New Report Released on Inpatient Care in Virginia Hospitals for 2016

In December 2017, the Schroeder Center for Health Policy at William & Mary released its newest report detailing inpatient care provided in Virginia’s community hospitals. *Inpatient Hospital Utilization in the Commonwealth of Virginia: 2016 Data Analysis* describes nearly 844,000 hospitalizations in 2016 at 82 of Virginia’s acute, critical access, and children’s hospitals. The report provides a compendium of useful data and statistics to researchers, organizations, and others who are interested in the provision of healthcare in hospitals around the state. The report offers a statistical depiction of the characteristics of patients (their average age, sex, race/ethnicity), the most common types of conditions behind inpatient hospitalizations, and the source of payment for inpatient hospitalizations, among other types of information.

According to the report, inpatient hospitalizations at Virginia community hospitals in 2016 accounted for $33.2 billion in total charges. As was the case in 2015, adults between the ages of 65 and 84 represent the single largest age group of patients discharged from Virginia’s hospitals (237,440 discharges or 28% of all discharges). Nearly 52% of all non-obstetric hospitalizations are for females, and just under 64% of all hospitalizations are for white, non-Hispanic patients. About 23% of all hospitalizations are for black, non-Hispanic patients. Other findings from the report include:

- The most common conditions responsible for inpatient hospitalizations are childbirth, septicemia, osteoarthritis, mood disorders, and congestive heart failure. These five conditions alone account for nearly 27% of all hospitalizations in 2016.

- Chronic conditions account for 40% of all hospitalizations.

- Nearly 90% of all hospitalizations occurred at urban hospitals, which had, on average, longer lengths of stay and charges per stay compared to hospitalizations at rural hospitals.

- Nearly 62,000 hospitalizations in Virginia’s community hospitals are for mental health conditions, and these hospitalizations result in over $1.2 billion in hospital charges.

- Medicare is the primary source of payment for 40% of discharges and private insurance is the primary source of payment for 34% of discharges.

The report was produced by student researchers and staff at the Schroeder Center for Health Policy. Contributors include the following William & Mary undergraduate students: Kate Archambault (CAMS Applied Statistics), Carmen Lehnigk (Economics), and Yash Singh (Economics).
In a recently published study in *Health Services Research*, the Schroeder Center for Health Policy at William & Mary uses Virginia data to look at one reason why some parts of Virginia have higher rates of avoidable hospitalizations than others.

Avoidable hospitalizations, or hospitalizations for a set of conditions including hypertension, diabetes, and urinary tract infections, among others, constitute 12% of Medicare inpatient spending. They are called “avoidable” because they occur when patients have poor access to primary care or receive poor quality primary care. Limiting these hospitalizations cannot only curb Medicare spending, but it can also protect patients from unnecessary hospital stays and illnesses.

The Schroeder Center’s study uses Virginia hospital discharge records to measure rates of avoidable hospitalizations among adults age 65 and up. The main focus of this study is whether having more primary care physicians nearby is linked to fewer avoidable hospitalizations. “What’s unique about this study is the way we measure primary care physician access,” said Michael Daly, one of the study authors. “Rather than simply counting the doctors in a county, and dividing by the population in the county, we use geospatial methods to construct a better measure … we pinpoint doctors’ locations on the map, and we construct measures of physician access that allow for the fact that patients can go to doctors near their residence – even if that doctor is outside their county boundary.” As the study authors stress, this technique has not been used before to study avoidable hospitalizations among older adults.

The study finds that areas in Virginia with more primary care physicians per capita within a 30-minute driving radius have significantly lower avoidable hospitalization rates. This finding is based on models that control for various factors, like median household income, poverty rates, the age distribution of the older adult population, and measures of health system traits, like distance to the nearest hospital, and the number of non-physician clinicians nearby.

**Undergraduates Examine Healthcare Issues in Virginia**

For the third consecutive year, undergraduate students from William & Mary and medical school students at Eastern Virginia Medical School (EVMS) carried out intensive research projects related to health policy and health services research as part of the annual SC-BI research program. The program, which is sponsored by the Schroeder Center for Health Policy at William & Mary and the Brock Institute for Community and Global Health at EVMS, competitively selected students from both organizations to conduct independent research projects. For seven weeks, the students attended talks by expert researchers, carried out their own statistical analysis of healthcare data, made connections with various faculty and students at the partner organizations, prepared briefs, and presented their research findings.
William & Mary students, like other SC-BI fellows in the past, conducted their research using administrative data from Virginia hospitals. Cara Alcorn (Public Policy, 2018) used patient discharge records to identify racial disparities among white and African American patients with hospital-acquired infections. Paige Anders (Economics, 2019) used hospital discharge records to study the effects of the Affordable Care Act’s dependent care coverage mandate on hospitalizations of young adults with asthma. Yash Singh (Economics, 2019) used patient discharge records to study whether unemployment rates affect substance abuse hospitalizations and the intensity of treatment for those already admitted.

For more information on the William & Mary student projects, please visit the Schroeder Center website.