also rise significantly. The quality improving cluster had the highest percentage of government-owned and rural facilities as well as the largest annual increase in care related spending. The medium-to-high cost and medium-to-high quality cluster had the highest concentration of urban facilities (Twin City Metro Area) and were the most likely to be non-profit and chain owned. Although the new VBR system appeared effective in achieving its goals for a subset of facilities with lowest cost and quality, the majority of facilities increased care-related costs without improved quality.

SESSION 2862 (POSTER)

LONG-TERM CARE II: CHALLENGES IN CARING

A SYSTEMATIZED REVIEW OF UTI MANAGEMENT PROTOCOL FOR LONG-TERM CARE RESIDENTS
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Clinical acuity for the elderly population has significantly intensified. This population is at heightened risk of infection, especially urinary tract infections (UTIs). Urinary tract infections exist as a clinical leviathan in the long-term care (LTC) industry and, despite its high prevalence rates, there exists a dearth of research on management protocol. The following review aims to summarize the current literature, identify, and comparatively analyze the current UTI management guidelines among LTC residents to guide provider leadership development of standards to prevent UTIs. The Joanna Briggs Institute’s approach to systematic reviews was implemented to search the following databases: ProQuest, PubMed, CINAHL, and MEDLINE. 538 citations were assessed, with 32 articles included in the review. Inclusion criteria comprised of clinical trial studies, a time frame of 2005 to current, and no restriction on the study country/region. Key results were collected and analyzed using a data extraction tool. Study findings show that consistent protocols are not followed by licensed staff to prevent, diagnose, and treat UTIs among the elderly residing in long term care facilities. Inappropriate use of antibiotics is problematic due to the lack of specific practice guidelines for testing, diagnosis and, treatment. Studies implementing (1) successful clinical management strategies (i.e. antibiotic initiation, urinalysis frequency) and (2) facility administrative strategies (i.e. incontinence nurse specialist, DON/nurse leadership education) are needed to establish gold standard practice guidelines for the LTC industry.

ADVANCED PRACTICE CLINICIANS PROVIDING AN INCREASED SHARE OF PRIMARY CARE IN SKILLED NURSING FACILITIES, 2008-2016
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Rising care complexity in skilled nursing facilities (SNFs), coupled with growing shortages of geriatricians and other primary care physicians able to see SNF patients, have increased demand for nurse practitioners and physician assistants (NP/PAs). We used 2008-2016 Medicare Part A and B claims and nursing home assessment data to describe longitudinal trends in NP/PA practice in SNFs. We identified 8,877,094 SNF post-acute primary care visits for 1,494,113 Medicare beneficiaries. The total number of visits increased from 850,285 in 2008 to 1,189,553 in 2016. The share of visits by NP/PAs rose significantly over time, from 24% of visits in 2008 to 43% in 2016. 71% of SNFs (n=10,139) used NP/PAs in 2016, up from 46% (n=6,696) in 2008. The number of NP/PAs practicing in SNFs more than doubled, from 4,472 clinicians in 2008 to 10,000 in 2016. The number of physicians practicing in SNFs declined from 26,297 in 2008 to 19,745 in 2016. NP/PAs represented 14% of all SNF medical providers in 2008 and 34% of providers in 2016. In 2016, 48% of NP/PAs were SNFists (i.e. >90% of visits billed in SNF), vs. only 11% of physicians. SNFs with NP/PAs are on average larger, more likely urban, for profit, and care for larger populations of racial minorities, than SNFs without NP/PAs. SNFs with NP/PAs also have more short-stay Medicare residents, more admissions, higher nurse and rehab staffing levels, and higher case mix. These findings show that NP/PAs are taking on increasingly prominent roles as medical providers in SNFs.

AGE MATTERS: BUILDING BLOCKS NEEDED TO INFORM NURSE STAFFING HOURS REQUIREMENTS IN RESIDENTIAL CARE FOR OLDER ADULTS
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This study addresses the need for more complete information about the impact of nurse staffing hours (NSH) on nursing home quality of care. We used national data to examine the relationship between three types (Registered Nurse, Licensed Practical Nurse, and Nurse Aide) of hours, and long-stay quality of care measures over time, taking into account the possible confounding influence of regional differences. Data analyzed were from U.S. Nursing Home Compare datasets which reflect quarterly reports, July 1, 2018 - June 30, 2019 (14,768 facilities). The hours for each staff type in each facility were compared with the facility’s four-quarter quality average scores for each of the 12 measures. Results showed only one strong and statistically significant relationship (Beta= .548; p< .001) between Nurse Aide hours and the quality measure used in data sets to exemplify facilities that serve “lower-risk” residents. Analyses using multiple R (.517) indicate that the linear combination of the three NSH types strongly and significantly (p< .001) predicted the four-quarter average scores and explained 27% of the variance in the scores. Holding the other two NSH types constant, the scores for that measure increased by 63 for each additional increase in the Nurse Aide nurse staffing hours per resident per day. There was no multicollinearity among the three types of staffing hours. This research adds information to the foundation needed for future research about process indicators to assess their efficacy as measures of actual quality of care, and will be submitted as a Technical Note to journals.

AVOIDABLE DEATHS--NURSING PRACTICE FAILURES TO HONOR ADVANCED DIRECTIVES IN SNFS--A NATIONAL SAMPLE
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Ongoing evidence of failures to provide cardiopulmonary resuscitation in skilled nursing facilities (SNFs) has resulted in the federal regulation - F678 Cardio-Pulmonary Resuscitation (CPR). Descriptions of CPR-related non-compliance and nursing practice failures are contained in Statements of Deficiencies (CMS-2367). These data provide a unique opportunity to describe practice failures at the point-of-care. A mixed methods case study using content analysis and descriptive statistics was used for a purposeful sample of SODs from 11 SNFs in six states derived from a 2012 first quarter national CMS report of 42 avoidable deaths associated with immediate jeopardy citations. A codebook was developed and tested, based on empirical evidence reported in Office of Inspector General (OIG) 2014 Adverse Events and the Institute of Medicine 2004 nursing surveillance framework. Two trained and independent coders analyzed data. Analysis of SOD quality was conducted. Patterns of practice failures were identified. Ownership included 3 not-for-profit; 1 governmental; and 7 for-profit facilities. The 2012-star ratings ranged from 1.0 – 2.8. The practices of 5 RNs and 5 DONs were described. OIG categories included abuse and neglect, care transitions, and medications. Practice failures were associated with inadequate initiation of CPR resulting from improper processing of orders, poor identification of resident status, poor RN and DON surveillance, absence of CPR certified staff, and a lack of urgency in nursing’s response. The quality of SODs, based on 5 parameters, ranged from 18% - 100%. SODs are useful as data sources. Identified practice failures are useful in developing best practice protocols.

BETA TEST OF A PAC DEMENTIA KNOWLEDGE TRAINING MODULE INCLUDED IN A NURSING HOME ORIENTATION CURRICULUM

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Providing quality care for older adults in long-term care can be challenging, and this issue appears to be more pressing with people living with dementia. Using the Positive Approach® to Care (PAC) model, a 2-hour module for new staff nursing home orientation curriculum was designed to help introduce the concept of working with people living with dementia. Twelve undergraduate students participated in a beta-test of the nursing home orientation. A pre-and-post 38-item survey was administered to measure knowledge level and improvement. Participants also responded to qualitative semi-structured questions after the orientation. Descriptive statistics and bivariate analysis were conducted. Results indicated an improvement on dementia-related knowledge in most of the survey items (21 of 34 items). Examples of statistically significant differences in the pretest and posttest identified are knowledge on the effect of pressure in the palm to comfort a person with dementia (p-0.039), vision as the most powerful sensory input during dementia caregiving (p-0.001), and functionalities lost when the left temporal lobe shrinks (p-0.014). The qualitative evaluation showed that most of the participants indicated a change in dementia caregiving views — including how to pause if permission is not given to engage, and to respect personal space. These findings prove important because the PAC orientation curriculum was successful in improving the students’ knowledge and perspectives on dementia. This training program could be a useful tool if implemented into nursing home employee orientation.

CALCULATING THE TRUE COSTS OF FOOD SERVICE IN LONG-TERM CARE: DEVELOPMENT OF A COSTING METHODOLOGY

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As population’s age and the need for long term care (LTC) increases, so too does the focus on the costs to provide that care. Providing food, oral nutrition supplements and meals, can be a considerable expense to a home. The objective of this research was to develop a valid foodservice costing tool (FCT), to calculate the real cost of providing foods and meals in LTC. Current costing methodologies are not specific to LTC and do not account for all costs of a foodservice, including staff, procurement and nutrition supplements. An initial tool was developed using the systems approach in conjunction with literature and professional knowledge. This was piloted in real world contexts, using volunteer LTC homes. Four iterations of the tool were completed to assess its feasibility in calculating costs and useability. Managers were interviewed after completing the tool to gather an understanding of how the tool was interpreted and to refine completion. Following feedback, the resulting tool consists of nine sections, measuring both costs incurred in meal production and service as well as analysis of staff workloads. Preliminary results show consistency between homes within Australia, indicating that the true cost is much higher than that reported in the literature to date. The development of a comprehensive, usable tool which captures the total cost of foodservice allows homes to accurately report and understand costs from a systems level. This information can be used to demonstrate cost effectiveness of a foodservice and the potential to justify and plan future system changes.

DEFICIENCY CITATIONS IN NURSING HOMES THAT PREDOMINANTLY SERVE RESIDENTS WITH SERIOUS MENTAL ILLNESS

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Studies suggest that nursing homes (NHs) that predominantly serve residents with serious mental illness (SMI) are of worse quality due to poor resources (i.e., high Medicaid-paying census) and lower staffing. We used national Certification and Survey Provider Enhanced Reports (CASPER) data to examine the deficiencies issued to NHs from 37,800 recertification inspections of 14,582 unique