UCSF

UC San Francisco Previously Published Works

Title

MAKING THE HOMEBOUND VISIBLE: EPIDEMIOLOGY AND QUALITY MEASUREMENT

Permalink

https://escholarship.org/uc/item/5804v17z

Journal

Innovation in aging, 1(Suppl 1)

ISSN

2399-5300

Authors

Ritchie, CS Leff, BA Harrison, KL

Publication Date

2017-06-01

Peer reviewed

compromise somatic well-being for all adults following the Great Recession, but especially those under the age of 65 because of their more disadvantaged positions entering into the recession. For instance, adults under the age of 65 were more susceptible to unemployment and its reverberations, with many forced to delay retirement altogether. Findings from this study reveal that initial financial strain and change in financial strain between 2006 and 2010 independently contribute to increased acute physical symptoms among all adults, even after controlling for demographic and socioeconomic characteristics. Thus, despite their distinct social and economic circumstances, results from this study suggest that both groups were similarly affected by the Great Recession.

HOW EXPOSURE TO RECESSIONS AS A YOUNG ADULT IMPACTS SUBJECTIVE WELL-BEING IN LATER LIFE

B. Bartlett, Duke University, Durham, North Carolina

Numerous studies find that subjective well-being suffers during economic downturns, but are often limited to full-time workers and short-term effects. Combining research on subjective well-being and recessions with cultural demography and life course theory, this study expands on prior research by (1) exploring the effects of recessive periods beyond fulltime workers, (2) examining long-term impacts of experience with recessions, and (3) determining whether exposure to recessive periods in young adulthood changes individuals' future outlook. In particular, this study focuses on exposure to a recession during young adulthood, a critical period for development. Using logistic models for the General Social Survey (GSS) repeated cross-sections (1994–2014) and logistic models adjusted for individual effects across three GSS panels of three years each (2006-2014), this study finds that exposure to a recession in young adulthood is associated with different levels of subjective well-being. This effect is different depending on the intensity of the recession: older adults who experienced a short recession in young adulthood have better well-being, while older adults who experienced a long-term recession in young adulthood have poorer subjective well-being. Finally, this study finds that these effects are partially mediated by future outlook (as measured by pessimism or optimism about children's future standard of living). These mechanisms are important given the dramatic decline in recessive periods throughout the 1980s, 1990s, and early 2000s, decreasing the proportion of the population exposed to short-term recessions, and thereby reducing the population capacity for positive subjective well-being.

SESSION 5015 (SYMPOSIUM)

NOVEL PARTNERSHIPS TO DEVELOP MEASURES OF QUALITY CARE FOR OLDER ADULTS: IMPROVING HOMEBOUND CARE

Chair: K. Ornstein, Mount Sinai Hospital, New York City, New York

This symposium will demonstrate the role of a unique, multi-stakeholder collaboration to improve care for home-bound and other complex, older patients. The homebound are a vulnerable, high-risk population. Performance measurement of care for this population is insufficient, relative

to similar measurement in other care settings. Payers therefore have little basis on which to determine the quality of home-based medical care across providers while the spectrum of care needs for this population goes unrecognized. Interdisciplinary presenters represent varied healthcare perspectives, including practice, consumer advocacy, quality, research, and data science. The National Quality Forum (NQF) will describe the NQF Measure IncubatorTM, an innovative effort to facilitate efficient measure development and testing through collaboration and partnership. The Measure Incubator is addressing important gaps in quality measurement. Geriatricians from Johns Hopkins University and UCSF will describe existing definitions of the homebound, gaps in care, and needed quality assessments for these patients. Representatives from AARP will discuss the role of consumer organizations in measure development, particularly for frail populations. Finally, researchers and practitioners from UCSF and OptumLabsTM will highlight a collaboration to develop quality measures in an open science, "big data" environment. The team will present a data-driven example of using large data assets to develop quality measures for a high-risk target population. This symposium highlights the value of a collaborative model for measure development and care improvement for elderly homebound patients that leverages "big data", and multiple stakeholder perspectives as core components.

INNOVATION IN MEASUREMENT: THE NQF MEASURE INCUBATOR TM

H. Burstin, National Quality Forum, Washington, District of Columbia

Critical areas of health and healthcare for older Americans don't have enough or the right kinds of measures to drive improvement. With the rapid growth of long-term services and supports for the elderly and disabled, measures that reflect the quality of care provided in home and community-based services are needed. Measures that reflect the voice of patients and caretakers, including measures of function and shared decisionmaking must be developed. The NQF Measure IncubatorTM is an innovative effort that facilitates efficient measure development and testing through collaboration to address important aspects of care for which quality measures are underdeveloped or nonexistent. NQF is exploring innovative and agile approaches to incubate and test measures more efficiently, such as early and continuous access to data. This innovative approach can help drive measurement where it's most needed during this period of rapid change in the care of older patients in their home and community.

MAKING THE HOMEBOUND VISIBLE: EPIDEMIOLOGY AND QUALITY MEASUREMENT

C.S. Ritchie², B.A. Leff¹, K.L. Harrison², 1. Johns Hopkins University, School of Medicine, Baltimore, Maryland, 2. University of California, San Francisco, School of Medicine, San Francisco, California

Recent nationally representative data suggest that between 2 and 6 million Americans are homebound. They are often unable to access office-based primary care and are among the most costly patients in the US health care system, because of a powerful combination of multiple chronic

conditions, functional impairment, frailty, and social stressors. Rendering the homebound visible to the health care system is critical to improving care delivery and health outcomes for this vulnerable population and population health efforts. Home-based primary care (HBPC) practices have developed effective approaches to address the clinical needs of this population. Appropriate metrics are lacking to measuring the quality of care delivered by HBPC to this frail population. This session will focus on 1) understanding the characteristics of the homebound population, and; 2) elucidating efforts to address gaps in quality measurement, including the development of quality measures, a national registry, and a learning collaborative for HBPC practices.

ALL IN IT TOGETHER: WHY DEVELOPMENT OF BETTER HEALTH CARE QUALITY MEASURES IS GOOD FOR CONSUMERS

L. Walker, AARP Public Policy Institute, Washington, District of Columbia

Health care in the United States is evolving. With this change, consumers and families are taking on greater responsibilities in managing their health care - sometimes voluntarily and sometimes involuntarily. For them to navigate effectively in this new environment they and their clinicians need information about the quality of care they receive, and that information has to be meaningful to their decision-making process. This is particularly so for people who are frail, functionally impaired, and have complex chronic conditions. The homebound are a subset of this group. Consumer and patient groups, including AARP, support the development of measures in critical gap areas, such as for patients who are homebound, who would benefit tremendously from the development of home-based quality of care measures. In addition to clinical measures, consumers would welcome development of measures in domains that capture patient and caregiver experience, care coordination, safety, and quality of life.

NO LONGER THE INVISIBLE HOMEBOUND: IDENTIFYING CANDIDATES FOR HOME-BASED MEDICAL CARE IN BIG DATA

K.L. Harrison^{1,4}, A. Altan², S.C. Dunning², C. Patterson², C.S. Ritchie¹, B.A. Leff³, 1. *University of California San Francisco*, School of Medicine, San Francisco, California, 2. OptumLabs, Cambridge, Massachusetts, 3. Johns Hopkins University, School of Medicine, Baltimore, Maryland, 4. San Francisco VA Medical Center, San Francisco, California

Homebound patients who could benefit from high-quality, cost-saving longitudinal home-based medical care cannot be identified easily by hospitals, health systems, or payers. Further, without a well-defined population denominator, assessments of care quality are inadequate. We addressed these gaps using the OptumLabsTM Data Warehouse, which includes more than 3 million commercial and Medicare 2014 enrollees age 65 and older. We identified two patient phenotypes who may benefit from home-based medical care: (1) patients with complex comorbid conditions already receiving home-based care (>2 in-home physician visits (N=30,251); and (2) patients receiving substantial acute care (>57% with >1 hospitalization, ER visit, or ambulance service) and low levels of ambulatory services (19.2% with <2 ambulatory

visits/year); (N=171,894). This project revealed a high-need patient population for whom home-based care may be beneficial and established a method for using administrative data to identify patients who are either homebound or would benefit from coordinated home-based services.

SESSION 5020 (SYMPOSIUM)

BEYOND PERFORMANCE MEASURES: NOVEL INFORMATION FROM ACCELEROMETRY FOR FUNCTION

Chair: T. Harris, NIA/Intramural Research Program, Bethesda, Maryland

Functional status has long been recognized as critical to health and independence of older persons. Self-reported and performance measures, which are quick and easy to administer, allow assessment of function and are widely used in community population studies and clinical trials. However, these measurements are limited in that they are taken at one point in time in home, clinical and laboratory settings, and thus may not be representative of a person's usual function over time. Accelerometry is an emerging technology that has gained popularity in recent years, which allows for continuous and objective assessment of daily physical activity and function over an extended period of time in the free-living environment. Although these device present new opportunities to understand functional mobility, the benefits may be limited by associated costs, methodological, and data processing challenges. This begs the question: Are the data generated from accelerometry worth the effort? In this symposium, presenters will highlight novel information derived from the accelerometers and compare with routinely available self-report or performance measures. Accelerometer types, body placement locations, processing challenges, and costs will be addressed

ACTIGRAPHY FEATURES FOR PREDICTING MOBILITY DISABILITY IN OLDER ADULTS

T.M. Manini¹, M. Kheirkhahan¹, C. Tudor-Locke², N.W. Glynn³, J.M. Guralnik⁴, M. Pahor¹, S. Ranka¹, 1. University of Florida, Gainesville, Florida, 2. University of Massachusetts-Amherst, Amherst, Massachusetts, 3. University of Pittsburgh, Pittsburgh, Pennsylvania, 4. University of Maryland, Baltimore, Maryland

Actigraphy has attracted much attention for assessing and documenting physical activity in the past decade. However, there is a lack of understanding whether these data can help in detecting and/or predicting mobility function, or more specifically, mobility impairment and major mobility disability (MMD). Men (N=357) and women (N=778) aged 70-89 years wore a tri-axial accelerometer (Actigraph GT3X) on the right hip during free-living conditions for 8.4 ± 3.0 days and 67 features were extracted from the accelerometer data. Sensitivity and specificity of identifying slow walkers was approximately 70% and 80%, respectively. The top five features, which were related to movement pace and amount (activity counts and steps), length in activity engagement (bout length), accumulation patterns of activity, and movement variability significantly improved the prediction of MMD beyond that found with common covariates (age,