Health Care Delivery Customers by Market Segment: Summary of Findings

Click here for a bibliography of this project

Introduction

The Health Care Delivery Policy Program at Harvard University’s John F. Kennedy School of Government’s Mossavar-Rahmani Center for Business & Government tracks the users (customers) of health care delivery products. Sources include articles from newspapers, magazines, journals, government agencies (National Center for Health Statistics, Centers for Medicare & Medicaid Services, etc.), non-profit organizations, foundations and consultants (Families USA, Volunteers in Health Care, Henry J. Kaiser Family Foundation, etc.), and original articles and presentations by the Health Care Delivery Policy Program.

This project segments the United States health care marketplace (children, employed, unemployed, retirees, etc.) in terms of how many people receive payment for medical care through various products:

- Medicare/Medicaid/Other governmental (TRICARE, CHAMPVA, SCHIP, etc.)
- Military insurance
- Private insurance
- Employer provided (Union Trust, COBRA, etc.)
- Individually purchased insurance (not purchased through an employer or group)
- Uninsured

Data Sources

Statistics on types of health insurance individuals and families have is obtained through surveys and interviews and enrollment records of issuing bodies. No individual or organization currently oversees the collecting or reporting of this data at a national level and there is no standardized methodology for tracking this data for the US population.

Major data collection surveys and organizations include, but are not limited to:

- **Bureau of the Census** - The US Census is conducted on a decennial basis (every ten years); the most recent Census took place in 2000. The Census itself does not ask questions about health insurance status, but about 213,000 people receive an Annual Social and Economic Supplement (ASEC). ASEC participants are asked about their “health insurance plan type” and are given a choice of: no insurance, Medicare, Medicaid, TRICARE/CHAMPVA, VA health care, Military health care, SCHIP, Indian Health Service, other government health care, employer/union provided, privately purchased, plan of someone outside the household, or other.

- **Centers for Medicare & Medicaid Services (CMS)** – Medicare enrollment figures are based on estimates prepared by a federally selected panel for the Medicare Board of Trustees to submit to Congress. The Medicare Enrollment Database (ED) collects enrollment data from states. The Medicaid Statistical Information System (MSIS) reports data for each year about Medicaid enrollees and recipients of Medicaid services. Medicaid data are collected on a quarterly basis from states through MSIS and CMS-64 fund reports.

- **Medical Expenditure Panel Survey (MEPS)** – MEPS is conducted annually by the Agency for Healthcare Research and Quality (AHRQ), National Center for Health Statistics (NCHS), Westat (a survey research firm) and the National Opinion Research Center (affiliated with the University of Chicago). The MEPS is drawn from a nationally representative subsample of households that participated in the prior year’s National Health Interview Survey (NHIS). 32,320 individuals participated in the MEPS in 2005. The MEPS asks about coverage under Medicare, Medicaid, TRICARE/CHAMPVA, other government programs, private insurance, employer-sponsored coverage and directly purchased insurance. Information is collected on the length of a person’s uninsured spell.
National Health Interview Survey (NHIS) - The NHIS is conducted annually by the National Center for Health Statistics (NCHS). About 106,000 individuals are interviewed. Questions are asked about whom in the family is covered and the type of coverage (private, Medicare, Medicaid, Military/CHAMPVA/TRICARE, Indian Health Service, state-sponsored or government plan). Other information collected from respondents includes the source of coverage (i.e., the workplace or direct purchase). Information is also collected on noncovered household members on the length of time without coverage as well as the reasons that coverage stopped.

Social Security Administration – The Social Security Administration’s Office of the Actuary collects data on a monthly basis on Social Security beneficiaries, including retirees and disabled workers. Individuals are considered permanently insured under Social Security if they were fully insured and lost their fully-insured status when they stopped working under covered employment.

Survey of Income and Program Participation (SIPP) - The Bureau of the Census’s SIPP surveys households by personal visit and telephone over a 2.5 to 4 year period. The current SIPP panel began in 2004 and is surveying 43,700 households. Only individuals over age 15 are interviewed. SIPP asks about lack of coverage and coverage under Medicare, Medicaid, SCHIP, TRICARE/CHAMPVA, Military/VA health care, other governmental coverage, current/former employer/union, privately purchased, plan of someone outside the household or other.

Available Data

Health insurance, by nature, is a complex topic that encompasses everything from doctor and hospital visits to medications to long-term care and more. Different plans have their own policies for what can and cannot be paid for, and there is currently no all-inclusive plan that provides payment for every conceivable type of health expense. Even when people own health insurance, certain medical expenses will undoubtedly not be covered by their insurer. For the purpose of the Customers by Market Segment project, data are collected on how many Americans receive any form of payment for medical care through various types of health insurance products, or are considered beneficiaries, members, enrolled, covered or insured by a health insurance product.

Another HCDP project, Covered Lives, addresses how many Americans are enrolled in various “brands” of governmental products (Medicare Advantage, Medicare Part B, etc.) and commercial health insurers such as Aetna, Blue Cross Blue Shield, etc. As new healthcare delivery products like health savings accounts, concierge care plans and health coverage tax credits are introduced, major surveys have incorporated questions about their utilization. We have included trends on enrollment, costs and interest levels for these newer specialty products in the Healthcare Options project. The Deconstructing the Costs project identifies annual national expenditures for selected products (Medicare, Medicaid, SCHIP, etc.).

Table 1. Reported Customers of Healthcare Products by Market Segment 2004-2007

<table>
<thead>
<tr>
<th>Year</th>
<th>Total US population **</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>294,148,337</td>
<td>297,822,329</td>
<td>300,883,741</td>
<td>303,143,120</td>
<td></td>
</tr>
<tr>
<td>No/Percent/Drop or Rise *</td>
<td>#</td>
<td>%</td>
<td>-/+</td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Medicare</td>
<td>40.5- 41.7</td>
<td>13.8% - 14.2%</td>
<td>-0.6 - +1.7</td>
<td>39.5- 41.4</td>
<td>13.7% - 14.2%</td>
</tr>
<tr>
<td>Medicaid</td>
<td>42.4-51</td>
<td>14.4% - 17.3%</td>
<td>-4.6 - +10</td>
<td>32.4-47</td>
<td>12.4% - 16%</td>
</tr>
<tr>
<td>Private Insurance</td>
<td>179.4</td>
<td>61% - 68.2%</td>
<td>-27.1 - +4.7</td>
<td>182-200</td>
<td>59.8% - 70.9%</td>
</tr>
<tr>
<td>Percent “insured” if based on above ranges ***</td>
<td>89.2% - 99.7%</td>
<td>85.9% - 100%</td>
<td></td>
<td>88% - 100%</td>
<td></td>
</tr>
<tr>
<td>Employer provided</td>
<td>179.4</td>
<td>59.8% - 61%</td>
<td>-9.9 - +48.4</td>
<td>62-182</td>
<td>45% - 65%</td>
</tr>
<tr>
<td>Uninsured</td>
<td>20-46</td>
<td>6.8% - 15.4%</td>
<td>-76 - +4</td>
<td>8.2-81.8</td>
<td>13.2% - 33%</td>
</tr>
</tbody>
</table>

*Numbers of customers are in millions.

** Total US population source: US Census Bureau Population Clock viewed on 12/31 of each year

*** This row displays sums of the percentages of reported individuals covered by Medicare, Medicaid and private insurance. The chart excludes other types of governmental coverage, which would add even more to the tally of reported people with access to insurance. It also does not account for individuals with dual coverage. This tally is included as a demonstration of problems with the validity of some reported data and does not necessarily reflect true numbers of individuals with access to health insurance.
Why are the Numbers so Different?

Table 1 displays wide ranges of data on health insurance coverage. The Customers by Market Segment bibliography includes abstracts and sources for the statistics used to construct the table. Some trends can be observed, but conclusions cannot realistically be drawn. If one adds the ranges of reported customers with access to health insurance (the gray bar), it seems that most, if not all, people in the United States had health insurance during 2004-2007, which simply does not correlate with reported numbers of the uninsured. The problem stems with the data itself.

We have found no cohesive or standardized approach to collecting or reporting data on health insurance status in the United States. There have been two major approaches: 1) Insurer Reporting of Enrollees (i.e., CMS counts the number of persons enrolled in Medicaid), and 2) surveys and estimates by various governmental and industry organizations and consultants. No one has taken the lead to standardize data collection or appointed a single individual or organization to oversee data collection efforts.

Why is collecting this type of data so difficult? The first quandary is whether to count all individuals eligible for a program or only those who have enrolled. For example:

- A study by the Urban Institute found that only 88% of those eligible for employer-sponsored health coverage purchased it and the Bureau of Labor Statistics stated that 71% of workers in private industry had access to employer-sponsored medical care plans, while 52% participated in medical care plans in 2006. These numbers could all be used to show the employer-based health care market, but which metrics better demonstrate how many people are insured through an employer?
- In 2006, 10.1% of employees and dependents became eligible for COBRA continuation of coverage, and 26.6% of those eligible actually took the health care coverage offered.

People may not even be aware that they or their families are covered by health insurance. When asked in the 2005-06 National Health and Nutrition Examination Survey, “Are you covered by health insurance or some other kind of health care plan?” twenty-six people answered, “Don’t Know”.

Point-in-time surveys may miss health insurance status information that changes throughout the course of the year. Someone who leaves a job with insurance coverage on a Friday to begin another job with insurance coverage on Monday could be counted as “uninsured” during that one weekend between jobs. The National Center for Policy Analysis found that, typically, those who lack insurance are uninsured for a short period of time; 75% of uninsured spells are over in one year or less.

How one looks at the length of time someone is uninsured could dramatically affect survey results and time periods have been arranged in many ways to illustrate all sorts of numbers. The Census Bureau sometimes combines estimates for multiple years “to improve precision”. For example, it was estimated that the 3-year average percentage of the American Indian and Alaska Native population without health insurance was 31.4% during 2004-2006.

Other difficulties arise from the complex nature of survey data itself. Reporters may miss or not understand key concepts. The Census Bureau states that errors are based on issues that include, “The interviewer records the wrong answer, the respondent provides incorrect information, the respondent estimates the requested information, an unclear survey question is misunderstood by the respondent, the respondent is unwilling to provide information, values are estimated imprecisely for missing data, forms may be lost, or data may be incorrectly keyed, coded, or recoded.”

Individuals may be covered by multiple sources, either concurrently or at different points throughout a year. People covered by Medicare are now required to purchase private supplemental prescription drug coverage. Hence, everyone covered by Medicare is now also covered by private insurance. Even before Medicare Part D prescription drug coverage was enacted, many Medicare beneficiaries also purchased private insurance (such as Medicare Advantage). People covered by governmental plans may also receive benefits through more than one federal source. Dual-eligibles for Medicare and Medicaid are now automatically enrolled in the new Medicare Extra Help program for Medicare Part D. Two-income families may also be covered by two distinct plans.

Nomenclature may also pose problems. The words “Medicare” and “Medicaid” sound similar, and it’s entirely possible for people being interviewed to confuse one program with the other. Survey participants may not understand the difference between private or individual (purchased directly by the policyholder without a third party payer) health insurance. A study sponsored by eHealthInsurance and the Kaiser Family Foundation found that 16.5 million people bought their own insurance in 2004, a far reach from the approximately 200 million Americans estimated as privately insured.

Survey designers and analysts concede that there are difficulties with obtaining accurate data on health insurance status. A senior editor at the New Republic stated, “among experts, a rough consensus exists that, at any one time, between 40 and 45 million people have no health insurance.” In 2007, the U.S. Census Bureau released a revised figure of 44.8 million uninsured for 2005, based on a more accurate methodology. Lessons learned from problems addressed in previous studies should aid in our ability to devise standardized methodologies for obtaining more accurate and useful statistics.
Customers by Income Level

Table 1 illustrates general numbers for customers by market segment for the entire US population. If we look at health insurance access by demographic or socioeconomic groups, the statistics are not consistent. Various surveys and analyses have examined health insurance status by gender, age, geographic area, ethnicity, level of education and income level, and have discovered that wide health disparities exist, especially for minorities and low-income individuals.

It is difficult to fully define poverty. US poverty thresholds are updated annually by the Census Bureau and take into account family size and elderly status. There are different poverty thresholds for Alaska and Hawaii. An official definition of poor is, “an individual’s or family’s income falling at or below the US poverty threshold” and low-income is, “persons in families with income over 125% through 200% of the poverty line”. However, “poor” and “low-income” may be used more subjectively in surveys and reports, and “near poor” can also be used. Although poverty thresholds are the same throughout the 48 continuous states, a family of four with an income of $30,000 may be considered low-income in one region and poor in another, due to cost and standard of living. Some of the surveys asking about income level start at less than $10,000, while others start at less than $20,000. In Table 2, we’ve grouped the income levels into ranges found in the literature and attempted to logically define the categories.

In comparing Tables 1 and 2, some trends are observed:
1. There seem to be a large percentage of poor to low-income individuals who are uninsured, as well as a high proportion of middle income to wealthy individuals with access to private insurance.
2. More people in the low-income range seem to be covered by Medicaid than those in the poor and near poor categories.
3. Table 1 estimates that about 60%-70% of all Americans are covered by private insurance. The only category that correlates with this trend in Table 2 is the high-income one.
4. If we add the columns in Table 2, the numbers are different than the totals for Table 1. For example, between 129.2-228.4 million people would be privately insured and between 23.4-67.7 million people would be uninsured if based on Table 2 (177-201 million privately insured and 8.2-81.8 million uninsured if based on Table 1).

While no meaningful comparisons can be drawn without data standardization, these observations could create starting points for policy discussion.

### Table 2. Customers by Income Level

<table>
<thead>
<tr>
<th>Income Level</th>
<th>Private</th>
<th>Medicare</th>
<th>Medicaid</th>
<th>Uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Number</td>
<td>Number</td>
<td>Number</td>
</tr>
<tr>
<td>Poor (Less than $10,000)</td>
<td>466k – 20 mil</td>
<td>216k – 3.9 mil</td>
<td>433 k - 14.3 mil</td>
<td>1.1 mil - 12 mil</td>
</tr>
<tr>
<td></td>
<td>1% - 8.2%</td>
<td>1% - 10%</td>
<td>1% - 15%</td>
<td>2% - 5%</td>
</tr>
<tr>
<td>Near Poor ($10,000-$25,000)</td>
<td>4.5 mil – 14.3 mil</td>
<td>4.9 mil – 8.5 mil</td>
<td>4.2 mil – 7.7 mil</td>
<td>3 mil – 17 mil</td>
</tr>
<tr>
<td></td>
<td>1% - 10%</td>
<td>12% - 22%</td>
<td>13% - 21%</td>
<td>7% - 17%</td>
</tr>
<tr>
<td>Low Income ($25,000-$35,000)</td>
<td>17.6 mil - 19.1 mil</td>
<td>6 mil</td>
<td>5.1 mil – 5.4 mil</td>
<td>6.9 mil – 7.2 mil</td>
</tr>
<tr>
<td></td>
<td>9% - 31.2%</td>
<td>12.7% - 16%</td>
<td>15% - 24.4%</td>
<td>16% - 41%</td>
</tr>
<tr>
<td>Middle Income ($35,000-$55,000)</td>
<td>30 mil - 45.8 mil</td>
<td>4.4 mil – 5.6 mil</td>
<td>3 mil – 5.4 mil</td>
<td>7.2 mil – 7.8 mil</td>
</tr>
<tr>
<td></td>
<td>12.1% - 67%</td>
<td>11% - 14%</td>
<td>4% - 15%</td>
<td>11.2% - 18%</td>
</tr>
<tr>
<td>High Income ($55,000-$75,000)</td>
<td>25.4 mil – 47.5 mil</td>
<td>4.4 mil – 4.6 mil</td>
<td>783k – 3.5 mil</td>
<td>2.4 mil – 7.8 mil</td>
</tr>
<tr>
<td></td>
<td>6.7% - 80.2%</td>
<td>9.6% - 12%</td>
<td>1.4% - 10%</td>
<td>5.2% - 17%</td>
</tr>
<tr>
<td>Wealthy ($75,000+)</td>
<td>51.3 mil – 81.7 mil</td>
<td>4.5 mil – 5.2 mil</td>
<td>554k – 2.5 mil</td>
<td>2.8 mil – 8.1 mil</td>
</tr>
<tr>
<td></td>
<td>39% - 41%</td>
<td>12% - 13%</td>
<td>7%</td>
<td>17% - 18%</td>
</tr>
</tbody>
</table>


Future Directions

Policymakers need to have a comprehensive illustration of the current marketplace, as well as historical trend data, to make informed decisions on how best to serve that market. There are many reports outlining problems with the present health care system accompanied by numerous proposals for reform, but the underlying studies lack a systematic approach to enumerating and understanding the various customer market segments. The Health Care Delivery Policy Program recommends that research be conducted to determine best practices for standardizing and coordinating how we collect and report data on health insurance status as a first step to better understanding the health insurance market.
Bibliography

Click here for an annotated bibliography of over 150 sources of data.

1. 2006 Health and Hospital Trends, Chicago, IL, American Hospital Association, 2006.
42. New Census Figures Show Number of Uninsured Increased in 2004, as Did Number Covered by Medicaid, Robert Wood Johnson Foundation/Covertheuninsuredweek.org. September 2, 2005.

Updated 1/1/08