D2-3:

Development of a Provider-level Patient Centered Medical Home Questionnaire for Measuring Implementation and Impact

Jove Graham¹; Dione Mercer¹; Lorraine Tusing¹; Walter Stewart²

¹Geisinger Health System; ²Sutter Health

Background/Aims: The patient-centered medical home (PCMH) is widely supported as a means to coordinate care in the primary care environment, but relatively little is known about how variation in implementation of a PCMH model influences the success and sustainability. Many survey instruments developed to date for assessing PCMH are aimed at the healthcare system design as a whole or at patient experience, but not at providers who may have varying attitudes and perspectives on the role of PCMH and unique insights into practical implementation issues. Our goal was to develop questionnaires aimed at primary care physicians (PCPs) and nurse case managers (CMs) to assess variation in perception and implementation of PCMH. **Methods:** This study was performed within Geisinger Health System, an integrated health system with a PCMH program first introduced in 2006. We reviewed care management, medical home, chronic illness and chronic care model literature, and existing tools such as Patients Assessment of Chronic Illness Care (PACIC). Based on 60-minute interviews with system leadership about program design, we developed pilot questions and completed 90-minute interviews with 3 highly-experienced nurse CMs to map global concepts of services and systems to individual staff member functions. Two structured questionnaires were developed for CMs and PCPs focusing on team interactions, linkages to outside resources, and tasks/responsibilities. Providers were asked to rate difficulty of various functions as well as their perceived impact on patient care. **Results:** We administered questionnaires during 60-minute semi-structured interviews with 47 clinical staff covering 23 medical home clinics. Case managers and physicians showed strong agreement on who bears responsibility for ensuring patient access (PCP), monitoring and linkages (CM) and education (Shared), but there was wide variation among clinics in perceived difficulty and impact of various tasks, particularly connecting patients with community resources and interacting with external nursing home facilities in different areas. Results of other questionnaire areas will be presented. **Conclusions:** Design characteristics, process measures and patient-level outcomes are all important in assessing benefits of a PCMH program, and this work contributes additional tools for measuring provider perspectives and variation in implementation across different PCMH sites.

Keywords: Patient-centered medical home; Primary care

doi:10.3121/cmr.2014.1250.d2-3

D2-4:

Failure on Cognitive Screening Predicts Increased Healthcare Utilization

Leah Hanson¹; Terry Barclay¹; Ann Hanson¹; Logan Stuck¹; Maria Pyle¹; Amanda Cagan¹; Michael Rosenbloom¹

¹HealthPartners

Background/Aims: Most physicians fail to diagnose dementia until the moderate-severe stages. Cognitive screening for dementia in the asymptomatic population is not routinely performed due to the absence of evidence showing improved health outcomes. HealthPartners has piloted the use of the Mini-Cog as a standardized screening tool for cognitive function in patients aged 65 and older in order to assess the impact of undetected cognitive impairment on chronic disease management and healthcare utilization. **Methods:** Patients screened within specialty or primary care clinics were identified. Data from the 18 months prior to screening was collected from the electronic medical record and included the Mini-cog score (scored 0-5, fail is less than 4), demographics, presence of diagnosis for four chronic diseases (diabetes, hypertension, hyperlipidemia, heart disease), measures of chronic disease management (HbA1c, blood pressure, lipid panel, INR levels), and measures of healthcare utilization. Data analysis consisted of Poisson regression and normal mixed effects regression. **Results:** The Mini-Cog was administered in 753 patients (average 77 yr, 58% female) and 33% failed screening. No significant differences in chronic disease management were identified in the 18 months prior to screening between the patients that passed and failed. However, patients failing the MiniCog had a significantly

higher incidence rate of hospitalizations (24%), emergency room visits (58%), appointment no shows (76%), cancelled visits (23%), and phone encounters (11%). In a sub-analysis, patients failing screening in specialty care (193 of 554) had a higher incidence rate of appointment no shows (82%), but no difference in hospitalizations. In contrast, patients failing screening in primary care (56 of 199) showed a more profound effect on crisis driven care (a 134% and 411% increase in hospitalization and emergency room visit rates, respectively compared to those passing), but no difference in appointment no shows. **Conclusions:** Standardized cognitive screening in older adults has the potential to not only diagnosis dementia at its earliest stages, but also to identify at-risk individuals with higher healthcare utilization. The next step is to examine post-screen data for any changes in chronic disease management or healthcare utilization.

Keywords: Aging; Dementia

doi:10.3121/cmr.2014.1250.d2-4

D2-5:

Interpersonal Continuity of Care and Utilization Among Multimorbid Seniors in an Integrated Healthcare System

Jennifer Ellis¹; Chan Zeng¹; John Steiner¹; Jo Ann Shoup¹; Deanna McQuillan¹; Elizabeth Bayliss¹

¹Kaiser Permanente Colorado

Background/Aims: Greater continuity of care (CoC) is associated with lower hospital utilization. This has not been fully explored in integrated care delivery systems with high informational continuity. **Methods:** We determined associations between hospital utilization and: the Modified, Modified Continuity Index (MMCI), the Continuity of Care Index (COCI), and patient-reported care integration, in 2 retrospective cohorts of persons age 65+ with 3+ chronic conditions. A primary cohort (N = 806) reported care integration as measured by the Ambulatory Care Experiences Survey (ACES) in addition to administratively-measured CoC data; a secondary cohort (N = 11,394) had CoC data only. CoC and outcomes were measured over a 2-year period. Outcomes included: 1+ inpatient admissions (total and preventable), observation stays, and treat-and-release ED visits. Associations were evaluated with Wilcoxon Rank Sum tests. **Results:** Cohorts had similar age, gender, and morbidity. Median (5%,95%) scores for ACES domains were all 90 (50,100). CoC measures had different distributions, but were highly correlated: Median MMCI scores for primary and secondary cohorts were 0.54 (0.23, 0.80) and 0.55 (0.26, 0.84) respectively; COCI scores for primary and secondary cohorts were 0.17 (0.05, 0.53) and 0.20 (0.05, 0.65). In the primary cohort, ACES domains were not associated with having an inpatient admission, preventable admission, or observation stay; those with 1+ ED visit reported slightly lower team coordination; and no associations were observed between CoC measures and outcomes. In the secondary cohort, higher mean MMCI scores were associated with slightly greater utilization for all outcomes, whereas higher mean COCI scores were associated with slightly lower utilization. **Conclusions:** Differences in CoC among those with and without hospital use were statistically but not clinically significant. For multimorbid patients in a highly integrated system, the value of interpersonal continuity is unlikely to be demonstrated by a reduction in hospital utilization, which may be more a function of informational continuity.

Keywords: Multimorbidity; Continuity of care

doi:10.3121/cmr.2014.1250.d2-5

PS2-10:

Predictors of Depression and Poor Physical Health among Patients with Chronic Hepatitis C Infection: Results from the Chronic Hepatitis Cohort Study

Joseph Boscarino¹; Mei Lu²; Stuart Gordon²; Loralee Rupp²; Mark Schmidt³; Vinutha Vijayadeva³

¹Geisinger Health System; ²Henry Ford Health System; ³Kaiser Permanente Hawaii

Background/Aims: Our objective was to assess risk factors for depression and poor physical health among patients with chronic hepatitis C virus (HCV) infection. **Methods:** We conducted a survey of HCV patients seen at