Technical/background considerations on data used in ED study

UT Houston School of Public Health

Data

The ED algorithm is designed to focus on visits where a person is discharged to home or self care. The report on 2006 ED visits at 25 hospitals focus on 709,496 visits to the Harris County area where a person is discharged to home or self care. “Harris County area” in this case represents ZIP codes completely within Harris County, as well as some ZIP codes that border along Montgomery, Liberty, and Chambers Counties. These 709,496 visits are representative of the ED visits in the area as follows:

90.95% of the non hospitalized visits to these 25 hospitals by residents of the entire eight county area (780,076).

85.29% of the total visits to these 25 hospitals (admitted and non admitted) by residents of the Harris County area (831,860).

71.53% of the total ED visits to these 25 hospitals (admitted and non admitted) by residents of the eight county area (991,861).

Not every hospital in Harris County or that serves Harris County residents has participated in the 2006 analyses.

Payer codes and classification

While ICD-9 codes and race/ethnicity codes are standard across hospitals, codes that relate to payer source and financial class are varied. Classifications such as “charity care” and “self pay” were categorized as “uninsured.” Reclassification of other payer codes was necessary to group payers under the remaining categories. This was done based on experience with local sources of public and private coverage. However, there is a limited possibility of some misclassification. For example, some cases of Medicaid patients may potentially have been misclassified as private or commercial insurance. Every effort was made to keep this to a minimum. For the most part, SCHIP patients were classified as Medicaid.
New ZIP codes

The Harris County area has shown extensive population growth. This has led to the creation of new ZIP codes in the Tomball and Cleveland areas. These new ZIP codes are reflected in the 2006 aggregate and individual hospital reports. However, their inclusion must be considered when comparing old and new maps.

Census data and population estimates

From 2002 to 2004, the ED reports used actual data from the 2000 US Census. In order to reflect recent population growth, current population estimates were used starting in 2005. The estimates were provided by Environmental Systems Research Institute, Inc., or ESRI. ESRI is the company that produces ArcGIS, the software used to generate maps for the reports. ESRI provides the estimates to owners of its software. Their estimates begin with Census data, but are adjusted based on a variety of other sources (e.g. business growth, residential utility hookups, etc.). These estimates of 2005 population cannot be broken down according to race, age, or gender. While the 2005 population estimates are more current than the 2000 US Census, the rapid growth of the Houston area limits their accuracy. For further information on the population estimates, please see http://www.esri.com/library/whitepapers/pdfs/evaluating-population.pdf

Patrick Courtney

UT School of Public Health

April 2008