pragmatic design to evaluate health systems-based approaches to CRC screening among age-eligible patients who receive care at FQHCs. **Methods:** STOP CRC has two phases. In Phase I (Year 01), we will pilot-test an evidence-based approach to improve participation in CRC screening in two FQHCs. This phase will include an assessment of the intervention's feasibility, effectiveness, and cost. In Phase II (Years 02–05), we will conduct a comparative effectiveness pragmatic clinical trial, using a mixed-methods approach to evaluate the adoption, implementation, and maintenance of our CRC screening program. Throughout the project, we will involve a diverse planning advisory group of FQHC clinicians and patients, community representatives, state policy makers, and researchers, using principles of Community-Based Participatory Research. **Conclusions:** STOP CRC is a large-scale approach to raising rates of colorectal cancers screening in FQHCs. STOP CRC is expected to expand meaningful use of electronic health information; synergistically meet national goals to improve cancer screening rates, address health disparities, reduce health care costs; and act as a catalyst for future systems-based approaches to improve care delivery in FQHCs and other health systems.

Keywords: Methods; Pragmatic Trial; Colon Cancer
doi:10.3121/cmr.2013.1176.ps1-55

PS1-56:

Beyond Barriers: Systemic Constraints Limiting Sexual Health Care for Breast Cancer Survivors

Meghan Halley[1]; Suepattra May[1]; Katharine Rendle[1]; Dominick Frosch[1]; Allison Kurian[2]

[1]Palo Alto Medical Foundation for Healthcare, Research and Education; [2]Stanford University

Background/Aims: Sexual health problems represent one of the most frequently experienced and longest-lasting effects of breast cancer treatment, but research suggests that providers rarely discuss sexual health with their patients. Existing research examining barriers to addressing the sexual health concerns of cancer patients has focused on discrete characteristics of the provider-patient interaction without considering the broader context in which these interactions occur. Drawing on focus group discussions with breast cancer survivors, we explore how foundational cultural and structural characteristics of the healthcare system may be preventing breast cancer survivors from addressing their sexual health concerns. **Methods:** Five focus groups were conducted with breast cancer survivors receiving support services at a breast cancer advocacy and resource organization in Northern California. Each group focused on a different aspect of treatment including: 1) diagnosis; 2) surgery and reconstruction; 3) chemotherapy; 4) radiation; and 5) survivorship. An interview guide for each topic area was used to elicit participants' thoughts, opinions and experiences of breast cancer treatment. Analysis utilized inductive techniques incorporating elements of Grounded Theory to identify salient themes that emerged in the discussions. **Results:** An average of eight women participated in each focus group, and women were allowed to participate in more than one group, for a total of 21 participants. Participants' discussions illustrated three core ways in which cultural and structural characteristics of the healthcare system prevented them from addressing their sexual health concerns, including: 1) the structure of cancer care led to participants being disconnected from the healthcare system at the time when sexual side effects most commonly emerged; 2) when their sexual side effects did emerge, the highly specialized structure of the biomedical system made it difficult for patients to identify the appropriate provider to address their complex sexual health concerns; and 3) when patients did discuss sexual health with their providers, their providers approached sexuality as primarily physical, while participants were experiencing biopsychosocial sexual concerns. **Conclusions:** These results suggest that addressing breast cancer survivors' sexual health needs will require a comprehensive approach that includes educating physicians, coordinating existing resources, and developing new sources of information and support during the survivorship period.

Keywords: Breast Cancer; Sexuality; Communication
doi:10.3121/cmr.2013.1176.ps1-56

PS1-60:

Advanced Pancreatic Cancer: Patterns of Care and Recommendations for Education and Support

Jessica Engel[1]; Darlene Plank[1]; Adedayo Onitilo[1]

[1]Marshfield Clinic / Security Health Plan of Wisconsin

Background/Aims: Advanced pancreatic cancer has a poor overall prognosis. Fear, anxiety, sadness, and uncertainty are common responses felt by many who are diagnosed with this unfortunate disease, as well as feeling a variety of discomforts related to the cancer itself. Faced with limited time, many hope for longevity while maintaining as good a quality of life as possible. After diagnosis, a multitude of considerations are thought to be essential and beneficial for the patient, caregivers, and medical care providers, including addressing advanced illness planning related to coping, decision-making, cancer treatment, symptom management, and end-of-life care. While the recognition of those considerations is thought to contribute to improved quality of care, often these topics or related interventions are not fully addressed or implemented, potentially leading to a less than ideal experience for the patient with advanced pancreatic cancer. The goal of this study is to evaluate care patterns for advanced pancreatic cancer, address completeness of care based on current standards and guidelines, and provide recommendations for improved overall care and support. **Methods:** Data from the Marshfield Clinic electronic medical record and cancer registry will be electronically and manually abstracted. All patients diagnosed with stage IV pancreatic cancer from 2010-2012 will be included to reflect current care patterns. Data will include patient and cancer characteristics; cancer treatment; presence and management of significant symptoms; number and reason for hospitalization(s); whether or not prognosis and treatment options were discussed; and whether palliative/hospice care and other supportive care referrals were offered or occurred. Comprehensive review of the literature will be undertaken to compile present standards and guidelines regarding advanced cancer care. **Results:** Planned analyses include summary of patient and cancer characteristics, including survival; and determination of variability and commonalities in patient care coordination and utilization of supportive services. **Conclusions:** Understanding the met and unmet needs of patients with advanced pancreatic cancer will lead to improved quality of care and quality of life. Results of this study will be used to write a guideline for improved care and support.

Keywords: Advanced Cancer Planning; Pancreatic Cancer; End of Life Care
doi:10.3121/cmr.2013.1176.ps1-60

PS1-61:

Race and Receipt of Radiation Therapy with Curative Intent after Radical Prostatectomy for Prostate Cancer

Kathryn Richert-Boe[1]; Reina Haque[2]; Stephen Van Den Eeden[3]; Sheila Weinmann[1]; Bhaskar Kallakury[4]

[1]Kaiser Permanente Northwest; [2]Kaiser Permanente Southern California; [3]Kaiser Permanente Northern California; [4]Georgetown University Medical Center

Background/Aims: We determined if differences existed in prostate cancer treatment received by Caucasian and African-American men who had local or biochemical recurrence following radical prostatectomy (RP) for prostate cancer at an HMO where access to medical care is theoretically equal for all members. We used data collected for a population-based case-control study designed to evaluate the role of specific molecular markers in prostate cancer survival. The subjects were diagnosed with prostate cancer from 1971 through 2001. **Methods:** Study subjects were members of one of three health plans: Kaiser Permanente Northwest (KPNW), Kaiser Permanente Southern California (KPSC), or Kaiser Permanente Northern California (KPNC). The study population included 90 African-American and 233 Caucasian men with prostate cancer who had either local or biochemical recurrence following RP. We compared the likelihood, according to race, of treatment with salvage radiation therapy with curative intent (SRT) among these subjects. We reviewed medical records of all subjects to determine all treatment received in addition to RP and to assess potential confounding factors and effect modifiers. **Results:** After adjusting for case/control status, institution, age at diagnosis, year of diagnosis, Gleason grade (all matching criteria in the

original study), tumor stage, comorbid conditions, presence of positive margins, seminal vesicle involvement or perineural invasion at RP, age at recurrence, year of recurrence, time to recurrence, and intensity of follow-up, Caucasian men were more likely than African-American men to receive SRT in this study population (OR 1.5; 95% CI 0.7-3.1). However, this difference did not reach statistical significance. The factors that did predict for receipt of SRT were the absence of comorbid conditions (OR 2.1; 95% CI 1.1-4.2), recurrence prior to 1994 (OR 2.8; 95% CI 1.4-5.6), and local (rather than biochemical) recurrence (OR 6.9; 95% CI 2.6-18.6). **Conclusions:** Although the difference in receipt of SRT between Caucasian and African-American men was not statistically significant, the point estimate suggests that Caucasian men were about 50% more likely to receive it. It is possible that this is a real difference, and that a study with a larger sample size would show that.

Keywords: Racial Differences; Prostate Cancer Therapy
doi:10.3121/cmr.2013.1176.ps1-61

PS1-62:

Evaluation of the National Coalition for Cancer Survivorship (NCCS) - Cancer Survival Toolbox®: A Mixed Methods Approach

Bridget Gaglio[1]; Borsika Rabin[2]; Pamela Goetz[3]; Jo Ann Shoup[2]; Carmen Martin[2]; Michelle Henton[2]; Kathleen Mazor[4]; Richard Street, Jr[5]

[1]Kaiser Permanente Mid-Atlantic; [2]Kaiser Permanente Colorado; [3]National Coalition for Cancer Survivorship; [4]Fallon Community Health Plan / Reliant Medical Group; [5]Texas A&M University

Background/Aims: In 1998, the NCCS released the Cancer Survival Toolbox® (Toolbox), a free, self-learning audio program that can help people develop skills to better meet and understand the challenges of their cancer. The objectives of the current study were to increase the dissemination potential for the Toolbox by learning from individuals who had been diagnosed with cancer about their experiences and preferences related to health information and with the Toolbox specifically. **Methods:** Newly diagnosed cancer patients (N = 42) from Kaiser Permanente Colorado were sent a copy of the Toolbox. Participants were asked to complete a questionnaire at one and three months, post-receipt of the Toolbox, asking how they used the Toolbox, timing of receiving the Toolbox in relation to their diagnosis, and actual usage. A sub-set of individuals who completed the questionnaire participated in interviews at one and three months to further explore experiences related to receiving, using, and understanding the Toolbox. Usability testing was conducted at three months, comparing usage of the original Toolbox and alternative modalities. **Results:** Overall, participants felt the Toolbox was a useful and comprehensive resource. Almost half of the study participants thought the Toolbox provided more useful information compared to other health information sources they found. Many specifically stated they liked the personal stories told on the CDs and that hearing about someone else's experience was very helpful. Participants emphasized wanting to receive the Toolbox at the time of diagnosis. At the three month assessment, participants stated that they found the information in the Toolbox easy to understand and were able to apply the information provided as they reported feeling more comfortable and confident in asking questions and expressing opinions about their care and treatment options. **Conclusions:** Study participants used numerous sources to find cancer-related information, including the Internet, cancer-related organizations, members of healthcare team, family, and friends. Given that people are different in terms of interests, learning style, and comfort using technology, it is important to have cancer-related health information in a multitude of formats and modalities to meet the patients' preferences and needs.

Keywords: Mixed Methods Research; Health Information; Evaluation
doi:10.3121/cmr.2013.1176.ps1-62

Cardiovascular Disease

A3-1:

Outcomes of a Randomized Trial of Home Blood Pressure Telemonitoring with Pharmacist Case Management

Karen Margolis[1]; Stephen Asche[1]; Anna Bergdall[1]; Nicole Trower[1]; Jaime Sekenski[1]; Rachel Pritchard[1]; Patrick O'Connor[1]; JoAnn Sperl-Hillen[1]; Michael Maciosek[1]

[1]HealthPartners

Background/Aims: Patients with high blood pressure (BP) visit a physician on average 4 times per year though fewer than half achieve BP control. Practical, effective, and sustainable models are needed to improve BP management. Hyperlink is a clinic-randomized trial testing an intervention that combines home BP telemonitoring with pharmacist case management in patients with uncontrolled hypertension. **Methods:** We enrolled 450 patients with uncontrolled BP from 16 primary care clinics. Eight clinics (222 patients) were randomized to usual care and 8 clinics (228 patients) to intervention. Intervention patients received home telemonitors that transmit BP data to a secure database. Pharmacists consult with patients by phone and adjust antihypertensive therapy based on home BP data. The intervention lasts 12 months with follow-up to 18 months to observe durability. The primary outcome is BP control at 6 and 12 months, defined as BP ≤140/90 mm Hg (or ≤130/80 mm Hg in patients with chronic kidney disease or diabetes). Data on demographics, medication use and adherence, and satisfaction with care were also gathered. Here we report 6-month BP outcomes. General and generalized linear mixed models are used to accommodate the cluster-randomization. **Results:** Enrollees were 45% female, 82% white, and 12% black, with mean age of 61 years. Mean BP at baseline was 148/85 mm Hg in both treatment groups. Of the 403 attending the 6-month visit (197 usual care, 206 intervention), 45.2% in usual care and 71.8% in intervention achieved BP control (P <0.0001). In usual care, mean systolic BP decreased by 10.8 mm Hg and diastolic decreased by 3.4 mm Hg. In intervention, mean systolic BP decreased by 21.5 mm Hg and diastolic decreased by 9.4 mm Hg. The difference in change between groups was 10.7 mm Hg systolic (P <0.0001) and 6.0 mm Hg diastolic (P = 0.002). Secondary outcomes, including changes in self-reported satisfaction with care, treatment intensification, and medication adherence, will also be reported. **Conclusions:** Home telemonitoring with pharmacist case management was effective at reducing BP for hypertensive patients over 6 months. This intervention may be cost-effective for managing hypertensive patients with uncontrolled BP, especially if results are sustained during the maintenance and post-intervention phases of follow-up.

Keywords: Hypertension; Team-Based Care; Telemonitoring
doi:10.3121/cmr.2013.1176.a3-1

A3-2:

The Signs and Symptoms of Heart Failure are Frequently Documented to Wax and Wane in the Years Prior to a Clinical Diagnosis of Heart Failure: Data from 4,644 Patients Followed in Primary Care

Steven Steinhubl[1]; Jimeng Sun[2]; Rajakrishnan Vijayakrishnan[1]; Roy Byrd[2]; Zahra Daar[1]; David Gotz[2]; Shahram Ebadollahi[2]; Walter Stewart[3]

[1]Geisinger Health System; [2]IBM; [3]Sutter Health

Background/Aims: The diagnosis of heart failure (HF) is frequently delayed until patients are symptomatic enough to require hospitalization. Earlier identification of these patients would allow for the aggressive initiation of preventive strategies, potentially resulting in a decrease in hospitalizations and improved outcomes. **Methods:** Patient Electronic Health Record (EHR) data from 39 community practice clinics within the Geisinger Clinic were used. Among primary care patients, 4,644 incident cases of HF were identified between 2001 and 2010 with their diagnosis date determined by specific operational criteria. A validated natural language processing application was applied to primary care encounter progress notes to identify affirmations and denials of Framingham signs and symptoms for heart failure. **Results:** During a mean duration of 3.4 years of observation preceding the HF diagnosis date, positive affirmations of HF signs/symptoms were frequently documented. The median duration of time between first