

settings may facilitate functional and psychosocial support to meet dementia and non-dementia related needs for adults who have dementia with comorbidities.

IMPACT OF INFORMAL CARE ON HEALTH CARE UTILIZATION AMONG OLDER PEOPLE IN CHINA

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Population aging has become a challenge to long-term care and health care for the society. Using China as a case study, this paper assesses allocative efficiency of resources in informal care and health care, to explore the effectiveness of the policy, i.e., encouraging informal care as a more cost-effective way to reduce public health care spending. Drawing data from the 2011, 2014, and 2018 waves of the Chinese Longitudinal Healthy Longevity Survey, this study examines the impact of informal care on utilization of health care as well as amount of health care expenditures among older people with functional limitations in China. Using random effects model with instrumental variable approach, our findings suggest that informal care significantly reduces the utilization of health care, primarily by reducing the utilization of outpatient care. However, informal care significantly increases the amount of inpatient care expenditures for inpatient care users. We do not observe significant association between informal care and amount of outpatient care expenditures for outpatient care users. This study highlights a pressing need for the Chinese government to support informal caregivers by taking economic values of informal caregiving into consideration, and to improve efficiency in inpatient care by a more integrated resource allocation mechanism

NURSING FACILITY AND HEALTH CARE SERVICE USE AND COSTS UNDER THE CMS FINANCIAL ALIGNMENT INITIATIVE

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The Centers for Medicare & Medicaid Services created the Financial Alignment Initiative (FAI) to test the impact of integrated care and financing models for dually eligible Medicare-Medicaid beneficiaries. Using Medicare claims, the Minimum Data Set 3.0, and state-provided enrollment files, we evaluated demonstration impacts on long-stay nursing facility (NF) use, other health care service utilization, and costs for the overall eligible population in two FAI demonstration States with managed fee-for-service models, Colorado and Washington. We used quasi-experimental, difference-in-differences regression models for the impact analyses. In Colorado, there was a 7.2 percent decrease ($p < 0.001$) in long-stay NF use, relative to the comparison group. Otherwise, the demonstration showed unfavorable service utilization results—increases in preventable emergency department (ED) visits and declines in 30-day follow-up after mental health discharge (MHFU)—and no impact on Medicare costs. In Washington, there was also a decrease in long-stay NF use (12.4 percent, $p < 0.001$) and

skilled NF admissions (21.7 percent, $p < 0.001$). However, the demonstration resulted in decreases in physician visits and 30-day MHFU. There was a favorable decrease in Medicare costs. The impact of the FAI demonstrations on NF use was favorable for both States, while the impact on service utilization and Medicare costs was mixed and more favorable in Washington. Washington's care coordination model was intensive and targeted to high-cost individuals while Colorado provided minimal care coordination. Coordinated care and integrated long-term services and support may help postpone NF institutionalization, but there is no evidence these activities reduced preventable hospitalizations or ED visits.

Session 3280 (Symposium)

MAXWELL A. POLLACK AWARD LECTURE

Chair: Bob Harootyan

The lecture will feature an address by the 2020 Pollack Award recipient, Karl Pillmer, PhD, FGSA of Cornell University. The 2021 Pollack Award recipient is Namkee G. Choi, PhD, FGSA, of the University of Texas at Austin. The Maxwell A. Pollack Award for Contributions to Healthy Aging Award recognizes instances of practice informed by research and analysis, research that has directly improved policy or practice, and distinction in bridging the worlds of research and practice.

MAXWELL A. POLLACK AWARD LECTURE

Karl Pillemer, *Cornell University, Ithaca, New York, United States*

The lecture will feature an address by the 2020 Pollack Award recipient, Karl Pillmer, PhD, FGSA of Cornell University. The 2021 Pollack Award recipient is Namkee G. Choi, PhD, FGSA, of the University of Texas at Austin. The Maxwell A. Pollack Award for Contributions to Healthy Aging Award recognizes instances of practice informed by research and analysis, research that has directly improved policy or practice, and distinction in bridging the worlds of research and practice.

Session 3285 (Paper)

MEDICATIONS AND PRESCRIBING

DEPRESCRIBING BLOOD PRESSURE TREATMENT IN VA LONG-TERM CARE RESIDENTS

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There is growing interest in deprescribing of antihypertensive medications in response to adverse effects, or when a patient's situation evolves such that the benefits are outweighed by the harms. We conducted a retrospective

cohort study to evaluate the incidence and predictors of deprescribing of antihypertensive medication among VA long-term care residents ≥ 65 years admitted between 2006 and 2017. Data were extracted from the VA electronic health record, CMS Minimum Data Set, and Bar Code Medication Administration. Deprescribing was defined as a reduction in the number of antihypertensive medications, sustained for 2 weeks. Potentially triggering events for deprescribing included low blood pressure ($<90/60$ mmHg), acute renal impairment (creatinine increase of 50%), electrolyte imbalance (potassium below 3.5 mEq/L, sodium decrease by 5 mEq/L), and fall in the past 30 days. Among 22,826 VA nursing home residents on antihypertensive medication, 57% had describing event during their stay (median length of stay = 6 months). Deprescribing events were most common in the first 4 weeks after admission and the last 4 weeks of life. Among potentially triggering events, acute renal impairment was associated with greatest increase in the likelihood of deprescribing over the subsequent 4 weeks: among residents with this event, 32.7% were described compared to 7.3% in those without (risk difference = 25.5%, $p<0.001$). Falls were associated with the smallest increased risk of deprescribing (risk difference = 2.1%, $p<0.001$) of the events considered. Deprescribing of antihypertensive medications is common among VA nursing home residents, especially after a potential renal adverse event.

OPIOID USE AMONG RURAL MEDICARE BENEFICIARIES

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This study examines differences in opioid prescribing rates among a nationally representative sample of Medicare beneficiaries across rural and urban areas, as well as among beneficiaries with chronic overlapping pain conditions (COPCs). We assess whether prescribing patterns exceed the Centers for Disease Control and Prevention guidelines for dose and duration, and identify socioeconomic and health risk factors associated with opioid prescribing using logistic regression analyses. Data were from the 2010-2017 Medicare Current Beneficiary Survey files. Rural-Urban Commuting Area codes were used to identify patients' residential location. The Area Health Resource Files were used to identify market characteristics such as primary care and mental health shortage areas. With the exception of 2010, over years 2011-2017, higher percentages of community-dwelling rural beneficiaries received opioid prescriptions (21.8-25.4%) compared to their urban counterparts (19.1-23.7%). During the same time period, facility-dwelling rural beneficiaries were more likely to receive opioid prescriptions (39.8-47.2%) compared to their urban counterparts (28.8-35.0%). Higher percentages (18.8%) of the community dwelling population in rural had COPCs compared to urban (15.2%), and a higher percentage of rural beneficiaries with COPCs (31.4%) received an opioid prescription than their urban counterparts (22.2%). Previous research points to other factors contributing to a lack of alternatives to opioids for pain management

in rural areas, including greater reliance on primary care providers, lack of access to chronic pain specialists and alternative therapies, and travel barriers. Improving the capacity of rural primary care to deal with COPCs and expanding access to specialists via telehealth warrants further attention from policymakers.

PHARMACIST-LED INTERVENTIONS TO IMPROVE MEDICATION ADHERENCE IN OLDER ADULTS: A META-ANALYSIS

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As pharmacists work to ensure reimbursement for chronic disease management services on the national (e.g., Medicare) level, summative evidence of their impact on important health metrics, such as medication adherence, is needed. The objective of this study was to assess the effectiveness of pharmacist-led interventions on medication adherence in older adults. In April 2020, a comprehensive search was conducted in six databases for publications of randomized clinical trials of pharmacist-led interventions to improve medication adherence in older adults. English-language studies with codable data on medication adherence and diverse adherence-promoting interventions targeting older adults (age 65+) were eligible. A standardized mean difference effect size (intervention vs. control) was calculated for the medication adherence outcome in each study. Study effect sizes were pooled using a random-effects meta-analysis model. Moderator analyses were then conducted to explore for differences in effect size due to intervention, sample, and study characteristics. The primary outcome was medication adherence using any method of measurement. This meta-analysis included 40 unique randomized trials of pharmacist-led interventions with data from 8,822 unique patients (mean age, range: 65 to 85 years). The mean effect size was 0.57 (95% Confidence Interval [CI]: 0.38-0.76). When two outlier studies were excluded from the analysis, the mean effect size decreased to 0.41 (95% CI: 0.27-0.54). Moderator analyses showed larger effect sizes for interventions containing medication education and when interventions had components delivered at least partly in patients' homes. In conclusion, this meta-analysis found a significant improvement in medication adherence among older adults receiving pharmacist-led interventions.

SEX DIFFERENCES IN POTENTIALLY INAPPROPRIATE PRESCRIBING AMONG OLDER ADULTS WITH MULTIMORBIDITY

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Sex differences in prescribing potentially inappropriate medications (PIMs) for various multimorbidity patterns are not well understood. This study sought to identify sex specific risk of PIMs in older adults with cardiovascular-metabolic patterns. Secondary analysis of the Health and Retirement Study interview data (2004-2014; n=6,341,