system to test whether it reduces the total cost of care. **Methods:** GHS PPC applies to care over the entire gestational period (antepartum, intrapartum and postpartum) using a single standardized pathway with 103 best practice measures grouped in five clinically relevant bundles and automated reporting for all patients across 22 practice sites and four hospitals. Geisinger Health Plan claims data from 2007 to 2010 for 3,369 mother-infant combinations were used to calculate total costs of care per live birth for mothers and infants for PPC and control groups. A difference-in-difference method was used to estimate the cost impact accounting for baseline differences between groups and the secular trend in the control group. A set of multivariate regression models was developed to calculate regression-adjusted cost estimates. **Results:** Average total cost of care per live birth in the PPC group was approximately 26% ($P = 0.001$) lower compared to the control group. Much of this cost savings was attributable to reductions in the cost associated with infant care, including lower utilization of expensive NICU services. **Conclusions:** This study demonstrates the potential for reduction in medical care costs of a standardized perinatal care delivery process based on Geisinger's experience. The findings suggest that cost savings are attributable to prevention of adverse patient outcomes. If applied more broadly, including to state Medicaid programs which cover almost half of U.S. births, similarly implemented standardized processes could result in better health outcomes and significant cost savings.

Keywords: Perinatal care; Cost

doi:10.3121/cmr.2014.1250.d4-1

D4-4:

Shared Medical Appointments: A Promising Innovation to Improve Patient-Physician Relationship and Ease Primary Care Shortage

Cheryl Stults¹; Mary McCuiston²; Dominick Frosch¹; Dorothy Hung¹; Ming Tai-Seale¹

¹Palo Alto Medical Foundation Research Institute; ²Essential Anthropology

Background/Aims: Shared medical appointments (SMAs) or group visits have been touted as a primary care system change to overcome the challenges of short visits, underused self-management education, and to relieve physician shortage. However, few studies have examined SMAs from the patient's perspective. Using data collected through focus groups, we present the thoughts and experiences of patients participating in SMAs. **Methods:** We conducted five focus groups with participants who had attended SMAs at a large, non-profit, multispecialty group practice in northern California which serves four counties and more than 700,000 patients. Focus groups were recorded, transcribed, and thematically coded according to study aims. Transcripts were coded at the paragraph level. Disagreements in coding were discussed until consensus was reached. **Results:** Similar themes emerged across the focus groups. Patients expressed many benefits to SMAs including enhanced learning by being able to cover more information than what would be provided in a traditional visit, increased motivation for health behavior change, and were able to connect with others in a similar situation. Patients also felt that the SMA altered their relationship with their physician. Patients now saw the more "human" side to their physician which placed them at ease for future visits. Overall, the power dynamic between patient and physician was lessened as the patient now viewed themselves as being able to impart information to the physician. **Conclusions:** Given the upcoming Affordable Care Act and existing primary care shortage, SMAs provide a way for patients to improve access, relationships with physicians, and an increased knowledge of health, but also to help ease patient load for physicians. Thus, SMAs are an innovative form of delivery that can improve efficiencies and better use the scarce resource of primary care physicians.

Keywords: Shared medical appointments; Qualitative

doi:10.3121/cmr.2014.1250.d4-4

PS1-26:

The Impact of Relational Dynamics in Primary Care Departments on Patient Satisfaction with Clinic Performance

Laura Panattoni¹; Ming Tai-Seale¹

¹Palo Alto Medical Foundation Research Institute

Background/Aims: We examined the extent to which relational dynamics among primary care providers and clinic staff impacts clinic quality and efficiency from the patients' perspective. Relational dynamics, measured by team communication (frequency, timeliness, accuracy, problem-solving) and relationships (shared goals, shared knowledge, mutual respect), has been associated with better performance in hospital settings through better communication and coordination of tasks among providers; however, the impact in primary care has received more limited attention in the literature. We take advantage of the natural variation in practice culture that occurred in 13 family medicine and 13 internal medicine departments in a large multispecialty practice in California. **Methods:** We conducted a cross sectional study using data from a relational dynamics survey completed by providers (142 physicians; 96 medical assistants; 46% response rate), Press Ganey patient satisfaction data ($n = 13,076$; 21% response rate), and EHR from July 2011 to June 2012. Relational dynamics was measured by 7 reliable items of team interaction (Cronbach's $\alpha = 0.90$), scored 1 (lowest) to 5 (highest). Department averages were constructed and matched to 8 patient satisfaction measures of clinic quality and efficiency, scored as the % of "very satisfied" respondents. Relevant patient case-mix, physician, and department characteristics were included in multilevel models with random effects at the department level. **Results:** Relational dynamics varied across the 26 departments ranging from 3.57 to 4.52 (mean = 4.17; SD = 0.25). A one SD increase in relational dynamics was associated with an increase in the % of patients "very satisfied" with scheduling appointments (1.61, $P < 0.05$), getting the clinic on the phone (1.46, $P < 0.05$), returning phone calls (2.19, $P < 0.01$), returning emails (2.23, $P < 0.05$), wait times (3.71, $P < 0.01$), and the likelihood of recommending the practice (1.53, $P < 0.01$). However, there was no relationship with the ease of obtaining referrals and the sensitivity to patients' needs. **Conclusions:** The relational dynamics in primary care departments are associated with improvements in patient satisfaction with clinic performance. These findings support establishing formal procedures to enhance the communication and relationships among primary care providers and clinic staff in order to improve the patient experience with care.

Keywords: Relational dynamics in primary care; Patient satisfaction

doi:10.3121/cmr.2014.1250.ps1-26

PS1-29:

Changing the Culture of Medicine: An Exploration of Lean Healthcare in Primary Care

Caroline Gray¹; Meghan Martinez¹; Dorothy Hung¹

¹Palo Alto Medical Foundation Research Institute

Background/Aims: Despite its soaring costs, healthcare in the U.S. still suffers from inefficiencies and wastefulness. Given recent health care reform efforts, healthcare organizations know significant change is on the horizon, and in anticipation of that, some organizations have begun adopting delivery systems that address these wastes and inefficiencies. One system that has gained considerable attention in recent years is commonly referred to as Lean Healthcare. Originating from the manufacturing industry, this approach to healthcare focuses on retaining value for the patient and eliminating non-value or waste. However, implementing Lean healthcare is not without its challenges. One major challenge to implementing Lean is essentially cultural. More specifically, the values and norms associated with Lean and those deeply entrenched in the field of medicine may conflict, and therefore reconciling them may be necessary to successfully implement Lean. **Methods:** This study consists of a qualitative evaluation of a Lean implementation effort at a large healthcare organization. Researchers conducted observations of key implementation events and interviewed frontline leaders, as well as physicians, nurses, and medical assistants who have participated in the change effort. The data produced from these qualitative methods were analyzed and coded using an inductive, grounded approach. **Results:** This paper highlights five main major changes that produced cultural conflict when this healthcare organization implemented Lean. These include: (1) adopting team care approaches (2) democratization of the workplace and the erosion of hierarchies (3) reducing variation and standardizing work (4) surveillance of staff and employees (5) a perceived emphasis on profit over patient care. **Conclusions:** Implementing new ways of delivering care in healthcare organizations is often met with many challenges. Some of these challenges may be rooted in a conflict between