

costs). We used multivariable logistic regression to study the association between living alone and ED admission, and ran two-part models (probit & generalised linear model) to estimate the association of living alone on inpatient days and hospitalization cost. We found that compared to living with others, living alone was associated with a higher odds of ED admissions [Odds Ratio (OR) 1.28, 95% Confidence Interval (CI) 1.08-1.51], longer inpatient days (+0.61, 95% CI 0.25-0.97) and higher hospitalization costs (+322 USD, 95% CI 54-591). Compared to those living with others without multimorbidity, living alone with multimorbidity was associated with higher odds of ED admission (OR 1.64 95% CI 1.33-2.03), longer inpatient days (+0.73, 95% CI 0.29-1.17) and higher hospitalization costs (+567 USD, 95% CI 230-906). In conclusion, living alone is associated with higher odds of ED admission, longer inpatient days and higher hospitalization costs among older adults, particularly among those with multimorbidity.

HOSPITAL-ASSOCIATED DISABILITY ASSOCIATED WITH DELIRIUM AMONG OLDER ADULTS

Richard Kennedy,¹ Hyun Freeman,² Roy Martin,¹ Caroline Whittington,² John Osborne,² Alayne Markland,² Thomas Buford,¹ and Cynthia Brown,³ 1. *University of Alabama at Birmingham, Birmingham, Alabama, United States*, 2. *University of Alabama at Birmingham, University of Alabama at Birmingham, Alabama, United States*, 3. *Louisiana State University Health Sciences Center - New Orleans, New Orleans, Louisiana, United States*

Hospital-associated disability (HAD), defined as a loss of activities of daily living (ADLs) occurring during hospitalization, is a common complication among older adults. Delirium is also a common complication during hospitalization and is associated with multiple long-term sequelae. We sought to determine the effect of delirium and known covariates on the risk of incident HAD in hospitalized older adults. We examined electronic health record (EHR) data for 35,201 older adults ≥ 65 years of age admitted to the general inpatient (non-ICU) units of UAB Hospital from January 1, 2015 to December 31, 2019. Delirium was defined as a score ≥ 2 on the Nursing Delirium Screening Scale (NuDESC) during hospital admission, and HAD defined as a decline on the Katz ADL scale from hospital admission to discharge. Generalized linear mixed models were used to examine the association between delirium and HAD, adjusting for covariates and repeated observations for individuals with multiple admissions. We found that 21.2% of older adults developed HAD during their hospitalization and experienced higher delirium rates as compared to those not developing HAD (25.2% vs. 16.3%). Presence of delirium, medical comorbidity score, baseline cognitive status, and baseline ADL function were associated (all $p < 0.001$) with incident HAD. Mediation analyses also showed that 8% of the effect of comorbidity on incident HAD was due to delirium ($p < 0.001$). Reducing rates of delirium can be one component of a comprehensive approach to reduce rates of HAD in older adults.

PREDICTING UNSCHEDULED EMERGENCY DEPARTMENT REVISITS LEADING TO ACUTE HOSPITAL ADMISSIONS AMONG OLDER ADULTS

Tony Rosen,¹ Yufang Huang,² Matthew McCarty,³ Michael Stern,³ Yiye Zhang,⁴ Daniel Barchi,³

Rahul Sharma,³ and Peter Steel,³ 1. *New York, New York, United States*, 2. *Weill Cornell Medicine, New York, New York, United States*, 3. *New York-Presbyterian Hospital Weill Cornell Medical Center, New York, New York, United States*, 4. *Weill Cornell Medical College, New York, New York, United States*, 5. *New York-Presbyterian Hospital, New York, New York, United States*

Background: Unscheduled emergency department (ED) revisits leading to acute hospital admission (RVA) are tantamount to a failed discharge, associated with physician error, mis-prognosis, and inadequate care planning. Previous research has shown RVA to be associated with adverse outcomes such as ICU admissions, long hospitalizations and mortality. Given the limited impact of pre-existing screening tools for older adults, we developed and validated a machine learning model to predict individual patient risk of RVA within 72 hours and 9 days of index ED visits.

Method: A machine learning model was applied to retrospective electronic health record (EHR) data of patients presenting to 2 geographically and demographically divergent urban EDs in 2019. 478 clinically meaningful EHR data variables were included: socio-demographics, ED and comorbidity diagnoses, therapeutics, laboratory test orders and test results, diagnostic imaging test orders, vital signs, and utilization and operational data. Multiple machine learning algorithms were constructed; models were compared against a pre-existing adult ED-RVA risk score as a baseline.

Results: A total of 62,154 patients were included in the analysis, with 508 (0.82%) and 889 (1.4%) having 72-hour and 9-day RVA. The best-performing model, combining deep significance clustering (DICE) and regularized logistic regression, achieved AUC of 0.86 and 0.79 for 72-hour and 9-day ED-RVA for older adult patients, respectively, outperforming the pre-existing RVA risk score (0.704 and 0.694).

Discussion: Machine learning models to screen for and predict older adults at high-risk for ED-RVA may be useful in directing interventions to reduce adverse events in older adults discharged from the ED.

REJECTION OF CARE IN HOSPITALIZED PERSONS LIVING WITH DEMENTIA: THE IMPACT OF NURSE COMMUNICATION

Clarissa Shaw,¹ Caitlin Ward,¹ Jean Gordon,¹ Kristine Williams,² and Keela Herr,¹ 1. *University of Iowa, Iowa City, Iowa, United States*, 2. *University of Kansas School of Nursing, Kansas City, Kansas, United States*

Rejection of care (RoC) by persons living with dementia (PLWD) has yet to be measured in the hospital setting. Elderspeak communication (i.e., baby talk or infantilization) is an established antecedent to RoC in nursing home dementia care. The purpose of this study was to determine the impact of elderspeak communication by nursing staff on RoC by hospitalized PLWD. Eighty-eight care encounters between 16 PLWD and 53 nursing staff were observed for RoC using the Resistiveness to Care scale in one Midwestern hospital. Audio-recordings of the care encounters were transcribed verbatim and coded for semantic, pragmatic, and prosodic features of elderspeak. Over one-quarter (28.7%) of the duration of nursing staff speech towards PLWD constituted elderspeak and nearly all (96.6%) of the 88 care encounters included some elderspeak. Almost half of the observations (48.9%) included RoC behaviors by PLWD. Rejection of care was modeled as

present or absent using a GEE method. Characteristics of the PLWD (e.g., pain, delirium) and the observation (e.g., environmental simulation) were evaluated as potential covariates. After adjusting for pain, length of stay, and gender, a 15-percentage point decrease in the proportion of elderspeak communication by nursing staff reduced the odds of RoC by 62% (OR=0.38, 95% CI=0.21-0.71, $p=.002$), and a one unit decrease in pain reduced the odds of RoC by 63% (OR=0.37, 95% CI=0.22-0.63, $p<.001$). This study identified that pain and elderspeak are two modifiable factors of RoC. Person-centered interventions are needed that address communication practices and approaches to pain management for hospitalized PLWD.

UNDERSTANDING THE ROLE AND VALUE OF PROCESS QUALITY INDICATORS IN HOSPITALIZED OLDER SURGICAL PATIENTS

Janani Thillainadesan,¹ Sarah Hilmer,² Alison Mudge,³ Sarah Aitken,⁴ and Vasi Naganathan,⁴ 1. *Concord Hospital, NSW, New South Wales, Australia*, 2. *The University of Sydney, St Leonards, New South Wales, Australia*, 3. *Royal Brisbane and Women's Hospital, Royal Brisbane and Women's Hospital, Queensland, Australia*, 4. *University of Sydney, Concord, New South Wales, Australia*

Background Despite the development of geriatrics surgery process quality indicators (QIs), few studies have reported on these QIs in routine surgical practice. Even less is known about the links between these QIs and clinical outcomes, and patient characteristics. We aimed to measure geriatrics surgery process QIs, and investigate the association between process QIs and outcomes, and QIs and patient characteristics, in hospitalized older vascular surgery patients. **Methods** This was a prospective cohort study of 150 consecutive patients aged ≥ 65 years admitted to a tertiary vascular surgery unit. Occurrence of geriatrics surgery process QIs as part of routine vascular surgery care was measured. Associations between QIs and high-risk patient characteristics, and QIs and clinical outcomes were assessed using clustered heatmaps. Results QI occurrence rate varied substantially from 2% to 93%. Some QIs, such as cognition and delirium screening, documented treatment preferences, and geriatrician consultation were infrequent and clustered with high-risk patients. There were two major process-outcome clusters: (a) multidisciplinary consultations, communication and screening-based process QIs with multiple adverse outcomes, and (b) documentation and prescribing-related QIs with fewer adverse outcomes. **Conclusions** Clustering patterns of process QIs with clinical outcomes are complex, and there is a differential occurrence of QIs within older vascular surgery patients, suggesting process QIs alone may be unreliable targets for quality improvement. Prospective intervention studies are needed to understand the causal pathways between process QIs and outcomes to help prioritize care processes that are most clearly linked to improved outcomes.

Session 4595 (Symposium)

PREPARING FOR THE NEW NORMAL: CHRONICLING THE IMPACT OF COVID-19 ON OLDER ADULTS AND PROVIDERS

Chair: Rose Ann DiMaria-Ghalili Discussant: Justine Sefcik

COVID-19 and social distancing heralded an unprecedented change in the way older adults and health care

providers live, work, socialize and manage their health. Early "calls-to-action" included the call for researchers to chronicle the impact of the COVID-19 pandemic on care of older adults to inform models of care and best practices in the new normal. This symposium explores the impact of COVID-19 on the health of older adults across the care continuum and healthcare delivery augmented by technology. The perspectives of older adults living in the community and providers who care for this population are highlighted. Additionally, there is a focus on the most vulnerable, those living in skilled care facilities and continuing care retirement communities. Fisher analyzes the key themes in 37 COVID-19 video communiques over 11 months at a continuing care retirement community. Sefcik explores coping strategies including outdoor activities among community-dwelling older adults. DiMaria-Ghalili examined patterns of physical and mental health, technology usage and loneliness in older adults, including those living in the community and a continuing care retirement community. Using longitudinal data and COVID-19 supplemental survey data from the National Health and Aging Trends Study, Huh-Yoo discusses disparities in online patient-provider communication and implications for the Post-COVID era. Coates discusses the facilitators and barriers perceived by interdisciplinary providers deploying telehealth during the COVID-19 pandemic and implications for healthcare delivery in older adults. The symposium will conclude with a discussion by Dr. Sefcik on the implications for research, practice and policy in the post COVID-19 era.

PHYSICAL AND MENTAL HEALTH, TECHNOLOGY USE, AND LONELINESS IN OLDER ADULTS DURING THE COVID-19 PANDEMIC

Martha Coates,¹ Zachary Hathaway,² Katelyn Moore,² Yaegin Park,² Jenny Tsui,² Justine Sefcik,³ and Rose Ann DiMaria-Ghalili,³ 1. *Drexel University, Bryn Mawr, Pennsylvania, United States*, 2. *Drexel University, Philadelphia, Pennsylvania, United States*, 3. *Drexel University, College of Nursing and Health Professions, Philadelphia, Pennsylvania, United States*

Social isolation is a negative outcome of COVID-19. This study examined patterns of physical and mental health and technology use in older adults, and loneliness during the COVID-19 pandemic. We recruited 115 community-dwelling older adults 65 and older (72% female) from the Pennsylvania region via Research Match (N=84) or from a retirement community (N=31). A significant association between loneliness and worsening of health during the pandemic was observed, Fisher's Exact Test 6.90, $p=.03$. Those who were lonely demonstrated significantly lower Mental Component Summary Scores (M = 42.75, SD = 11.55) compared to those who were not lonely (M= 55.34, SD= 7.66), $t(49) = 5.84$, $p <.01$. Those reporting loneliness were more likely to use a new electronic device to communicate with family during COVID-19 pandemic, $X^2(1, N= 107) = 6.24$, $p =.01$. These findings suggest the important role of technology to decrease loneliness in older adults during a pandemic.

ASSESSING COPING STRATEGIES AND OUTDOOR ACTIVITIES AMONG OLDER ADULTS DURING THE COVID-19 PANDEMIC

Martha Coates,¹ Sarah Wetzel,² Janvi Patel,² Keyanna Bynum,² K. Linh Pham,²