

HRR Level Demographic, Cost, Utilization, and Quality Data
Methods
Data Source: CMS Chronic Conditions Warehouse (see http://ccwdata.org/index.php) which contains 100 percent of Medicare claims for beneficiaries who are enrolled in the fee-for-service (FFS) program as well as enrollment and eligibility data.
Year: 2007-2010
Geographic Variables: Hospital Referral Region (HRRs) which were developed by the Dartmouth Atlas of Health Care to delineate regional health care markets in the United States (http://www.dartmouthatlas.org/).
Population: Medicare FFS beneficiaries age 65 and older who were enrolled in Parts A and B for the entire year or who were enrolled in Parts A and B until their death date.
<p>Display of Risk Scores: The table gives the average Hierarchical Condition Category (HCC) risk score for the beneficiaries in each region, and displays the risk score in two different ways.</p> <ol style="list-style-type: none"> 1. The column "Average HCC Score" shows a region's actual average risk score for the beneficiaries in the study population. The national average risk score is 1.15 for 2010 (which is higher than the average risk score for the entire Medicare population). 2. The column "Average HCC Score Expressed as a Ratio to the National Average" is included to make relative comparisons between geographic regions more straightforward. We calculated these figures by dividing the actual average risk for a region by the national average risk score, which is 1.15 for the study population in 2010. For example, if a region has an average HCC score of 1.21, the region's average HCC score expressed as a ratio to the national average would be 1.05. The resulting figures express risk scores relative to a national average of 1.0. Regions with figures greater than 1.0 have above-average risk, while regions with figures below 1.0 have below-average risk.
Utilization Measures: We present three different types of utilization measures for certain major types of Medicare covered services: the number of times beneficiaries used a particular service, the number of beneficiaries who used a particular service, and the percentage of beneficiaries who used a particular service.
Readmission Measures: We present two readmission measures: number of readmissions and a readmission rate. Readmissions are defined as admissions that occur within 30 days of the initial discharge and the readmission rates presented are not risk-adjusted.
Emergency Department (ED) Visit Measures: We present two measures of ED utilization: a total count of ED visits and ED visits per 1000 beneficiaries. ED visits include both visits to the ED that result in an admission and visits that do not result in an admission.
Hospital Compare: We present CMS Hospital Compare measures which were developed by CMS and use data from hospitals and Medicare claims to measure processes and outcomes for hospital care for heart attack, heart failure, pneumonia, and surgical care.
Prevention Quality Indicators (PQI): We present AHRQ PQIs which measure hospital admission rates for ambulatory care sensitive conditions. We limited our analyses to measures that were applicable to the Medicare aged population and measures where the sample size was large enough for analyses at the HRR or state level.