7. High utilizers of healthcare

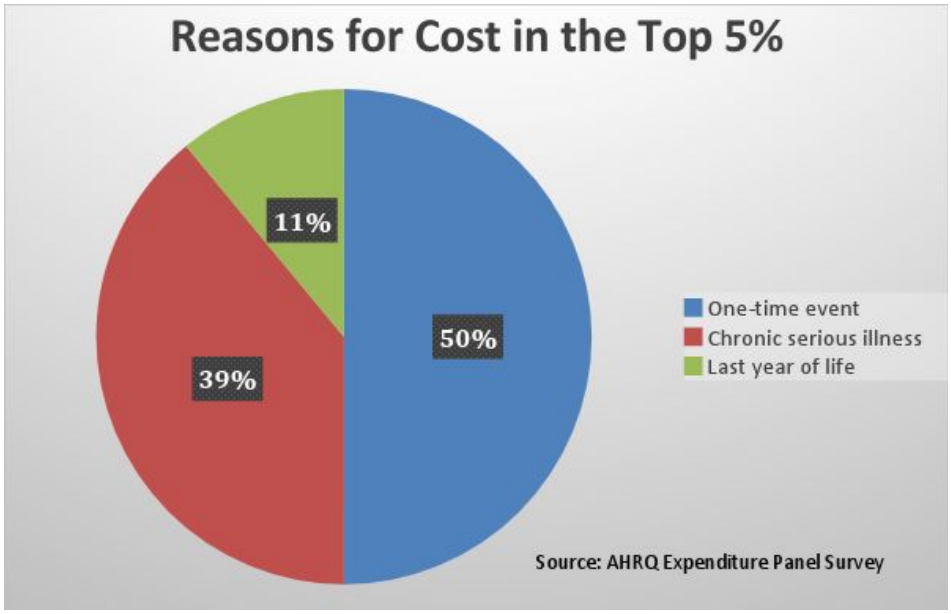
Health policy experts have long been aware that each year a small number of Americans account for a disproportionate share of healthcare costs. Might these patients represent an opportunity to focus effort and manage total costs?

Who are the high utilizers of healthcare?

AHRQ's 2015 study defined Superutilizers (SU) as either 1) privately insured patients with three or more hospital stays in 2012 or 2) patients covered by Medicare or Medicaid with four or more stays in 2012. The analysis found that:

- 1% of the U.S. population accounts for 22% of the nation's health care expenses
- 5% account for 50% of all expenses
- SU had an average all-cause 30-day readmission 4-8x times higher than the readmission rate for other patients. For patients under 65, SU accounted for more than 50% of these readmissions.
- Top 10 principal diagnoses for SU across payers included chronic medical conditions, such as CHF. Acute conditions such as septicemia, pneumonia, and urinary tract infections were in the top 10 conditions for SU across various payer groups.
- Mood disorders were among the top 10 principal diagnoses for SU aged 1-64 years in different payer groups.
- SU with either private insurance or Medicaid were also likely to have cancer-related hospital stays, for chemotherapy/ radiotherapy in particular.

The 5% of Americans who account for half of healthcare spending break down this way:



An earlier AHRQ study found that 38% of those in the top 5% of healthcare expenditures in 2008 remained in the top 5% during 2009.

A 2016 Commonwealth Fund study examined "high needs" healthcare users, defined as having multiple chronic diseases as well as a limitation that hinders their ability to carry out necessary daily activities. These populations differentiate from those who just have multiple chronic diseases.

High needs individuals are likely to be over age 65, white, female, low income and less educated, have public insurance, and are either in fair or poor self-reported health. They visit the doctor an average of 9.6 times a year, about 50% more on average than adults with just multiple chronic conditions and about three times as often as all adults. They also use the hospital emergency department (ED) at more than twice the rate of adults with multiple chronic diseases, and more than three times as often as the total adult population.

A *Health Affairs* article looked at a specific population of high utilizers: Hennepin County, Minnesota's Medicaid population after ACA expansion. The assumption was that high utilizers represented a disproportionate share of public spending and also used more non-health care services than other Medicaid expansion enrollees.

Investigators found that:

- High utilizers represented about 7% of the sample;
- Were disproportionately American Indian and young
- Much more likely than other Medicaid expansion enrollees to have mental health issues (88% versus 48%)
- More likely to have a substance use diagnosis (79.2% versus 29.6%)
- Total cross-sector public spending was significantly higher for high utilizers ($25,337 versus $6,786), and their nonhealth care expenses ($7,476 versus $3,108).

What are the repercussions of high utilization?

Much higher costs: The Commonwealth Fund study noted above, which defined high utilizers as defined as having multiple chronic diseases as well as a limitation that hinders their ability to carry out necessary daily activities, found that annual healthcare spending for high-need adult population is significantly higher than for those with just multiple chronic conditions. Among those in each group who represented top 5% of spending, annual spending for high needs patients was $73,087 compared with $27,573 for those with multiple chronic conditions only.

Overuse of ED and greater social needs: Another recent analysis of high needs patients from the Commonwealth Fund, whose sample included 1,805 high needs adult patients and 1,204 non-high needs patients, revealed:

- Nearly half (47%) visited the ED multiple times in the past two years, and one in five used the ED for conditions that could have been addressed in a physician's office.
- More than half did not have good access to services that could help them manage their conditions, such as adequate help with activities of daily living (62%) or an informed and up-to-date care coordinator (58%).

- 44% reported delaying care in the past year due to lack of transportation to the doctor's office, limited office hours, or an inability to get a timely appointment.
- More than 60% were stressed about affording everyday needs such as housing, good food and utilities, compared to 32% of people without high needs.
- Many (37%) felt socially isolated.

Strategies to address this problem

Case Study: Atrius Health
This large nonprofit medical group (led by Zetema member Steve Strongwater) has adopted a series of individualized plans to prospectively identify patients at high risk for hospitalization and re-hospitalization. This avoids ER visits and better coordinates care through case managers, population health managers and health facilitators.

Strategies include:
- Identifying patients at high risk for hospitalization in the electronic medical record (EMR). Should these patients call, rather than delaying a visit or triaging to the ED, they are immediately seen by a medical practitioner at Atrius urgent care centers.
- Care in place programs, in which registered nurses or NPs make home visits to avoid ambulance/ED visits for patients over 65. Atrius uses tools such as a biometric patch with iPad and a phone to monitor patients at home and avoid hospitalization.
- Telehealth and e-consults to reduce utilization, avoid unnecessary specialty visits, and eliminate low value testing/procedures.
- Real-time EMR interfaces with nearly all hospitals where Atrius patients are admitted. Alerts are sent to medical doctors and case managers when patients arrive in the ED, as well as to transitional nurse liaisons stationed in high volume/cost hospitals/EDs to redirect patients to lower cost settings.
- A proprietary vendor-neutral archive (medical imaging technology), which Atrius uses extensively for disease-focused monitoring, home care and chronic disease interventions, and post-hospitalization telemonitoring to reduce readmissions.
- Embedding behavioral health in most practices, offering near real-time access/triage and intensive care/follow up in patients with behavioral health issues. This reduces co-morbid health problems that often drive up costs.

Strategies at other healthcare systems:
University of Florida Health (UFH) leveraged a 3-year, $600,000 grant to establish a multidisciplinary clinic, reducing SU hospitalizations by 25%, hospital days by 23% and ED visits by 11%. The key strategy was to identify the reasons for superutilization and improve care through better coordination and communication. Many of these patients were in poor health, socially isolated and had poor language or reading skills. UFH carefully studied this population and designed individualized care plans. For example, pharmacists fill pillboxes for patients whose eyesight isn't strong enough to read labels.

This report from the Center for Health Care Strategies, Inc. (CHCS) mentions 14 programs in the United States that have targeted high-utilizing, complex patients, primarily in Medicaid. Two examples:

- AtlantiCare, a member of Geisinger, has a Special Care Center (SCC) that provides care to low-income workers in Atlantic City casinos with chronic diseases and in the top 10% of predicted health spending. Under this ambulatory ICU model, patients exchange primary care providers for care at the center, which is staffed by health coaches familiar with this patient population's language and culture. Compared to a control group, SCC cohort costs were 18% less and utilization was lower.
- Geriatric Resources for Assessment and Care of Elders (GRACE), Wishard Health Services, tracks care of low-income seniors with medical complexities through periodic home visits and phone calls. Home visits take place after any ED visit or hospitalization. Patients retain their primary care provider; consult and care management teams meet regularly to review individual patient cases. The program over 3 years showed significant savings: By year 2, high-risk patients had 44% fewer hospital admissions than controls, and ED visits were 23% lower for high-risk GRACE patients than for controls. In year 3, total costs were $5,100 for high-risk enrollees compared with $6,600 for controls.

Medicare Programs:

A *Health Affairs* article reported – somewhat surprisingly – that spending reductions achieved for ACO patients in the Medicare Shared Savings Program (MSSP) were not due primarily to better management of high-risk patients. In fact, in 2013, low-risk patients that accounted for practically all reductions in spending.

Medicare Advantage Chronic Condition Special Needs Plans (C-SNPs) have had more success in curbing high utilization. Under this model, caregivers make direct contact with patients and place an emphasis on preventive and primary care. A *Health Affairs* article that compared the management of diabetes patients in C-SNPs and fee-for-service Medicare founded that hospital days per enrollee were 19% lower and physician office visits were 7% higher in SNP participants. Nonwhite participants in SNPs especially had much lower rates of hospitalization and readmission than those in FFS Medicare.

7.1 High utilizers of healthcare: discussion questions

- Do the 5% of Americans who account for 50% of costs represent a significant opportunity to achieve better value for the healthcare dollar?
- How can we reduce costs for the half of high utilizers who suffer from one-time events?
- How can costs be reduced for chronically high-cost patients?
- To what extent are social determinants of healthcare contributing to high-cost patients?
- Should payers covering high-cost patients be granted waivers allowing funds to be spent on non-medical, supportive care? If so, what limits, if any, should there be on such spending?
- To what degree are lifestyle choices leading individuals to become high utilizers, and what can be done to address this?
- How can we drive better value for patients with advanced illness/at end of life?
- How can health benefits be designed to achieve better value for high-cost patients?

- Are Special Needs Plans (SNPs) an effective way to manage chronically high-cost patients? If so, should they be expanded beyond the Medicare population?
- Should high-cost chronic patients be placed in separate risk pools?
- Could more robust reinsurance programs aimed at high-cost patients save money for the healthcare system? Which payers would benefit?