challenges in design and execution, particularly for Medicaid providers. In order to find an alternative that overcame the challenges of P4P, CareOregon—a non-profit health plan serving Medicaid and Medicare enrollees in Oregon—developed the Care Support and System Innovation (CSSI) Program. An evaluation was conducted to assess the overall impact of the CSSI program in promoting comprehensive improvements in quality of care among network providers and the extent to which it offers a viable alternative to P4P. **Methods:** Data were collected from the 48 medical practices that participated in the CSSI Program between 2005 and 2007. Data collection strategies included site visits, telephone interviews, document review and a web-based survey. Qualitative data were coded and analyzed using a grounded theory approach, emphasizing identification of themes judged meaningful to the study subjects. Quantitative data were analyzed through the use of descriptive statistics and chi-squared analysis. **Results:** The evaluation found that the CSSI Program successfully addressed many challenges inherent in P4P. The CSSI Program successfully engaged providers, fostered a culture of quality improvement within its provider network, and provided practices with the opportunity to develop sustainable and innovative solutions to address quality concerns. Success of the program was attributed to CareOregon's focus on building relationships while providing technical assistance and responsive funding. **Conclusions:** The CSSI Program has provided valuable support for improving quality of health care delivery and encouraged innovation among participating providers. The model provides a viable alternative for overcoming many of the challenges faced by pay-for-performance and other quality improvement programs.

Keywords: Quality of health care delivery, Care Support and System Innovation Program, Quality improvement assessments

doi:10.3121/cmr.2010.943.ps3-24

PS3-25:

Raising Literacy and Capacity for Incontinence and Skin Care in Dementia: Needs Assessment of Family/Friend Caregivers and Healthcare Providers

Jody Jackson, RN, BSN¹; Donna Bliss, PhD, RN²; Cheri Rolnick, PhD, MPH¹; Kenneth Hepburn, PhD³; Casey Arntson²

¹HealthPartners; ²University of Minnesota; ³Emory University

Background and Aims: Incontinence can occur in Alzheimer's disease or dementia (AD). Skin damage is frequently a physical complication. Few AD support programs directly address these problems. The purpose of this study is to assess and better meet the needs of informal caregivers and healthcare providers of persons with AD about issues of incontinence and perineal skin care. **Methods:** Audiotaped focus groups or interviews are being conducted with informal (family/friend) caregivers (goal n=56) and healthcare providers including physicians and nurse practitioners (NPs) (goal n=10) to determine needs for raising literacy and care capacity related to incontinence and skin damage. This assessment addresses health literacy content (e.g., knowledge, skills) as well as attitudes and preferred methods of receiving content. Results of this assessment, review of literature of current evidence and recommendations by expert clinical consultants will guide development of an informational and supportive intervention. **Results:** To date, 30 informal caregivers have participated in discussions (mean age 60; 75% female; 50% of care recipients are incontinent). A total of 11 healthcare providers participated in discussions (8 MDs, 2 NPs, 1 Pharmacist; mean age 53; 64% female; mean years of professional experience 23). Literacy needs of informal caregivers include prevalence and reasons why incontinence occurs in AD, when to discuss with healthcare provider and terms to use, types and photos of skin damage that can occur, indications for various absorbent and skin care products, and "step by step" instructions on ways to manage. Literacy needs of providers include evidenced-based recommendations for non-pharmacological management strategies, terms used by families and patients to refer to incontinence, referral or follow-up visit with specialist nurse, and utilization of provider (primary care, geriatrics) who has established relationship with patient. Preferred methods of learning/dissemination for both caregivers and providers include informational brochure, FAQ sheet, and guide to skin care products. Few preferred computer-based materials. **Conclusions:** Family/friend caregivers and

healthcare providers of individuals with AD have indicated health literacy needs related to incontinence and associated skin damage and have identified preferred ways of addressing these needs.

Keywords: Incontinence and perineal skin care, Health literacy, Caregivers and health providers

doi:10.3121/cmr.2010.943.ps3-25

PS3-26:

Reasons for Not Achieving Optimal Secondary Prevention Care for Coronary Artery Disease

Thomas Kottke, MD, MSPH¹; James Smith, MD²

¹HealthPartners Research Foundation; ²HealthPartners Medical Group

Background and Aims: Adherence to four secondary prevention goals (not using tobacco, LDL measured and <100 mg/dl within one year, blood pressure <140/90 at last visit, and daily aspirin) significantly improves outcomes for patients with coronary artery disease (ICD 9 410-414). However, a significant proportion of patients fail to achieve these four goals. We wished to determine the reasons why patients with CAD failed to achieve care goals in our multispecialty medical group. **Methods:** We abstracted 170 randomly-selected records of patients with CAD who failed to achieve care goals. **Results:** The two most frequent reasons for failure to achieve care goals were: the care team overlooked care needs at the time of an acute care visit (n=98), and the patient failed to return for follow-up (n=28). Other less frequent reasons were: The patient was offered treatment but declined (n=14); the clinician changed a medication in response to a value that was out of range, and the patient was not yet due for follow-up (n=10); and, the patient was not invited back for follow-up (n=9). The following reasons were observed in only one case each: Co-morbid conditions did not justify aggressive goals; the ordering physician failed to follow-up on a completed test; and, the patient was intolerant of statins. Eight patients failed to meet the optimal CAD care goal for other unique reasons. **Conclusion:** Providing clinical care teams with the tools to better track patient care needs (e.g., electronic patient identification and follow-up systems) could significantly reduce secondary prevention care gaps in our medical group.

Keywords: Coronary Artery Disease, Patient care outcome goals, Secondary prevention care

doi:10.3121/cmr.2010.943.ps3-26

PS3-28:

Telemedicine Specialty Consultation in a Medically Underserved Community

Ted Palen, PhD, MD, MSPH¹; Mike Bodily, MBA²

¹Colorado Permanente Medical Group; ²Kaiser Permanente Health Plan of Colorado

Background and Aims: During the current national health care reform discussions, health information technologies (HIT) are receiving a lot of attention as means of lowering health care costs, improving access to health care, reducing errors during the delivery of healthcare, and improving health outcomes. Patients in rural or medically underserved areas find it difficult to obtain and maintain adequate access to health care. Telemedicine (TM) services can exchange video and audio information between healthcare providers and patients in different locations. For individuals in rural communities TM may improve access to care through the use of novel care delivery models. We are conducting a proof of concept (POC) study to evaluate the use of TM consultation between a primary care clinic in a medically underserved region of southern Colorado and a specialty care (endocrinology) clinic in Denver. **Methods:** This is a prospective health services POC study. We are taking advantage of a "natural experiment," the expansion of primary care services into a medically underserved area of southern Colorado, to examine the requirements for establishing TM services between a rural primary care clinic and metropolitan based specialists. **Results:** Technical requirements included establishing network capabilities (512 kbps ISDN, H.320), 2 Mbps IP (H.323 or SIP), wireless LAN connection,

encryption embedded transmissions (H.235 and IEEE 802.1 x authentication); and remote monitoring equipment (exam camera, ENT/otoscope, electronic digital audio stethoscope (frequency: 40 Hz-2000 Hz, response: 45 Hz-1.6 KHz). Legal requirements involved the review of both federal and state statutes governing the use of TM for patient care and geographical/population requirements. Billing and regulatory requirements entail ensuring the use of the correct CPT and modifiers codes for TM and making sure these are operational within the medical record. Establishing criteria to ensure patients are appropriate for TM, the contents for TM informed consent, rules governing the use of TM for Medicare/Medicaid and non-Medicare/Medicaid patients. Establish clinical workflows for TM between the primary care and specialty care clinics. **Conclusions:** Involve legal counsel early to review state statutes and develop TM patient/provider consent forms. Coordinate services with IT department. Coordinate documentation requirements with the billing and coding department. Work with clinic staff to incorporate TM into the clinic and administrative workflow. Define roles and responsibilities. Early planning and inter-department coordination is essential for a successful TM project.

Keywords: Telemedicine services, Medically underserved communities, Improving access to care

doi:10.3121/cmr.2010.943.ps3-28

PS3-29:

The Benefits of Stakeholder Involvement in Research

Kathryn Horner, MS¹; Ed Wagner, MD, MPH¹; Erin Aiello Bowles, MPH¹; Beth Kirlin, BA¹; Leah Tuzzio, MPH¹

¹Group Health Cooperative

Background and Aims: The Oncology Nurse Navigator randomized clinical trial at Group Health is testing whether providing oncology “nurse navigators” to patients newly diagnosed with lung, breast or colorectal cancer affects quality of life and satisfaction with care compared with patients in enhanced usual care. While implementing our research interventions, we integrated input from patients, community groups and the delivery system. **Methods:** Group Health patients and community groups were invited to participate through word-of-mouth outreach by the study team. Our delivery system partners were distributed materials for input via e-mail, phone calls and team meetings. To date, stakeholders have been involved in three main activities. First, our enhanced usual care resource guide was developed after a panel discussion with Group Health patients, caregivers and a community advisor. Second, our nurse navigator training incorporated firsthand patient experiences. Third, our intervention protocols and processes were constructed from input with our oncology department and nurse navigator team. **Results:** Patients and caregivers provided valuable insights and practical feedback while developing our study’s enhanced usual care resource guide. Their involvement revealed the importance of making materials feel accessible and upbeat. We have since presented the guide to Group Health’s cancer support group who commented they were, “Perfect!” The initial panel discussion was so useful that we invited stakeholders to participate in our nurse navigator training. Patients shared their experiences about feeling overwhelmed and unable to process information during a training session. The involvement of Group Health patients was especially enlightening for our seasoned nurses and emphasized the patient-centered design of our study. Since it is important for our nurse navigator intervention to be a viable delivery system program, input from clinical groups was integral to our protocols and processes. We have not only incorporated standard Group Health work into our intervention (e.g., fatigue assessment) but also, programmed our intervention into Group Health’s electronic medical record. **Conclusions:** Stakeholders were willing and often eager to provide feedback on our research. Furthermore, obtaining guidance from these groups early on in this study was critical to building and implementing a truly patient-centered cancer care program.

Keywords: Nurse navigators, Patient-centered cancer care program, Patient navigation

doi:10.3121/cmr.2010.943.ps3-29

PS3-30:

The Group Health Plain Language Network: A System-wide Initiative to Improve Communication from the Ground Up

Jessica Ridpath, BA¹; Sarah Greene, MPH¹

¹Group Health Research Institute

Background/Aims: Limited health literacy negatively impacts health care costs, quality, and outcomes. Complex language and other communication barriers prevent 93 million U.S. adults from finding, understanding, and acting on essential health information—leading to medication and treatment errors, failure to seek preventive care or manage chronic illness effectively, increased use of emergency rooms for primary care, and higher health care costs. The Group Health Plain Language Network is a staff-driven initiative to reduce these barriers by establishing a standard of clear communication with patients throughout the system. **Methods:** The Group Health Plain Language Network was founded in 2007 by a small group of multidisciplinary staff interested in system-level communication improvements to advance health literacy. The Network’s overarching strategy is promotion of plain language—a concise, patient-centered communication style that achieves clarity through common vocabulary and straightforward organization. Network leaders set annual goals tied to organizational priorities and emerging health literacy innovations. We also meet at least quarterly to monitor projects carried out by subgroups of the now 30+-member coalition. **Results:** Network membership tripled in just two years, thanks to successful engagement of dozens of individuals and departments in a leadership-endorsed plain language initiative. Primary outcomes include: creating a plain language charter and securing executive-level buy-in; developing an online plain language toolkit for all staff; providing plain language training for subgroups of staff; revising dozens of print and Web-based health education materials; and partnering with the Group Health legal department to revise consent templates for medical procedures—many of which went from >15th-grade reading level to <7th grade. Formal evaluation of improvements to consent templates is planned for 2010. **Conclusions:** The Network’s many accomplishments have occurred without allocating additional resources—demonstrating that system-level communication improvements are possible even when resources are scarce. We attribute the Network’s early success to our focus on a solution-oriented approach that facilitates wide-ranging buy-in: plain language clearly aligns with other organizational goals, cuts across system silos, and engages staff who may not otherwise feel connected to or see the impact of low health literacy. We hope our experience can serve as a helpful example for other health systems striving to advance health literacy through improved communication.

Keywords: Health literacy, Communication within Health systems, Group Health Plain Language Network

doi:10.3121/cmr.2010.943.ps3-30

Cardiovascular

C-B4-01:

Cognitive Impairment in Patients Hospitalized for Decompensated Heart Failure

Jane Saczynski, PhD¹; Darleen Lessard, MS²; Jerry Gurwitz, MD¹; Catherine Emery, RN²; Frederick Spencer, MD³; Robert Goldberg, PhD²

¹Meyers Primary Care Institute; ²University of Massachusetts Medical School; ³McMaster University

Background/Aims: Cognitive impairment (CI) is increasingly being recognized as an important clinical issue in the context of providing care to older adults with other prevalent medical conditions, including cardiovascular disease. The purpose of this study was to describe the prevalence of CI among older adults hospitalized with decompensated HF, and examine factors associated with cognitive status. **Methods:** Preliminary data from the Observational Study of Heart Failure Delays are currently available from 277 patients (mean age = 76 years; 46% female) who received care in four area hospitals. Patients were interviewed using a 25-minute standardized