.6	2,324	19.7	2,429	19.4	2,571	19.7	2,646	19.4
TOTAL		20,867	21.3	20,529	21.4	21,270	21.3	21,040	21.2	20,815	21.1

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year.

Surgical procedures for kidney stones included open stone surgery, laparoscopic removal procedure, percutaneous nephrolithotomy, ureteroscopy, and extracorporeal shock wave lithotripsy. All percentages are rounded to one decimal place.

### 2004-2005

				20	04					20	05		
		То	tal	Inpa	tient	Ambu	latory	Tc	tal	Inpa	tient	Ambu	latory
Demograph	nic Characteristics	Number of open stone surgeries	stone patients	Number of open stone surgeries	Percent of stone patients with open stone surgery	Number of open stone surgeries	stone patients						
AGE	18 - 24	4	0.2	4	0.2	0	0.0	6	0.3	5	0.2	1	0.1
	25 - 34	8	0.1	6	0.1	2	0.0	14	0.2	11	0.2	3	0.0
	35 - 44	26	0.2	19	0.2	7	0.1	36	0.3	28	0.2	8	0.1
	45 - 54	51	0.4	40	0.3	11	0.1	48	0.3	35	0.2	13	0.1
	55 - 64	41	0.4	32	0.3	9	0.1	39	0.3	36	0.3	3	0.0
GENDER	Male	62	0.2	46	0.2	16	0.1	77	0.2	62	0.2	15	0.1
	Female	68	0.4	55	0.3	13	0.1	66	0.3	53	0.2	13	0.1
RACE	White	103	0.3	79	0.2	24	0.1	102	0.3	84	0.2	18	0.1
	Black	6	0.2	6	0.2	0	0.0	13	0.5	8	0.3	5	0.2
	Hispanic	9	0.3	7	0.2	2	0.1	16	0.4	13	0.3	3	0.1
	Asian	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1	0	0.0
	Unknown	12	0.3	9	0.2	3	0.1	11	0.2	9	0.2	2	0.0
REGION	Northeast	10	0.2	8	0.2	2	0.0	10	0.2	9	0.2	1	0.0
	Midwest	33	0.3	26	0.2	7	0.1	33	0.2	31	0.2	2	0.0
	South	69	0.3	54	0.2	15	0.1	80	0.3	58	0.2	22	0.1
	West	18	0.3	13	0.2	5	0.0	20	0.3	17	0.2	3	0.1
TOTAL		130	0.3	101	0.2	29	0.1	143	0.3	115	0.2	28	0.1

#### 2006-2007

				20	06					20	07		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	latory
	nographic acteristics	Number of open stone surgeries	stone patients	Number of open stone surgeries	stone patients	Number of open stone surgeries	Percent of stone patients with open stone surgery	open stone	stone patients	Number of open stone surgeries	stone patients	Number of open stone surgeries	stone patients
AGE	18 - 24	6	0.3	4	0.2	2	0.1	2	0.1	2	0.1	0	0.0
	25 - 34	14	0.2	9	0.1	5	0.0	16	0.2	12	0.1	4	0.1
	35 - 44	24	0.2	14	0.1	10	0.1	30	0.2	17	0.1	13	0.1
	45 - 54	55	0.3	49	0.3	6	0.0	44	0.3	29	0.2	15	0.1
	55 - 64	50	0.3	37	0.2	13	0.1	45	0.2	28	0.2	17	0.1
GENDER	Male	86	0.3	63	0.2	23	0.1	71	0.2	44	0.1	27	0.1
	Female	63	0.3	50	0.2	13	0.1	66	0.3	44	0.2	22	0.1
RACE	White	114	0.3	85	0.2	29	0.1	98	0.2	61	0.1	37	0.1
	Black	11	0.3	6	0.2	5	0.1	11	0.2	6	0.2	5	0.1
	Hispanic	12	0.2	10	0.2	2	0.0	18	0.3	12	0.2	6	0.1
	Asian	4	0.3	4	0.3	0	0.0	2	0.2	2	0.2	0	0.0
	Unknown	8	0.2	8	0.2	0	0.0	8	0.2	7	0.2	1	0.0
REGION	Northeast	14	0.3	13	0.2	1	0.0	12	0.2	12	0.2	0	0.0
	Midwest	36	0.2	32	0.2	4	0.0	39	0.3	32	0.2	7	0.1
	South	90	0.3	61	0.2	29	0.1	72	0.2	35	0.1	37	0.1
	West	9	0.1	7	0.1	2	0.0	14	0.2	9	0.1	5	0.1
TOTAL		149	0.3	113	0.2	36	0.1	137	0.2	88	0.2	49	0.1

#### 2008-2009

				20	08					20	09		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	latory
	ographic acteristics	Number of open stone surgeries	Percent of stone patients with open stone surgery	Number of open stone surgeries	Percent of stone patients with open stone surgery	Number of open stone surgeries	Percent of stone patients with open stone surgery	open stone	Percent of stone patients with open stone surgery	Number of open stone surgeries	stone patients	Number of open stone surgeries	Percent of stone patients with open stone surgery
AGE	18 - 24	5	0.2	3	0.1	2	0.1	4	0.2	4	0.2	0	0.0
	25 - 34	18	0.2	14	0.2	4	0.0	11	0.1	8	0.1	3	0.0
	35 - 44	29	0.2	15	0.1	14	0.1	36	0.2	22	0.1	14	0.1
	45 - 54	42	0.2	32	0.2	10	0.1	32	0.2	28	0.2	4	0.0
	55 - 64	76	0.4	53	0.3	23	0.1	50	0.3	35	0.2	15	0.1
GENDER	Male	101	0.3	62	0.2	39	0.1	73	0.2	52	0.1	21	0.1
	Female	69	0.3	55	0.2	14	0.1	60	0.2	45	0.2	15	0.1
RACE	White	123	0.3	85	0.2	38	0.1	105	0.2	75	0.2	30	0.1
	Black	22	0.4	14	0.3	8	0.1	10	0.2	7	0.1	3	0.1
	Hispanic	10	0.2	7	0.1	3	0.0	9	0.2	7	0.1	2	0.0
	Asian	0	0.0	0	0.0	0	0.0	3	0.2	2	0.1	1	0.1
	Unknown	15	0.4	11	0.3	4	0.1	6	0.2	6	0.2	0	0.0
REGION	Northeast	13	0.2	10	0.2	3	0.1	16	0.2	15	0.2	1	0.0
	Midwest	45	0.3	37	0.3	8	0.1	24	0.2	20	0.1	4	0.0
	South	95	0.3	58	0.2	37	0.1	82	0.2	52	0.2	30	0.1
	West	17	0.2	12	0.1	5	0.1	11	0.1	10	0.1	1	0.0
TOTAL		170	0.3	117	0.2	53	0.1	133	0.2	97	0.2	36	0.1

#### 2010-2011

				20	10					20	)11		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	latory
	nographic acteristics	Number of open stone surgeries	stone patients	Number of open stone surgeries	Percent of stone patients with open stone surgery	Number of open stone surgeries	Percent of stone patients with open stone surgery	open stone	Percent of stone patients with open stone surgery	Number of open stone surgeries	stone patients	Number of open stone surgeries	Percent of stone patients with open stone surgery
AGE	18 - 24	5	0.2	4	0.2	1	0.0	4	0.1	4	0.1	0	0.0
	25 - 34	19	0.2	16	0.2	3	0.0	10	0.1	7	0.1	3	0.0
	35 - 44	28	0.2	18	0.1	10	0.1	14	0.1	10	0.1	4	0.0
	45 - 54	41	0.2	36	0.2	5	0.0	22	0.1	15	0.1	7	0.0
	55 - 64	63	0.3	50	0.2	13	0.1	36	0.2	28	0.1	8	0.0
GENDER	Male	72	0.2	57	0.2	15	0.0	38	0.1	26	0.1	12	0.0
	Female	84	0.3	67	0.2	17	0.1	48	0.2	38	0.1	10	0.0
RACE	White	116	0.2	91	0.2	25	0.1	59	0.1	43	0.1	16	0.0
	Black	20	0.4	16	0.3	4	0.1	12	0.2	8	0.2	4	0.1
	Hispanic	12	0.2	9	0.2	3	0.1	5	0.1	4	0.1	1	0.0
	Asian	2	0.1	2	0.1	0	0.0	2	0.1	2	0.1	0	0.0
	Unknown	6	0.2	6	0.2	0	0.0	8	0.2	7	0.2	1	0.0
REGION	Northeast	11	0.2	10	0.2	1	0.0	9	0.1	9	0.1	0	0.0
	Midwest	28	0.2	26	0.2	2	0.0	26	0.2	20	0.1	6	0.0
	South	99	0.3	74	0.2	25	0.1	41	0.1	26	0.1	15	0.0
	West	18	0.2	14	0.2	4	0.1	10	0.1	9	0.1	1	0.0
TOTAL		156	0.2	124	0.2	32	0.1	86	0.1	64	0.1	22	0.0

#### 2012-2013

				20	12					20	13		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	latory
	ographic acteristics	Number of open stone surgeries	stone patients	Number of open stone surgeries	stone patients	Number of open stone surgeries	Percent of stone patients with open stone surgery	open stone	Percent of stone patients with open stone surgery	Number of open stone surgeries	stone patients	Number of open stone surgeries	Percent of stone patients with open stone surgery
AGE	18 - 24	3	0.1	3	0.1	0	0.0	3	0.1	2	0.1	1	0.0
	25 - 34	8	0.1	7	0.1	1	0.0	16	0.2	5	0.1	11	0.1
	35 - 44	13	0.1	6	0.0	7	0.1	16	0.1	8	0.1	8	0.1
	45 - 54	17	0.1	17	0.1	0	0.0	27	0.1	16	0.1	11	0.0
	55 - 64	37	0.2	25	0.1	12	0.1	45	0.2	21	0.1	24	0.1
GENDER	Male	44	0.1	33	0.1	11	0.0	58	0.1	26	0.1	32	0.1
	Female	34	0.1	25	0.1	9	0.0	49	0.2	26	0.1	23	0.1
RACE	White	54	0.1	39	0.1	15	0.0	83	0.2	39	0.1	44	0.1
	Black	9	0.2	7	0.1	2	0.0	13	0.2	5	0.1	8	0.1
	Hispanic	5	0.1	3	0.1	2	0.0	7	0.1	5	0.1	2	0.0
	Asian	3	0.2	3	0.2	0	0.0	2	0.1	2	0.1	0	0.0
	Unknown	7	0.2	6	0.2	1	0.0	2	0.1	1	0.0	1	0.0
REGION	Northeast	8	0.1	6	0.1	2	0.0	8	0.1	7	0.1	1	0.0
	Midwest	14	0.1	12	0.1	2	0.0	22	0.1	15	0.1	7	0.0
	South	51	0.2	35	0.1	16	0.0	71	0.2	25	0.1	46	0.1
	West	5	0.1	5	0.1	0	0.0	6	0.1	5	0.1	1	0.0
TOTAL		78	0.1	58	0.1	20	0.0	107	0.2	52	0.1	55	0.1

Table O.4.5: Number of laparoscopic removal procedures for kidney stones and percent of privately insured kidney stone patients with laparoscopic removal procedure for kidney stones (by age, gender, race, & region)

### 2004-2005

				20	04					20	05		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	latory
	nographic racteristics	Number of laparoscopic removal procedures	natients with l	Number of laparoscopic removal procedures	laparoscopic	Number of laparoscopic removal procedures	patients with laparoscopic removal	Number of laparoscopic removal	laparoscopic removal	Number of laparoscopic removal procedures	patients with laparoscopic removal	Number of laparoscopic removal procedures	Percent of stone patients with laparoscopic removal procedure
AGE	18 - 24	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	25 - 34	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	35 - 44	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	45 - 54	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	55 - 64	0	0.0	0	0.0	0	0.0	3	0.0	2	0.0	1	0.0
GENDER	Male	1	0.0	1	0.0	0	0.0	2	0.0	1	0.0	1	0.0
	Female	0	0.0	0	0.0	0	0.0	1	0.0	1	0.0	0	0.0
RACE	White	0	0.0	0	0.0	0	0.0	3	0.0	2	0.0	1	0.0
	Black	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Hispanic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Asian	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Unknown	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
REGION	Northeast	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Midwest	1	0.0	1	0.0	0	0.0	1	0.0	0	0.0	1	0.0
	South	0	0.0	0	0.0	0	0.0	2	0.0	2	0.0	0	0.0
	West	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTAL		1	0.0	1	0.0	0	0.0	3	0.0	2	0.0	1	0.0

#### 2006-2007

				20	06					20	)07		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	atient	Ambu	latory
	nographic acteristics	Number of laparoscopic removal procedures	patients with laparoscopic removal	Number of laparoscopic removal procedures	Percent of stone patients with laparoscopic removal procedure								
AGE	18 - 24	1	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
	25 - 34	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	35 - 44	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	1	0.0
	45 - 54	1	0.0	1	0.0	0	0.0	1	0.0	1	0.0	0	0.0
	55 - 64	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
GENDER	Male	1	0.0	1	0.0	0	0.0	2	0.0	1	0.0	1	0.0
	Female	1	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
RACE	White	2	0.0	1	0.0	1	0.0	2	0.0	1	0.0	1	0.0
	Black	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Hispanic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Asian	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
REGION	Northeast	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Midwest	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	1	0.0
	South	1	0.0	0	0.0	1	0.0	1	0.0	1	0.0	0	0.0
	West	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTAL		2	0.0	1	0.0	1	0.0	2	0.0	1	0.0	1	0.0

## 2008-2009

				20	08					20	)09		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	atient	Ambu	latory
	emographic aracteristics	Number of laparoscopic removal procedures	patients with laparoscopic removal	Number of laparoscopic removal procedures	patients with laparoscopic removal	Number of laparoscopic removal procedures	patients with laparoscopic removal	Number of laparoscopic removal	laparoscopic removal	Number of laparoscopic removal procedures	patients with laparoscopic removal	Number of laparoscopic removal procedures	patients with laparoscopic removal
AGE	18 - 24	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	25 - 34	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	35 - 44	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	45 - 54	0	0.0	0	0.0	0	0.0	1	0.0	1	0.0	0	0.0
	55 - 64	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
GENDER	Male	1	0.0	1	0.0	0	0.0	1	0.0	1	0.0	0	0.0
	Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
RACE	White	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Black	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Hispanic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Asian	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1	0	0.0
	Unknown	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
REGION	Northeast	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Midwest	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	South	0	0.0	0	0.0	0	0.0	1	0.0	1	0.0	0	0.0
	West	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTAL		1	0.0	1	0.0	0	0.0	1	0.0	1	0.0	0	0.0

#### 2010-2011

				20	10					20	)11		
		То	tal	Inpa	tient	Ambı	latory	То	tal	Inpa	atient	Ambu	latory
	ographic acteristics	Number of laparoscopic removal procedures	patients with laparoscopic removal	Number of laparoscopic removal procedures	patients with laparoscopic removal	Number of laparoscopic removal procedures	laparoscopic removal	Number of laparoscopic removal procedures	laparoscopic removal	Number of laparoscopic removal	laparoscopic removal	Number of laparoscopic removal procedures	laparoscopic removal
AGE	18 - 24	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	25 - 34	1	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
	35 - 44	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	45 - 54	2	0.0	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0
	55 - 64	2	0.0	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0
GENDER	Male	3	0.0	2		1	0.0	0	0.0	0	0.0	0	0.0
	Female	2	0.0	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0
RACE	White	3	0.0	2	0.0	1	0.0	0	0.0	0	0.0	0	0.0
	Black	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Hispanic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Asian	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Unknown	1	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
REGION	Northeast	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Midwest	2	0.0	0	0.0	2	0.0	0	0.0	0	0.0	0	0.0
	South	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	West	2	0.0	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTAL		5	0.0	3	0.0	2	0.0	0	0.0	0	0.0	0	0.0

#### 2012-2013

				20	12					20	)13		
		То	tal	Inpa	itient	Ambu	latory	To	tal	Inpa	atient	Ambul	atory
	nographic acteristics	Number of laparoscopic removal procedures	patients with laparoscopic removal	Number of laparoscopic removal procedures	laparoscopic removal	Number of laparoscopic removal procedures	laparoscopic	Number of laparoscopic removal	laparoscopic	Number of laparoscopic removal procedures	laparoscopic removal	Number of laparoscopic removal procedures	Percent of stone patients with laparoscopic removal procedure
AGE	18 - 24	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	1	0.0
	25 - 34	1	0.0	0	0.0	1	0.0	1	0.0	0	0.0	1	0.0
	35 - 44	1	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
	45 - 54	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	55 - 64	2	0.0	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0
GENDER	Male	2	0.0	0	0.0	2	0.0	0	0.0	0	0.0	0	0.0
	Female	2	0.0	1	0.0	1	0.0	2	0.0	0	0.0	2	0.0
RACE	White	3	0.0	0	0.0	3	0.0	2	0.0	0	0.0	2	0.0
	Black	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Hispanic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Asian	1	0.1	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
	Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
REGION	Northeast	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	1	0.0
	Midwest	1	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
	South	3	0.0	1	0.0	2	0.0	1	0.0	0	0.0	1	0.0
	West	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTAL		4	0.0	1	0.0	3	0.0	2	0.0	0	0.0	2	0.0

Table 0.4.6: Number of percutaneous nephrolithotomies for kidney stones and percent of privately insured kidney stone patients with percutaneous nephrolithotomy for kidney stones (by age, gender, race, & region)

### 2004-2005

				20	04					20	05		
		То	tal	Inpa	itient	Ambu	latory	To	otal	Inpa	itient	Ambu	latory
	mographic racteristics	Number of PCNLs	I nationte with I	Number of PCNLs	I nationte with I		I nationte with	Number of PCNLs	Percent of stone patients with PCNL	Number of PCNLs	I nationte with I	Number of PCNLs	Percent of stone patients with PCNL
AGE	18 - 24	11	0.5	9	0.4	2	0.1	16	0.7	15	0.6	1	0.1
	25 - 34	62	0.7	47	0.6	15	0.2	52	0.5	46	0.5	6	0.1
	35 - 44	119	0.8	86	0.6	33	0.2	100	0.7	73	0.5	27	0.2
	45 - 54	170	1.0	126	0.9	44	0.3	172	0.9	131	0.8	41	0.3
	55 - 64	154	1.1	107	0.8	47	0.4	152	1.0	122	0.8	30	0.2
GENDER	Male	257	0.8	183	0.6	74	0.2	253	0.7	192	0.6	61	0.2
	Female	259	1.1	192	1.0	67	0.3	239	1.0	195	0.8	44	0.2
RACE	White	366	0.9	265	0.7	101	0.2	355	0.8	283	0.7	72	0.2
	Black	24	1.0	21	0.9	3	0.1	35	1.1	30	0.9	5	0.2
	Hispanic	45	0.9	30	0.7	15	0.3	48	0.9	33	0.8	15	0.3
	Asian	16	1.1	16	1.1	0	0.0	9	0.8	6	0.6	3	0.3
	Unknown	65	0.9	43	0.7	22	0.4	45	0.7	35	0.6	10	0.2
REGION			0.9	35	0.7	10	0.2	30	0.5	27	0.5	3	0.1
	Midwest	168	1.0	112	0.8	56	0.3	146	0.9	119	0.8	27	0.2
	South	245	0.9	184	0.7	61	0.2	251	0.8	192	0.7	59	0.2
	West	58	0.7	44	0.6	14	0.2	65	0.9	49	0.8	16	0.2
TOTAL		516	0.9	375	0.7	141	0.3	492	0.8	387	0.7	105	0.2

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year.

Ambulatory surgical procedures include procedures serviced in hospital-based outpatient facility and physician office. PCNL, percutaneous nephrolithotomy. All percentages are rounded to one decimal place.

Table O.4.6: Number of percutaneous nephrolithotomies for kidney stones and percent of privately insured kidney stone patients with percutaneous nephrolithotomy for kidney stones (by age, gender, race, & region)

## 2006-2007

				20	006					20	007		
		То	tal	Inpa	atient	Ambu	latory	To	tal	Inpa	itient	Ambu	latory
	mographic aracteristics	Number of PCNLs	Percent of stone patients with PCNL	Number of PCNLs		Number of PCNLs	i nationte w/ith	Number of	i natients with i	Number of		Number of PCNLs	nationte With I
AGE	18 - 24	25	1.0	20	0.9	5	0.2	17	0.6	13	0.5	4	0.1
	25 - 34	53	0.6	45	0.5	8	0.1	64	0.7	49	0.6	15	0.2
	35 - 44	87	0.6	68	0.5	19	0.1	105	0.6	75	0.5	30	0.2
	45 - 54	176	0.9	136	0.7	40	0.2	193	0.9	149	0.8	44	0.3
	55 - 64	186	1.0	149	0.9	37	0.2	192	1.0	153	0.9	39	0.2
GENDER	Male	267	0.7	209	0.6	58	0.2	289	0.7	227	0.6	62	0.2
	Female	260	1.0	209	0.8	51	0.2	282	1.0	212	0.8	70	0.3
RACE	White	392	0.8	310	0.7	82	0.2	425	0.8	327	0.7	98	0.2
	Black	33	1.0	24	0.7	9	0.3	42	0.9	34	0.8	8	0.2
	Hispanic	50	0.8	45	0.8	5	0.1	55	0.9	40	0.6	15	0.3
	Asian	12	0.9	12	0.9	0	0.0	15	0.9	15	0.9	0	0.0
	Unknown	40	0.9	27	0.7	13	0.3	34	0.8	23	0.6	11	0.3
REGION	Northeast	40	0.6	36	0.5	4	0.1	49	0.7	41	0.7	8	0.1
	Midwest	168	1.0	136	0.8	32	0.2	186	1.2	152	1.0	34	0.2
	South	269	0.8	199	0.7	70	0.2	280	0.7	198	0.6	82	0.2
	West	50	0.6	47	0.6	3	0.0	56	0.7	48	0.6	8	0.1
TOTAL		527	0.8	418	0.7	109	0.2	571	0.8	439	0.7	132	0.2

Table 0.4.6: Number of percutaneous nephrolithotomies for kidney stones and percent of privately insured kidney stone patients with percutaneous nephrolithotomy for kidney stones (by age, gender, race, & region)

## 2008-2009

				20	08					20	09		
		То	tal	Inpa	tient	Ambu	latory	To	tal	Inpa	tient	Ambu	latory
	mographic aracteristics	Number of PCNLs	Percent of stone patients with PCNL	Number of PCNLs		Number of PCNLs				Number of PCNLs		Number of PCNLs	
AGE	18 - 24	11	0.4	9	0.3	2	0.1	13	0.5	10	0.4	3	0.1
	25 - 34	54	0.5	41	0.4	13	0.1	61	0.6	52	0.5	9	0.1
	35 - 44	89	0.6	77	0.5	12	0.1	132	0.7	99	0.6	33	0.2
	45 - 54	175	0.9	135	0.7	40	0.2	181	0.8	132	0.6	49	0.2
	55 - 64	248	1.2	194	1.0	54	0.3	232	1.0	166	0.8	66	0.3
GENDER	Male	290	0.7	223	0.6	67	0.2	300	0.7	219	0.5	81	0.2
	Female	287	1.0	233	0.8	54	0.2	319	1.0	240	0.8	79	0.3
RACE	White	435	0.8	340	0.7	95	0.2	449	0.8	329	0.6	120	0.2
	Black	42	0.9	32	0.7	10	0.2	84	1.0	62	0.8	22	0.3
	Hispanic	51	0.8	43	0.7	8	0.1	50	0.6	38	0.5	12	0.2
	Asian	14	0.7	12	0.6	2	0.1	9	0.5	9	0.5	0	0.0
	Unknown	35	0.8	29	0.7	6	0.1	27	0.6	21	0.5	6	0.1
REGION	Northeast	57	0.8	48	0.7	9	0.1	51	0.7	42	0.6	9	0.1
	Midwest	167	1.0	148	0.9	19	0.1	156	0.9	124	0.7	32	0.2
	South	300	0.8	214	0.6	86	0.2	352	0.8	240	0.6	112	0.3
	West	53	0.6	46	0.5	7	0.1	60	0.7	53	0.6	7	0.1
TOTAL		577	0.8	456	0.7	121	0.2	619	0.8	459	0.6	160	0.2

Table 0.4.6: Number of percutaneous nephrolithotomies for kidney stones and percent of privately insured kidney stone patients with percutaneous nephrolithotomy for kidney stones (by age, gender, race, & region)

## 2010-2011

				20	10					2(	)11		
		То	tal	Inpa	tient	Ambu	latory	To	tal	Inpa	atient	Ambu	latory
	mographic racteristics	Number of PCNLs	i natients with i	Number of PCNLs	i natients with	Number of PCNLs	i natients w/ith	Number of	naienis wiini		i natients with i	Number of PCNLs	natients with l
AGE	18 - 24	22	0.6	15	0.5	7	0.2	15	0.4	12	0.3	3	0.1
	25 - 34	58	0.6	42	0.5	16	0.2	50	0.6	39	0.5	11	0.1
	35 - 44	100	0.6	71	0.5	29	0.2	103	0.6	65	0.4	38	0.2
	45 - 54	172	0.8	122	0.6	50	0.3	185	0.8	133	0.7	52	0.3
	55 - 64	242	1.1	174	0.8	68	0.3	235	1.0	166	0.7	69	0.3
GENDER	Male	290	0.7	202	0.5	88	0.2	277	0.6	194	0.5	83	0.2
	Female	304	1.0	222	0.8	82	0.3	311	1.0	221	0.8	90	0.3
RACE	White	448	0.8	318	0.6	130	0.2	436	0.8	298	0.6	138	0.3
	Black	47	0.8	32	0.6	15	0.3	62	1.0	46	0.8	16	0.3
	Hispanic	44	0.7	36	0.6	8	0.2	41	0.6	33	0.5	8	0.1
	Asian	15	0.7	8	0.5	7	0.4	16	0.7	11	0.5	5	0.2
	Unknown	40	1.0	30	0.8	10	0.3	33	0.9	27	0.7	6	0.2
REGION	Northeast	50	0.7	43	0.6	7	0.1	55	0.7	48	0.7	7	0.1
	Midwest	168	1.0	122	0.9	46	0.3	199	1.1	139	0.8	60	0.3
	South	314	0.8	211	0.6	103	0.3	267	0.7	178	0.5	89	0.3
	West	62	0.7	48	0.6	14	0.2	67	0.6	50	0.5	17	0.2
TOTAL		594	0.8	424	0.6	170	0.2	588	0.8	415	0.6	173	0.3

Table 0.4.6: Number of percutaneous nephrolithotomies for kidney stones and percent of privately insured kidney stone patients with percutaneous nephrolithotomy for kidney stones (by age, gender, race, & region)

### 2012-2013

				20	)12					20	)13		
		То	tal	Inpa	tient	Ambu	latory	To	otal	Inpa	atient	Ambu	latory
	nographic racteristics	Number of PCNLs	Percent of stone patients with PCNL	Number of PCNLs		Number of PCNLs		Number of PCNLs		Number of PCNLs		Number of PCNLs	Percent of stone patients with PCNL
AGE	18 - 24	15	0.4	14	0.4	1	0.0	15	0.4	12	0.3	3	0.1
	25 - 34	56	0.6	42	0.4	14	0.2	70	0.7	46	0.5	24	0.3
	35 - 44	120	0.7	79	0.5	41	0.3	104	0.7	61	0.4	43	0.3
	45 - 54	208	0.9	141	0.7	67	0.3	184	0.9	111	0.6	73	0.4
	55 - 64	227	1.0	156	0.7	71	0.3	266	1.0	161	0.6	105	0.4
GENDER	Male	296	0.7	195	0.5	101	0.2	290	0.7	173	0.4	117	0.3
	Female	330	1.0	237	0.8	93	0.3	349	1.1	218	0.7	131	0.4
RACE	White	438	0.8	307	0.6	131	0.2	447	0.8	271	0.5	176	0.4
	Black	72	1.2	45	0.8	27	0.5	64	1.0	38	0.6	26	0.5
	Hispanic	53	0.8	36	0.6	17	0.2	55	0.8	40	0.6	15	0.2
	Asian	20	0.9	14	0.7	6	0.3	21	0.8	16	0.6	5	0.2
	Unknown	43	0.9	30	0.7	13	0.4	52	1.0	26	0.6	26	0.5
REGION	Northeast	52	0.7	33	0.4	19	0.3	51	0.7	37	0.5	14	0.2
	Midwest	214	1.1	159	0.9	55	0.3	213	1.0	135	0.7	78	0.4
	South	283	0.7	180	0.5	103	0.3	294	0.8	162	0.5	132	0.4
	West	77	0.8	60	0.6	17	0.2	81	0.7	57	0.5	24	0.2
TOTAL		626	0.8	432	0.6	194	0.3	639	0.8	391	0.5	248	0.4

## 2004-2005

				20	04					20	05		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	latory
Demograpi	hic Characteristics	Number of procedures	I stone natients I	Number of procedures	Percent of stone patients with procedure	Number of procedures	I etono nationte l	Number of procedures	I stone natients l	Number of procedures	Percent of stone patients with procedure	Number of procedures	etono nationte l
AGE	18 - 24	362	15.8	98	4.8	264	11.9	362	14.4	129	5.6	233	9.5
	25 - 34	1,336	16.1	455	6.1	881	11.2	1,311	14.8	450	5.6	861	10.3
	35 - 44	2,153	15.5	622	5.0	1,531	11.6	2,393	15.5	701	5.1	1,692	11.4
	45 - 54	2,727	17.1	745	5.5	1,982	12.8	3,081	16.6	854	5.3	2,227	12.7
	55 - 64	2,170	16.6	609	5.4	1,561	12.5	2,569	16.4	751	5.6	1,818	12.2
GENDER	Male	5,002	15.5	1,330	4.7	3,672	11.8	5,528	15.2	1,519	4.8	4,009	11.5
	Female	3,746	17.6	1,199	6.5	2,547	12.7	4,188	17.0	1,366	6.3	2,822	12.1
RACE	White	6,584	16.7	1,879	5.5	4,705	12.4	7,357	16.3	2,131	5.4	5,226	12.1
	Black	457	16.2	126	5.1	331	12.5	545	16.7	188	6.4	357	11.8
	Hispanic	590	14.1	206	5.7	384	9.7	671	12.7	263	5.7	408	8.2
	Asian	154	13.0	44	4.2	110	10.2	151	12.2	41	3.5	110	9.2
	Unknown	963	16.0	274	5.2	689	12.0	992	15.9	262	4.9	730	12.5
REGION	Northeast	713	12.4	280	5.7	433	8.0	691	11.7	296	5.6	395	7.0
	Midwest	2,920	18.6	854	6.4	2,066	13.7	3,250	18.7	1,007	6.8	2,243	13.6
	South	4,227	16.1	1,140	5.0	3,087	12.3	4,692	15.6	1,292	4.8	3,400	11.8
	West	888	15.1	255	4.6	633	11.1	1,083	14.4	290	4.3	793	11.1
TOTAL		8,748	16.3	2,529	5.4	6,219	12.1	9,716	15.9	2,885	5.4	6,831	11.7

#### 2006-2007

				20	06					20	07		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	latory
	nographic racteristics	Number of procedures	Percent of stone patients with procedure	Number of procedures	Percent of stone patients with procedure	Number of procedures	etono nationte l	Number of procedures	stone natients l	Number of procedures	I stone natients I	Number of procedures	stone natients
AGE	18 - 24	392	14.0	139	5.4	253	9.7	363	12.6	116	4.5	247	9.1
	25 - 34	1,257	13.8	398	4.9	859	10.0	1,387	14.6	372	4.4	1,015	11.3
	35 - 44	2,337	14.4	698	4.8	1,639	10.6	2,402	14.4	642	4.4	1,760	11.1
	45 - 54	3,041	16.0	828	4.9	2,213	12.2	3,243	15.7	861	4.8	2,382	11.9
	55 - 64	2,789	15.4	809	5.2	1,980	11.6	2,979	14.8	794	4.6	2,185	11.3
GENDER	Male	5,623	14.5	1,492	4.3	4,131	11.1	5,860	14.1	1,437	4.0	4,423	11.1
	Female	4,193	15.8	1,380	5.9	2,813	11.4	4,514	15.9	1,348	5.4	3,166	11.7
RACE	White	7,563	15.4	2,154	4.9	5,409	11.6	8,002	15.1	2,099	4.6	5,903	11.7
	Black	628	16.1	173	5.2	455	12.3	682	14.4	161	4.0	521	11.4
	Hispanic	723	12.0	262	4.9	461	8.1	842	13.3	289	5.2	553	9.2
	Asian	183	12.6	52	4.3	131	9.7	186	12.2	51	3.7	135	9.4
	Unknown	719	15.4	231	5.4	488	10.9	662	14.8	185	4.7	477	11.2
REGION	Northeast	738	10.6	313	5.2	425	6.6	750	10.4	295	4.6	455	6.7
	Midwest	3,140	17.6	971	6.3	2,169	12.8	3,124	17.6	913	6.0	2,211	13.1
	South	4,801	14.9	1,260	4.4	3,541	11.5	5,384	14.8	1,285	4.0	4,099	11.7
	West	1,137	13.7	328	4.3	809	10.3	1,116	13.3	292	4.0	824	10.2
TOTAL		9,816	15.0	2,872	5.0	6,944	11.2	10,374	14.8	2,785	4.6	7,589	11.3

#### 2008-2009

				20	08					20	09		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	latory
	nographic acteristics	Number of procedures	Percent of stone patients with procedure	Number of procedures	Percent of stone patients with procedure	Number of procedures	Percent of stone patients with procedure	Number of procedures	l stone natients l	Number of procedures	I stone nationte l	Number of procedures	stone natients l
AGE	18 - 24	405	13.3	127	4.6	278	9.2	448	14.4	136	5.0	312	10.8
	25 - 34	1,384	13.6	366	4.0	1,018	10.5	1,401	13.3	360	3.8	1,041	10.4
	35 - 44	2,405	14.2	643	4.4	1,762	10.8	2,591	14.3	680	4.2	1,911	11.1
	45 - 54	3,417	15.5	876	4.5	2,541	12.1	3,361	14.8	854	4.3	2,507	11.6
	55 - 64	3,261	14.6	831	4.3	2,430	11.6	3,462	14.9	887	4.4	2,575	11.6
GENDER	Male	6,009	13.8	1,381	3.6	4,628	11.1	6,206	13.7	1,473	3.7	4,733	10.9
	Female	4,863	15.7	1,462	5.4	3,401	11.7	5,057	15.6	1,444	5.1	3,613	11.9
RACE	White	8,452	15.1	2,125	4.4	6,327	11.9	8,608	14.9	2,156	4.3	6,452	11.8
	Black	763	13.6	194	4.0	569	10.6	941	14.8	241	4.4	700	11.7
	Hispanic	812	11.9	280	4.5	532	8.1	872	11.7	294	4.6	578	8.3
	Asian	219	12.0	49	3.1	170	10.0	231	11.6	56	3.3	175	9.2
	Unknown	626	14.1	195	4.9	431	10.4	611	13.9	170	4.5	441	10.5
REGION	Northeast	832	10.5	315	4.6	517	7.1	888	11.2	334	4.8	554	7.5
	Midwest	3,132	17.8	839	5.5	2,293	13.7	3,016	17.5	830	5.6	2,186	13.5
	South	5,578	14.0	1,318	3.8	4,260	11.2	6,066	14.1	1,411	3.8	4,655	11.3
	West	1,330	14.4	371	4.4	959	11.0	1,293	13.5	342	4.0	951	10.6
TOTAL		10,872	14.6	2,843	4.4	8,029	11.3	11,263	14.5	2,917	4.3	8,346	11.3

### 2010-2011

				20	10					20	11		
		To	otal	Inpa	tient	Ambu	latory	To	otal	Inpa	tient	Ambu	ılatory
	nographic acteristics	Number of procedures	Percent of stone patients with procedure	Number of procedures	Percent of stone patients with procedure	Number of procedures	Percent of stone patients with procedure	Number of procedures	stone natients l	Number of procedures	I stone natients I	Number of procedures	stone natients
AGE	18 - 24	418	12.6	127	4.4	291	9.4	471	12.1	119	3.5	352	9.4
	25 - 34	1,310	13.4	361	4.2	949	10.4	1,268	13.3	320	3.8	948	10.4
	35 - 44	2,470	14.5	644	4.3	1,826	11.3	2,504	14.3	614	4.1	1,890	11.3
	45 - 54	3,512	15.7	872	4.6	2,640	12.4	3,616	15.5	848	4.3	2,768	12.6
	55 - 64	3,658	15.2	904	4.4	2,754	12.3	4,082	15.6	952	4.4	3,130	12.6
GENDER	Male	6,311	14.0	1,463	3.8	4,848	11.4	6,659	14.0	1,457	3.6	5,202	11.5
	Female	5,057	16.0	1,445	5.3	3,612	12.2	5,282	16.0	1,396	4.9	3,886	12.5
RACE	White	8,802	15.3	2,208	4.4	6,594	12.2	9,196	15.3	2,094	4.1	7,102	12.4
	Black	980	15.1	219	4.0	761	12.4	1,020	15.1	234	4.2	786	12.4
	Hispanic	797	12.3	261	4.6	536	8.8	845	11.6	274	4.4	571	8.4
	Asian	237	12.1	52	3.1	185	9.9	212	10.2	51	2.9	161	8.0
	Unknown	552	13.4	168	4.7	384	9.9	668	15.1	200	5.3	468	11.6
REGION	Northeast	868	10.9	297	4.5	571	7.7	841	10.3	309	4.6	532	7.1
	Midwest	3,217	18.3	875	5.8	2,342	14.2	3,447	18.0	861	5.2	2,586	14.3
	South	5,939	14.2	1,372	3.8	4,567	11.6	6,246	14.4	1,331	3.6	4,915	11.9
	West	1,344	14.2	364	4.4	980	11.0	1,407	14.2	352	4.1	1,055	11.1
TOTAL		11,368	14.8	2,908	4.4	8,460	11.7	11,941	14.8	2,853	4.2	9,088	11.9

### 2012-2013

				20	12					20	13		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	latory
	nographic acteristics	Number of procedures	Percent of stone patients with procedure	Number of procedures	Percent of stone patients with procedure	Number of procedures	Percent of stone patients with procedure	Number of procedures	Percent of stone patients with procedure	Number of procedures	I stone natients I	Number of procedures	stone natients
AGE	18 - 24	504	12.3	133	3.7	371	9.8	451	11.8	116	3.4	335	9.2
	25 - 34	1,383	14.2	338	3.9	1,045	11.3	1,272	13.6	314	3.8	958	10.8
	35 - 44	2,535	14.8	603	4.1	1,932	11.8	2,409	14.7	556	3.9	1,853	11.8
	45 - 54	3,550	15.4	867	4.4	2,683	12.4	3,672	15.8	821	4.3	2,851	12.9
	55 - 64	4,079	15.4	963	4.4	3,116	12.6	4,348	16.0	979	4.3	3,369	13.2
GENDER	Male	6,635	14.2	1,468	3.7	5,167	11.6	6,624	14.4	1,367	3.5	5,257	12.0
	Female	5,416	16.1	1,436	5.0	3,980	12.7	5,528	16.2	1,419	4.9	4,109	12.8
RACE	White	9,266	15.5	2,154	4.2	7,112	12.6	9,324	15.7	2,032	4.1	7,292	12.9
	Black	1,038	15.6	245	4.3	793	12.7	996	14.9	240	4.3	756	12.0
	Hispanic	911	12.2	307	4.8	604	8.7	915	12.7	279	4.4	636	9.5
	Asian	268	11.6	57	3.0	211	9.8	295	12.0	74	3.5	221	9.7
	Unknown	568	13.7	141	3.8	427	10.9	622	14.8	161	4.4	461	11.4
REGION	Northeast	903	10.6	302	4.2	601	7.7	885	10.8	296	4.3	589	7.8
	Midwest	3,733	18.6	952	5.5	2,781	14.6	3,781	18.4	879	5.2	2,902	14.9
	South	5,888	14.2	1,260	3.6	4,628	11.9	5,867	14.5	1,200	3.5	4,667	12.2
	West	1,527	14.6	390	4.3	1,137	11.4	1,619	14.6	411	4.3	1,208	11.6
TOTAL		12,051	15.0	2,904	4.2	9,147	12.1	12,152	15.2	2,786	4.1	9,366	12.3

### 2004-2005

				20	04					20	05		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	latory
	nographic racteristics	Number of ESWLs	Percent of stone patients with ESWL	Number of ESWLs	Percent of stone patients with ESWL	Number of ESWLs	Percent of stone patients with ESWL	Number of ESWLs	ctana nationte l	Number of ESWLs	ctono nationte l	Number of ESWLs	ctono nationte l
AGE	18 - 24	184	8.4	7	0.4	177	8.1	214	8.6	9	0.4	205	8.3
	25 - 34	991	11.7	39	0.5	952	11.3	981	11.2	46	0.6	935	10.7
	35 - 44	1,787	13.1	65	0.6	1,722	12.7	1,974	12.8	58	0.4	1,916	12.5
	45 - 54	2,265	14.4	76	0.6	2,189	14.0	2,608	14.0	81	0.5	2,527	13.6
	55 - 64	1,927	14.5	68	0.6	1,859	13.9	2,327	14.3	69	0.5	2,258	14.0
GENDER	Male	4,373	13.5	151	0.6	4,222	13.0	4,908	13.2	154	0.5	4,754	12.8
	Female	2,781	13.3	104	0.6	2,677	12.8	3,196	13.1	109	0.5	3,087	12.7
RACE	White	5,407	13.7	202	0.6	5,205	13.2	6,212	13.5	191	0.5	6,021	13.1
	Black	368	13.4	13	0.6	355	12.9	442	13.7	22	0.7	420	13.2
	Hispanic	470	11.7	17	0.5	453	11.3	476	9.6	21	0.5	455	9.3
	Asian	139	12.2	4	0.4	135	12.0	159	12.4	2	0.2	157	12.4
	Unknown	770	12.7	19	0.4	751	12.5	815	13.3	27	0.5	788	12.9
REGION	Northeast	792	14.0	19	0.4	773	13.7	791	12.4	20	0.4	771	12.1
	Midwest	1,995	13.3	74	0.6	1,921	12.8	2,213	13.1	72	0.5	2,141	12.7
	South	3,613	13.6	132	0.6	3,481	13.1	4,266	13.8	148	0.6	4,118	13.3
	West	754	12.4	30	0.6	724	12.0	834	11.3	23	0.3	811	11.1
TOTAL		7,154	13.4	255	0.6	6,899	13.0	8,104	13.1	263	0.5	7,841	12.8

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year.

Ambulatory surgical procedures include procedures serviced in hospital-based outpatient facility and physician

office. ESWL, extracorporeal shock wave lithotripsy. All percentages are rounded to one decimal place.

#### 2006-2007

				20	06					20	07		
ļ		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	atory
	nographic racteristics	Number of ESWLs	Percent of stone patients with ESWL	Number of ESWLs	Percent of stone patients with ESWL	Number of ESWLs		Number of	ctono notionte l	Number of ESWLs	Percent of stone patients with ESWL	Number of ESWLs	Percent of stone patients with ESWL
AGE	18 - 24	254	8.8	15	0.6	239	8.3	225	8.3	9	0.4	216	8.0
	25 - 34	990	11.4	41	0.5	949	10.9	931	10.1	26	0.3	905	9.9
	35 - 44	1,950	12.5	71	0.5	1,879	12.1	1,991	12.4	84	0.6	1,907	12.0
	45 - 54	2,616	13.4	82	0.5	2,534	13.1	2,707	13.1	85	0.5	2,622	12.7
	55 - 64	2,505	13.8	80	0.5	2,425	13.3	2,663	13.1	86	0.5	2,577	12.7
GENDER	Male	4,978	12.8	176	0.5	4,802	12.4	5,084	12.3	170	0.5	4,914	11.9
	Female	3,337	12.8	113	0.5	3,224	12.4	3,433	12.4	120	0.5	3,313	12.0
RACE	White	6,436	13.1	211	0.5	6,225	12.7	6,576	12.6	203	0.5	6,373	12.2
	Black	528	13.8	15	0.5	513	13.5	633	13.4	27	0.7	606	12.8
	Hispanic	593	10.1	32	0.7	561	9.6	641	10.4	35	0.7	606	9.8
	Asian	135	10.0	5	0.4	130	9.7	156	9.8	6	0.5	150	9.5
	Unknown	623	12.8	26	0.6	597	12.3	511	11.9	19	0.5	492	11.5
REGION	Northeast	835	12.2	24	0.4	811	11.9	862	11.8	19	0.3	843	11.6
	Midwest	2,327	13.4	56	0.4	2,271	13.1	1,973	11.7	52	0.4	1,921	11.5
	South	4,247	13.0	178	0.7	4,069	12.5	4,803	13.1	185	0.6	4,618	12.6
	West	906	11.2	31	0.4	875	10.8	879	10.6	34	0.5	845	10.2
TOTAL		8,315	12.8	289	0.5	8,026	12.4	8,517	12.3	290	0.5	8,227	11.9

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. Ambulatory surgical procedures include procedures serviced in hospital-based outpatient facility and physician

office. ESWL, extracorporeal shock wave lithotripsy.

#### 2008-2009

				20	08					20	09		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	atory
	nographic acteristics	Number of ESWLs	Percent of stone patients with ESWL	Number of ESWLs	Percent of stone patients with ESWL	Number of ESWLs	Percent of stone patients with ESWL	Number of ESWLs	ctono notionte l	Number of ESWLs	Percent of stone patients with ESWL	Number of ESWLs	Percent of stone patients with ESWL
AGE	18 - 24	206	7.0	8	0.3	198	6.8	236	8.1	10	0.4	226	7.8
	25 - 34	1,028	10.6	28	0.3	1,000	10.3	932	9.3	34	0.4	898	8.9
	35 - 44	2,030	12.3	84	0.6	1,946	11.8	1,999	11.3	67	0.4	1,932	11.0
	45 - 54	2,787	13.1	92	0.5	2,695	12.7	2,705	12.4	90	0.5	2,615	12.0
	55 - 64	2,839	13.2	94	0.5	2,745	12.8	2,979	12.8	90	0.5	2,889	12.5
GENDER	Male	5,249	12.3	163	0.5	5,086	12.0	5,266	11.8	152	0.4	5,114	11.4
	Female	3,641	12.3	143	0.6	3,498	11.9	3,585	11.5	139	0.5	3,446	11.1
RACE	White	6,875	12.7	217	0.5	6,658	12.4	6,823	12.1	213	0.4	6,610	11.8
	Black	699	12.7	26	0.6	673	12.2	739	12.2	27	0.5	712	11.8
	Hispanic	643	9.5	35	0.6	608	9.0	630	8.9	30	0.5	600	8.4
	Asian	188	10.8	5	0.3	183	10.6	169	8.9	6	0.4	163	8.6
	Unknown	485	11.7	23	0.6	462	11.2	490	11.0	15	0.4	475	10.6
REGION	Northeast	852	11.3	23	0.4	829	11.0	852	10.8	20	0.3	832	10.5
	Midwest	2,022	12.3	66	0.5	1,956	12.0	1,871	11.4	52	0.4	1,819	11.2
	South	5,011	12.8	175	0.5	4,836	12.4	5,142	12.1	171	0.5	4,971	11.7
	West	1,005	11.2	42	0.5	963	10.8	986	10.8	48	0.6	938	10.4
TOTAL		8,890	12.3	306	0.5	8,584	11.9	8,851	11.7	291	0.4	8,560	11.3

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. Ambulatory surgical procedures include procedures serviced in hospital-based outpatient facility and physician

office. ESWL, extracorporeal shock wave lithotripsy.

#### 2010-2011

				20	10					20	11		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	latory
	nographic acteristics	Number of ESWLs	Percent of stone patients with ESWL	Number of ESWLs	Percent of stone patients with ESWL	Number of ESWLs	Percent of stone patients with ESWL	Number of ESWLs	ctono notionte l	Number of ESWLs	Percent of stone patients with ESWL	Number of ESWLs	ctono nationte l
AGE	18 - 24	214	7.0	14	0.5	200	6.7	255	6.9	5	0.2	250	6.8
	25 - 34	926	10.0	32	0.4	894	9.7	827	9.1	20	0.3	807	8.9
	35 - 44	1,830	11.1	57	0.4	1,773	10.8	1,892	11.2	59	0.4	1,833	10.9
	45 - 54	2,583	12.1	90	0.5	2,493	11.7	2,681	12.1	71	0.4	2,610	11.8
	55 - 64	2,853	12.3	82	0.4	2,771	12.0	3,000	12.0	83	0.4	2,917	11.7
GENDER	Male	4,920	11.4	159	0.4	4,761	11.1	5,052	11.1	142	0.4	4,910	10.8
	Female	3,486	11.5	116	0.4	3,370	11.2	3,603	11.5	96	0.4	3,507	11.2
RACE	White	6,558	11.9	198	0.4	6,360	11.6	6,618	11.5	170	0.4	6,448	11.2
	Black	735	11.6	32	0.6	703	11.3	734	11.6	18	0.3	716	11.3
	Hispanic	500	7.9	22	0.4	478	7.6	623	8.8	24	0.4	599	8.5
	Asian	182	9.9	6	0.4	176	9.6	205	10.4	7	0.4	198	10.0
	Unknown	431	10.7	17	0.5	414	10.3	475	11.4	19	0.5	456	11.1
REGION	Northeast	792	10.5	24	0.4	768	10.3	773	10.2	20	0.3	753	10.0
	Midwest	1,955	11.9	64	0.4	1,891	11.6	2,055	11.4	50	0.3	2,005	11.2
	South	4,761	11.7	141	0.4	4,620	11.4	4,882	11.7	139	0.4	4,743	11.4
	West	898	10.2	46	0.6	852	9.7	945	9.9	29	0.3	916	9.7
TOTAL		8,406	11.4	275	0.4	8,131	11.1	8,655	11.2	238	0.4	8,417	11.0

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. Ambulatory surgical procedures include procedures serviced in hospital-based outpatient facility and physician office.

ESWL, extracorporeal shock wave lithotripsy.

#### 2012-2013

				20	12					20	13		
		То	tal	Inpa	tient	Ambu	latory	То	tal	Inpa	tient	Ambu	latory
	nographic acteristics	Number of ESWLs	Percent of stone patients with ESWL	Number of ESWLs	Percent of stone patients with ESWL	Number of ESWLs	Percent of stone patients with ESWL	Number of ESWLs	ctono nationte l	Number of ESWLs	Percent of stone patients with ESWL	Number of ESWLs	Percent of stone patients with ESWL
AGE	18 - 24	246	6.8	4	0.1	242	6.6	231	6.3	3	0.1	228	6.2
	25 - 34	855	9.3	40	0.5	815	8.9	786	8.7	24	0.3	762	8.5
	35 - 44	1,771	10.9	55	0.4	1,716	10.6	1,629	10.4	51	0.4	1,578	10.1
	45 - 54	2,471	11.3	73	0.4	2,398	10.9	2,430	11.2	51	0.3	2,379	11.0
	55 - 64	2,938	11.5	85	0.4	2,853	11.2	2,839	11.0	71	0.3	2,768	10.8
GENDER	Male	4,804	10.7	156	0.4	4,648	10.4	4,578	10.4	117	0.3	4,461	10.1
	Female	3,477	10.9	101	0.4	3,376	10.6	3,337	10.5	83	0.3	3,254	10.3
RACE	White	6,352	11.1	186	0.4	6,166	10.8	6,072	10.7	138	0.3	5,934	10.5
	Black	720	11.2	16	0.3	704	10.9	655	10.5	22	0.4	633	10.2
	Hispanic	586	8.4	37	0.6	549	8.0	598	8.7	19	0.3	579	8.4
	Asian	202	9.8	1	0.1	201	9.8	211	9.3	9	0.4	202	8.9
	Unknown	421	10.6	17	0.5	404	10.1	379	9.8	12	0.3	367	9.5
REGION	Northeast	780	9.9	17	0.3	763	9.7	701	9.4	9	0.1	692	9.3
	Midwest	2,139	11.4	67	0.4	2,072	11.1	2,086	10.9	73	0.4	2,013	10.5
	South	4,400	11.0	127	0.4	4,273	10.7	4,188	10.8	97	0.3	4,091	10.6
	West	962	9.6	46	0.5	916	9.1	940	9.0	21	0.2	919	8.8
TOTAL		8,281	10.8	257	0.4	8,024	10.5	7,915	10.4	200	0.3	7,715	10.2

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. Ambulatory surgical procedures include procedures serviced in hospital-based outpatient facility and physician office.

ESWL, extracorporeal shock wave lithotripsy.

#### 2004-2005

			2004			2005	
Demo	graphic Characteristics	Number of imaging procedures	Number of stone patients with imaging procedure	Percent of stone patients with imaging procedure	Number of imaging procedures	Number of stone patients with imaging procedure	Percent of stone patients with imaging procedure
AGE	18 - 24	6,442	1,533	80.1	6,757	1,784	80.4
	25 - 34	21,773	5,656	82.8	22,642	5,987	80.9
	35 - 44	37,849	9,478	83.4	38,345	10,522	81.9
	45 - 54	43,489	10,519	82.2	44,996	11,954	80.1
	55 - 64	35,780	8,665	82.2	36,920	10,055	78.3
GENDER	Male	87,170	21,679	82.4	88,929	24,223	80.6
	Female	58,163	14,172	82.7	60,731	16,079	79.6
RACE	White	110,291	26,737	83.5	114,639	30,427	81.5
	Black	7,156	1,803	81.3	7,494	2,110	78.5
	Hispanic	8,904	2,583	74.7	9,952	2,988	72.2
	Asian	2,635	708	76.0	2,677	806	75.0
	Unknown	16,347	4,020	83.0	14,898	3,971	79.2
REGION	Northeast	12,165	3,271	71.8	11,601	3,490	70.1
	Midwest	55,098	11,347	90.8	52,041	12,036	86.2
	South	65,264	17,561	82.5	70,965	20,267	81.3
	West	12,806	3,672	71.5	15,053	4,509	70.9
TOTAL		145,333	35,851	82.5	149,660	40,302	80.2

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year.

Imaging procedures for kidney stone evaluation included plain film/Kidney, Ureter, Bladder X-ray, intravenous pyelography, ultrasound, computed

tomography, and magnetic resonance imaging.

All percentages are rounded to one decimal place.

A code change in computed tomograph starting for year 2011: Before 2011, abdomen computed tomograph and pelvis computed tomograph each had their own distinct HCPCS code. In 2011, one consolidated code for the two procedures was introduced and used from that year forward.

### 2006-2007

			2006			2007	
Demog	graphic Characteristics	Number of imaging procedures	Number of stone patients with imaging procedure	Percent of stone patients with imaging procedure	Number of imaging procedures	Number of stone patients with imaging procedure	Percent of stone patients with imaging procedure
AGE	18 - 24	7,890	1,914	80.9	7,716	1,893	78.5
	25 - 34	23,301	6,129	81.4	24,468	6,433	81.0
	35 - 44	40,946	10,766	81.4	43,821	11,091	81.7
	45 - 54	48,927	12,751	80.0	54,783	13,682	81.1
	55 - 64	42,992	11,351	78.7	48,911	12,723	77.5
GENDER	Male	96,932	25,460	80.2	105,946	27,205	80.3
	Female	67,124	17,451	80.4	73,753	18,617	79.8
RACE	White	126,159	32,818	81.1	138,452	35,068	81.1
	Black	9,121	2,518	79.5	11,267	3,050	77.9
	Hispanic	12,253	3,461	72.7	14,201	3,843	74.2
	Asian	3,019	863	73.7	3,477	936	72.9
	Unknown	13,504	3,251	82.7	12,302	2,925	81.2
REGION	Northeast	14,002	3,955	70.8	16,265	4,288	71.5
	Midwest	52,992	12,365	86.0	50,971	11,974	84.7
	South	78,578	21,523	80.9	93,256	24,479	81.2
	West	18,484	5,068	73.4	19,207	5,081	73.2
TOTAL		164,056	42,911	80.2	179,699	45,822	80.1

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

Imaging procedures for kidney stone evaluation included plain film/Kidney, Ureter, Bladder X-ray, intravenous pyelography, ultrasound, computed

tomography, and magnetic resonance imaging.

All percentages are rounded to one decimal place.

A code change in computed tomograph starting for year 2011: Before 2011, abdomen computed tomograph and pelvis computed tomograph each had their own distinct HCPCS code. In 2011, one consolidated code for the two procedures was introduced and used from that year forward.

### 2008-2009

	Demographic Characteristics		2008			2009	
Demo	graphic Characteristics	Number of imaging procedures	Number of stone patients with imaging procedure	Percent of stone patients with imaging procedure	Number of imaging procedures	Number of stone patients with imaging procedure	Percent of stone patients with imaging procedure
AGE	18 - 24	8,153	2,117	80.8	8,323	2,128	81.7
	25 - 34	26,155	6,835	80.5	25,022	6,674	77.7
	35 - 44	44,972	11,442	81.5	45,597	11,903	80.1
	45 - 54	56,897	14,356	81.0	56,596	14,702	79.7
	55 - 64	55,252	13,980	78.1	56,297	14,752	78.3
GENDER	Male	110,270	28,410	79.8	110,681	29,376	78.8
	Female	81,159	20,320	80.6	81,154	20,783	79.6
RACE	White	147,123	36,951	81.5	147,037	37,916	80.6
	Black	13,527	3,548	77.0	14,631	3,894	77.2
	Hispanic	14,976	4,238	74.1	15,169	4,357	72.6
	Asian	3,705	1,083	73.3	3,935	1,152	69.1
	Unknown	12,098	2,910	80.1	11,063	2,840	78.6
REGION	Northeast	16,573	4,533	71.5	16,150	4,611	70.9
	Midwest	50,352	11,933	84.4	45,540	11,424	82.4
	South	102,008	26,341	81.0	107,925	28,164	80.6
	West	22,496	5,923	76.2	22,220	5,960	74.2
TOTAL		191,429	48,730	80.2	191,835	50,159	79.2

Data source: De-identified Optum Clinformatics® Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

Imaging procedures for kidney stone evaluation included plain film/Kidney, Ureter, Bladder X-ray, intravenous pyelography, ultrasound, computed

tomography, and magnetic resonance imaging.

All percentages are rounded to one decimal place.

A code change in computed tomograph starting for year 2011: Before 2011, abdomen computed tomograph and pelvis computed tomograph each had their own distinct HCPCS code. In 2011, one consolidated code for the two procedures was introduced and used from that year forward.

## 2010-2011

			2010			2011	
Demo	graphic Characteristics	Number of imaging procedures	Number of stone patients with imaging procedure	Percent of stone patients with imaging procedure	Number of imaging procedures	Number of stone patients with imaging procedure	Percent of stone patients with imaging procedure
AGE	18 - 24	7,824	2,111	79.9	5,595	2,536	79.0
	25 - 34	24,032	6,509	81.0	15,058	6,383	79.7
-	35 - 44	43,324	11,450	81.6	27,505	11,413	80.3
	45 - 54	54,310	14,145	79.4	36,976	14,693	79.5
	55 - 64	57,286	14,957	78.8	40,827	15,885	77.7
GENDER	Male	107,068	28,642	79.4	72,554	29,695	78.4
	Female	79,708	20,530	80.7	53,407	21,215	80.1
RACE	White	143,686	37,367	81.1	96,410	38,606	80.2
-	Black	15,044	4,011	78.9	9,757	3,980	76.0
-	Hispanic	13,541	3,938	73.5	9,922	4,310	74.2
	Asian	4,223	1,179	75.1	2,816	1,260	73.3
-	Unknown	10,282	2,677	78.9	7,056	2,754	79.4
REGION	Northeast	15,274	4,356	70.8	10,684	4,522	71.8
	Midwest	46,751	11,645	83.6	32,199	12,389	81.6
	South	103,566	27,443	81.5	68,877	27,928	80.8
	West	21,185	5,728	74.3	14,201	6,071	73.2
TOTAL		186,776	49,172	80.0	125,961	50,910	79.1

Data source: De-identified Optum Clinformatics® Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

Imaging procedures for kidney stone evaluation included plain film/Kidney, Ureter, Bladder X-ray, intravenous pyelography, ultrasound, computed

tomography, and magnetic resonance imaging.

All percentages are rounded to one decimal place.

A code change in computed tomograph starting for year 2011: Before 2011, abdomen computed tomograph and pelvis computed tomograph each had their own distinct HCPCS code. In 2011, one consolidated code for the two procedures was introduced and used from that year forward.

## 2012-2013

			2012			2013	
Demo	graphic Characteristics	Number of imaging procedures	Number of stone patients with imaging procedure	Percent of stone patients with imaging procedure	Number of imaging procedures	Number of stone patients with imaging procedure	Percent of stone patients with imaging procedure
AGE	18 - 24	5,327	2,490	75.8	5,284	2,468	77.0
	25 - 34	14,710	6,221	77.8	14,038	5,929	77.9
	35 - 44	26,803	11,038	79.3	24,965	10,553	78.5
	45 - 54	35,905	14,617	78.7	36,037	14,138	78.3
	55 - 64	40,506	15,955	77.3	41,566	16,212	76.7
GENDER	Male	70,735	29,300	77.8	69,168	28,315	76.9
	Female	52,516	21,021	78.6	52,722	20,985	78.8
RACE	White	94,411	38,156	79.1	92,988	37,078	78.6
	Black	9,923	3,951	76.4	9,554	3,926	76.6
	Hispanic	9,678	4,295	73.6	9,433	4,270	73.3
	Asian	2,961	1,314	73.9	3,213	1,416	72.0
	Unknown	6,278	2,605	76.7	6,702	2,610	77.9
REGION	Northeast	10,589	4,676	71.6	10,404	4,533	71.7
	Midwest	33,321	12,937	81.0	34,451	13,057	81.1
	South	64,738	26,391	79.4	61,552	25,168	78.6
	West	14,603	6,317	73.0	15,483	6,542	72.7
TOTAL		123,251	50,321	78.1	121,890	49,300	77.7

Data source: De-identified Optum Clinformatics® Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

Imaging procedures for kidney stone evaluation included plain film/Kidney, Ureter, Bladder X-ray, intravenous pyelography, ultrasound, computed

tomography, and magnetic resonance imaging.

All percentages are rounded to one decimal place.

A code change in computed tomograph starting for year 2011: Before 2011, abdomen computed tomograph and pelvis computed tomograph each had their own distinct HCPCS code. In 2011, one consolidated code for the two procedures was introduced and used from that year forward.

### 2004-2005

			2004		2005			
Demographic Characteristics		Number of plain film/KUB procedures	Number of stone patients with plain film/KUB procedures	Percent of stone patients with plain film/KUB procedures	Number of plain film/KUB procedures	Number of stone patients with plain film/KUB procedures	Percent of stone patients with plain film/KUB procedures	
AGE	18 - 24	1,896	854	44.6	1,981	947	42.7	
	25 - 34	7,615	3,296	48.2	7,326	3,423	46.3	
	35 - 44	14,068	5,843	51.4	13,705	6,356	49.4	
	45 - 54	17,352	6,851	53.5	17,418	7,555	50.6	
	55 - 64	15,023	5,801	55.0	15,239	6,644	51.7	
GENDER	Male	34,107	13,745	52.2	33,471	15,058	50.1	
	Female	21,847	8,900	51.9	22,198	9,867	48.9	
RACE	White	42,940	17,128	53.5	42,966	19,109	51.2	
	Black	2,905	1,177	53.1	2,997	1,376	51.2	
	Hispanic	2,968	1,404	40.6	3,167	1,547	37.4	
	Asian	952	427	45.8	1,041	469	43.7	
	Unknown	6,189	2,509	51.8	5,498	2,424	48.3	
REGION	Northeast	4,348	1,793	39.4	3,634	1,741	35.0	
	Midwest	20,247	7,200	57.6	18,276	7,471	53.5	
	South	26,488	11,432	53.7	28,519	13,091	52.5	
	West	4,871	2,220	43.2	5,240	2,622	41.2	
TOTAL		55,954	22,645	52.1	55,669	24,925	49.6	

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year.

KUB, Kidney, Ureter, Bladder X-ray

## 2006-2007

			2006		2007			
	mographic ıracteristics	Number of plain film/KUB procedures	Number of stone patients with plain film/KUB procedures	Percent of stone patients with plain film/KUB procedures	Number of plain film/KUB procedures	Number of stone patients with plain film/KUB procedures	Percent of stone patients with plain film/KUB procedures	
AGE	18 - 24	2,016	995	42.1	1,792	937	38.8	
	25 - 34	6,707	3,362	44.7	6,580	3,392	42.7	
	35 - 44	12,838	6,293	47.6	13,019	6,370	46.9	
	45 - 54	17,027	7,863	49.3	17,608	8,394	49.8	
	55 - 64	16,186	7,401	51.3	17,041	8,070	49.2	
GENDER	Male	32,805	15,400	48.5	33,405	16,082	47.5	
	Female	21,969	10,514	48.4	22,635	11,081	47.5	
RACE	White	42,931	20,131	49.8	44,078	21,206	49.1	
	Black	3,287	1,596	50.4	3,720	1,849	47.3	
	Hispanic	3,367	1,752	36.8	3,668	1,946	37.6	
	Asian	898	471	40.2	957	482	37.5	
	Unknown	4,291	1,964	49.9	3,617	1,680	46.6	
REGION	Northeast	4,044	2,055	36.8	4,044	2,147	35.8	
	Midwest	17,407	7,460	51.9	15,796	7,099	50.2	
	South	27,820	13,549	50.9	30,641	15,146	50.3	
	West	5,503	2,850	41.3	5,559	2,771	39.9	
TOTAL		54,774	25,914	48.5	56,040	27,163	47.5	

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year.

KUB, Kidney, Ureter, Bladder X-ray

## 2008-2009

			2008		2009			
Demographic Characteristics		Number of plain film/KUB procedures	Number of stone patients with plain film/KUB procedures	Percent of stone patients with plain film/KUB procedures	Number of plain film/KUB procedures	Number of stone patients with plain film/KUB procedures	Percent of stone patients with plain film/KUB procedures	
AGE	18 - 24	1,842	1,019	38.9	2,051	1,065	40.9	
	25 - 34	6,937	3,647	43.0	6,602	3,398	39.6	
	35 - 44	12,820	6,356	45.3	13,032	6,639	44.7	
	45 - 54	18,237	8,671	48.9	17,404	8,635	46.8	
	55 - 64	18,599	8,788	49.1	19,448	9,241	49.0	
GENDER	Male	34,114	16,605	46.7	33,826	16,896	45.3	
	Female	24,321	11,876	47.1	24,711	12,082	46.3	
RACE	White	46,195	22,176	48.9	46,048	22,486	47.8	
	Black	4,251	2,123	46.1	4,650	2,313	45.9	
	Hispanic	3,526	1,973	34.5	3,586	2,026	33.8	
	Asian	979	557	37.7	1,010	569	34.1	
	Unknown	3,484	1,652	45.5	3,243	1,584	43.8	
REGION	Northeast	4,244	2,256	35.6	4,152	2,211	34.0	
	Midwest	15,672	7,078	50.1	14,274	6,632	47.8	
	South	32,034	15,953	49.0	33,799	16,879	48.3	
	West	6,485	3,194	41.1	6,312	3,256	40.6	
TOTAL		58,435	28,481	46.9	58,537	28,978	45.7	

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year.

KUB, Kidney, Ureter, Bladder X-ray

## 2010-2011

			2010		2011			
Demographic Characteristics		Number of plain film/KUB procedures	Number of stone patients with plain film/KUB procedures	Percent of stone patients with plain film/KUB procedures	Number of plain film/KUB procedures	Number of stone patients with plain film/KUB procedures	Percent of stone patients with plain film/KUB procedures	
AGE	18 - 24	1,764	966	36.5	2,086	1,182	36.8	
	25 - 34	6,347	3,281	40.8	5,992	3,140	39.2	
	35 - 44	12,462	6,292	44.9	12,182	6,189	43.5	
	45 - 54	17,399	8,310	46.7	16,858	8,444	45.7	
	55 - 64	19,694	9,399	49.5	20,250	9,741	47.7	
GENDER	Male	33,551	16,402	45.5	33,336	16,659	44.0	
	Female	24,115	11,846	46.6	24,032	12,037	45.5	
RACE	White	45,635	21,989	47.7	44,936	22,295	46.3	
	Black	4,695	2,308	45.4	4,357	2,220	42.4	
	Hispanic	3,126	1,854	34.6	3,762	2,005	34.5	
	Asian	1,170	622	39.6	1,191	638	37.1	
	Unknown	3,040	1,475	43.5	3,122	1,538	44.3	
REGION	Northeast	3,967	2,095	34.0	3,897	2,135	33.9	
	Midwest	15,212	6,785	48.7	15,486	7,266	47.8	
	South	32,296	16,265	48.3	31,615	16,071	46.5	
	West	6,191	3,103	40.3	6,370	3,224	38.9	
TOTAL		57,666	28,248	45.9	57,368	28,696	44.6	

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year.

KUB, Kidney, Ureter, Bladder X-ray

## 2012-2013

			2012			2013	
	ographic acteristics	Number of plain film/KUB procedures	Number of stone patients with plain film/KUB procedures	Percent of stone patients with plain film/KUB procedures	Number of plain film/KUB procedures	Number of stone patients with plain film/KUB procedures	Percent of stone patients with plain film/KUB procedures
AGE	18 - 24	1,934	1,098	33.4	1,916	1,049	32.7
	25 - 34	5,792	3,081	38.6	5,679	2,823	37.1
	35 - 44	11,840	5,939	42.7	10,537	5,413	40.3
	45 - 54	16,453	8,261	44.5	16,456	7,912	43.8
	55 - 64	19,877	9,651	46.7	20,240	9,764	46.2
GENDER	Male	32,175	16,147	42.9	31,245	15,384	41.8
	Female	23,721	11,883	44.4	23,583	11,577	43.5
RACE	White	44,002	21,822	45.2	43,024	20,864	44.2
	Black	4,276	2,166	41.9	4,150	2,116	41.3
	Hispanic	3,679	1,974	33.8	3,422	1,870	32.1
	Asian	1,200	662	37.2	1,287	702	35.7
	Unknown	2,739	1,406	41.4	2,945	1,409	42.1
REGION	Northeast	3,718	2,086	32.0	3,409	2,013	31.9
	Midwest	16,147	7,600	47.6	16,981	7,618	47.3
	South	29,541	15,025	45.2	27,337	13,899	43.4
	West	6,490	3,319	38.3	7,101	3,431	38.1
TOTAL		55,896	28,030	43.5	54,828	26,961	42.5

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year.

KUB, Kidney, Ureter, Bladder X-ray

2004-2005

			2004			2005	
Demographic Characteristics		Number of intravenous pyelography procedures	Number of stone patients with intravenous pyelography procedure	Percent of stone patients with intravenous pyelography procedure	Number of intravenous pyelography procedures	Number of stone patients with intravenous pyelography procedure	Percent of stone patients with intravenous pyelography procedure
AGE	18 - 24	388	289	15.1	346	253	11.4
	25 - 34	1,432	1,064	15.6	1,031	850	11.5
	35 - 44	2,148	1,649	14.5	1,725	1,439	11.2
	45 - 54	2,645	1,940	15.2	1,876	1,520	10.2
	55 - 64	1,905	1,390	13.2	1,525	1,248	9.7
GENDER	Male	4,883	3,652	13.9	3,603	2,951	9.8
	Female	3,635	2,680	15.6	2,900	2,359	11.7
RACE	White	6,382	4,717	14.7	4,961	4,009	10.7
	Black	502	367	16.5	362	305	11.3
	Hispanic	603	487	14.1	486	424	10.3
	Asian	160	105	11.3	95	84	7.8
	Unknown	871	656	13.5	599	488	9.7
REGION	Northeast	342	260	5.7	254	214	4.3
	Midwest	2,885	1,894	15.2	1,881	1,461	10.5
	South	4,651	3,648	17.1	3,916	3,250	13.0
	West	640	530	10.3	452	385	6.1
TOTAL		8,518	6,332	14.6	6,503	5,310	10.6

## 2006-2007

			2006		2007			
Demographic Characteristics		Number of intravenous pyelography procedures	Number of stone patients with intravenous pyelography procedure	Percent of stone patients with intravenous pyelography procedure	Number of intravenous pyelography procedures		Percent of stone patients with intravenous pyelography procedure	
AGE	18 - 24	249	206	8.7	187	150	6.2	
	25 - 34	759	634	8.4	588	527	6.6	
	35 - 44	1,222	1,043	7.9	893	781	5.8	
	45 - 54	1,582	1,306	8.2	1,132	958	5.7	
	55 - 64	1,214	1,026	7.1	969	839	5.1	
GENDER	Male	2,764	2,336	7.4	1,963	1,718	5.1	
	Female	2,262	1,879	8.7	1,806	1,537	6.6	
RACE	White	3,837	3,216	8.0	2,909	2,508	5.8	
	Black	354	290	9.2	238	212	5.4	
	Hispanic	421	371	7.8	354	312	6.0	
	Asian	80	67	5.7	57	55	4.3	
	Unknown	334	271	6.9	211	168	4.7	
REGION	Northeast	214	184	3.3	125	121	2.0	
	Midwest	1,362	1,080	7.5	869	697	4.9	
	South	3,077	2,630	9.9	2,518	2,196	7.3	
	West	373	321	4.6	257	241	3.5	
TOTAL		5,026	4,215	7.9	3,769	3,255	5.7	

## 2008-2009

			2008			2009	
Demographic Characteristics		Number of intravenous pyelography procedures	Number of stone patients with intravenous pyelography procedure	Percent of stone patients with intravenous pyelography procedure	Number of intravenous pyelography procedures	Number of stone patients with intravenous pyelography procedure	Percent of stone patients with intravenous pyelography procedure
AGE	18 - 24	107	95	3.6	134	120	4.6
	25 - 34	430	364	4.3	327	299	3.5
	35 - 44	779	676	4.8	563	512	3.4
	45 - 54	797	706	4.0	696	603	3.3
	55 - 64	733	637	3.6	652	561	3.0
GENDER	Male	1,533	1,330	3.7	1,241	1,094	2.9
	Female	1,313	1,148	4.6	1,131	1,001	3.8
RACE	White	2,157	1,877	4.1	1,823	1,593	3.4
	Black	235	204	4.4	205	191	3.8
	Hispanic	237	213	3.7	185	166	2.8
	Asian	48	45	3.0	30	29	1.7
	Unknown	169	139	3.8	129	116	3.2
REGION	Northeast	97	86	1.4	90	85	1.3
	Midwest	618	495	3.5	391	344	2.5
	South	1,905	1,692	5.2	1,713	1,497	4.3
	West	226	205	2.6	178	169	2.1
TOTAL		2,846	2,478	4.1	2,372	2,095	3.3

## 2010-2011

			2010			2011	
Demographic Characteristics		Number of intravenous pyelography procedures	Number of stone patients with intravenous pyelography procedure	Percent of stone patients with intravenous pyelography procedure	Number of intravenous pyelography procedures	Number of stone patients with intravenous pyelography procedure	Percent of stone patients with intravenous pyelography procedure
AGE	18 - 24	90	79	3.0	83	76	2.4
	25 - 34	259	242	3.0	233	222	2.8
	35 - 44	425	380	2.7	429	380	2.7
	45 - 54	593	528	3.0	513	470	2.5
	55 - 64	498	442	2.3	523	464	2.3
GENDER	Male	925	842	2.3	926	833	2.2
	Female	940	829	3.3	855	779	2.9
RACE	White	1,496	1,336	2.9	1,360	1,221	2.5
	Black	138	125	2.5	155	144	2.8
	Hispanic	120	104	1.9	146	135	2.3
	Asian	39	37	2.4	39	37	2.2
	Unknown	72	69	2.0	81	75	2.2
REGION	Northeast	69	63	1.0	63	58	0.9
	Midwest	362	314	2.3	373	335	2.2
	South	1,280	1,150	3.4	1,220	1,103	3.2
	West	154	144	1.9	125	116	1.4
TOTAL		1,865	1,671	2.7	1,781	1,612	2.5

## 2012-2013

			2012			2013	
Demographic Characteristics		Number of intravenous pyelography procedures	Number of stone patients with intravenous pyelography procedure	Percent of stone patients with intravenous pyelography procedure	Number of intravenous pyelography procedures	Number of stone patients with intravenous pyelography procedure	Percent of stone patients with intravenous pyelography procedure
AGE	18 - 24	84	78	2.4	69	64	2.0
	25 - 34	193	169	2.1	158	141	1.9
	35 - 44	317	288	2.1	239	214	1.6
	45 - 54	419	378	2.0	393	348	1.9
	55 - 64	420	380	1.8	316	281	1.3
GENDER	Male	780	698	1.9	584	521	1.4
	Female	653	595	2.2	591	527	2.0
RACE	White	1,105	1,001	2.1	913	810	1.7
	Black	107	94	1.8	93	90	1.8
	Hispanic	139	124	2.1	93	83	1.4
	Asian	42	37	2.1	26	23	1.2
	Unknown	40	37	1.1	50	42	1.3
REGION	Northeast	53	51	0.8	53	50	0.8
	Midwest	298	260	1.6	250	220	1.4
	South	964	875	2.6	799	710	2.2
	West	118	107	1.2	73	68	0.8
TOTAL		1,433	1,293	2.0	1,175	1,048	1.7

### 2004-2005

			2004		2005			
Demographi	c Characteristics	Number of ultrasounds	Number of stone patients with ultrasound	Percent of stone patients with ultrasound	Number of ultrasounds	Number of stone patients with ultrasound	Percent of stone patients with ultrasound	
AGE	18 - 24	332	215	11.2	404	272	12.3	
	25 - 34	1,397	926	13.6	1,388	970	13.1	
	35 - 44	2,176	1,507	13.3	2,220	1,594	12.4	
	45 - 54	2,667	1,840	14.4	2,639	1,966	13.2	
	55 - 64	2,541	1,729	16.4	2,431	1,766	13.8	
GENDER	Male	5,171	3,535	13.4	4,910	3,646	12.1	
	Female	3,942	2,682	15.6	4,172	2,922	14.5	
RACE	White	6,340	4,324	13.5	6,327	4,562	12.2	
	Black	496	343	15.5	505	379	14.1	
	Hispanic	967	675	19.5	1,064	747	18.1	
	Asian	279	181	19.4	258	200	18.6	
	Unknown	1,031	694	14.3	928	680	13.6	
REGION	Northeast	1,931	1,170	25.7	1,884	1,228	24.7	
	Midwest	1,643	1,168	9.3	1,427	1,088	7.8	
	South	4,833	3,375	15.9	4,974	3,620	14.5	
	West	706	504	9.8	797	632	9.9	
TOTAL		9,113	6,217	14.3	9,082	6,568	13.1	

## 2006-2007

			2006			2007	
Demographic Characteristics		Number of ultrasounds	Number of stone patients with ultrasound	Percent of stone patients with ultrasound	Number of ultrasounds	Number of stone patients with ultrasound	Percent of stone patients with ultrasound
AGE	18 - 24	459	300	12.7	550	309	12.8
	25 - 34	1,389	936	12.4	1,457	985	12.4
	35 - 44	2,302	1,645	12.4	2,472	1,674	12.3
	45 - 54	2,830	2,033	12.8	3,192	2,195	13.0
-	55 - 64	2,792	2,009	13.9	3,344	2,247	13.7
GENDER	Male	5,427	3,818	12.0	6,267	4,153	12.3
	Female	4,345	3,105	14.3	4,748	3,257	14.0
RACE	White	6,853	4,869	12.0	7,769	5,235	12.1
	Black	569	405	12.8	688	493	12.6
	Hispanic	1,237	871	18.3	1,387	948	18.3
	Asian	322	219	18.7	340	212	16.5
	Unknown	791	559	14.2	831	522	14.5
REGION	Northeast	2,101	1,306	23.4	2,423	1,403	23.4
	Midwest	1,411	1,133	7.9	1,459	1,107	7.8
	South	5,204	3,750	14.1	6,014	4,180	13.9
	West	1,056	734	10.6	1,119	720	10.4
TOTAL		9,772	6,923	12.9	11,015	7,410	13.0

## 2008-2009

			2008			2009	
Demographic Characteristics		Number of ultrasounds	Number of stone patients with ultrasound	Percent of stone patients with ultrasound	Number of ultrasounds	Number of stone patients with ultrasound	Percent of stone patients with ultrasound
AGE	18 - 24	511	320	12.2	528	375	14.4
-	25 - 34	1,691	1,126	13.3	1,657	1,135	13.2
	35 - 44	2,575	1,735	12.4	2,969	1,987	13.4
	45 - 54	3,624	2,328	13.1	3,619	2,483	13.5
	55 - 64	3,949	2,531	14.1	4,226	2,876	15.3
GENDER	Male	6,673	4,294	12.1	7,179	4,811	12.9
	Female	5,677	3,746	14.9	5,820	4,045	15.5
RACE	White	8,604	5,588	12.3	9,193	6,263	13.3
	Black	968	633	13.7	1,027	708	14.0
	Hispanic	1,575	1,042	18.2	1,570	1,100	18.3
	Asian	399	272	18.4	426	271	16.3
	Unknown	804	505	13.9	783	514	14.2
REGION	Northeast	2,838	1,581	24.9	2,681	1,642	25.2
	Midwest	1,328	1,048	7.4	1,379	1,082	7.8
	South	7,030	4,599	14.1	7,667	5,201	14.9
	West	1,154	812	10.4	1,272	931	11.6
TOTAL		12,350	8,040	13.2	12,999	8,856	14.0

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. All percentages are rounded to one decimal place.

# 2010-2011

			2010			2011	
Demogra	aphic Characteristics	Number of ultrasounds	Number of stone patients with ultrasound	Percent of stone patients with ultrasound	Number of ultrasounds	Number of stone patients with ultrasound	Percent of stone patients with ultrasound
AGE	18 - 24	644	415	15.7	699	463	14.4
-	25 - 34	1,799	1,212	15.1	1,909	1,280	16.0
	35 - 44	3,028	2,048	14.6	2,950	2,060	14.5
-	45 - 54	3,889	2,640	14.8	4,272	3,016	16.3
-	55 - 64	4,503	3,063	16.1	4,916	3,393	16.6
GENDER	Male	7,596	5,044	14.0	8,046	5,530	14.6
	Female	6,267	4,334	17.0	6,700	4,682	17.7
RACE	White	9,703	6,667	14.5	10,431	7,282	15.1
	Black	1,261	813	16.0	1,193	821	15.7
	Hispanic	1,556	1,012	18.9	1,741	1,193	20.5
	Asian	517	325	20.7	475	316	18.4
	Unknown	826	561	16.5	906	600	17.3
REGION	Northeast	2,758	1,706	27.7	3,018	1,888	30.0
	Midwest	1,559	1,262	9.1	1,894	1,430	9.4
	South	8,078	5,424	16.1	8,375	5,845	16.9
	West	1,468	986	12.8	1,459	1,049	12.7
TOTAL		13,863	9,378	15.3	14,746	10,212	15.9

Data source: De-identified Optum Clinformatics® Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. All percentages are rounded to one decimal place.

# 2012-2013

			2012		2013			
Demographic Characteristics		Number of ultrasounds	Number of stone patients with ultrasound	Percent of stone patients with ultrasound	Number of ultrasounds	Number of stone patients with ultrasound	Percent of stone patients with ultrasound	
AGE	18 - 24	722	511	15.6	778	523	16.3	
	25 - 34	1,832	1,307	16.4	1,874	1,303	17.1	
	35 - 44	3,083	2,160	15.5	3,160	2,195	16.3	
	45 - 54	4,367	3,118	16.8	4,797	3,235	17.9	
	55 - 64	4,858	3,435	16.6	5,620	3,875	18.3	
GENDER	Male	8,115	5,723	15.2	8,932	6,043	16.4	
	Female	6,747	4,808	18.0	7,297	5,088	19.1	
RACE	White	10,476	7,505	15.6	11,404	7,877	16.7	
	Black	1,303	873	16.9	1,289	887	17.3	
	Hispanic	1,676	1,206	20.7	1,915	1,260	21.6	
	Asian	552	369	20.8	635	437	22.2	
	Unknown	855	578	17.0	986	670	20.0	
REGION	Northeast	3,067	1,978	30.3	3,313	2,115	33.5	
	Midwest	2,130	1,608	10.1	2,254	1,708	10.6	
	South	8,036	5,757	17.3	8,887	6,004	18.7	
	West	1,629	1,188	13.7	1,775	1,304	14.5	
TOTAL		14,862	10,531	16.3	16,229	11,131	17.5	

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. All percentages are rounded to one decimal place.

## 2004-2005

			2004			2005	
Demographic Characteristics		Number of CTs	Number of stone patients with CT	Percent of stone patients with CT	Number of CTs	Number of stone patients with CT	Percent of stone patients with CT
AGE	18 - 24	3,824	1,092	57.1	4,025	1,343	60.6
	25 - 34	11,316	3,863	56.5	12,893	4,375	59.1
	35 - 44	19,451	6,380	56.1	20,680	7,356	57.2
	45 - 54	20,805	6,815	53.3	23,048	8,237	55.2
	55 - 64	16,285	5,186	49.2	17,707	6,330	49.3
GENDER	Male	42,964	14,182	53.9	46,907	16,863	56.1
	Female	28,717	9,154	53.4	31,446	10,778	53.4
RACE	White	54,572	17,577	54.9	60,350	21,022	56.3
	Black	3,251	1,090	49.1	3,630	1,357	50.5
	Hispanic	4,363	1,572	45.5	5,230	2,010	48.6
	Asian	1,244	422	45.3	1,283	479	44.6
	Unknown	8,251	2,675	55.2	7,860	2,773	55.3
REGION	Northeast	5,541	1,945	42.7	5,826	2,179	43.8
	Midwest	30,311	8,401	67.2	30,445	9,203	65.9
	South	29,251	10,502	49.4	33,520	13,028	52.2
	West	6,578	2,488	48.4	8,562	3,231	50.8
TOTAL		71,681	23,336	53.7	78,353	27,641	55.0

Data source: De-identified Optum Clinformatics® Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

CT, computed tomography.

All percentages are rounded to one decimal place.

### 2006-2007

			2006		2007		
Demographi	c Characteristics	Number of CTs	Number of stone patients with CT	Percent of stone patients with CT	Number of CTs	Number of stone patients with CT	Percent of stone patients with CT
AGE	18 - 24	5,165	1,502	63.5	5,187	1,534	63.6
	25 - 34	14,432	4,628	61.5	15,832	4,984	62.7
	35 - 44	24,567	7,924	59.9	27,422	8,451	62.2
	45 - 54	27,458	8,972	56.3	32,830	9,984	59.2
	55 - 64	22,777	7,402	51.3	27,507	8,539	52.0
GENDER	Male	55,887	18,251	57.5	64,257	20,074	59.3
	Female	38,512	12,177	56.1	44,521	13,418	57.5
RACE	White	72,476	23,409	57.9	83,624	25,719	59.5
	Black	4,897	1,699	53.7	6,615	2,206	56.4
	Hispanic	7,225	2,406	50.5	8,779	2,762	53.3
	Asian	1,719	567	48.4	2,122	655	51.0
	Unknown	8,082	2,347	59.7	7,638	2,150	59.7
REGION	Northeast	7,636	2,554	45.7	9,668	2,919	48.7
	Midwest	32,793	9,616	66.9	32,827	9,546	67.5
	South	42,427	14,506	54.5	54,017	17,180	57.0
	West	11,543	3,752	54.3	12,266	3,847	55.4
TOTAL		94,399	30,428	56.9	108,778	33,492	58.5

Data source: De-identified Optum Clinformatics® Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

CT, computed tomography.

All percentages are rounded to one decimal place.

#### 2008-2009

			2008		2009		
Demograph	c Characteristics	Number of CTs	Number of stone patients with CT	Percent of stone patients with CT	Number of CTs	Number of stone patients with CT	Percent of stone patients with CT
AGE	18 - 24	5,693	1,706	65.1	5,610	1,720	66.0
	25 - 34	17,091	5,384	63.4	16,432	5,202	60.6
	35 - 44	28,775	8,795	62.7	29,013	9,155	61.6
-	45 - 54	34,214	10,556	59.5	34,850	11,012	59.7
	55 - 64	31,946	9,492	53.0	31,938	10,044	53.3
GENDER	Male	67,923	21,112	59.3	68,386	21,977	59.0
	Female	49,796	14,821	58.8	49,457	15,156	58.1
RACE	White	90,113	27,381	60.4	89,907	28,162	59.9
	Black	8,070	2,509	54.5	8,744	2,818	55.9
	Hispanic	9,619	3,116	54.5	9,822	3,246	54.1
	Asian	2,278	739	50.0	2,468	796	47.8
	Unknown	7,639	2,188	60.2	6,902	2,111	58.4
REGION	Northeast	9,384	2,947	46.5	9,221	2,987	45.9
	Midwest	32,718	9,530	67.4	29,475	9,066	65.4
	South	60,998	18,903	58.1	64,693	20,469	58.6
	West	14,619	4,553	58.5	14,454	4,611	57.4
TOTAL		117,719	35,933	59.1	117,843	37,133	58.6

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

CT, computed tomography.

All percentages are rounded to one decimal place.

## 2010-2011

			2010			2011	
Demographic	Characteristics	Number of CTs	Number of stone patients with CT	Percent of stone patients with CT	Number of CTs	Number of stone patients with CT	Percent of stone patients with CT
AGE	18 - 24	5,319	1,712	64.8	2,725	2,024	63.1
	25 - 34	15,621	5,186	64.6	6,913	5,024	62.8
	35 - 44	27,403	8,838	63.0	11,935	8,780	61.7
	45 - 54	32,408	10,440	58.6	15,320	10,872	58.9
	55 - 64	32,577	10,330	54.4	15,108	10,790	52.8
GENDER	Male	64,977	21,359	59.2	30,213	22,053	58.2
	Female	48,351	15,147	59.6	21,788	15,437	58.3
RACE	White	86,815	27,828	60.4	39,631	28,411	59.0
	Black	8,945	2,971	58.4	4,049	2,947	56.3
	Hispanic	8,735	2,906	54.3	4,269	3,219	55.4
	Asian	2,495	823	52.4	1,109	877	51.0
	Unknown	6,338	1,978	58.3	2,943	2,036	58.7
REGION	Northeast	8,474	2,848	46.3	3,702	2,881	45.8
	Midwest	29,600	9,228	66.2	14,434	9,630	63.4
	South	61,884	20,078	59.6	27,628	20,381	59.0
	West	13,370	4,352	56.5	6,237	4,598	55.5
TOTAL		113,328	36,506	59.4	52,001	37,490	58.3

Data source: De-identified Optum Clinformatics® Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

CT, computed tomography.

All percentages are rounded to one decimal place.

## 2012-2013

			2012			2013		
Demograph	ic Characteristics	Number of CTs	Number of stone patients with CT	Percent of stone patients with CT	Number of CTs	Number of stone patients with CT	Percent of stone patients with CT	
AGE	18 - 24	2,583	1,978	60.2	2,518	1,948	60.8	
	25 - 34	6,892	4,892	61.2	6,324	4,651	61.1	
	35 - 44	11,558	8,443	60.7	11,012	8,007	59.6	
	45 - 54	14,634	10,739	57.8	14,368	10,320	57.1	
	55 - 64	15,319	10,914	52.9	15,355	10,904	51.6	
GENDER	Male	29,635	21,726	57.7	28,366	20,685	56.2	
	Female	21,351	15,240	57.0	21,211	15,145	56.9	
RACE	White	38,773	28,054	58.2	37,590	26,994	57.2	
	Black	4,234	2,972	57.4	4,021	2,910	56.8	
	Hispanic	4,175	3,168	54.3	3,991	3,100	53.2	
	Asian	1,163	902	50.7	1,258	964	49.0	
	Unknown	2,641	1,870	55.1	2,717	1,862	55.6	
REGION	Northeast	3,744	2,927	44.8	3,623	2,796	44.2	
	Midwest	14,736	9,981	62.5	14,950	9,970	61.9	
	South	26,152	19,264	57.9	24,479	18,121	56.6	
	West	6,354	4,794	55.4	6,525	4,943	54.9	
TOTAL		50,986	36,966	57.4	49,577	35,830	56.5	

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year.

CT, computed tomography. All percentages are rounded to one decimal place. A code change in CT starting for year 2011: Before 2011, abdomen CT and pelvis CT each had their own distinct HCPCS code. In 2011, one consolidated code for the two procedures was introduced and used from that year forward.

## 2004-2005

			2004		2005			
Demographic	Characteristics	Number of CT without contrast procedures	Number of stone patients with CT without contrast procedures	Percent of stone patients with CT without contrast procedures	Number of CT without contrast procedures	Number of stone patients with CT without contrast procedures	Percent of stone patients with CT without contrast procedures	
AGE	18 - 24	3,483	1,021	53.3	3,638	1,245	56.1	
	25 - 34	10,260	3,589	52.5	11,655	4,056	54.8	
	35 - 44	17,572	5,949	52.3	18,205	6,680	52.0	
	45 - 54	18,424	6,193	48.4	20,110	7,392	49.5	
	55 - 64	14,022	4,561	43.2	14,920	5,470	42.6	
GENDER	Male	38,704	13,046	49.6	41,609	15,340	51.1	
	Female	25,057	8,267	48.2	26,919	9,503	47.1	
RACE	White	48,541	16,061	50.2	52,866	18,919	50.7	
	Black	2,823	993	44.8	3,094	1,194	44.4	
	Hispanic	3,960	1,456	42.1	4,565	1,796	43.4	
	Asian	1,062	374	40.1	1,149	438	40.8	
	Unknown	7,375	2,429	50.1	6,854	2,496	49.8	
REGION	Northeast	4,922	1,788	39.3	5,171	1,961	39.4	
	Midwest	26,959	7,668	61.4	26,590	8,302	59.5	
	South	26,033	9,570	45.0	29,170	11,650	46.7	
	West	5,847	2,287	44.5	7,597	2,930	46.1	
TOTAL		63,761	21,313	49.0	68,528	24,843	49.4	

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year.

CT, computed tomography.

All percentages are rounded to one decimal place.

Table O.4.14: Use of computed tomography (without contrast) in privately insured kidney stone patients for evaluation of kidney stones (by age, gender, race, & region)

#### 2006-2007

			2006		2007			
Demographic Characteristics		Number of CT without contrast procedures	Number of stone patients with CT without contrast procedures	Percent of stone patients with CT without contrast procedures	Number of CT without contrast procedures	Number of stone patients with CT without contrast procedures	Percent of stone patients with CT without contrast procedures	
AGE	18 - 24	4,620	1,381	58.4	4,585	1,414	58.6	
	25 - 34	12,907	4,264	56.6	14,124	4,616	58.1	
	35 - 44	21,686	7,261	54.9	23,974	7,661	56.4	
	45 - 54	23,704	8,015	50.3	27,977	8,887	52.7	
	55 - 64	18,906	6,367	44.2	22,644	7,336	44.7	
GENDER	Male	49,331	16,629	52.4	56,041	18,202	53.7	
	Female	32,492	10,659	49.1	37,263	11,712	50.2	
RACE	White	62,840	20,979	51.9	71,817	22,995	53.2	
	Black	4,222	1,531	48.4	5,661	1,942	49.6	
	Hispanic	6,295	2,165	45.5	7,505	2,461	47.5	
	Asian	1,461	520	44.4	1,731	566	44.1	
	Unknown	7,005	2,093	53.2	6,590	1,950	54.1	
REGION	Northeast	6,592	2,303	41.2	8,165	2,586	43.1	
	Midwest	28,520	8,611	59.9	28,572	8,609	60.9	
	South	36,743	13,013	48.9	46,198	15,304	50.8	
	West	9,968	3,361	48.7	10,369	3,415	49.2	
TOTAL		81,823	27,288	51.0	93,304	29,914	52.3	

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year.

CT, computed tomography.

All percentages are rounded to one decimal place.

Table O.4.14: Use of computed tomography (without contrast) in privately insured kidney stone patients for evaluation of kidney stones (by age, gender, race, & region)

#### 2008-2009

			2008		2009			
Demographic Characteristics		Number of CT without contrast procedures	Number of stone patients with CT without contrast procedures	Percent of stone patients with CT without contrast procedures	Number of CT without contrast procedures	Number of stone patients with CT without contrast procedures	Percent of stone patients with CT without contrast procedures	
AGE	18 - 24	5,045	1,565	59.7	5,040	1,590	61.0	
	25 - 34	15,180	4,960	58.4	14,483	4,744	55.2	
•	35 - 44	24,869	7,955	56.7	25,210	8,272	55.7	
	45 - 54	28,870	9,203	51.9	29,391	9,712	52.6	
	55 - 64	26,306	8,117	45.3	26,086	8,523	45.2	
GENDER	Male	58,467	18,891	53.1	59,001	19,651	52.7	
	Female	41,803	12,909	51.2	41,209	13,190	50.5	
RACE	White	77,077	24,325	53.6	76,671	24,964	53.1	
	Black	6,704	2,171	47.1	7,440	2,475	49.1	
	Hispanic	8,138	2,747	48.0	8,251	2,858	47.6	
	Asian	1,852	632	42.8	2,051	677	40.6	
	Unknown	6,499	1,925	53.0	5,797	1,867	51.6	
REGION	Northeast	7,914	2,566	40.5	7,679	2,615	40.2	
	Midwest	28,254	8,545	60.4	25,282	8,026	57.9	
	South	51,824	16,690	51.3	55,309	18,173	52.0	
	West	12,278	3,999	51.4	11,940	4,027	50.2	
TOTAL		100,270	31,800	52.3	100,210	32,841	51.8	

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year.

CT, computed tomography. All percentages are rounded to one decimal place.

Table O.4.14: Use of computed tomography (without contrast) in privately insured kidney stone patients for evaluation of kidney stones (by age, gender, race, & region)

### 2010-2011

			2010		2011			
Demographic Characteristics		Number of CT without contrast procedures	Number of stone patients with CT without contrast procedures	Percent of stone patients with CT without contrast procedures	Number of CT without contrast procedures	Number of stone patients with CT without contrast procedures	Percent of stone patients with CT without contrast procedures	
AGE	18 - 24	4,685	1,550	58.6	2,394	1,820	56.7	
	25 - 34	13,688	4,714	58.7	6,125	4,547	56.8	
	35 - 44	23,610	7,976	56.9	10,430	7,933	55.8	
	45 - 54	27,599	9,237	51.9	12,997	9,543	51.7	
	55 - 64	27,178	8,855	46.7	12,272	9,052	44.3	
GENDER	Male	56,541	19,167	53.2	26,068	19,549	51.6	
	Female	40,219	13,165	51.8	18,150	13,346	50.4	
RACE	White	74,235	24,667	53.5	33,683	24,924	51.8	
	Black	7,662	2,644	52.0	3,456	2,612	49.9	
	Hispanic	7,296	2,540	47.4	3,616	2,808	48.4	
	Asian	2,050	711	45.3	926	749	43.6	
	Unknown	5,517	1,770	52.2	2,537	1,802	51.9	
REGION	Northeast	7,158	2,503	40.7	3,137	2,523	40.1	
	Midwest	25,557	8,200	58.8	12,356	8,516	56.1	
	South	52,947	17,823	52.9	23,583	17,896	51.8	
	West	11,098	3,806	49.4	5,142	3,960	47.8	
TOTAL		96,760	32,332	52.6	44,218	32,895	51.1	

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year.

CT, computed tomography. All percentages are rounded to one decimal place.

Table O.4.14: Use of computed tomography (without contrast) in privately insured kidney stone patients for evaluation of kidney stones: (by age, gender, race, & region)

### 2012-2013

			2012		2013		
Demographic Characteristics		Number of CT without contrast procedures	Number of stone patients with CT without contrast procedures	Percent of stone patients with CT without contrast procedures	Number of CT without contrast procedures	Number of stone patients with CT without contrast procedures	Percent of stone patients with CT without contrast procedures
AGE	18 - 24	2,299	1,804	54.9	2,187	1,741	54.3
	25 - 34	6,094	4,447	55.6	5,585	4,214	55.4
	35 - 44	10,029	7,536	54.1	9,487	7,124	53.0
	45 - 54	12,320	9,346	50.3	12,052	8,959	49.6
	55 - 64	12,304	9,138	44.3	12,373	9,069	42.9
GENDER	Male	25,363	19,213	51.0	24,168	18,160	49.3
	Female	17,683	13,058	48.8	17,516	12,947	48.6
RACE	White	32,757	24,486	50.8	31,709	23,447	49.7
	Black	3,595	2,599	50.2	3,350	2,528	49.3
	Hispanic	3,510	2,781	47.6	3,321	2,680	46.0
	Asian	944	757	42.6	1,032	818	41.6
	Unknown	2,240	1,648	48.5	2,272	1,634	48.8
REGION	Northeast	3,130	2,499	38.3	2,995	2,380	37.7
	Midwest	12,574	8,831	55.3	12,750	8,726	54.2
	South	22,054	16,842	50.6	20,618	15,809	49.4
	West	5,288	4,099	47.4	5,321	4,192	46.6
TOTAL		43,046	32,271	50.1	41,684	31,107	49.0

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. CT, computed tomography. All percentages are rounded to one decimal place.

## 2004-2005

			2004		2005		
Demographic Characteristics		Number of CT with contrast procedures	Number of stone patients with CT with contrast procedure	Percent of stone patients with CT with contrast procedure	Number of CT with contrast procedures	Number of stone patients with CT with contrast procedure	Percent of stone patients with CT with contrast procedure
AGE	18 - 24	207	94	4.9	214	102	4.6
	25 - 34	532	255	3.7	583	300	4.1
	35 - 44	876	447	3.9	1,188	642	5.0
	45 - 54	1,127	599	4.7	1,334	735	4.9
	55 - 64	1,045	534	5.1	1,202	689	5.4
GENDER	Male	1,971	1,028	3.9	2,383	1,346	4.5
	Female	1,816	901	5.3	2,138	1,122	5.6
RACE	White	2,847	1,441	4.5	3,444	1,903	5.1
	Black	193	98	4.4	241	132	4.9
	Hispanic	213	112	3.2	294	159	3.8
	Asian	88	44	4.7	46	26	2.4
	Unknown	446	234	4.8	496	248	4.9
REGION	Northeast	275	140	3.1	266	156	3.1
	Midwest	1,662	798	6.4	1,855	947	6.8
	South	1,489	805	3.8	1,998	1,143	4.6
	West	361	186	3.6	402	222	3.5
TOTAL		3,787	1,929	4.4	4,521	2,468	4.9

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. CT, computed tomography.

All percentages are rounded to one decimal place.

#### 2006-2007

			2006			2007	
Demographic Characteristics		Number of CT with contrast procedures	Number of stone patients with CT with contrast procedure	Percent of stone patients with CT with contrast procedure	Number of CT with contrast procedures	Number of stone patients with CT with contrast procedure	Percent of stone patients with CT with contrast procedure
AGE	18 - 24	308	146	6.2	274	127	5.3
	25 - 34	651	344	4.6	680	326	4.1
	35 - 44	1,182	617	4.7	1,331	651	4.8
	45 - 54	1,393	753	4.7	1,784	865	5.1
	55 - 64	1,490	795	5.5	1,769	884	5.4
GENDER	Male	2,542	1,362	4.3	3,086	1,507	4.5
	Female	2,482	1,293	6.0	2,752	1,346	5.8
RACE	White	3,890	2,056	5.1	4,452	2,166	5.0
	Black	282	154	4.9	385	212	5.4
	Hispanic	342	186	3.9	467	235	4.5
	Asian	85	42	3.6	150	60	4.7
	Unknown	425	217	5.5	384	180	5.0
REGION	Northeast	416	211	3.8	551	254	4.2
	Midwest	1,925	993	6.9	1,864	898	6.4
	South	2,073	1,128	4.2	2,744	1,385	4.6
	West	610	323	4.7	679	316	4.6
TOTAL		5,024	2,655	5.0	5,838	2,853	5.0

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year.

CT, computed tomography. All percentages are rounded to one decimal place.

#### 2008-2009

			2008		2009			
Demographic Characteristics		Number of CT with contrast procedures	Number of stone patients with CT with contrast procedure	Percent of stone patients with CT with contrast procedure	Number of CT with contrast procedures	Number of stone patients with CT with contrast procedure	Percent of stone patients with CT with contrast procedure	
AGE	18 - 24	322	144	5.5	303	156	6.0	
	25 - 34	772	376	4.4	797	393	4.6	
	35 - 44	1,511	720	5.1	1,434	662	4.5	
	45 - 54	1,975	981	5.5	1,911	935	5.1	
	55 - 64	1,920	907	5.1	2,117	1,015	5.4	
GENDER	Male	3,307	1,608	4.5	3,324	1,602	4.3	
	Female	3,193	1,520	6.0	3,238	1,559	6.0	
RACE	White	4,869	2,324	5.1	5,010	2,411	5.1	
	Black	526	273	5.9	517	256	5.1	
	Hispanic	558	282	4.9	522	254	4.2	
	Asian	111	52	3.5	100	51	3.1	
_	Unknown	436	197	5.4	413	189	5.2	
REGION	Northeast	532	275	4.3	583	275	4.2	
	Midwest	1,820	860	6.1	1,826	870	6.3	
	South	3,381	1,624	5.0	3,303	1,624	4.6	
	West	767	369	4.7	850	392	4.9	
TOTAL		6,500	3,128	5.1	6,562	3,161	5.0	

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. CT, computed tomography. All percentages are rounded to one decimal place.

### 2010-2011

			2010		2011			
Demographic Characteristics		Number of CT with contrast procedures	Number of stone patients with CT with contrast procedure	Percent of stone patients with CT with contrast procedure	Number of CT with contrast procedures	Number of stone patients with CT with contrast procedure	Percent of stone patients with CT with contrast procedure	
AGE	18 - 24	317	135	5.1	208	194	6.0	
	25 - 34	827	392	4.9	460	405	5.1	
	35 - 44	1,662	761	5.4	700	629	4.4	
	45 - 54	1,949	937	5.3	1,009	910	4.9	
	55 - 64	2,070	990	5.2	1,184	1,082	5.3	
GENDER	Male	3,421	1,639	4.5	1,809	1,643	4.3	
	Female	3,404	1,576	6.2	1,752	1,577	6.0	
RACE	White	5,321	2,471	5.4	2,744	2,464	5.1	
	Black	519	258	5.1	263	245	4.7	
	Hispanic	513	256	4.8	304	280	4.8	
	Asian	144	72	4.6	75	72	4.2	
	Unknown	328	158	4.7	175	159	4.6	
REGION	Northeast	543	256	4.2	234	217	3.4	
	Midwest	1,855	855	6.1	1,042	889	5.9	
	South	3,573	1,705	5.1	1,767	1,669	4.8	
	West	854	399	5.2	518	445	5.4	
TOTAL		6,825	3,215	5.2	3,561	3,220	5.0	

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year.

CT, computed tomography.

All percentages are rounded to one decimal place.

### 2012-2013

			2012		2013			
Demographic Characteristics		Number of CT with contrast procedures	Number of stone patients with CT with contrast procedure	Percent of stone patients with CT with contrast procedure	Number of CT with contrast procedures	Number of stone patients with CT with contrast procedure	Percent of stone patients with CT with contrast procedure	
AGE	18 - 24	189	175	5.3	219	205	6.4	
	25 - 34	467	392	4.9	421	379	5.0	
	35 - 44	800	713	5.1	848	735	5.5	
	45 - 54	1,089	986	5.3	1,116	1,007	5.6	
	55 - 64	1,306	1,126	5.5	1,291	1,160	5.5	
GENDER	Male	1,953	1,718	4.6	1,973	1,783	4.8	
	Female	1,898	1,674	6.3	1,922	1,703	6.4	
RACE	White	2,920	2,555	5.3	2,883	2,589	5.5	
	Black	328	303	5.9	342	303	5.9	
	Hispanic	321	285	4.9	323	296	5.1	
	Asian	94	85	4.8	122	108	5.5	
	Unknown	188	164	4.8	225	190	5.7	
REGION	Northeast	268	236	3.6	291	271	4.3	
	Midwest	1,160	969	6.1	1,174	997	6.2	
	South	1,934	1,740	5.2	1,849	1,680	5.2	
	West	489	447	5.2	581	538	6.0	
TOTAL		3,851	3,392	5.3	3,895	3,486	5.5	

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year.

CT, computed tomography.

All percentages are rounded to one decimal place.

## 2004-2005

			2004			2005		
Demographic Characteristics		Number of CT without then with contrast procedures	Number of stone patients with CT without then with contrast procedure	Percent of stone patients with CT without then with contrast procedure	Number of CT without then with contrast procedures	Number of stone patients with CT without then with contrast procedure	Percent of stone patients with CT without then with contrast procedure	
AGE	18 - 24	134	72	3.8	173	87	3.9	
	25 - 34	524	269	3.9	655	344	4.6	
	35 - 44	1,003	505	4.4	1,287	696	5.4	
	45 - 54	1,254	637	5.0	1,604	883	5.9	
	55 - 64	1,218	615	5.8	1,585	877	6.8	
GENDER	Male	2,289	1,187	4.5	2,915	1,616	5.4	
	Female	1,844	911	5.3	2,389	1,271	6.3	
RACE	White	3,184	1,601	5.0	4,040	2,187	5.9	
	Black	235	108	4.9	295	166	6.2	
	Hispanic	190	111	3.2	371	207	5.0	
	Asian	94	49	5.3	88	48	4.5	
	Unknown	430	229	4.7	510	279	5.6	
REGION	Northeast	344	177	3.9	389	216	4.3	
	Midwest	1,690	773	6.2	2,000	1,030	7.4	
	South	1,729	959	4.5	2,352	1,337	5.4	
	West	370	189	3.7	563	304	4.8	
TOTAL		4,133	2,098	4.8	5,304	2,887	5.7	

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each

year. CT, computed tomography. All percentages are rounded to one decimal place.

#### 2006-2007

			2006		2007		
Demographic Characteristics		Number of CT without then with contrast procedures	Number of stone patients with CT without then with contrast procedure	Percent of stone patients with CT without then with contrast procedure	Number of CT without then with contrast procedures	Number of stone patients with CT without then with contrast procedure	Percent of stone patients with CT without then with contrast procedure
AGE	18 - 24	237	100	4.2	328	132	5.5
	25 - 34	874	393	5.2	1,028	408	5.1
	35 - 44	1,699	750	5.7	2,117	861	6.3
	45 - 54	2,361	1,095	6.9	3,069	1,228	7.3
	55 - 64	2,381	1,095	7.6	3,094	1,226	7.5
GENDER	Male	4,014	1,849	5.8	5,130	2,054	6.1
	Female	3,538	1,584	7.3	4,506	1,801	7.7
RACE	White	5,746	2,624	6.5	7,355	2,933	6.8
	Black	393	188	5.9	569	248	6.3
	Hispanic	588	268	5.6	807	339	6.5
	Asian	173	61	5.2	241	87	6.8
	Unknown	652	292	7.4	664	248	6.9
REGION	Northeast	628	273	4.9	952	370	6.2
	Midwest	2,348	1,094	7.6	2,391	995	7.0
	South	3,611	1,669	6.3	5,075	2,053	6.8
	West	965	397	5.7	1,218	437	6.3
TOTAL		7,552	3,433	6.4	9,636	3,855	6.7

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year.

CT, computed tomography.

All percentages are rounded to one decimal place.

#### 2008-2009

			2008		2009			
	mographic racteristics	Number of CT without then with contrast procedures	Number of stone patients with CT without then with contrast procedure	Percent of stone patients with CT without then with contrast procedure	with contrast procedures	Number of stone patients with CT without then with contrast procedure	Percent of stone patients with CT without then with contrast procedure	
AGE	18 - 24	326	129	4.9	267	97	3.7	
	25 - 34	1,139	416	4.9	1,152	432	5.0	
	35 - 44	2,395	905	6.4	2,369	884	6.0	
	45 - 54	3,369	1,334	7.5	3,548	1,383	7.5	
	55 - 64	3,720	1,460	8.2	3,735	1,459	7.7	
GENDER	Male	6,149	2,380	6.7	6,061	2,325	6.2	
	Female	4,800	1,864	7.4	5,010	1,930	7.4	
RACE	White	8,167	3,181	7.0	8,226	3,201	6.8	
	Black	840	332	7.2	787	314	6.2	
	Hispanic	923	350	6.1	1,049	376	6.3	
	Asian	315	108	7.3	317	116	7.0	
	Unknown	704	273	7.5	692	248	6.9	
REGION	Northeast	938	369	5.8	959	342	5.3	
	Midwest	2,644	1,068	7.6	2,367	992	7.2	
	South	5,793	2,252	6.9	6,081	2,340	6.7	
	West	1,574	555	7.1	1,664	581	7.2	
TOTAL		10,949	4,244	7.0	11,071	4,255	6.7	

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year.

CT, computed tomography.

All percentages are rounded to one decimal place.

### 2010-2011

			2010		2011			
Demographic Characteristics		Number of CT without then with contrast procedures	Number of stone patients with CT without then with contrast procedure	Percent of stone patients with CT without then with contrast procedure	with contrast procedures	Number of stone patients with CT without then with contrast procedure	Percent of stone patients with CT without then with contrast procedure	
AGE	18 - 24	317	122	4.6	123	101	3.1	
	25 - 34	1,106	409	5.1	328	290	3.6	
	35 - 44	2,131	807	5.8	805	714	5.0	
	45 - 54	2,860	1,091	6.1	1,314	1,151	6.2	
	55 - 64	3,329	1,324	7.0	1,652	1,416	6.9	
GENDER	Male	5,015	1,958	5.4	2,336	2,039	5.4	
	Female	4,728	1,795	7.1	1,886	1,633	6.2	
RACE	White	7,259	2,819	6.1	3,204	2,793	5.8	
	Black	764	302	5.9	330	288	5.5	
	Hispanic	926	333	6.2	349	306	5.3	
	Asian	301	102	6.5	108	93	5.4	
	Unknown	493	197	5.8	231	192	5.5	
REGION	Northeast	773	280	4.5	331	302	4.8	
	Midwest	2,188	909	6.5	1,036	885	5.8	
	South	5,364	2,072	6.2	2,278	1,991	5.8	
	West	1,418	492	6.4	577	494	6.0	
TOTAL		9,743	3,753	6.1	4,222	3,672	5.7	

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. CT, computed tomography. All percentages are rounded to one decimal place.

### 2012-2013

			2012		2013			
Demographic Characteristics		Number of CT without then with contrast procedures	Number of stone patients with CT without then with contrast procedure	Percent of stone patients with CT without then with contrast procedure	with contrast procedures	Number of stone patients with CT without then with contrast procedure	Percent of stone patients with CT without then with contrast procedure	
AGE	18 - 24	95	78	2.4	112	87	2.7	
	25 - 34	331	282	3.5	318	272	3.6	
	35 - 44	729	632	4.5	677	590	4.4	
	45 - 54	1,225	1,067	5.7	1,200	1,063	5.9	
	55 - 64	1,709	1,454	7.0	1,691	1,442	6.8	
GENDER	Male	2,319	1,980	5.3	2,225	1,905	5.2	
	Female	1,770	1,533	5.7	1,773	1,549	5.8	
RACE	White	3,096	2,674	5.5	2,998	2,610	5.5	
	Black	311	262	5.1	329	282	5.5	
	Hispanic	344	297	5.1	347	291	5.0	
	Asian	125	104	5.8	104	95	4.8	
	Unknown	213	176	5.2	220	176	5.3	
REGION	Northeast	346	323	4.9	337	308	4.9	
	Midwest	1,002	842	5.3	1,026	859	5.3	
	South	2,164	1,845	5.5	2,012	1,755	5.5	
	West	577	503	5.8	623	532	5.9	
TOTAL		4,089	3,513	5.5	3,998	3,454	5.4	

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. CT, computed tomography.

All percentages are rounded to one decimal place.

Table O.4.17: Use of magnetic resonance imaging in privately insured kidney stone patients for evaluation of kidney stones (by age, gender, race, & region)

## 2004-2005

Dem	h ! .	2004			2005		
	nographic acteristics	Number of MRIs	Number of stone patients with MRI	Percent of stone patients with MRI	Number of MRIs	Number of stone patients with MRI	Percent of stone patients with MRI
AGE	18 - 24	2	2	0.1	1	1	0.0
	25 - 34	13	9	0.1	4	4	0.1
	35 - 44	6	6	0.1	15	13	0.1
	45 - 54	20	16	0.1	15	11	0.1
	55 - 64	26	20	0.2	18	14	0.1
GENDER	Male	45	37	0.1	38	30	0.1
	Female	22	16	0.1	15	13	0.1
RACE	White	57	44	0.1	35	28	0.1
	Black	2	2	0.1	0	0	0.0
	Hispanic	3	3	0.1	5	4	0.1
	Asian	0	0	0.0	0	0	0.0
	Unknown	5	4	0.1	13	11	0.2
REGION	Northeast	3	2	0.0	3	3	0.1
	Midwest	12	10	0.1	12	10	0.1
	South	41	32	0.2	36	29	0.1
	West	11	9	0.2	2	1	0.0
TOTAL		67	53	0.1	53	43	0.1

Data source: De-identified Optum Clinformatics® Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

MRI, magnetic resonance imaging.

## 2006-2007

		2006			2007		
Demographi	ic Characteristics	Number of MRIs	Number of stone patients with MRI	Percent of stone patients with MRI	Number of MRIs	Number of stone patients with MRI	Percent of stone patients with MRI
AGE	18 - 24	1	1	0.0	0	0	0.0
	25 - 34	14	10	0.1	11	11	0.1
	35 - 44	17	12	0.1	15	14	0.1
	45 - 54	30	25	0.2	21	19	0.1
	55 - 64	23	17	0.1	50	37	0.2
GENDER	Male	49	40	0.1	54	40	0.1
	Female	36	25	0.1	43	41	0.2
RACE	White	62	51	0.1	72	59	0.1
	Black	14	7	0.2	6	5	0.1
	Hispanic	3	3	0.1	13	13	0.3
	Asian	0	0	0.0	1	1	0.1
	Unknown	6	4	0.1	5	3	0.1
REGION	Northeast	7	4	0.1	5	5	0.1
- -	Midwest	19	18	0.1	20	19	0.1
	South	50	35	0.1	66	51	0.2
	West	9	8	0.1	6	6	0.1
TOTAL		85	65	0.1	97	81	0.1

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

MRI, magnetic resonance imaging.

## 2008-2009

D		2008			2009		
	ographic cteristics	Number of MRIs	Number of stone patients with MRI	Percent of stone patients with MRI	Number of MRIs	Number of stone patients with MRI	Percent of stone patients with MRI
AGE	18 - 24	0	0	0.0	0	0	0.0
	25 - 34	6	4	0.0	4	4	0.0
	35 - 44	23	19	0.1	20	15	0.1
	45 - 54	25	20	0.1	27	23	0.1
	55 - 64	25	22	0.1	33	29	0.2
GENDER	Male	27	24	0.1	49	42	0.1
	Female	52	41	0.2	35	29	0.1
RACE	White	54	46	0.1	66	58	0.1
	Black	3	3	0.1	5	3	0.1
	Hispanic	19	13	0.2	6	5	0.1
	Asian	1	1	0.1	1	1	0.1
	Unknown	2	2	0.1	6	4	0.1
REGION	Northeast	10	5	0.1	6	6	0.1
	Midwest	16	13	0.1	21	16	0.1
	South	41	37	0.1	53	47	0.1
	West	12	10	0.1	4	2	0.0
TOTAL		79	65	0.1	84	71	0.1

Data source: De-identified Optum Clinformatics® Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

MRI, magnetic resonance imaging.

# 2010-2011

			2010		2011		
Demograph	ic Characteristics	Number of MRIs	Number of stone patients with MRI	Percent of stone patients with MRI	Number of MRIs	Number of stone patients with MRI	Percent of stone patients with MRI
AGE	18 - 24	7	4	0.2	2	2	0.1
	25 - 34	6	5	0.1	11	11	0.1
	35 - 44	6	4	0.0	9	8	0.1
	45 - 54	21	14	0.1	13	13	0.1
	55 - 64	14	13	0.1	30	24	0.1
GENDER	Male	19	14	0.0	33	27	0.1
	Female	35	26	0.1	32	31	0.1
RACE	White	37	28	0.1	52	46	0.1
	Black	5	3	0.1	3	3	0.1
	Hispanic	4	3	0.1	4	4	0.1
	Asian	2	2	0.1	2	2	0.1
	Unknown	6	4	0.1	4	3	0.1
REGION	Northeast	6	4	0.1	4	4	0.1
	Midwest	18	11	0.1	12	12	0.1
	South	28	24	0.1	39	34	0.1
	West	2	1	0.0	10	8	0.1
TOTAL		54	40	0.1	65	58	0.1

Data source: De-identified Optum Clinformatics® Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

MRI, magnetic resonance imaging.

# 2012-2013

Demographic Characteristics			2012		2013		
		Number of MRIs	Number of stone patients with MRI	Percent of stone patients with MRI	Number of MRIs	Number of stone patients with MRI	Percent of stone patients with MRI
AGE	18 - 24	4	2	0.1	3	3	0.1
	25 - 34	1	1	0.0	3	2	0.0
	35 - 44	5	3	0.0	17	14	0.1
	45 - 54	32	27	0.1	23	17	0.1
	55 - 64	32	27	0.1	35	32	0.2
GENDER	Male	30	23	0.1	41	36	0.1
	Female	44	37	0.1	40	32	0.1
RACE	White	55	44	0.1	57	48	0.1
	Black	3	3	0.1	1	1	0.0
	Hispanic	9	9	0.2	12	8	0.1
	Asian	4	1	0.1	7	7	0.4
	Unknown	3	3	0.1	4	4	0.1
REGION	Northeast	7	5	0.1	6	6	0.1
	Midwest	10	7	0.0	16	16	0.1
	South	45	39	0.1	50	38	0.1
	West	12	9	0.1	9	8	0.1
TOTAL		74	60	0.1	81	68	0.1

Data source: De-identified Optum Clinformatics® DataMart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

MRI, magnetic resonance imaging.

# 2004-2005

			2004		2005		
Demographi	ic Characteristics	Number of ER visits	Number of stone patients with ER visits	Percent of stone patients with ER visits	Number of ER visits	Number of stone patients with ER visits	Percent of stone patients with ER visits
AGE	18 - 24	1,211	964	50.4	1,422	1,160	52.3
	25 - 34	3,729	3,048	44.6	4,261	3,432	46.4
	35 - 44	5,473	4,503	39.6	6,201	5,118	39.8
	45 - 54	5,415	4,421	34.6	6,186	5,160	34.6
	55 - 64	3,608	2,899	27.5	4,163	3,487	27.2
GENDER	Male	12,220	10,036	38.1	14,011	11,605	38.6
	Female	7,216	5,799	33.8	8,222	6,752	33.4
RACE	White	14,326	11,752	36.7	16,521	13,731	36.8
	Black	1,000	778	35.1	1,235	992	36.9
	Hispanic	1,619	1,284	37.1	1,893	1,498	36.2
	Asian	303	261	28.0	336	293	27.3
	Unknown	2,188	1,760	36.3	2,248	1,843	36.8
REGION	Northeast	1,248	1,085	23.8	1,543	1,326	26.6
	Midwest	6,525	5,126	41.0	7,037	5,685	40.7
	South	9,489	7,759	36.5	10,907	9,008	36.1
	West	2,174	1,865	36.3	2,746	2,338	36.7
TOTAL		19,436	15,835	36.4	22,233	18,357	36.5

Data source: De-identified Optum Clinformatics® Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

ER, emergency room.

## 2006-2007

			2006		2007		
Demographic	Characteristics	Number of ER visits	Number of stone patients with ER visits	Percent of stone patients with ER visits	Number of ER visits	Number of stone patients with ER visits	Percent of stone patients with ER visits
AGE	18 - 24	1,540	1,221	51.6	1,583	1,296	53.7
	25 - 34	4,205	3,426	45.5	4,443	3,700	46.6
	35 - 44	6,589	5,406	40.9	6,643	5,571	41.0
	45 - 54	6,482	5,481	34.4	6,903	5,859	34.7
	55 - 64	4,844	4,014	27.8	5,363	4,461	27.2
GENDER	Male	14,901	12,326	38.8	15,486	13,036	38.5
	Female	8,759	7,222	33.3	9,449	7,851	33.6
RACE	White	17,859	14,785	36.6	18,717	15,776	36.5
	Black	1,463	1,206	38.1	1,639	1,418	36.2
	Hispanic	2,203	1,786	37.5	2,537	1,996	38.5
	Asian	355	324	27.7	440	395	30.8
	Unknown	1,780	1,447	36.8	1,602	1,302	36.1
REGION	Northeast	1,641	1,432	25.6	1,898	1,635	27.3
	Midwest	7,232	5,910	41.1	7,065	5,848	41.4
	South	11,661	9,616	36.1	12,896	10,781	35.8
	West	3,126	2,590	37.5	3,076	2,623	37.8
TOTAL		23,660	19,548	36.6	24,935	20,887	36.5

Data source: De-identified Optum Clinformatics <sup>®</sup> Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

ER, emergency room.

## 2008-2009

			2008		2009		
Demographic	c Characteristics	Number of ER visits	Number of stone patients with ER visits	Percent of stone patients with ER visits	Number of ER visits	Number of stone patients with ER visits	Percent of stone patients with ER visits
AGE	18 - 24	1,654	1,384	52.8	1,738	1,423	54.6
	25 - 34	4,664	3,856	45.4	4,758	3,932	45.8
	35 - 44	6,847	5,714	40.7	7,301	6,131	41.3
	45 - 54	7,372	6,248	35.2	7,610	6,440	34.9
	55 - 64	5,803	4,787	26.7	5,964	5,101	27.1
GENDER	Male	16,100	13,507	38.0	16,793	14,168	38.0
	Female	10,240	8,482	33.7	10,578	8,859	34.0
RACE	White	19,638	16,532	36.5	20,203	17,116	36.4
	Black	1,978	1,608	34.9	2,197	1,866	37.0
	Hispanic	2,737	2,162	37.8	2,892	2,308	38.5
	Asian	448	401	27.1	538	478	28.7
	Unknown	1,539	1,286	35.4	1,541	1,259	34.8
REGION	Northeast	1,925	1,673	26.4	2,054	1,776	27.3
	Midwest	7,167	5,882	41.6	6,806	5,686	41.0
	South	13,862	11,557	35.5	15,112	12,600	36.0
	West	3,386	2,877	37.0	3,399	2,965	36.9
TOTAL		26,340	21,989	36.2	27,371	23,027	36.3

Data source: De-identified Optum Clinformatics® Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

ER, emergency room.

# 2010-2011

			2010		2011		
Demographi	ic Characteristics	Number of ER visits	Number of stone patients with ER visits	Percent of stone patients with ER visits	Number of ER visits	Number of stone patients with ER visits	Percent of stone patients with ER visits
AGE	18 - 24	1,770	1,458	55.2	2,199	1,796	56.0
	25 - 34	4,618	3,853	48.0	4,768	3,946	49.3
	35 - 44	7,057	5,979	42.6	7,209	6,112	43.0
	45 - 54	7,557	6,453	36.2	7,794	6,609	35.8
	55 - 64	6,058	5,270	27.8	6,594	5,707	27.9
GENDER	Male	16,629	14,100	39.1	17,530	14,842	39.2
	Female	10,431	8,913	35.1	11,034	9,328	35.2
RACE	White	20,401	17,289	37.5	21,559	18,128	37.7
	Black	2,269	1,948	38.3	2,374	2,033	38.8
	Hispanic	2,341	2,026	37.8	2,529	2,191	37.7
-	Asian	564	510	32.5	610	553	32.2
	Unknown	1,485	1,240	36.6	1,492	1,265	36.5
REGION	Northeast	2,073	1,775	28.8	2,066	1,792	28.5
	Midwest	7,293	6,047	43.4	7,754	6,452	42.5
	South	14,391	12,352	36.7	15,151	12,859	37.2
	West	3,303	2,839	36.8	3,593	3,067	37.0
TOTAL		27,060	23,013	37.4	28,564	24,170	37.6

Data source: De-identified Optum Clinformatics® Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

ER, emergency room.

# 2012-2013

			2012		2013		
Demograph	nic Characteristics	Number of ER visits	Number of stone patients with ER visits	Percent of stone patients with ER visits	Number of ER visits	Number of stone patients with ER visits	Percent of stone patients with ER visits
AGE	18 - 24	2,251	1,887	57.5	2,229	1,863	58.1
	25 - 34	4,760	3,886	48.6	4,579	3,822	50.2
	35 - 44	7,182	5,981	43.0	7,017	5,843	43.5
	45 - 54	8,064	6,846	36.9	7,732	6,637	36.7
	55 - 64	6,838	5,841	28.3	7,065	6,001	28.4
GENDER	Male	17,729	14,938	39.6	17,134	14,516	39.4
	Female	11,366	9,503	35.5	11,488	9,650	36.2
RACE	White	21,917	18,350	38.0	21,369	18,026	38.2
	Black	2,421	2,041	39.4	2,368	2,003	39.1
	Hispanic	2,698	2,296	39.3	2,786	2,341	40.2
	Asian	616	543	30.5	688	601	30.6
	Unknown	1,443	1,211	35.7	1,411	1,195	35.7
REGION	Northeast	2,168	1,852	28.4	2,049	1,741	27.6
	Midwest	8,258	6,822	42.7	8,150	6,785	42.2
	South	14,767	12,465	37.5	14,325	12,190	38.1
	West	3,902	3,302	38.2	4,098	3,450	38.3
TOTAL		29,095	24,441	37.9	28,622	24,166	38.1

Data source: De-identified Optum Clinformatics ® Data Mart, 2004-2013

Enrollees with full enrollment in commercial health plan during each year.

ER, emergency room.

Table O.5.1: Insurer expenditures on privately insured kidney stone patients for services with a primary diagnosis of kidney stones (by place of service, age, gender, race, & region)

#### 2004

				20	04		
	nographic acteristics	Total expenditures	Per patient per year expenditures	Expenditures for inpatient hospital stays	Expenditures for hospital- based outpatient services	Expenditures for physician office services	Expenditures for all other services
AGE	18 - 24	\$8,471,892	\$4,426	\$1,774,516	\$6,234,324	\$402,749	\$60,302
	25 - 34	\$30,344,577	\$4,442	\$7,245,202	\$21,320,029	\$1,544,083	\$235,262
	35 - 44	\$52,549,234	\$4,623	\$12,372,712	\$37,092,992	\$2,666,232	\$417,298
	45 - 54	\$62,759,186	\$4,905	\$15,459,701	\$43,579,898	\$3,171,887	\$547,701
	55 - 64	\$48,979,379	\$4,644	\$12,450,050	\$33,362,443	\$2,633,150	\$533,736
GENDER	Male	\$120,462,245	\$4,577	\$26,246,525	\$87,084,509	\$6,136,425	\$994,786
	Female	\$82,642,022	\$4,822	\$23,055,656	\$54,505,178	\$4,281,675	\$799,513
RACE	White	\$150,557,227	\$4,704	\$36,039,764	\$105,674,968	\$7,514,818	\$1,327,677
	Black	\$10,234,674	\$4,614	\$2,557,480	\$6,968,216	\$526,324	\$182,654
	Hispanic	\$16,359,790	\$4,731	\$4,342,162	\$10,962,043	\$952,982	\$102,603
	Asian	\$3,701,744	\$3,972	\$912,263	\$2,511,998	\$253,881	\$23,603
	Unknown	\$22,250,833	\$4,593	\$5,450,512	\$15,472,463	\$1,170,095	\$157,762
REGION	Northeast	\$17,230,394	\$3,784	\$5,053,048	\$10,313,208	\$1,653,099	\$211,041
	Midwest	\$60,182,603	\$4,817	\$15,835,431	\$41,475,345	\$2,375,773	\$496,055
	South	\$101,785,720	\$4,785	\$23,509,349	\$72,292,208	\$5,130,450	\$853,713
	West	\$23,905,550	\$4,655	\$4,904,353	\$17,508,927	\$1,258,778	\$233,492
TOTAL		\$203,104,268	\$4,674	\$49,302,181	\$141,589,687	\$10,418,100	\$1,794,299

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. All amounts are in 2013 US dollars. Table O.5.1: Insurer expenditures on privately insured kidney stone patients for services with a primary diagnosis of kidney stones (by place of service, age, gender, race, & region)

#### 2005

				20	05		
	ographic acteristics	Total expenditures	Per patient per year expenditures	Expenditures for inpatient hospital stays	Expenditures for hospital- based outpatient services	Expenditures for physician office services	Expenditures for all other services
AGE	18 - 24	\$9,604,382	\$4,330	\$2,225,459	\$6,833,327	\$497,257	\$48,338
	25 - 34	\$32,059,301	\$4,334	\$7,740,469	\$22,481,973	\$1,666,709	\$170,149
	35 - 44	\$58,073,306	\$4,518	\$12,708,109	\$41,783,104	\$3,189,186	\$392,908
	45 - 54	\$70,191,473	\$4,701	\$16,462,625	\$49,687,251	\$3,667,968	\$373,629
	55 - 64	\$56,402,472	\$4,392	\$13,268,806	\$39,624,471	\$3,153,869	\$355,326
GENDER	Male	\$133,891,678	\$4,456	\$27,784,388	\$98,214,052	\$7,074,260	\$818,978
	Female	\$92,439,255	\$4,577	\$24,621,081	\$62,196,074	\$5,100,728	\$521,373
RACE	White	\$168,375,436	\$4,510	\$37,738,312	\$120,802,492	\$8,868,411	\$966,221
	Black	\$12,931,591	\$4,809	\$3,671,166	\$8,517,032	\$679,092	\$64,301
	Hispanic	\$18,410,127	\$4,451	\$5,275,256	\$11,919,548	\$1,083,265	\$132,058
	Asian	\$4,278,235	\$3,983	\$932,425	\$3,030,107	\$284,774	\$30,929
	Unknown	\$22,335,544	\$4,455	\$4,788,310	\$16,140,946	\$1,259,447	\$146,841
REGION	Northeast	\$17,539,810	\$3,522	\$5,431,926	\$10,091,704	\$1,866,238	\$149,942
	Midwest	\$66,402,432	\$4,756	\$16,990,682	\$46,278,294	\$2,800,474	\$332,983
	South	\$115,036,589	\$4,613	\$24,982,645	\$83,353,676	\$6,015,549	\$684,719
	West	\$27,352,102	\$4,299	\$5,000,215	\$20,686,452	\$1,492,727	\$172,707
TOTAL		\$226,330,933	\$4,505	\$52,405,468	\$160,410,126	\$12,174,988	\$1,340,350

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. All amounts are in 2013 US dollars. Table O.5.1: Insurer expenditures on privately insured kidney stone patients for services with a primary diagnosis of kidney stones (by place of service, age, gender, race, & region)

#### 2006

				20	2006			
	ographic acteristics	Total expenditures	Per patient per year expenditures	Expenditures for inpatient hospital stays	Expenditures for hospital- based outpatient services		Expenditures for all other services	
AGE	18 - 24	\$10,318,249	\$4,361	\$2,483,828	\$7,277,777	\$494,284	\$62,360	
	25 - 34	\$30,157,720	\$4,006	\$6,641,396	\$21,751,752	\$1,595,618	\$168,955	
	35 - 44	\$54,802,858	\$4,145	\$11,677,012	\$39,841,224	\$2,957,369	\$327,254	
	45 - 54	\$67,182,266	\$4,214	\$14,460,554	\$48,560,272	\$3,731,720	\$429,720	
	55 - 64	\$59,558,526	\$4,131	\$13,960,905	\$41,986,830	\$3,297,031	\$313,760	
GENDER	Male	\$131,932,919	\$4,154	\$26,566,309	\$97,666,163	\$6,983,378	\$717,069	
	Female	\$90,086,700	\$4,149	\$22,657,386	\$61,751,692	\$5,092,643	\$584,979	
RACE	White	\$167,226,009	\$4,134	\$36,013,601	\$121,177,755	\$9,043,897	\$990,756	
	Black	\$13,535,267	\$4,275	\$2,873,611	\$9,889,950	\$689,075	\$82,630	
	Hispanic	\$20,622,695	\$4,331	\$5,726,151	\$13,647,784	\$1,147,233	\$101,527	
	Asian	\$4,169,060	\$3,560	\$921,103	\$2,958,229	\$263,986	\$25,742	
	Unknown	\$16,466,588	\$4,188	\$3,689,228	\$11,744,135	\$931,831	\$101,393	
REGION	Northeast	\$17,797,973	\$3,185	\$5,354,627	\$10,736,999	\$1,544,192	\$162,155	
	Midwest	\$63,094,444	\$4,387	\$15,778,162	\$44,365,278	\$2,668,800	\$282,204	
	South	\$113,045,447	\$4,250	\$22,805,655	\$83,336,331	\$6,228,670	\$674,791	
	West	\$28,081,755	\$4,066	\$5,285,251	\$20,979,246	\$1,634,360	\$182,898	
TOTAL		\$222,019,619	\$4,152	\$49,223,695	\$159,417,854	\$12,076,021	\$1,302,048	

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. All amounts are in 2013 US dollars.

#### 2007

				20	07		
	ographic cteristics	Total expenditures	Per patient per year expenditures	Expenditures for inpatient hospital stays	Expenditures for hospital- based outpatient services	Expenditures for physician office services	Expenditures for all other services
AGE	18 - 24	\$9,385,882	\$3,891	\$2,089,004	\$6,768,865	\$472,461	\$55,552
	25 - 34	\$30,511,667	\$3,841	\$6,118,023	\$22,578,813	\$1,638,071	\$176,761
	35 - 44	\$54,840,453	\$4,040	\$11,028,996	\$40,363,043	\$3,097,408	\$351,005
	45 - 54	\$70,489,545	\$4,180	\$16,106,717	\$49,959,980	\$3,932,598	\$490,249
	55 - 64	\$63,906,188	\$3,894	\$14,734,161	\$45,133,096	\$3,666,139	\$372,792
GENDER	Male	\$135,265,815	\$3,994	\$27,406,212	\$99,733,709	\$7,367,470	\$758,425
	Female	\$93,867,920	\$4,022	\$22,670,689	\$65,070,089	\$5,439,207	\$687,934
RACE	White	\$173,006,802	\$4,002	\$36,816,569	\$125,563,679	\$9,537,942	\$1,088,612
	Black	\$15,258,415	\$3,899	\$3,490,663	\$10,903,491	\$794,128	\$70,132
	Hispanic	\$21,928,964	\$4,233	\$5,773,338	\$14,708,581	\$1,283,042	\$164,002
	Asian	\$4,430,950	\$3,451	\$851,776	\$3,231,659	\$314,482	\$33,034
	Unknown	\$14,508,605	\$4,027	\$3,144,556	\$10,396,388	\$877,083	\$90,579
REGION	Northeast	\$19,036,496	\$3,175	\$5,648,454	\$11,763,418	\$1,458,007	\$166,617
	Midwest	\$59,678,414	\$4,222	\$15,493,398	\$41,366,212	\$2,591,303	\$227,500
	South	\$122,763,697	\$4,074	\$23,896,412	\$90,830,745	\$7,181,888	\$854,652
	West	\$27,655,128	\$3,983	\$5,038,636	\$20,843,423	\$1,575,478	\$197,590
TOTAL		\$229,133,736	\$4,005	\$50,076,901	\$164,803,798	\$12,806,677	\$1,446,359

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. All amounts are in 2013 US dollars.

#### 2008

				20	08		
	nographic acteristics	Total expenditures	Per patient per year expenditures	Expenditures for inpatient hospital stays	Expenditures for hospital- based outpatient services	Expenditures for physician office services	Expenditures for all other services
AGE	18 - 24	\$9,633,387	\$3,677	\$1,760,232	\$7,277,233	\$516,878	\$79,044
	25 - 34	\$31,513,481	\$3,712	\$5,694,038	\$23,814,119	\$1,712,327	\$292,998
	35 - 44	\$55,909,708	\$3,983	\$10,810,656	\$41,654,588	\$3,028,067	\$416,396
	45 - 54	\$72,638,386	\$4,096	\$15,315,090	\$52,718,404	\$4,105,824	\$499,068
	55 - 64	\$69,024,184	\$3,855	\$16,299,902	\$48,339,200	\$3,966,779	\$418,303
GENDER	Male	\$137,656,031	\$3,869	\$25,512,271	\$103,702,115	\$7,476,994	\$964,650
	Female	\$101,063,115	\$4,010	\$24,367,647	\$70,101,428	\$5,852,880	\$741,159
RACE	White	\$180,153,944	\$3,972	\$36,745,163	\$132,218,607	\$9,948,605	\$1,241,569
•	Black	\$17,910,037	\$3,888	\$4,127,925	\$12,785,051	\$894,387	\$102,674
•	Hispanic	\$21,319,126	\$3,729	\$4,732,980	\$15,044,277	\$1,326,771	\$215,098
•	Asian	\$5,163,311	\$3,496	\$869,705	\$3,929,019	\$340,118	\$24,468
•	Unknown	\$14,172,729	\$3,900	\$3,404,145	\$9,826,591	\$819,994	\$121,999
REGION	Northeast	\$19,016,871	\$2,999	\$5,575,168	\$11,768,549	\$1,486,097	\$187,057
	Midwest	\$58,874,969	\$4,164	\$14,301,171	\$41,698,115	\$2,600,675	\$275,007
	South	\$129,123,483	\$3,969	\$24,127,432	\$96,574,146	\$7,442,267	\$979,639
	West	\$31,703,823	\$4,077	\$5,876,148	\$23,762,734	\$1,800,836	\$264,106
TOTAL		\$238,719,146	\$3,927	\$49,879,919	\$173,803,543	\$13,329,875	\$1,705,809

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. All amounts are in 2013 US dollars.

#### 2009

				20	09		
	nographic racteristics	Total expenditures	Per patient per year expenditures	Expenditures for inpatient hospital stays	Expenditures for hospital- based outpatient services	Expenditures for physician office services	Expenditures for all other services
AGE	18 - 24	\$10,317,193	\$3,959	\$1,963,429	\$7,789,547	\$457,582	\$106,635
	25 - 34	\$31,055,588	\$3,615	\$5,635,413	\$23,513,612	\$1,648,238	\$258,325
	35 - 44	\$56,817,205	\$3,826	\$10,825,174	\$42,429,283	\$3,118,355	\$444,392
	45 - 54	\$70,814,687	\$3,837	\$14,264,125	\$52,055,451	\$3,979,387	\$515,725
	55 - 64	\$69,523,864	\$3,689	\$15,245,029	\$49,742,926	\$3,994,085	\$541,824
GENDER	Male	\$136,814,567	\$3,672	\$24,104,580	\$104,323,392	\$7,477,192	\$909,404
	Female	\$101,713,970	\$3,898	\$23,828,591	\$71,207,427	\$5,720,455	\$957,498
RACE	White	\$177,818,249	\$3,781	\$34,611,161	\$131,970,198	\$9,831,242	\$1,405,649
	Black	\$19,379,145	\$3,842	\$4,208,775	\$14,115,784	\$955,492	\$99,094
	Hispanic	\$22,595,000	\$3,766	\$5,171,362	\$15,923,092	\$1,275,939	\$224,606
•	Asian	\$5,538,487	\$3,322	\$1,183,003	\$3,928,324	\$381,684	\$45,477
	Unknown	\$13,197,656	\$3,651	\$2,758,870	\$9,593,421	\$753,290	\$92,076
REGION	Northeast	\$19,484,645	\$2,994	\$5,705,777	\$11,918,794	\$1,705,060	\$155,014
	Midwest	\$54,057,652	\$3,900	\$12,441,091	\$39,045,511	\$2,293,848	\$277,202
	South	\$133,980,925	\$3,833	\$23,819,154	\$101,621,109	\$7,346,241	\$1,194,421
	West	\$31,005,314	\$3,863	\$5,967,148	\$22,945,405	\$1,852,497	\$240,264
TOTAL		\$238,528,538	\$3,765	\$47,933,171	\$175,530,819	\$13,197,647	\$1,866,902

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. All amounts are in 2013 US dollars.

#### 2010

				20	10		
	ographic cteristics	Total expenditures	Per patient per year expenditures	Expenditures for inpatient hospital stays	Expenditures for hospital- based outpatient services	Expenditures for physician office services	Expenditures for all other services
AGE	18 - 24	\$10,168,775	\$3,847	\$1,895,153	\$7,779,711	\$414,516	\$79,395
	25 - 34	\$29,770,114	\$3,706	\$4,981,178	\$23,183,307	\$1,371,125	\$234,504
	35 - 44	\$54,430,726	\$3,881	\$9,021,666	\$42,375,533	\$2,570,261	\$463,267
	45 - 54	\$69,951,202	\$3,928	\$12,849,890	\$53,223,492	\$3,370,727	\$507,094
	55 - 64	\$69,725,636	\$3,674	\$13,862,743	\$51,671,047	\$3,645,635	\$546,211
GENDER	Male	\$134,973,823	\$3,743	\$22,065,696	\$105,494,545	\$6,360,581	\$1,053,000
GENDER	Female	\$99,072,631	\$3,896	\$20,544,934	\$72,738,544	\$5,011,683	\$777,471
RACE	White	\$176,744,141	\$3,835	\$32,305,882	\$134,698,339	\$8,443,379	\$1,296,541
	Black	\$19,149,031	\$3,767	\$3,271,667	\$14,893,540	\$869,919	\$113,906
	Hispanic	\$19,973,384	\$3,729	\$3,900,794	\$14,781,243	\$1,064,144	\$227,203
	Asian	\$5,216,288	\$3,322	\$638,405	\$4,209,153	\$332,438	\$36,292
	Unknown	\$12,963,609	\$3,823	\$2,493,882	\$9,650,814	\$662,383	\$156,529
REGION	Northeast	\$18,470,473	\$3,000	\$4,488,324	\$12,383,184	\$1,470,809	\$128,156
	Midwest	\$56,715,295	\$4,069	\$12,285,101	\$41,974,240	\$2,126,425	\$329,528
	South	\$128,295,928	\$3,809	\$20,461,377	\$100,401,121	\$6,311,533	\$1,121,897
	West	\$30,564,758	\$3,966	\$5,375,828	\$23,474,543	\$1,463,496	\$250,890
TOTAL		\$234,046,453	\$3,807	\$42,610,630	\$178,233,089	\$11,372,264	\$1,830,471

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. All amounts are in 2013 US dollars.

### 2011

				20	11		
	ographic cteristics	Total expenditures	Per patient per year expenditures	Expenditures for inpatient hospital stays	Expenditures for hospital- based outpatient services		Expenditures for all other services
AGE	18 - 24	\$12,175,047	\$3,793	\$1,935,223	\$9,732,762	\$399,665	\$107,398
	25 - 34	\$30,137,554	\$3,765	\$4,319,518	\$24,468,130	\$1,123,551	\$226,355
	35 - 44	\$57,000,779	\$4,008	\$8,688,520	\$45,738,597	\$2,153,410	\$420,252
	45 - 54	\$73,716,900	\$3,990	\$12,128,295	\$58,045,279	\$2,966,451	\$576,876
	55 - 64	\$77,423,336	\$3,789	\$14,066,012	\$59,489,741	\$3,288,808	\$578,775
GENDER	Male	\$145,709,742	\$3,847	\$21,860,548	\$117,231,494	\$5,590,011	\$1,027,690
	Female	\$104,743,873	\$3,957	\$19,277,019	\$80,243,016	\$4,341,872	\$881,967
RACE	White	\$187,396,227	\$3,895	\$29,842,757	\$148,807,081	\$7,388,450	\$1,357,939
	Black	\$21,042,038	\$4,019	\$3,749,306	\$16,443,131	\$744,841	\$104,760
	Hispanic	\$22,642,967	\$3,900	\$3,993,875	\$17,476,265	\$932,290	\$240,537
	Asian	\$5,560,393	\$3,235	\$803,771	\$4,400,606	\$302,203	\$53,813
	Unknown	\$13,811,990	\$3,980	\$2,747,859	\$10,347,427	\$564,098	\$152,606
REGION	Northeast	\$19,290,092	\$3,065	\$4,998,531	\$12,857,708	\$1,298,547	\$135,306
	Midwest	\$62,363,630	\$4,106	\$12,012,007	\$48,079,122	\$2,007,237	\$265,264
	South	\$135,977,292	\$3,933	\$19,268,765	\$110,119,342	\$5,301,152	\$1,288,032
	West	\$32,822,602	\$3,959	\$4,858,263	\$26,418,337	\$1,324,947	\$221,055
TOTAL		\$250,453,616	\$3,892	\$41,137,567	\$197,474,509	\$9,931,883	\$1,909,656

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. All amounts are in 2013 US dollars.

### 2012

				20	12		
	nographic acteristics	Total expenditures	Per patient per year expenditures	Expenditures for inpatient hospital stays	Expenditures for hospital- based outpatient services	Expenditures for physician office services	Expenditures for all other services
AGE	18 - 24	\$12,528,063	\$3,816	\$1,914,314	\$10,126,942	\$364,393	\$122,414
	25 - 34	\$31,923,570	\$3,994	\$4,796,157	\$25,778,518	\$1,099,884	\$249,011
	35 - 44	\$56,939,466	\$4,091	\$8,646,695	\$45,838,794	\$2,056,644	\$397,334
	45 - 54	\$76,095,345	\$4,097	\$13,783,808	\$58,935,566	\$2,766,153	\$609,817
	55 - 64	\$78,855,518	\$3,819	\$14,396,882	\$60,655,485	\$3,151,284	\$651,866
GENDER	Male	\$147,706,103	\$3,920	\$22,407,174	\$118,754,404	\$5,357,914	\$1,186,610
GENDER	Female	\$108,635,860	\$4,063	\$21,130,682	\$82,580,902	\$4,080,444	\$843,832
RACE	White	\$191,397,559	\$3,969	\$31,542,777	\$151,420,212	\$6,972,167	\$1,462,403
	Black	\$22,413,764	\$4,332	\$3,917,911	\$17,643,579	\$707,814	\$144,460
	Hispanic	\$23,761,181	\$4,070	\$4,981,905	\$17,608,800	\$897,667	\$272,809
	Asian	\$6,113,539	\$3,438	\$889,688	\$4,872,184	\$298,303	\$53,364
	Unknown	\$12,655,919	\$3,727	\$2,205,576	\$9,790,530	\$562,407	\$97,406
REGION	Northeast	\$20,279,594	\$3,107	\$4,734,625	\$14,066,373	\$1,324,288	\$154,308
	Midwest	\$68,009,334	\$4,258	\$13,654,693	\$52,027,164	\$2,056,378	\$271,098
	South	\$132,019,265	\$3,970	\$19,000,785	\$106,892,381	\$4,775,973	\$1,350,126
	West	\$36,033,769	\$4,163	\$6,147,753	\$28,349,387	\$1,281,719	\$254,910
TOTAL		\$256,341,962	\$3,980	\$43,537,857	\$201,335,305	\$9,438,358	\$2,030,442

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. All amounts are in 2013 US dollars.

#### 2013

				20	013					
	ographic acteristics	Total expenditures	Per patient per year expenditures	Expenditures for inpatient hospital stays	Expenditures for hospital- based outpatient services	Expenditures for physician office services	Expenditures for all other services			
AGE	18 - 24	\$11,840,434	\$3,694	\$1,395,130	\$9,946,753	\$363,352	\$135,200			
	25 - 34	\$31,922,471	\$4,196	\$5,190,086	\$25,449,076	\$965,588	\$317,720			
	35 - 44	\$55,565,641	\$4,133	\$7,743,964	\$45,448,342	\$1,904,139	\$469,196			
	45 - 54	\$77,189,462	\$4,274	\$11,399,642	\$62,304,144	\$2,744,489	\$741,188			
	55 - 64	\$85,132,753	\$4,029	\$14,838,695	\$66,283,404	\$3,178,388	\$832,266			
GENDER	Male	\$148,343,213	\$4,029	\$20,040,829	\$121,761,024	\$5,159,392	\$1,381,968			
	Female	\$113,307,549	\$4,255	\$20,526,688	\$87,670,695	\$3,996,564	\$1,113,602			
RACE	White	\$194,442,745	\$4,121	\$28,640,891	\$157,210,060	\$6,772,333	\$1,819,461			
	Black	\$22,058,813	\$4,303	\$4,472,453	\$16,733,540	\$678,311	\$174,508			
	Hispanic	\$24,613,997	\$4,228	\$3,990,797	\$19,446,316	\$864,470	\$312,414			
	Asian	\$6,924,194	\$3,522	\$1,096,923	\$5,417,955	\$323,638	\$85,678			
	Unknown	\$13,611,013	\$4,063	\$2,366,453	\$10,623,847	\$517,205	\$103,509			
REGION	Northeast	\$19,872,078	\$3,145	\$4,529,706	\$13,906,014	\$1,267,335	\$169,024			
	Midwest	\$68,631,403	\$4,264	\$11,917,305	\$54,353,611	\$2,020,122	\$340,366			
	South	\$134,257,351	\$4,192	\$18,172,903	\$109,912,558	\$4,584,437	\$1,587,453			
	West	\$38,889,929	\$4,319	\$5,947,603	\$31,259,535	\$1,284,062	\$398,728			
TOTAL		\$261,650,762	\$4,124	\$40,567,517	\$209,431,719	\$9,155,956	\$2,495,570			

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. All amounts are in 2013 US dollars. Table O.5.2: Insurer expenditures on privately insured kidney stone patients for hospital-based outpatient services with any diagnosis of kidney stones (by age, gender, race, & region)

# 2004-2008

		200	)4	200	)5	20	06	200	07	200	8
	mographic aracteristics	Total expenditures	Per person per year expenditures								
AGE	18 - 24	\$6,892,447	\$3,601	\$7,657,962	\$3,453	\$8,159,235	\$3,449	\$7,686,902	\$3,187	\$8,308,738	\$3,171
	25 - 34	\$23,337,641	\$3,416	\$24,963,952	\$3,374	\$24,139,541	\$3,207	\$25,361,111	\$3,193	\$26,625,750	\$3,137
	35 - 44	\$40,131,593	\$3,530	\$45,288,726	\$3,523	\$43,775,492	\$3,311	\$44,372,244	\$3,268	\$45,674,955	\$3,254
	45 - 54	\$46,627,862	\$3,644	\$53,503,682	\$3,583	\$52,546,257	\$3,296	\$56,460,533	\$3,348	\$57,652,152	\$3,251
	55 - 64	\$35,871,701	\$3,401	\$42,821,922	\$3,335	\$45,804,526	\$3,177	\$49,156,000	\$2,995	\$52,931,051	\$2,956
GENDER	Male	\$93,346,299	\$3,547	\$105,914,204	\$3,525	\$105,961,095	\$3,336	\$110,386,438	\$3,260	\$112,851,116	\$3,172
	Female	\$59,514,945	\$3,473	\$68,322,041	\$3,383	\$68,463,956	\$3,153	\$72,650,353	\$3,113	\$78,341,529	\$3,108
RACE	White	\$113,840,775	\$3,557	\$130,930,579	\$3,507	\$132,450,290	\$3,275	\$139,519,099	\$3,228	\$145,054,175	\$3,198
	Black	\$7,625,049	\$3,438	\$9,355,911	\$3,479	\$10,877,152	\$3,436	\$12,043,897	\$3,078	\$14,108,947	\$3,063
	Hispanic	\$11,897,492	\$3,441	\$13,068,724	\$3,160	\$15,129,830	\$3,177	\$16,529,110	\$3,190	\$17,059,842	\$2,984
	Asian	\$2,713,194	\$2,911	\$3,255,303	\$3,031	\$3,188,071	\$2,723	\$3,565,163	\$2,777	\$4,223,063	\$2,859
	Unknown	\$16,784,734	\$3,464	\$17,625,727	\$3,515	\$12,779,707	\$3,250	\$11,379,523	\$3,158	\$10,746,619	\$2,957
REGION	Northeast	\$11,338,231	\$2,490	\$11,193,637	\$2,248	\$11,793,769	\$2,111	\$13,145,745	\$2,192	\$13,088,874	\$2,064
	Midwest	\$44,833,819	\$3,589	\$50,287,652	\$3,601	\$48,513,696	\$3,373	\$45,352,432	\$3,209	\$45,828,879	\$3,241
	South	\$77,915,869	\$3,662	\$90,245,550	\$3,619	\$91,109,686	\$3,425	\$101,631,744	\$3,373	\$106,337,236	\$3,269
	West	\$18,773,325	\$3,655	\$22,509,405	\$3,538	\$23,007,900	\$3,331	\$22,906,871	\$3,299	\$25,937,657	\$3,335
TOTAL		\$152,861,244	\$3,518	\$174,236,244	\$3,468	\$174,425,051	\$3,262	\$183,036,791	\$3,200	\$191,192,645	\$3,145

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. All amounts are in 2013 US dollars. Table O.5.2: Insurer expenditures on privately insured kidney stone patients for hospital-based outpatient services with any diagnosis of kidney stones (by age, gender, race, & region)

## 2009-2013

			2009		10	<b>20</b> ′	11	20	12	201	3
	mographic aracteristics	Total expenditures	Per person per year expenditures								
AGE	18 - 24	\$9,054,605	\$3,475	\$8,913,667	\$3,373	\$11,165,752	\$3,478	\$11,628,328	\$3,542	\$11,559,939	\$3,607
	25 - 34	\$26,536,871	\$3,089	\$26,355,888	\$3,281	\$27,750,973	\$3,467	\$29,092,057	\$3,640	\$28,839,233	\$3,791
	35 - 44	\$47,073,057	\$3,170	\$47,144,939	\$3,361	\$50,485,187	\$3,550	\$51,203,975	\$3,679	\$50,453,739	\$3,753
	45 - 54	\$57,217,421	\$3,100	\$58,477,537	\$3,284	\$63,693,220	\$3,448	\$64,677,782	\$3,483	\$67,964,913	\$3,763
	55 - 64	\$54,755,688	\$2,905	\$56,661,601	\$2,986	\$65,385,052	\$3,200	\$66,620,308	\$3,226	\$72,515,572	\$3,432
GENDER	Male	\$114,115,322	\$3,063	\$115,582,758	\$3,206	\$128,212,533	\$3,385	\$130,410,024	\$3,461	\$132,470,420	\$3,598
	Female	\$80,522,320	\$3,086	\$81,970,875	\$3,224	\$90,267,650	\$3,410	\$92,812,425	\$3,471	\$98,862,976	\$3,713
RACE	White	\$145,999,791	\$3,105	\$149,145,990	\$3,236	\$164,327,588	\$3,415	\$167,667,826	\$3,477	\$173,147,344	\$3,670
	Black	\$15,728,180	\$3,118	\$16,535,270	\$3,252	\$18,305,844	\$3,496	\$19,343,554	\$3,739	\$18,797,570	\$3,667
	Hispanic	\$18,064,468	\$3,011	\$16,597,681	\$3,099	\$19,679,579	\$3,390	\$19,991,468	\$3,424	\$21,915,181	\$3,764
	Asian	\$4,330,559	\$2,598	\$4,650,717	\$2,962	\$4,810,198	\$2,798	\$5,301,520	\$2,982	\$5,886,838	\$2,994
	Unknown	\$10,514,644	\$2,909	\$10,623,974	\$3,133	\$11,356,974	\$3,273	\$10,918,082	\$3,215	\$11,586,463	\$3,459
REGION	Northeast	\$13,283,609	\$2,041	\$13,818,691	\$2,245	\$14,324,798	\$2,276	\$15,560,436	\$2,384	\$15,293,867	\$2,420
	Midwest	\$43,412,878	\$3,132	\$46,535,732	\$3,339	\$53,088,923	\$3,495	\$57,563,388	\$3,604	\$60,162,249	\$3,738
	South	\$112,690,060	\$3,224	\$111,195,713	\$3,301	\$121,741,171	\$3,521	\$118,552,326	\$3,565	\$121,237,151	\$3,785
	West	\$25,251,094	\$3,146	\$26,003,496	\$3,374	\$29,325,291	\$3,537	\$31,546,299	\$3,645	\$34,640,129	\$3,847
TOTAL		\$194,637,642	\$3,072	\$197,553,632	\$3,213	\$218,480,183	\$3,395	\$223,222,449	\$3,465	\$231,333,396	\$3,646

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. All amounts are in 2013 US dollars. Table O.5.3: Insurer expenditures on privately insured kidney stone patients for physician office services with any diagnosis of kidney stones (by age, gender, race, & region)

# 2004-2008

		200	04	20	)5	20(	06	200	)7	200	8
Demograpi	nic Characteristics	Total expenditures	Per person per year expenditures								
AGE	18 - 24	\$496,908	\$260	\$604,004	\$272	\$622,345	\$263	\$600,939	\$249	\$646,740	\$247
	25 - 34	\$1,909,492	\$279	\$2,088,139	\$282	\$2,066,100	\$274	\$2,127,260	\$268	\$2,254,105	\$266
	35 - 44	\$3,429,679	\$302	\$4,062,378	\$316	\$3,905,141	\$295	\$4,021,050	\$296	\$4,047,055	\$288
	45 - 54	\$4,185,113	\$327	\$4,916,468	\$329	\$5,044,058	\$316	\$5,335,093	\$316	\$5,687,042	\$321
	55 - 64	\$3,635,855	\$345	\$4,409,780	\$343	\$4,735,343	\$328	\$5,310,489	\$324	\$5,764,721	\$322
GENDER	Male	\$8,086,550	\$307	\$9,373,043	\$312	\$9,505,909	\$299	\$10,068,493	\$297	\$10,404,219	\$292
	Female	\$5,570,498	\$325	\$6,707,725	\$332	\$6,867,077	\$316	\$7,326,337	\$314	\$7,995,443	\$317
RACE	White	\$9,802,665	\$306	\$11,631,682	\$312	\$12,130,669	\$300	\$12,900,225	\$298	\$13,520,184	\$298
	Black	\$709,036	\$320	\$893,982	\$332	\$929,715	\$294	\$1,082,668	\$277	\$1,268,157	\$275
	Hispanic	\$1,269,602	\$367	\$1,489,940	\$360	\$1,680,361	\$353	\$1,801,626	\$348	\$1,976,198	\$346
	Asian	\$347,766	\$373	\$385,293	\$359	\$389,595	\$333	\$439,337	\$342	\$499,525	\$338
	Unknown	\$1,527,979	\$315	\$1,679,871	\$335	\$1,242,646	\$316	\$1,170,975	\$325	\$1,135,598	\$312
REGION	Northeast	\$2,181,726	\$479	\$2,382,794	\$478	\$2,111,772	\$378	\$2,075,335	\$346	\$2,193,711	\$346
	Midwest	\$3,081,548	\$247	\$3,614,228	\$259	\$3,527,024	\$245	\$3,433,199	\$243	\$3,441,125	\$243
	South	\$6,719,059	\$316	\$8,113,108	\$325	\$8,544,101	\$321	\$9,711,016	\$322	\$10,303,373	\$317
	West	\$1,674,714	\$326	\$1,970,638	\$310	\$2,190,090	\$317	\$2,175,281	\$313	\$2,461,454	\$317
TOTAL		\$13,657,048	\$314	\$16,080,768	\$320	\$16,372,986	\$306	\$17,394,830	\$304	\$18,399,662	\$303

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. All amounts are in 2013 US dollars. Table O.5.3: Insurer expenditures on privately insured kidney stone patients for physician office services with any diagnosis of kidney stones (by age, gender, race, & region)

# 2009-2013

		200	)9	20	0	201	11	20 <sup>-</sup>	12	20 <sup>-</sup>	13
Demographic Characteristics		Total expenditures	Per person per year expenditures								
AGE	18 - 24	\$594,484	\$228	\$546,066	\$207	\$522,356	\$163	\$497,713	\$152	\$495,255	\$155
	25 - 34	\$2,165,293	\$252	\$1,829,080	\$228	\$1,545,706	\$193	\$1,537,622	\$192	\$1,361,208	\$179
	35 - 44	\$4,190,589	\$282	\$3,534,610	\$252	\$3,029,303	\$213	\$2,935,446	\$211	\$2,732,434	\$203
	45 - 54	\$5,534,987	\$300	\$4,760,818	\$267	\$4,346,562	\$235	\$4,207,162	\$227	\$4,124,688	\$228
	55 - 64	\$5,895,289	\$313	\$5,416,454	\$285	\$5,133,986	\$251	\$4,970,992	\$241	\$5,109,482	\$242
GENDER	Male	\$10,488,339	\$282	\$9,121,465	\$253	\$8,350,617	\$220	\$8,117,643	\$215	\$7,876,167	\$214
	Female	\$7,892,304	\$302	\$6,965,562	\$274	\$6,227,294	\$235	\$6,031,291	\$226	\$5,946,900	\$223
RACE	White	\$13,535,154	\$288	\$11,877,220	\$258	\$10,760,565	\$224	\$10,383,107	\$215	\$10,145,715	\$215
	Black	\$1,380,601	\$274	\$1,270,257	\$250	\$1,121,887	\$214	\$1,088,643	\$210	\$1,042,420	\$203
	Hispanic	\$1,848,080	\$308	\$1,521,524	\$284	\$1,416,514	\$244	\$1,400,298	\$240	\$1,366,991	\$235
-	Asian	\$560,628	\$336	\$487,992	\$311	\$447,386	\$260	\$450,782	\$254	\$495,027	\$252
	Unknown	\$1,056,179	\$292	\$930,034	\$274	\$831,561	\$240	\$826,104	\$243	\$772,914	\$231
REGION	Northeast	\$2,417,060	\$371	\$2,153,299	\$350	\$1,925,359	\$306	\$1,983,621	\$304	\$1,940,296	\$307
	Midwest	\$3,100,747	\$224	\$2,910,039	\$209	\$2,852,565	\$188	\$2,991,119	\$187	\$2,986,683	\$186
	South	\$10,326,730	\$295	\$8,913,587	\$265	\$7,854,329	\$227	\$7,268,488	\$219	\$6,931,121	\$216
	West	\$2,536,106	\$316	\$2,110,101	\$274	\$1,945,659	\$235	\$1,905,706	\$220	\$1,964,967	\$218
TOTAL		\$18,380,642	\$290	\$16,087,027	\$262	\$14,577,912	\$227	\$14,148,934	\$220	\$13,823,067	\$218

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. All amounts are in 2013 US dollars. Table O.6.1: Percent of privately insured kidney stone patients who filled a prescription of any drug classes (including opioids) for kidney stone treatment (by age, gender, race & region)

## 2004-2008

		20	04	2005		20	06	20	07	2008	
	mographic iracteristics	Number of stone patients who filled a prescription for treatment	Percent of stone patients who filled a prescription for treatment	patients who filled	Percent of stone patients who filled a prescription for treatment	patients who filled a prescription for	patients who filled				
AGE	18 - 24	1,390	72.6	1,625	73.3	1,759	74.3	1,766	73.2	2,006	76.6
	25 - 34	4,941	72.3	5,516	74.6	5,663	75.2	5,939	74.8	6,500	76.6
	35 - 44	8,077	71.1	9,060	70.5	9,606	72.6	9,677	71.3	10,257	73.1
	45 - 54	9,050	70.7	10,564	70.7	11,406	71.5	11,687	69.3	12,832	72.4
	55 - 64	7,405	70.2	8,886	69.2	10,179	70.6	10,955	66.7	12,788	71.4
GENDER	Male	18,612	70.7	21,311	70.9	22,960	72.3	23,727	70.1	25,996	73.1
	Female	12,251	71.5	14,340	71.0	15,653	72.1	16,297	69.8	18,387	73.0
RACE	White	23,050	72.0	26,904	72.1	29,600	73.2	30,611	70.8	33,601	74.1
	Black	1,590	71.7	1,988	73.9	2,355	74.4	2,626	67.1	3,516	76.3
	Hispanic	2,276	65.8	2,663	64.4	3,224	67.7	3,502	67.6	3,850	67.3
	Asian	530	56.9	600	55.9	665	56.8	759	59.1	862	58.4
	Unknown	3,417	70.5	3,496	69.7	2,769	70.4	2,526	70.1	2,554	70.3
REGION	Northeast	2,725	59.9	2,966	59.6	3,483	62.3	3,875	64.6	4,015	63.3
	Midwest	8,884	71.1	9,972	71.4	10,312	71.7	10,233	72.4	10,475	74.1
	South	15,637	73.5	18,332	73.5	19,900	74.8	20,926	69.4	24,248	74.5
	West	3,617	70.4	4,381	68.9	4,918	71.2	4,990	71.9	5,645	72.6
TOTAL		30,863	71.0	35,651	71.0	38,613	72.2	40,024	70.0	44,383	73.0

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. Drug classes for kidney stone treatment included alkalinization agents, ammonia detoxicants, heavy metal antagonists, TIOPRONIN, alpha blockers, calcium channel blockers, and opiate agonists.

Table O.6.1: Percent of privately insured kidney stone patients who filled a prescription of any drug classes (including opioids) for kidney stone treatment (by age, gender, race, & region)

### 2009-2013

		20	09	20	10	2011		20	12	20	13
	mographic iracteristics			patients who filled a prescription for		patients who filled a prescription for	patients who filled	patients who filled a prescription for			
AGE	18 - 24	1,978	75.9	2,022	76.5	2,478	77.2	2,523	76.9	2,427	75.7
	25 - 34	6,459	75.2	6,178	76.9	6,135	76.6	6,155	77.0	5,706	75.0
	35 - 44	10,877	73.2	10,435	74.4	10,550	74.2	10,291	73.9	9,853	73.3
	45 - 54	13,159	71.3	13,033	73.2	13,624	73.7	13,473	72.5	13,062	72.3
	55 - 64	13,612	72.2	13,733	72.4	14,884	72.8	14,909	72.2	15,227	72.1
GENDER	Male	27,164	72.9	26,654	73.9	28,119	74.2	27,876	74.0	27,197	73.9
	Female	18,921	72.5	18,747	73.7	19,552	73.9	19,475	72.8	19,078	71.6
RACE	White	34,743	73.9	34,453	74.8	36,109	75.0	35,858	74.4	34,936	74.0
	Black	3,819	75.7	3,917	77.0	4,050	77.3	3,910	75.6	3,806	74.2
	Hispanic	4,021	67.0	3,716	69.4	4,011	69.1	4,102	70.3	4,014	68.9
	Asian	971	58.2	943	60.1	1,028	59.8	1,084	61.0	1,184	60.2
	Unknown	2,531	70.0	2,372	69.9	2,473	71.3	2,397	70.6	2,335	69.7
REGION	Northeast	4,122	63.3	3,872	62.9	3,982	63.3	4,189	64.2	3,920	62.0
	Midwest	10,118	73.0	10,317	74.0	11,353	74.7	11,920	74.6	11,895	73.9
	South	26,066	74.6	25,608	76.0	26,283	76.0	24,893	74.8	23,942	74.8
	West	5,779	72.0	5,604	72.7	6,053	73.0	6,349	73.4	6,518	72.4
TOTAL		46,085	72.7	45,401	73.8	47,671	74.1	47,351	73.5	46,275	72.9

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. Drug classes for kidney stone treatment included alkalinization agents, ammonia detoxicants, heavy metal antagonists, TIOPRONIN, alpha blockers, calcium channel blockers, and opiate agonists.

Table O.6.2: Percent of privately insured kidney stone patients who filled a prescription of any drug classes for kidney stone treatment (by age, gender, race, & region)

# 2004-2008

		20	04	20	05	20	06	20	07	20	)8
	mographic iracteristics	Number of stone patients who filled a prescription for treatment			Percent of stone patients who filled a prescription for treatment	Number of stone patients who filled a prescription for treatment	Percent of stone patients who filled a prescription for treatment	Number of stone patients who filled a prescription for treatment	Percent of stone patients who filled a prescription for treatment	patients who filled a	Percent of stone patients who filled a prescription for treatment
AGE	18 - 24	97	5.1	142	6.4	224	9.5	274	11.4	428	16.3
	25 - 34	431	6.3	532	7.2	668	8.9	1,030	13.0	1,558	18.4
	35 - 44	1,086	9.6	1,430	11.1	1,776	13.4	2,241	16.5	2,937	20.9
	45 - 54	2,119	16.6	2,647	17.7	3,137	19.7	3,720	22.1	4,689	26.4
	55 - 64	2,917	27.7	3,565	27.8	4,318	29.9	4,943	30.1	6,251	34.9
GENDER	Male	4,740	18.0	5,859	19.5	7,196	22.7	8,697	25.7	11,237	31.6
	Female	1,910	11.1	2,457	12.2	2,927	13.5	3,511	15.0	4,626	18.4
RACE	White	4,945	15.5	6,279	16.8	7,805	19.3	9,357	21.6	12,051	26.6
	Black	385	17.4	496	18.4	629	19.9	815	20.8	1,266	27.5
	Hispanic	460	13.3	542	13.1	811	17.0	989	19.1	1,311	22.9
	Asian	140	15.0	155	14.4	170	14.5	254	19.8	320	21.7
	Unknown	720	14.9	844	16.8	708	18.0	793	22.0	915	25.2
REGION	Northeast	686	15.1	828	16.6	1,089	19.5	1,328	22.1	1,620	25.5
	Midwest	1,841	14.7	2,240	16.0	2,587	18.0	2,993	21.2	3,723	26.3
	South	3,421	16.1	4,305	17.3	5,233	19.7	6,392	21.2	8,429	25.9
	West	702	13.7	943	14.8	1,214	17.6	1,495	21.5	2,091	26.9
TOTAL		6,650	15.3	8,316	16.6	10,123	18.9	12,208	21.3	15,863	26.1

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year.

Drug classes for kidney stone treatment included alkalinization agents, ammonia detoxicants, heavy metal antagonists, TIOPRONIN, alpha blockers, and calcium channel blockers.

Table O.6.2: Percent of privately insured kidney stone patients who filled a prescription of any drug classes for kidney stone treatment (by age, gender, race, & region)

## 2009-2013

		20	09	20	10	20	11	20	12	20 <sup>-</sup>	13
	emographic laracteristics	Number of stone patients who filled a prescription for treatment	Percent of stone patients who filled a prescription for treatment	Number of stone patients who filled a prescription for treatment	Percent of stone patients who filled a prescription for treatment		Percent of stone patients who filled a prescription for treatment	Number of stone patients who filled a prescription for treatment	Percent of stone patients who filled a prescription for treatment	Number of stone patients who filled a prescription for treatment	Percent of stone patients who filled a prescription for treatment
AGE	18 - 24	558	21.4	698	26.4	1,020	31.8	1,117	34.0	1,198	37.4
	25 - 34	1,798	20.9	2,114	26.3	2,564	32.0	2,761	34.5	2,795	36.7
	35 - 44	3,682	24.8	4,260	30.4	4,850	34.1	5,053	36.3	5,201	38.7
	45 - 54	5,287	28.6	6,119	34.4	7,046	38.1	7,300	39.3	7,485	41.4
_	55 - 64	6,998	37.1	7,652	40.3	8,809	43.1	9,113	44.1	9,670	45.8
GENDER	Male	12,955	34.8	14,517	40.3	16,649	44.0	17,190	45.6	17,752	48.2
	Female	5,368	20.6	6,326	24.9	7,640	28.9	8,154	30.5	8,597	32.3
RACE	White	13,868	29.5	15,902	34.5	18,467	38.4	19,247	39.9	19,966	42.3
	Black	1,520	30.1	1,752	34.5	1,993	38.1	2,034	39.3	2,105	41.1
	Hispanic	1,519	25.3	1,562	29.2	1,936	33.3	2,126	36.4	2,175	37.4
	Asian	408	24.5	479	30.5	576	33.5	607	34.1	705	35.9
	Unknown	1,008	27.9	1,148	33.9	1,317	38.0	1,330	39.2	1,398	41.7
REGION	Northeast	1,804	27.7	1,934	31.4	2,161	34.3	2,361	36.2	2,289	36.2
	Midwest	4,033	29.1	4,840	34.7	5,880	38.7	6,462	40.5	6,948	43.2
	South	10,074	28.8	11,475	34.1	13,064	37.8	13,062	39.3	13,366	41.7
	West	2,412	30.0	2,594	33.7	3,184	38.4	3,459	40.0	3,746	41.6
TOTAL		18,323	28.9	20,843	33.9	24,289	37.7	25,344	39.3	26,349	41.5

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2004-2013 Enrollees with full enrollment in commercial health plan during each year. Drug classes for kidney stone treatment included alkalinization agents, ammonia detoxicants, heavy metal antagonists, TIOPRONIN, alpha blockers, and calcium channel blockers.

# Table O.6.3: Percent of privately insured kidney stone patients who filled a prescription of alkalinization agents (by age, gender, race, & region)

# 2004-2008

		20	04	20	05	20	06	20	07	20	08
Demograp	hic Characteristics	Number of stone patients who filled a prescription for treatment	patients who filled	patients who filled	patients who filled a prescription for	patients who filled	patients who filled	patients who filled a prescription for	patients who filled	patients who filled a prescription for	patients who filled
AGE	18 - 24	60	3.1	81	3.7	105	4.4	88	3.6	99	3.8
	25 - 34	240	3.5	263	3.6	253	3.4	268	3.4	291	3.4
	35 - 44	531	4.7	599	4.7	598	4.5	633	4.7	638	4.5
	45 - 54	765	6.0	933	6.2	1,004	6.3	1,014	6.0	1,069	6.0
	55 - 64	757	7.2	882	6.9	1,033	7.2	1,167	7.1	1,318	7.4
GENDER	Male		5.8	1,731	5.8	1,945	6.1	2,037	6.0	2,179	6.1
	Female	820	4.8	1,027	5.1	1,048	4.8	1,133	4.9	1,236	4.9
RACE	White	1,828	5.7	2,126	5.7	2,355	5.8	2,482	5.7	2,646	5.8
	Black	87	3.9	113	4.2	144	4.5	161	4.1	226	4.9
	Hispanic	138	4.0	168	4.1	215	4.5	257	5.0	276	4.8
	Asian	52	5.6	56	5.2	52	4.4	72	5.6	58	3.9
	Unknown	248	5.1	295	5.9	227	5.8	198	5.5	209	5.8
REGION	Northeast	243	5.3	289	5.8	319	5.7	352	5.9	383	6.0
	Midwest	725	5.8	805	5.8	854	5.9	834	5.9	844	6.0
	South	1,113	5.2	1,332	5.3	1,478	5.6	1,598	5.3	1,768	5.4
	West	272	5.3	332	5.2	342	5.0	386	5.6	420	5.4
TOTAL		2,353	5.4	2,758	5.5	2,993	5.6	3,170	5.5	3,415	5.6

Table O.6.3: Percent of privately insured kidney stone patients who filled a prescription of alkalinization agents (by age, gender, race, & region)

## 2009-2013

		20	09	20	10	20	11	20	12	20	13
Demograph	iic Characteristics	Number of stone patients who filled a prescription for treatment		Number of stone patients who filled a prescription for treatment	•		•	patients who filled	patients who filled	patients who filled	
AGE	18 - 24	96	3.7	96	3.6	118	3.7	132	4.0	101	3.2
	25 - 34	280	3.3	248	3.1	242	3.0	278	3.5	244	3.2
	35 - 44	681	4.6	647	4.6	625	4.4	628	4.5	560	
GENDER M	45 - 54	1,070	5.8	1,097	6.2	1,077	5.8	1,060	5.7	998	5.5
	55 - 64	1,349	7.2	1,415	7.5	1,540	7.5	1,564	7.6	1,629	
GENDER	Male	2,215	5.9	2,227	6.2	2,239	5.9	2,224	5.9	2,153	5.8
	Female	1,261	4.8	1,276	5.0	1,363	5.1	1,438	5.4	1,379	
RACE	White	2,682	5.7	2,747	6.0	2,846	5.9	2,883	6.0	2,785	
	Black	235	4.7	224	4.4	237	4.5	239	4.6	197	3.8
	Hispanic	276	4.6	246	4.6	233	4.0	246	4.2	236	
	Asian	88	5.3	78	5.0	84	4.9	84	4.7	99	5.0
	Unknown	195	5.4	208	6.1	202	5.8	210	6.2	215	6.4
REGION	Northeast	372	5.7	362	5.9	359	5.7	397	6.1	365	5.8
	Midwest	753	5.4	838	6.0	888	5.8	968	6.1	962	6.0
	South	1,896	5.4	1,865	5.5	1,895	5.5	1,800	5.4	1,716	
	West	455	5.7	438	5.7	460	5.5	497	5.7	489	5.4
TOTAL		3,476	5.5	3,503	5.7	3,602	5.6	3,662	5.7	3,532	5.6

# Table O.6.4: Percent of privately insured kidney stone patients who filled a prescription of TIOPRONIN (by age, gender, race, & region)

# 2004-2008

	lamographic Characteristics	2004		2005		2006		20	07	20	80
Demograpi	nic Characteristics	Number of stone patients who filled a prescription for treatment	patients who filled	patients who filled a prescription for	patients who filled	a prescription for	patients who filled a prescription for	patients who filled a prescription for	patients who filled a prescription for	patients who filled a prescription for	patients who filled
AGE	18 - 24	2	0.1	6	0.3	5	0.2	4	0.2	3	0.1
	25 - 34	1	0.0	1	0.0	1	0.0	5	0.1	4	0.0
	35 - 44	4	0.0	6	0.0	7	0.1	5	0.0	5	0.0
	45 - 54	3	0.0	3	0.0	5	0.0	6	0.0	10	0.1
	55 - 64	4	0.0	5	0.0	1	0.0	4	0.0	9	0.1
GENDER	Male	8	0.0	11	0.0	10	0.0	14	0.0	16	0.0
	Female	6	0.0	10	0.0	9	0.0	10	0.0	15	0.1
RACE	White	13	0.0	21	0.1	17	0.0	21	0.0	25	0.1
	Black	0	0.0	0	0.0	0	0.0	1	0.0	2	0.0
	Hispanic	0	0.0	0	0.0	1	0.0	2	0.0	1	0.0
	Asian	1	0.1	0	0.0	0	0.0	0	0.0	1	0.1
	Unknown	0	0.0	0	0.0	1	0.0	0	0.0	2	0.1
REGION	Northeast	2	0.0	2	0.0	1	0.0	0	0.0	1	0.0
	Midwest	3	0.0	4	0.0	4	0.0	7	0.0	9	0.1
	South	8	0.0	11	0.0	10	0.0	14	0.0	19	0.1
	West	1	0.0	4	0.1	4	0.1	3	0.0	2	0.0
TOTAL		14	0.0	21	0.0	19	0.0	24	0.0	31	0.1

# 2009-2013

	emographic Characteristics	20	09	20	10	20	11	20	12	20	13
Demograp	ohic Characteristics			patients who filled	patients who filled a prescription for	patients who filled a prescription for	patients who filled a prescription for	Number of stone patients who filled a prescription for treatment	patients who filled	patients who filled a prescription for	patients who filled
AGE	18 - 24	4	0.2	3	0.1	2	0.1	2	0.1	3	0.1
	25 - 34	2	0.0	4	0.0	5	0.1	5	0.1	5	0.1
	35 - 44	5	0.0	4	0.0	8	0.1	5	0.0	10	0.1
	45 - 54	7	0.0	6	0.0	5	0.0	5	0.0	9	0.0
	55 - 64	7	0.0	10	0.1	7	0.0	6	0.0	6	0.0
GENDER	Male	16	0.0	20	0.1	16	0.0	15	0.0	19	0.1
	Female	9	0.0	7	0.0	11	0.0	8	0.0	14	0.1
RACE	White	23	0.0	24	0.1	24	0.0	22	0.0	26	0.1
	Black	1	0.0	2	0.0	1	0.0	1	0.0	3	0.1
	Hispanic	0	0.0	0	0.0	0	0.0	0	0.0	2	0.0
	Asian	0	0.0	1	0.1	1	0.1	0	0.0	1	0.1
	Unknown	1	0.0	0	0.0	1	0.0	0	0.0	1	0.0
REGION	Northeast	0	0.0	1	0.0	2	0.0	3	0.0	3	0.0
	Midwest	4	0.0	7	0.1	5	0.0	5	0.0	9	0.1
	South	18	0.1	17	0.1	20	0.1	15	0.0	19	0.1
	West	3	0.0	2	0.0	0	0.0	0	0.0	2	0.0
TOTAL		25	0.0	27	0.0	27	0.0	23	0.0	33	0.1

# Table O.6.5: Percent of privately insured kidney stone patients who filled a prescription of opiate agonists (by age, gender, race, & region)

## 2004-2008

		20	04	20	05	20	06	20	07	20	08
Demograpi	nic Characteristics	Number of stone patients who filled a prescription for treatment	Percent of stone patients who filled a prescription for treatment		Percent of stone patients who filled a prescription for treatment	patients who filled	Percent of stone patients who filled a prescription for treatment	patients who filled a prescription for	Percent of stone patients who filled a prescription for treatment	•	
AGE	18 - 24	1,368	71.5	1,594	71.9	1,724	72.9	1,723	71.4	1,964	75.0
	25 - 34	4,838	70.8	5,402	73.0	5,548	73.7	5,808	73.1	6,332	74.6
	35 - 44	7,783	68.5	8,716	67.8	9,229	69.8	9,267	68.3	9,800	69.8
	45 - 54	8,393	65.6	9,816	65.7	10,554	66.2	10,780	63.9	11,796	66.5
	55 - 64	6,348	60.2	7,622	59.4	8,697	60.3	9,319	56.8	10,870	60.7
GENDER	Male	17,004	64.6	19,457	64.8	20,838	65.6	21,399	63.2	23,303	65.5
	Female	11,726	68.4	13,693	67.8	14,914	68.7	15,498	66.4	17,459	69.3
RACE	White	21,524	67.3	25,055	67.1	27,471	67.9	28,286	65.4	30,964	68.3
	Black	1,472	66.4	1,841	68.5	2,194	69.3	2,408	61.5	3,217	69.8
	Hispanic	2,097	60.6	2,479	59.9	2,944	61.8	3,214	62.0	3,514	61.5
	Asian	463	49.7	527	49.1	601	51.3	687	53.5	747	50.6
	Unknown	3,174	65.5	3,248	64.8	2,542	64.6	2,302	63.9	2,320	63.8
REGION	Northeast	2,428	53.3	2,630	52.8	3,080	55.1	3,424	57.1	3,529	55.7
	Midwest	8,285	66.3	9,293	66.6	9,536	66.3	9,461	66.9	9,684	68.5
	South	14,644	68.8	17,149	68.8	18,529	69.7	19,373	64.3	22,339	68.7
	West	3,373	65.7	4,078	64.1	4,607	66.7	4,639	66.8	5,210	67.0
TOTAL		28,730	66.1	33,150	66.0	35,752	66.9	36,897	64.5	40,762	67.1

Table O.6.5: Percent of privately insured kidney stone patients who filled a prescription of opiate agonists (by age, gender, race, & region)

# 2009-2013

		20	09	20	10	20	11	20	12	20	13
Demograpi	nic Characteristics	Number of stone patients who filled a prescription for treatment	patients who filled a prescription for	Number of stone patients who filled a prescription for treatment	patients who filled	patients who filled a prescription for	•	patients who filled a prescription for	patients who filled a prescription for	patients who filled	patients who filled
AGE	18 - 24	1,936	74.3	1,966	74.4	2,407	75.0	2,422	73.8	2,322	72.4
	25 - 34	6,287	73.2	6,001	74.7	5,922	74.0	5,911	74.0	5,457	71.7
	35 - 44	10,364	69.8	9,886	70.5	9,986	70.2	9,724	69.9	9,184	68.3
	45 - 54	12,060	65.3	11,905	66.9	12,355	66.9	12,163	65.5	11,707	64.8
	55 - 64	11,537	61.2	11,691	61.6	12,479	61.1	12,439	60.2	12,606	59.7
GENDER	Male	24,277	65.2	23,712	65.8	24,780	65.4	24,503	65.0	23,598	64.1
	Female	17,907	68.6	17,737	69.8	18,369	69.4	18,156	67.9	17,678	66.4
RACE	White	31,907	67.8	31,525	68.4	32,770	68.1	32,420	67.2	31,242	66.2
	Black	3,458	68.6	3,560	70.0	3,670	70.1	3,550	68.6	3,418	66.7
	Hispanic	3,651	60.9	3,412	63.7	3,615	62.3	3,661	62.7	3,554	61.0
	Asian	844	50.6	821	52.3	890	51.8	944	53.1	1,006	51.2
	Unknown	2,324	64.3	2,131	62.8	2,204	63.5	2,084	61.4	2,056	61.4
REGION	Northeast	3,599	55.3	3,356	54.5	3,404	54.1	3,555	54.5	3,230	51.1
	Midwest	9,321	67.3	9,447	67.8	10,371	68.3	10,828	67.8	10,689	66.4
	South	23,947	68.5	23,484	69.7	23,874	69.1	22,510	67.7	21,471	67.0
	West	5,317	66.2	5,162	67.0	5,500	66.3	5,766	66.6	5,886	65.4
TOTAL		42,184	66.6	41,449	67.4	43,149	67.1	42,659	66.2	41,276	65.1

# Table O.6.6: Percent of privately insured kidney stone patients who filled a prescription of alpha blockers (by age, gender, race, & region)

# 2004-2008

		20	04	20	05	20	06	20	07	20	08
	nographic racteristics		patients who filled	patients who filled a prescription for	patients who filled	patients who filled	patients who filled a prescription for	patients who filled	patients who filled a prescription for	patients who filled a prescription for	patients who filled
AGE	18 - 24	10	0.5	42	1.9	106	4.5	165	6.8	319	12.2
	25 - 34	48	0.7	147	2.0	315	4.2	646	8.1	1,114	13.1
	35 - 44	146	1.3	343	2.7	700	5.3	1,202	8.9	1,888	13.4
	45 - 54	432	3.4	681	4.6	1,153		1,700	10.1	2,503	14.1
	55 - 64	942	8.9	1,313	10.2	1,851	12.8	2,279	13.9	3,180	17.8
GENDER	Male	1,466	5.6	2,232	7.4	3,476		4,858	14.3	7,064	19.9
	Female	112	0.7	294	1.5	649	3.0	1,134	4.9	1,940	7.7
RACE	White	1,180	3.7	1,918	5.1	3,196	7.9	4,659	10.8	6,914	15.2
	Black	79	3.6	115	4.3	229	7.2	312	8.0	608	13.2
	Hispanic	100	2.9	167	4.0	336	7.1	480	9.3	767	13.4
	Asian	33	3.5	41	3.8	71	6.1	127	9.9	182	12.3
	Unknown	186	3.8	285	5.7	293	7.5	414	11.5	533	14.7
REGION	Northeast	177	3.9	277	5.6	463	8.3	685	11.4	929	14.7
	Midwest	376	3.0	649	4.6	1,000	7.0	1,458	10.3	2,182	15.4
	South	846	4.0	1,288	5.2	2,121	8.0	3,031	10.1	4,546	14.0
	West	179	3.5	312	4.9	541	7.8	818	11.8	1,347	17.3
TOTAL		1,578	3.6	2,526	5.0	4,125	7.7	5,992	10.5	9,004	14.8

Table O.6.6: Percent of privately insured kidney stone patients who filled a prescription of alpha blockers (by age, gender, race, & region)

# 2009-2013

		20	09	20	10	20	11	20	12	20	13
	mographic racteristics	Number of stone patients who filled a prescription for treatment	Percent of stone patients who filled a prescription for treatment	patients who filled		patients who filled	patients who filled	patients who filled		•	patients who filled
AGE	18 - 24	436	16.7	614	23.2	912	28.4	991	30.2	1,101	34.4
	25 - 34	1,387	16.1	1,746	21.7	2,227	27.8	2,429	30.4	2,519	33.1
	35 - 44	2,534	17.1	3,251	23.2	3,938	27.7	4,165	29.9	4,391	32.7
	45 - 54	3,127	16.9	4,047	22.7	4,983	27.0	5,401	29.1	5,720	31.7
	55 - 64	3,712	19.7	4,599	24.2	5,617	27.5	5,880	28.5	6,546	31.0
GENDER	Male	8,592	23.1	10,548	29.3	12,684	33.5	13,323	35.4	14,149	38.4
	Female	2,604	10.0	3,709	14.6	4,993	18.9	5,543	20.7	6,128	23.0
RACE	White	8,546	18.2	10,922	23.7	13,454	28.0	14,361	29.8	15,441	32.7
	Black	771	15.3	1,087	21.4	1,337	25.5	1,420	27.4	1,506	29.4
	Hispanic	984	16.4	1,106	20.6	1,487	25.6	1,632	28.0	1,741	29.9
	Asian	251	15.1	345	22.0	416	24.2	462	26.0	540	27.5
	Unknown	644	17.8	797	23.5	983	28.3	991	29.2	1,049	31.3
REGION	Northeast	1,137	17.5	1,294	21.0	1,500	23.8	1,724	26.4	1,631	25.8
	Midwest	2,570	18.5	3,437	24.7	4,420	29.1	4,892	30.6	5,491	34.1
	South	5,844	16.7	7,605	22.6	9,289	26.9	9,568	28.8	10,138	31.7
	West	1,645	20.5	1,921	24.9	2,468	29.8	2,682	31.0	3,017	33.5
TOTAL		11,196	17.7	14,257	23.2	17,677	27.5	18,866	29.3	20,277	32.0

# Table O.6.7: Percent of privately insured kidney stone patients who filled a prescription of calcium channel blockers (by age, gender, race, & region)

## 2004-2008

		20	04	20	05	20	06	20	07	20	08
Demog	raphic Characteristics	Number of stone patients who filled a prescription for treatment	patients who filled a prescription for	a prescription for	patients who filled a prescription for	patients who filled	patients who filled a prescription for	a prescription for	patients who filled	patients who filled	•
AGE	18 - 24	28	1.5	21	0.9	21	0.9	24	1.0	34	1.3
	25 - 34	153	2.2	141	1.9	125	1.7	152	1.9	223	2.6
	35 - 44	473	4.2	583	4.5	596	4.5	555	4.1	627	4.5
	45 - 54	1,102	8.6	1,259	8.4	1,308	8.2	1,413	8.4	1,610	9.1
	55 - 64	1,613	15.3	1,882	14.7	2,107	14.6	2,267	13.8	2,776	15.5
GENDER	Male	2,300	8.7	2,602	8.7	2,742	8.6	2,938	8.7	3,481	9.8
	Female	1,069	6.2	1,284	6.4	1,415	6.5	1,473	6.3	1,789	7.1
RACE	White	2,422	7.6	2,882	7.7	3,150	7.8	3,287	7.6	3,908	8.6
	Black	260	11.7	315	11.7	338	10.7	433	11.1	589	12.8
	Hispanic	266	7.7	255	6.2	332	7.0	347	6.7	377	6.6
	Asian	66	7.1	68	6.3	62	5.3	78	6.1	110	7.4
	Unknown	355	7.3	366	7.3	275	7.0	266	7.4	286	7.9
REGION	Northeast	323	7.1	340	6.8	422	7.6	440	7.3	484	7.6
	Midwest	908	7.3	1,024	7.3	1,021	7.1	1,024	7.2	1,153	8.2
	South	1,825	8.6	2,123	8.5	2,266	8.5	2,513	8.3	3,096	9.5
	West	313	6.1	399	6.3	448	6.5	434	6.3	537	6.9
TOTAL		3,369	7.8	3,886	7.7	4,157	7.8	4,411	7.7	5,270	8.7

Table O.6.7: Percent of privately insured kidney stone patients who filled a prescription of calcium channel blockers (by age, gender, race, & region)

# 2009-2013

		20	09	20	10	20	11	20	12	2013		
Demogra	uphic Characteristics	Number of stone patients who filled a prescription for treatment	Percent of stone patients who filled a prescription for treatment		patients who filled a prescription for	a prescription for	patients who filled a prescription for	patients who filled a prescription for		patients who filled a prescription for	patients who filled	
AGE	18 - 24	43	1.7	18	0.7	34	1.1	35	1.1	30	0.9	
	25 - 34	206	2.4	215	2.7	220	2.7	202	2.5	179	2.4	
	35 - 44	725	4.9	714	5.1	687	4.8	667	4.8	639	4.8	
	45 - 54	1,671	9.1	1,714	9.6	1,786	9.7	1,657	8.9	1,643	9.1	
	55 - 64	3,020	16.0	2,968	15.6	3,227	15.8	3,223	15.6	3,219	15.2	
GENDER	Male	3,748	10.1	3,748	10.4	3,946	10.4	3,869	10.3	3,866	10.5	
	Female	1,917	7.3	1,881	7.4	2,008	7.6	1,915	7.2	1,844	6.9	
RACE	White	4,171	8.9	4,218	9.2	4,437	9.2	4,278	8.9	4,208	8.9	
	Black	679	13.5	674	13.3	690	13.2		12.5	671	13.1	
	Hispanic	418	7.0	356	6.6	416		454	7.8	425	7.3	
	Asian	111	6.7	101	6.4	125	7.3	130	7.3	131	6.7	
	Unknown	286	7.9	280	8.3	286	8.2	276	8.1	275	8.2	
REGION	Northeast	498	7.7	509	8.3	554	8.8	554	8.5	566	9.0	
	Midwest	1,143	8.2	1,132	8.1	1,279	8.4	1,347	8.4	1,331	8.3	
	South	3,465	9.9	3,448	10.2		10.2		9.8	3,170	9.9	
	West	559	7.0	540	7.0	603	7.3	640	7.4	643	7.1	
TOTAL		5,665	8.9	5,629	9.2	5,954	9.3	5,784	9.0	5,710	9.0	

Table 0.7.1: Total number of privately insured enrollees ages 18 to 64 who were continuously enrolled from Jan 2009 through Dec 2013 (by age, gender, race, & region)

	ately insured enrollees ages ntinuously enrolled from c 2013	Number of enrollees	Percent of enrollees
AGE AT YEAR 2009	18 - 24	171,342	8.4
	25 - 34	345,218	16.9
	35 - 44	532,887	26.1
	45 - 54	616,129	30.2
	55 - 64	374,279	18.3
GENDER	Male	978,097	47.9
	Female	1,061,758	52.1
RACE	White	1,423,202	69.8
	Black	209,328	10.3
	Hispanic	175,540	8.6
	Asian	79,231	3.9
	Unknown	152,554	7.5
REGION	Northeast	209,804	10.3
	Midwest	516,091	25.3
	South	1,014,856	49.8
	West	299,104	14.7
TOTAL		2,039,855	100.0

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2009-2013 Enrollees are ages 18 to 64 with continuous enrollment in commercial health plan from January 2009 through December 2013. All percentages are rounded to one decimal place.

# Table O.7.2: Claim-based 5-year prevalence of kidney stones among privately insured enrollees who were continuously enrolled from Jan 2009 through Dec 2013 (by age, gender, race, & region)

	prevalence of kidney stones among rollees who were continuously enrolled ıgh Dec 2013	Enrollees with at least one evaluation and management visit for kidney stones	Claim-based prevalence
AGE AT YEAR 2009	18 - 24	2,762	1.6
	25 - 34	9,666	2.8
	35 - 44	19,668	3.7
	45 - 54	25,649	4.2
	55 - 64	18,245	4.9
SEX	Male	44,662	4.6
	Female	31,328	3.0
RACE	White	56,274	4.0
	Black	6,878	3.3
	Hispanic	6,686	3.8
	Asian	2,026	2.6
	Unknown	4,126	2.7
REGION	Northeast	7,318	3.5
	Midwest	16,827	3.3
	South	42,691	4.2
	West	9,154	3.1
TOTAL		75,990	3.7

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2009-2013 Enrollees are ages 18 to 64 with continuous enrollment in commercial health plan from January 2009 through December 2013. All percentages are rounded to one decimal place.

Table O.7.3a: Number of kidney stone imaging procedures among privately insured kidney stone patients from Jan 2009 through Dec 2013 (by age, gender, race, & region)

## 0-4 Imaging Procedures

Number of kidney stone imaging procedures among privately insured kidney stone patients from Jan 2009		All kidney stone	All kidney stone patients		Kidney stone patients with 0 imaging procedure		atients with rocedure	Kidney stone patients with 2 imaging procedures		Kidney stone patients with 3-4 imaging procedures	
through Dec 2013	5 110111 5011 2005	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AGE AT YEAR 2009	18 - 24	2,762	100.0	867	31.4	673	24.4	476	17.2	405	14.7
	25 - 34	9,666	100.0	2,891	29.9	2,164	22.4	1,777	18.4	1,435	14.8
	35 - 44	19,668	100.0	5,723	29.1	4,162	21.2	3,392	17.2	3,098	15.8
	45 - 54	25,649	100.0	7,458	29.1	5,194	20.3	4,271	16.7	4,091	15.9
	55 - 64	18,245	100.0	5,364	29.4	3,424	18.8	2,850	15.6	3,006	16.5
SEX	Male	44,662	100.0	12,647	28.3	9,338	20.9	7,688	17.2	7,219	16.2
	Female	31,328	100.0	9,656	30.8	6,279	20.0	5,078	16.2	4,816	15.4
RACE	White	56,274	100.0	16,015	28.5	11,470	20.4	9,445	16.8	9,147	16.3
	Black	6,878	100.0	2,148	31.2	1,430	20.8	1,141	16.6	1,007	14.6
	Hispanic	6,686	100.0	2,258	33.8	1,496	22.4	1,114	16.7	938	14.0
	Asian	2,026	100.0	670	33.1	444	21.9	350	17.3	268	13.2
	Unknown	4,126	100.0	1,212	29.4	777	18.8	716	17.4	675	16.4
REGION	Northeast	7,318	100.0	2,427	33.2	1,449	19.8	1,131	15.5	1,091	14.9
	Midwest	16,827	100.0	4,579	27.2	3,233	19.2	3,103	18.4	2,846	16.9
	South	42,691	100.0	12,299	28.8	8,959	21.0	6,992	16.4	6,788	15.9
	West	9,154	100.0	2,998	32.8	1,976	21.6	1,540	16.8	1,310	14.3
TOTAL		75,990	100.0	22,303	29.3	15,617	20.6	12,766	16.8	12,035	15.8

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2009-2013 Enrollees are ages 18 to 64 with continuous enrollment in commercial health plan from January 2009 through December 2013. Imaging procedures for kidney stone evaluation included plain film/kidney, ureter, bladder X-ray, intravenous pyelography, ultrasound, computed tomography, and magnetic resonance imaging. All percentages are rounded to one decimal place.

Table O.7.3a: Number of kidney stone imaging procedures among privately insured kidney stone patients from Jan 2009 through Dec 2013 (by age, gender, race, & region)

### 5-20+ Imaging Procedures

Number of kidney stone imaging procedures among privately insured kidney stone patients		All kidney stone	patients	Kidney stone p 5-9 imaging p		Kidney stone p 10-19 imaging		Kidney stone patients with 20+ imaging procedures		
from Jan 2009 through	Dec 2013	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
AGE AT YEAR 2009	18 - 24	2,762	100.0	247	8.9	83	3.0	11	0.4	
	25 - 34	9,666	100.0	1,050	10.9	307	3.2	42	0.4	
	35 - 44	19,668	100.0	2,513	12.8	690	3.5	90	0.5	
	45 - 54	25,649	100.0	3,419	13.3	1,059	4.1	157	0.6	
	55 - 64	18,245	100.0	2,627	14.4	847	4.6	127	0.7	
SEX	Male	44,662	100.0	5,848	13.1	1,697	3.8	225	0.5	
	Female	31,328	100.0	4,008	12.8	1,289	4.1	202	0.6	
RACE	White	56,274	100.0	7,551	13.4	2,306	4.1	340	0.6	
	Black	6,878	100.0	849	12.3	262	3.8	41	0.6	
	Hispanic	6,686	100.0	671	10.0	190	2.8	19	0.3	
	Asian	2,026	100.0	230	11.4	57	2.8	7	0.3	
	Unknown	4,126	100.0	555	13.5	171	4.1	20	0.5	
REGION	Northeast	7,318	100.0	923	12.6	263	3.6	34	0.5	
	Midwest	16,827	100.0	2,307	13.7	660	3.9	99	0.6	
	South	42,691	100.0	5,624	13.2	1,770	4.1	259	0.6	
	West	9,154	100.0	1,002	10.9	293	3.2	35	0.4	
TOTAL		75,990	100.0	9,856	13.0	2,986	3.9	427	0.6	

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2009-2013 Enrollees are ages 18 to 64 with continuous enrollment in commercial health plan from January 2009 through December 2013. Imaging procedures for kidney stone evaluation included plain film/kidney, ureter, bladder X-ray, intravenous pyelography, ultrasound, computed tomography, and magnetic resonance imaging. All percentages are rounded to one decimal place.

# Table O.7.3b: Number of plain film/KUB procedures among privately insured kidney stone patients from Jan 2009 through Dec 2013 (by age, gender, race, & region)

Number of plain film/KUB procedures among privately insured kidney stone patients from Jan 2009		All kidney stone patients		Kidney stone patients with 0 plain film/KUB procedure				Kidney stone patients with 2 plain film/KUB procedures		Kidney stone patients with 3-4 plain film/KUB procedures		Kidney stone patients with 5+ plain film/KUB procedures	
through Dec 2	2013	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AGE AT YEAR	<b>20</b> 18 - 24	2,762	100.0	1,965	71.1	418	15.1	180	6.5	137	5.0	62	2.2
	25 - 34	9,666	100.0	6,500	67.2	1,551	16.0	679	7.0	581	6.0	355	3.7
	35 - 44	19,668	100.0	12,587	64.0	3,217	16.4	1,592	8.1	1,403	7.1	869	4.4
	45 - 54	25,649	100.0	15,889	61.9	4,186	16.3	2,176	8.5	1,990	7.8	1,408	5.5
	55 - 64	18,245	100.0	10,813	59.3	2,960	16.2	1,605	8.8	1,667	9.1	1,200	6.6
SEX	Male	44,662	100.0	27,963	62.6	7,304	16.4	3,691	8.3	3,468	7.8	2,236	5.0
	Female	31,328	100.0	19,791	63.2	5,028	16.0	2,541	8.1	2,310	7.4	1,658	5.3
RACE	White	56,274	100.0	34,495	61.3	9,268	16.5	4,822	8.6	4,570	8.1	3,119	5.5
	Black	6,878	100.0	4,414	64.2	1,132	16.5	512	7.4	491	7.1	329	4.8
	Hispanic	6,686	100.0	4,846	72.5	958	14.3	405	6.1	305	4.6	172	2.6
	Asian	2,026	100.0	1,384	68.3	315	15.5	142	7.0	124	6.1	61	3.0
	Unknown	4,126	100.0	2,615	63.4	659	16.0	351	8.5	288	7.0	213	5.2
REGION	Northeast	7,318	100.0	5,101	69.7	1,079	14.7	500	6.8	376	5.1	262	3.6
	Midwest	16,827	100.0	10,211	60.7	2,690	16.0	1,551	9.2	1,399	8.3	976	5.8
	South	42,691	100.0	26,290	61.6	7,173	16.8	3,506	8.2	3,418	8.0	2,304	5.4
	West	9,154	100.0	6,152	67.2	1,390	15.2	675	7.4	585	6.4	352	3.8
TOTAL		75,990	100.0	47,754	62.8	12,332	16.2	6,232	8.2	5,778	7.6	3,894	5.1

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2009-2013 Enrollees are ages 18 to 64 with continuous enrollment in commercial health plan from January 2009 through December 2013. KUB, Kidney, Ureter, Bladder X-ray All percentages are rounded to one decimal place.

Table O.7.3c: Number of ultrasound procedures among privately insured kidney stone patients from Jan 2009 through Dec 2013 (by age, gender, race, & region)

Number of ultrasound procedures among privately insured kidney stone patients from Jan 2009		All kidney stone patients		0 ultrasound procedure		Kidney stone patients with 1 ultrasound procedure				Kidney stone patients with 3-4 ultrasound procedures			
through Dec 2013		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AGE AT YEAR 2009	18 - 24	2,762	100.0	2,407	87.1	233	8.4	68	2.5	41	1.5	13	0.5
	25 - 34	9,666	100.0	8,291	85.8	911	9.4	258	2.7	145	1.5	61	0.6
	35 - 44	19,668	100.0	16,912	86.0	1,737	8.8	535	2.7	329	1.7	155	0.8
	45 - 54	25,649	100.0	21,758	84.8	2,456	9.6	710	2.8	480	1.9	245	1.0
	55 - 64	18,245	100.0	15,414	84.5	1,702	9.3	563	3.1	365	2.0	201	1.1
SEX	Male	44,662	100.0	38,457	86.1	3,827	8.6	1,185	2.7	782	1.8	411	0.9
	Female	31,328	100.0	26,325	84.0	3,212	10.3	949	3.0	578	1.8	264	0.8
RACE	White	56,274	100.0	48,409	86.0	4,954	8.8	1,539	2.7	893	1.6	479	0.9
	Black	6,878	100.0	5,848	85.0	616	9.0	188	2.7	162	2.4	64	0.9
	Hispanic	6,686	100.0	5,418	81.0	811	12.1	232	3.5	154	2.3	71	1.1
	Asian	2,026	100.0	1,628	80.4	250	12.3	68	3.4	55	2.7	25	1.2
	Unknown	4,126	100.0	3,479	84.3	408	9.9	107	2.6	96	2.3	36	0.9
REGION	Northeast	7,318	100.0	5,200	71.1	1,132	15.5	439	6.0	347	4.7	200	2.7
	Midwest	16,827	100.0	15,441	91.8	1,005	6.0	258	1.5	95	0.6	28	0.2
	South	42,691	100.0	36,067	84.5	4,143	9.7	1,264	3.0	816	1.9	401	0.9
	West	9,154	100.0	8,074	88.2	759	8.3	173	1.9	102	1.1	46	0.5
TOTAL		75,990	100.0	64,782	85.3	7,039	9.3	2,134	2.8	1,360	1.8	675	0.9

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2009-2013 Enrollees are ages 18 to 64 with continuous enrollment in commercial health plan from January 2009 through December 2013. All percentages are rounded to one decimal place.

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Table O.7.3d: Number of CT procedures among privately insured kidney stone patients from Jan 2009 through Dec 2013 (by age, gender, race, & region)

Number of CT procedures among privately insured kidney stone patients from Jan 2009 through Dec		All kidney stone patients		Kidney stone patients with 0 CT procedure		Kidney stone patients with H 1 CT procedure		Kidney stone patients with 2 CT procedures		Kidney stone patients with 3-4 CT procedures		Kidney stone patients with 5+ CT procedures	
2013		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AGE AT YEAR 2009	18 - 24	2,762	100.0	1,172	42.4	756	27.4	483	17.5	225	8.1	126	4.6
	25 - 34	9,666	100.0	4,076	42.2	2,507	25.9	1,803	18.7	850	8.8	430	4.4
	35 - 44	19,668	100.0	8,295	42.2	5,002	25.4	3,680	18.7	1,745	8.9	946	4.8
	45 - 54	25,649	100.0	11,184	43.6	6,392	24.9	4,417	17.2	2,353	9.2	1,303	5.1
	55 - 64	18,245	100.0	8,301	45.5	4,145	22.7	3,212	17.6	1,652	9.1	935	5.1
SEX	Male	44,662	100.0	18,756	42.0	11,409	25.5	8,357	18.7	4,021	9.0	2,119	4.7
	Female	31,328	100.0	14,272	45.6	7,393	23.6	5,238	16.7	2,804	9.0	1,621	5.2
RACE	White	56,274	100.0	23,894	42.5	14,083	25.0	10,249	18.2	5,163	9.2	2,885	5.1
	Black	6,878	100.0	3,128	45.5	1,672	24.3	1,173	17.1	609	8.9	296	4.3
	Hispanic	6,686	100.0	3,192	47.7	1,598	23.9	1,120	16.8	511	7.6	265	4.0
	Asian	2,026	100.0	1,033	51.0	466	23.0	308	15.2	137	6.8	82	4.0
	Unknown	4,126	100.0	1,781	43.2	983	23.8	745	18.1	405	9.8	212	5.1
REGION	Northeast	7,318	100.0	3,841	52.5	1,643	22.5	1,015	13.9	537	7.3	282	3.9
	Midwest	16,827	100.0	6,350	37.7	4,218	25.1	3,525	20.9	1,784	10.6	950	5.6
	South	42,691	100.0	18,726	43.9	10,587	24.8	7,474	17.5	3,775	8.8	2,129	5.0
	West	9,154	100.0	4,111	44.9	2,354	25.7	1,581	17.3	729	8.0	379	4.1
TOTAL		75,990	100.0	33,028	43.5	18,802	24.7	13,595	17.9	6,825	9.0	3,740	4.9

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2009-2013 Enrollees are ages 18 to 64 with continuous enrollment in commercial health plan from January 2009 through December 2013. CT, computed tomography All percentages are rounded to one decimal place.

Table O.7.4: Number of kidney stone emergency room visits among privately insured kidney stone patients from Jan 2009 through Dec 2013 (by age, gender, race, & region)

Number of kidney stone emergency room visits among privately insured kidney stone		All kidney stone patients		Kidney stone p 0 emergency		Kidney stone 1 emergency		Kidney stone patients with 2 emergency room visits		Kidney stone patients with 3+ emergency room visits	
patients from Jan 200	9 through Dec 2013	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AGE AT YEAR 2009	18 - 24	2,762	100.0	999	36.2	1,343	48.6	290	10.5	130	4.7
	25 - 34	9,666	100.0	4,199	43.4	4,298	44.5	809	8.4	360	3.7
	35 - 44	19,668	100.0	9,501	48.3	8,045	40.9	1,540	7.8	582	3.0
	45 - 54	25,649	100.0	13,862	54.0	9,411	36.7	1,786	7.0	590	2.3
	55 - 64	18,245	100.0	10,932	59.9	5,873	32.2	1,114	6.1	326	1.8
SEX	Male	44,662	100.0	21,903	49.0	17,946	40.2	3,580	8.0	1,233	2.8
	Female	31,328	100.0	17,590	56.1	11,024	35.2	1,959	6.3	755	2.4
RACE	White	56,274	100.0	28,874	51.3	21,650	38.5	4,215	7.5	1,535	2.7
	Black	6,878	100.0	3,633	52.8	2,619	38.1	468	6.8	158	2.3
	Hispanic	6,686	100.0	3,543	53.0	2,516	37.6	470	7.0	157	2.3
	Asian	2,026	100.0	1,223	60.4	689	34.0	91	4.5	23	1.1
	Unknown	4,126	100.0	2,220	53.8	1,496	36.3	295	7.1	115	2.8
REGION	Northeast	7,318	100.0	4,480	61.2	2,294	31.3	408	5.6	136	1.9
	Midwest	16,827	100.0	7,654	45.5	7,073	42.0	1,510	9.0	590	3.5
	South	42,691	100.0	22,557	52.8	16,099	37.7	2,965	6.9	1,070	2.5
	West	9,154	100.0	4,802	52.5	3,504	38.3	656	7.2	192	2.1
TOTAL		75,990	100.0	39,493	52.0	28,970	38.1	5,539	7.3	1,988	2.6

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2009-2013 Enrollees are ages 18 to 64 with continuous enrollment in commercial health plan from January 2009 through December 2013. All percentages are rounded to one decimal place.

Table O.7.5: Number of kidney stone surgical episodes among privately insured kidney stone patients from Jan 2009 through Dec 2013 (by age, gender, race, & region)

Number of kidney stone surgical episodes among privately insured kidney		All kidney stone patients		Kidney stone patients with 0 surgery		Kidney stone 1 surg		Kidney stone patients with 2 surgeries		Kidney stone patients with 3+ surgeries	
stone patients from J	an 2009 Dec 2013	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AGE AT YEAR 2009	18 - 24	2,762	100.0	2,157	78.1	397	14.4	147	5.3	61	2.2
	25 - 34	9,666	100.0	7,297	75.5	1,555	16.1	530	5.5	284	2.9
	35 - 44	19,668	100.0	14,332	72.9	3,396	17.3	1,249	6.4	691	3.5
	45 - 54	25,649	100.0	17,874	69.7	4,736	18.5	1,918	7.5	1,121	4.4
	55 - 64	18,245	100.0	12,427	68.1	3,413	18.7	1,465	8.0	940	5.2
SEX	Male	44,662	100.0	32,096	71.9	7,782	17.4	3,074	6.9	1,710	3.8
	Female	31,328	100.0	21,991	70.2	5,715	18.2	2,235	7.1	1,387	4.4
RACE	White	56,274	100.0	39,387	70.0	10,448	18.6	4,072	7.2	2,367	4.2
	Black	6,878	100.0	4,917	71.5	1,118	16.3	504	7.3	339	4.9
	Hispanic	6,686	100.0	5,262	78.7	887	13.3	363	5.4	174	2.6
	Asian	2,026	100.0	1,542	76.1	341	16.8	82	4.0	61	3.0
	Unknown	4,126	100.0	2,979	72.2	703	17.0	288	7.0	156	3.8
REGION	Northeast	7,318	100.0	5,446	74.4	1,105	15.1	463	6.3	304	4.2
	Midwest	16,827	100.0	11,416	67.8	3,281	19.5	1,373	8.2	757	4.5
	South	42,691	100.0	30,482	71.4	7,474	17.5	2,942	6.9	1,793	4.2
	West	9,154	100.0	6,743	73.7	1,637	17.9	531	5.8	243	2.7
TOTAL		75,990	100.0	54,087	71.2	13,497	17.8	5,309	7.0	3,097	4.1

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2009-2013 Enrollees are ages 18 to 64 with continuous enrollment in commercial health plan from January 2009 through December 2013. Surgical procedures for kidney stones included open stone surgery, laparoscopic removal procedure, percutaneous nephrolithotomy, ureteroscopy, and extracorporeal shock wave lithotripsy. All percentages are rounded to one decimal place.

Table 0.7.6: Number and percent of re-surgeries within 120 days after a kidney stone surgical episode among privately insured kidney stone patients (by surgery type)

Initial surgery type	Number of surgeries	Number of surgeries with re-surgery*	Percent of re-surgeries*
ESWL	14,779	3,906	26.4
Ureteroscopy	20,579	6,585	32.0
PCNL	1,067	454	42.5
Open/Laparoscopy	220	85	38.6
Any	36,645	11,030	30.1

\* A re-surgery was defined by another surgical procedure performed from 1 day to 119 days after an initial surgical procedure.

Data source: De-identified Optum Clinformatics® Data Mart, 2009-2013

Enrollees are ages 18 to 64 with continuous enrollment in commercial health plan from January 2009 through December 2013.

Only surgeries during the period January 1, 2009, to August 31, 2013 are included. One patient may have multiple episodes of initial surgery that is tracked for re-surgery. ESWL, extracorporeal shock wave lithotripsy; PCNL, percutaneous nephrolithotomy

All percentages are rounded to one decimal place.

Table 0.7.7: Distribution of re-surgery type within 120 days after a kidney stone surgical episode among privately insured kidney stone patients (by surgery type)

Initial surgery type	Re-surgery* type	Number of surgeries	Percent of surgeries
ESWL	ESWL	1,954	50.0
	Ureteroscopy	1,845	47.2
	PCNL	87	2.2
	Open/Laparoscopy	20	0.5
	Total	3,906	100.0
Ureteroscopy	ESWL	2,795	42.4
	Ureteroscopy	3,530	53.6
	PCNL	215	3.3
	Open/Laparoscopy	45	0.7
	Total	6,585	100.0
PCNL	ESWL	82	18.1
	Ureteroscopy	227	50.0
	PCNL	134	29.5
	Open/Laparoscopy	11	2.4
	Total	454	100.0
Open/Laparoscopy	ESWL	7	8.2
	Ureteroscopy	43	50.6
	PCNL	26	30.6
	Open/Laparoscopy	9	10.6
	Total	85	100.0

\* A re-surgery was defined by another surgical procedure performed from 1 day to 119 days after an initial surgical procedure.

Table 0.7.8: Number and percent of privately insured kidney stone patients with re-surgery within 120 days after a kidney stone surgical episode (by age, gender, race, & region)

Number and percent of privately insured kidney stone patients with re-surgery within 120 days after a kidney stone surgical episode		Number of kidney stone patients with surgery during the period January 1, 2009, to August 31, 2013	Number of kidney stone patients with re-surgery*	Percent of kidney stone patients with re-surgery*
AGE AT YEAR 2009	18 - 24		164	29.1
	25 - 34	2,213	621	28.1
	35 - 44	4,999	1,521	30.4
	45 - 54	7,207	2,377	33.0
	55 - 64	5,467	1,930	35.3
SEX	Male		3,782	32.3
	Female	8,738	2,831	32.4
RACE	White		5,056	32.1
	Black	1,820	662	36.4
	Hispanic	1,327	435	32.8
	Asian	453	125	27.6
	Unknown	1,074	335	31.2
REGION	Northeast		610	34.9
	Midwest	5,056	1,708	33.8
	South	11,393	3,696	32.4
	West	2,250	599	26.6
TOTAL		20,449	6,613	32.3

\* A re-surgery was defined by another surgical procedure performed from 1 day to 119 days after an initial surgical procedure.

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2009-2013 Enrollees are ages 18 to 64 with continuous enrollment in commercial health plan from January 2009 through December 2013. Only patients with surgery during the period January 1, 2009, to August 31, 2013 are included.

One patient may have multiple episodes of initial surgery that is tracked for re-surgery.

All percentages are rounded to one decimal place.

Table 0.7.9: Number and percent of kidney stone surgical episodes with a prescription of alkalinization agents one week before or up to one month after surgical episode among privately insured kidney stone patients (by surgery type)

Number and percent of kidney stone surgical episodes with a prescription of alkalinization agents one week before or up to one month after a surgical episode among privately insured kidney stone patients	Number of surgeries	Number of surgeries with prescription	0
ESWL	15,628	807	5.2
Ureteroscopy	21,791	1,053	4.8
PCNL	1,133	77	6.8
Open/Laparoscopy	235	17	7.2
Any	38,787	1,954	5.0

Table 0.7.10: Number and percent of kidney stone surgical episodes with a prescription of opiate agonists one week before or up to one month after a surgical episode among privately insured kidney stone patients (by surgery type)

Number and percent of kidney stone surgical episodes with a prescription of opiate agonists one week before or up to one month after surgical episode among privately insured kidney stone patients	Number of surgeries	Number of surgeries with prescription	Percent of surgeries with prescription
ESWL	15,628	12,142	77.7
Ureteroscopy	21,791	18,165	83.4
PCNL	1,133	950	83.8
Open/Laparoscopy	235	179	76.2
Any	38,787	31,436	81.0

Table 0.7.11: Number and percent of kidney stone surgical episodes with a prescription of alpha blockers one week before or up to one month after a surgical episode among privately insured kidney stone patients (by surgery type)

Number and percent of kidney stone surgical episodes with a prescription of alpha blockers one week before or up to one month after a surgical episode among privately insured kidney stone patients	Number of surgeries	Number of surgeries with prescription	U
ESWL	15,628	4,509	28.9
Ureteroscopy	21,791	6,896	31.6
PCNL	1,133	171	15.1
Open/Laparoscopy	235	25	10.6
Any	38,787	11,601	29.9

Table 0.7.12: Number and percent of kidney stone surgical episodes with a prescription of calcium channel blockers one week before or up to one month after a surgical episode among privately insured kidney stone patients (by surgery type)

Number and percent of kidney stone surgical episodes with a prescription of calcium channel blockers one week before or up to one month after a surgical episode among privately insured kidney stone patients	Number of surgeries	Number of surgeries with prescription	0
ESWL	15,628	1,366	8.7
Ureteroscopy	21,791	1,991	9.1
PCNL	1,133	142	12.5
Open/Laparoscopy	235	25	10.6
Any	38,787	3,524	9.1

Table 0.7.13: Number and percent of privately insured kidney stone patients who filled a prescription of alkalinization agents one week before or up to one month after a surgical episode (by age, gender, race, & region)

Number and percent of privately insured kidney stone patients who filled a prescription of alkalinization agents one week before or up to one month after a surgical episode		Number of kidney stone patients	Number of kidney stone patients with prescription	Percent of kidney stone patients with prescription
AGE AT YEAR 2009	18 - 24	590	27	4.6
	25 - 34	2,331	78	3.3
	35 - 44	5,256	215	4.1
	45 - 54	7,621	388	5.1
	55 - 64	5,715	326	5.7
SEX	Male	12,338	625	5.1
	Female	9,175	409	4.5
RACE	White	16,585	789	4.8
	Black	1,923	92	4.8
	Hispanic	1,401	61	4.4
	Asian	479	31	6.5
	Unknown	1,125	61	5.4
REGION	Northeast	1,837	110	6.0
	Midwest	5,310	212	4.0
	South	11,993	580	4.8
	West	2,373	132	5.6
TOTAL		21,513	1,034	4.8

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2009-2013 Enrollees are ages 18 to 64 with continuous enrollment in commercial health plan from January 2009 through December 2013. Only patients with surgery during the period January 7, 2009, to November 30, 2013 are included. One patient may have multiple episodes of surgeries; the medication may not be prescribed for all episodes in patients with prescription.

Table 0.7.14: Number and percent of privately insured kidney stone patients who filled a prescription of opiate agonists one week before or up to one month after a surgical episode (by age, gender, race, & region)

Number and percent of privately insured kidney stone patients who filled a prescription of opiate agonists one week before or up to one month after a surgical episode		Number of kidney stone patients	Number of kidney stone patients with prescription	Percent of kidney stone patients with prescription
AGE AT YEAR 2009	18 - 24	590	504	85.4
	25 - 34	2,331	2,080	89.2
	35 - 44	5,256	4,617	87.8
	45 - 54	7,621	6,537	85.8
	55 - 64	5,715	4,753	83.2
SEX	Male	12,338	10,637	86.2
	Female	9,175	7,854	85.6
RACE	White	16,585	14,318	86.3
	Black	1,923	1,651	85.9
	Hispanic	1,401	1,174	83.8
	Asian	479	379	79.1
	Unknown	1,125	969	86.1
REGION	Northeast	1,837	1,488	81.0
	Midwest	5,310	4,572	86.1
	South	11,993	10,415	86.8
	West	2,373	2,016	85.0
TOTAL		21,513	18,491	86.0

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2009-2013 Enrollees are ages 18 to 64 with continuous enrollment in commercial health plan from January 2009 through December 2013.

Only patients with surgery during the period January 7, 2009, to November 30, 2013 are included. One patient may have multiple episodes of surgeries; the medication may not be prescribed for all episodes in patients with prescription.

Table 0.7.15: Number and percent of privately insured kidney stone patients who filled a prescription of alpha blockers one week before or up to one month after a surgical episode (by age, gender, race, & region)

Number and percent of privately insured kidney stone patients who filled a prescription of alpha blockers one week before or up to one month after a surgical episode		Number of kidney stone patients	Number of kidney stone patients with prescription	Percent of kidney stone patients with prescription
AGE AT YEAR 2009	18 - 24	590	214	36.3
	25 - 34	2,331	789	33.8
	35 - 44	5,256	1,938	36.9
	45 - 54	7,621	2,799	36.7
	55 - 64	5,715	2,129	37.3
SEX	Male	12,338	5,343	43.3
	Female	9,175	2,526	27.5
RACE	White	16,585	6,122	36.9
	Black	1,923	654	34.0
	Hispanic	1,401	507	36.2
	Asian	479	159	33.2
	Unknown	1,125	427	38.0
REGION	Northeast	1,837	653	35.5
	Midwest	5,310	1,964	37.0
	South	11,993	4,302	35.9
	West	2,373	950	40.0
TOTAL		21,513	7,869	36.6

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2009-2013 Enrollees are ages 18 to 64 with continuous enrollment in commercial health plan from January 2009 through December 2013. Only patients with surgery during the period January 7, 2009, to November 30, 2013 are included. One patient may have multiple episodes of surgeries; the medication may not be prescribed for all episodes in patients with prescription. All percentages are rounded to one decimal place.

Table 0.7.16: Number and percent of privately insured kidney stone patients who filled a prescription of calcium channel blockers one week before or up to one month after a surgical episode (by age, gender, race, & region)

Number and percent of privately insured kidney stone patients who filled a prescription of calcium channel blockers one week before or up to one month after a surgical episode		Number of kidney stone patients	Number of kidney stone patients with prescription	Percent of kidney stone patients with prescription
AGE AT YEAR 2009	18 - 24	590	3	0.5
	25 - 34	2,331	46	2.0
	35 - 44	5,256	250	4.8
	45 - 54	7,621	744	9.8
	55 - 64	5,715	824	14.4
SEX	Male	12,338	1,228	10.0
	Female	9,175	639	7.0
RACE	White	16,585	1,396	8.4
	Black	1,923	252	13.1
	Hispanic	1,401	90	6.4
	Asian	479	41	8.6
	Unknown	1,125	88	7.8
REGION	Northeast	1,837	144	7.8
	Midwest	5,310	408	7.7
	South	11,993	1,166	9.7
	West	2,373	149	6.3
TOTAL		21,513	1,867	8.7

Data source: De-identified Optum Clinformatics<sup>®</sup> Data Mart, 2009-2013 Enrollees are ages 18 to 64 with continuous enrollment in commercial health plan from January 2009 through December 2013. Only patients with surgery during the period January 7, 2009, to November 30, 2013 are included. One patient may have multiple episodes of surgeries; the medication may not be prescribed for all episodes in patients with prescription. All percentages are rounded to one decimal place.