Colorectal cancer screening and the Patient Centered Medical Home

July 28th, 2016
3:00pm ET
Purpose of Today’s Webinar

• Understand the concepts of the patient centered medical home (PCMH)
• Consider ways to align colorectal cancer (CRC) screening with PCMH
• Learn how one community health center used CRC screening as a quality improvement measure in achieving PCMH recognition
• Q&A
Presenters:

Michael Potter, MD (Moderator)
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University of California San Francisco School of Medicine
NCCRT Professional Education and Practice Task Group Co-chair

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American Cancer Society
Co-chair, NCCRT

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Chief Executive Officer
Fair Haven Community Health Center
Colorectal Cancer Screening & The Patient Centered Medical Home

Robert A. Smith, Ph.D.
Vice President, Cancer Screening
American Cancer Society
Co-Chair
National Colorectal Cancer Roundtable
Innovative Solution: History of the PCMH Concept

• Introduced by American Academy of Pediatrics (AAP) in 1967
• Initially referred to a central location for medical records
• The medical home concept was expanded in 2002 to include:
  – Accessible
  – Continuous
  – Comprehensive
  – Family-centered
  – Coordinated
  – Compassionate
  – Culturally sensitive care
• In 2007, the AAP, the American Academy of Family Physicians (AAFP), the American Osteopathic Association (AOA), and the American College of Physicians (ACP) adopted a set of joint principles to describe a new level of primary care.
Joint Principles of the PCMH

Adopted by AAFP, ACP, AAP, AOA:

• Personal Physician
• Physician Directed Medical Practice
• Whole Person Orientation
• Care is Coordinated and Integrated
• Quality and Safety are Hallmarks
• Enhanced Access
• Payment Reform
Healthcare Reform & The Patient Centered Medical Home

• A PCMH puts patients at the center of the health care system, and provides primary care that is “accessible, continuous, comprehensive, family-centered, coordinated, compassionate, and culturally effective.”

1 American Academy of Pediatrics
## A Change in Paradigm

<table>
<thead>
<tr>
<th>Today</th>
<th>Future</th>
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</thead>
<tbody>
<tr>
<td>Treating Sickness / Episodic</td>
<td>Managing Population</td>
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<td>Fragmented Care</td>
<td>Collaborative Care</td>
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<td>Specialty Driven</td>
<td>Primary Care Driven</td>
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<td>Isolated Patient Files</td>
<td>Integrated Electronic Record</td>
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<td>Utilization Management</td>
<td>Evidence-Based Medicine</td>
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<td>Fee for Service</td>
<td>Shared Risk/Reward</td>
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<td>Payment for Volume</td>
<td>Payment for Value</td>
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<td>Adversarial Payer-Provider Relations</td>
<td>Cooperative Payer-Provider Relations</td>
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<tr>
<td>“Everyone For Themselves”</td>
<td>Joint Contracting</td>
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</table>
While consensus has grown that primary care is the essential access point in a high-performing healthcare system, the current model of primary care underperforms in both chronic disease management and prevention.

The Patient Centered Medical Home model (PCMH) is at the center of efforts to reinvent primary care practice, and is regarded as the most promising approach to addressing the burden of chronic disease, improving health outcomes, and reducing health spending.
Trends in Cancer Screening Rates

- Overall, trends in cancer screening have been relatively flat in recent years.
- Colorectal cancer screening has been increasing, but annual increases are small.
- These patterns suggest that under the current model of primary care health care delivery, increasing screening rates beyond current levels is a major challenge.
Example: Colorectal Screening Rates are Still Too Low: Reasons….. (according to Patients)

- Low awareness of CRC as a personal health threat
- Lack of knowledge of screening benefits
- Fear, embarrassment, discomfort
- Time
- Cost
- Access
- “My doctor never talked to me about it!”
- More structural issues
  - Insufficient referral (not enough information, patient confusion, inertia, etc.)
Background. Patients and physicians strongly endorse the importance of preventive periodic health examinations (PHEs). However, the extent to which PHEs contribute to the delivery of cancer screening is uncertain.

Methods: In a retrospective cohort study, we determined the association between receipt of a PHE and cancer testing in a population-based sample of enrollees in a Washington state health plan who were aged 52-78 years and eligible for colorectal, breast, or prostate cancer screening between 2002-2003 (N=64,288). Complete, annual completion of any colorectal or cervical testing (fecal occult blood testing, sigmoidoscopy, colonoscopy, or barium enema), mammography, and prostate-specific antigen testing were assessed.

Results: More than half (52.4%) of the enrollees received a PHE during the study period. After adjusting for demographics, comorbidity, number of anatomic sites, and historical preventive services used before January 1, 2002, receipt of a PHE was significantly associated with completion of colorectal cancer testing (odds ratio difference, 4.04; 95% confidence interval, 3.94-4.14; absolute incidence, 3.44; 95% CI, 3.34-3.54); breast cancer screening (odds ratio difference, 3.2; 95% CI, 3.13-3.27); and prostate-specific antigen testing (odds ratio difference, 2.52; 95% CI, 2.51-2.53). In subgroups analyses, the PHE effect was greatest in the promotion of colorectal cancer screening and breast cancer screening and modest in prostate cancer screening.

Conclusions: Among managed care enrollees eligible for cancer screening, PHE receipt is associated with completion of colorectal, breast, and prostate cancer testing. In similar populations, the PHE may serve as a clinically important means for the promotion of evidence-based colorectal and breast cancer screening and oncologic care.

Keywords: Cancer Screening & the Periodic Preventive Health Exam

- Retrospective cohort study
- 64,288 adults ages 52-78 in a managed care plan
- Outcomes focused on completion of:
  - CRC screening
  - Breast cancer screening
  - Prostate cancer screening
Adjusted Incidence of 3 Cancer Screening Tests by Receipt of PHE

CRC Screening
Mammography
PSA Testing
Patient and Physician Reminders to Promote CRC Screening

A Randomized Controlled Trial

Thomas D. Szapary, MD, MPH; Alan M. Zuckerman, PhD; Richard Marshall, MD; Robert H. Fletcher, MD; John J. Ayestua, MD

Background: Colorectal cancer (CRC) is the second leading cause of cancer mortality in the United States. Screening programs involving fecal occult blood testing (FOBT), flexible sigmoidoscopy, and colonoscopy lower the incidence of colorectal cancer by removing precursor lesions at an early stage, and reduce colorectal cancer mortality. New guidelines strongly recommend screening for colorectal cancer for average-risk adults 50 years and older. Unfortunately, only 60% of eligible adults report a positive screening test. Patients cite lack of insurance and reimbursement as the main reason for colorectal cancer screening, and many report that their health care provider did not recommend screening. During office visits, physicians remain constrained by lack of reimbursement to patients, and electronic reminders may increase screening among adults who have non-frequent primary care visits.

Methods: We conducted a randomized controlled trial of patient and physician reminders in 11 ambulatory health care centers. Participants included 11,680 patients (50-80) overdue for CRC screening, 110 primary care physicians, and 1,168 staff members. Patients were randomly assigned to receive mailings containing an educational pamphlet, flexible sigmoidoscopy, and insurance for direct scheduling of flexible sigmoidoscopy or colonoscopy. Physicians were randomly assigned to receive electronic reminders during office visits with patients overdue for screening. The primary outcome was the rate of colorectal screening within 12 months, defined as negative flexible sigmoidoscopy or colonoscopy with no return visit within 12 months.

Results: Screening rates were higher for patients who received mailings compared to those who did not (44% vs 31.6% for patients randomized to receive mailings, P<0.01). The effect increased with age: +5.7% for ages 50 to 59 years, +7.1% for ages 60 to 69 years, and +10.1% for ages 70 to 80 years (P<0.01 for trend). Screening rates were similar among patients of physicians receiving electronic reminders and the control group (41.8% vs 40.2%, P=0.7). However, electronic reminders increased screening among patients with <2 or <5 primary care visits (50.9% vs 42.7%, P=0.37). Detection of adenomas tended to increase with electronic mailings (5.7% vs 2.8%, P=0.1) and physician reminders (1.0% vs 0.1%, P=0.001).

Conclusions: Mail and electronic reminders are effective tools to promote colorectal cancer screening and electronic reminders may increase screening among adults who have non-frequent primary care visits.

Trial Registration: clinicaltrials.gov Identifier: NCT00355064


Randomized Trial

- 11 ambulatory health care centers
- 21,860 patients (50-80) overdue for CRC screening
- 110 primary care physicians
- Patients randomized to receive mailings
- Physicians randomized to receive electronic reminders during patient encounters
Patient and Physician Reminders to Promote CRC Screening

- Patient mailings significantly increased screening rates (44% vs. 38%)
- Electronic reminders to physicians was only marginally influential (41.9% vs. 40.2%)
- The influence of electronic reminders increased with increasing (3+) primary care visits (59.5% vs. 52.7%)
Why weren’t electronic reminders more effective???

- One-third of patients did not visit their primary care physician during the intervention period.
- Half of colonoscopies ordered were not completed.
- Competing demands during brief office encounters.
A major contributor to the shortfalls in delivery of recommended health care services is lack of physician time.

Creation of primary care teams, including physician assistants, nurse practitioners, dietitians, health educators, social workers, psychologists, and lay coaches is important to meeting patients’ primary care needs.
Systems of Support to Increase Colorectal Cancer Screening Trial (SOS)

- 4664 patients from 21 clinics
- Patients from randomized from 2008-2009 to usual care, mailed fecal kits, kits plus brief assistance, or kits plus assistance and navigation
- A PCMH model that included a workflow for facilitating CRCS was implemented at all study clinics in late 2009
The investigators were interested in:
1) The effect of the interventions on CRC screening rates, and
2) The influence of time in the PCMH on CRC screening rates
**PCMH process map for medical assistant/nurse**

In-reach and Outreach Screening Processes

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**SOS active interventions were more effective at increasing CRC Screening than usual care regardless of PCMH exposure**
Colorectal Cancer Screening Uptake among Patients Receiving Usual Care in the Systems of Support to Increase Colorectal Cancer Screening Trial, by Exposure to a Patient-Centered Medical Home

<table>
<thead>
<tr>
<th>Usual Care Only</th>
<th>≤4 (n = 351)</th>
<th>&gt;4 and &lt;8 (n = 316)</th>
<th>≥8 (n = 499)</th>
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<tbody>
<tr>
<td>Primary outcome</td>
<td></td>
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<tr>
<td>Any CRCS*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unadjusted percent (95% CI)</td>
<td>36.8 (31.9–41.9)</td>
<td>34.8 (29.7–40.2)</td>
<td>44.9 (40.6–49.3)</td>
</tr>
<tr>
<td>Adjusted RR† (95% CI)</td>
<td>1.00 (Referent)</td>
<td>0.99 (0.81–1.18)</td>
<td>1.29 (1.15–1.42)</td>
</tr>
<tr>
<td>Adjusted difference‡ (95% CI)</td>
<td>Referent</td>
<td>−0.2 (−6.9 to 6.5)</td>
<td>10.1 (5.7–14.6)</td>
</tr>
<tr>
<td>Secondary outcomes</td>
<td></td>
<td></td>
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<tr>
<td>Any fecal test§</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unadjusted percentage (95% CI)</td>
<td>21.1 (17.1–25.7)</td>
<td>20.6 (16.5–25.4)</td>
<td>32.7 (28.7–36.9)</td>
</tr>
<tr>
<td>Adjusted RR† (95% CI)</td>
<td>1.00 (Referent)</td>
<td>0.99 (0.64–1.35)</td>
<td>1.58 (1.22–1.94)</td>
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<tr>
<td>Adjusted difference‡ (95% CI)</td>
<td>Referent</td>
<td>−0.1 (−7.6 to 7.3)</td>
<td>12.1 (5.9–18.2)</td>
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<tr>
<td>Any endoscopy</td>
<td></td>
<td></td>
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<tr>
<td>Unadjusted percentage (95% CI)</td>
<td>21.4 (17.4–26.0)</td>
<td>20.6 (16.5–25.4)</td>
<td>18.2 (15.1–21.9)</td>
</tr>
<tr>
<td>Adjusted RR† (95% CI)</td>
<td>1.00 (Referent)</td>
<td>1.03 (0.77–1.29)</td>
<td>0.95 (0.73–1.18)</td>
</tr>
<tr>
<td>Adjusted difference‡ (95% CI)</td>
<td>Referent</td>
<td>0.6 (−4.5 to 5.8)</td>
<td>−0.9 (−5.4 to 3.6)</td>
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Patients in PCMHs 8 months or longer were 29% more likely to receive CRC screening than patients with fewer months in the PCMH
The Current Challenge

• Health care reform, and in particular, the Medical Home, offer great potential to increase rates of regular colorectal cancer screening through:
  – Personalized preventive health plans
  – Time for prevention
  – Access
  – Systems
Acknowledgements & Resources

• Patient Centered Primary Care Collaborative
  https://www.pcpcc.org/

• Agency for Health Care Research and Quality
  https://pcmh.ahrq.gov/

• National Committee for Quality Assurance
  http://www.ncqa.org/programs/recognition/practices/patient-centered-medical-home-pcmh

• American Academy of Family Physicians
Key References


Thank you
PCMH AND COLON CANCER SCREENING

NCCRT Webinar, July 28 2016
FAIR HAVEN COMMUNITY HEALTH CENTER

- Community Health Center
- 17,000 patients
- 27% uninsured
- 72% Hispanic

- NCQA Level III
- TJC Primary Care Medical Home
- ACS Links to Care Awardee
## “Must Pass” Criteria of NCQA Standards

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CARE MANAGEMENT: Patient Navigation

• PCP makes referral
• Face to face with patient navigator
• Education about risk of CRC, role of lifestyle, FH
• FIT/colonoscopy scheduled
• Barriers addressed: transportation, language, health literacy
• Follows up on abnormal results and records EMR
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POPULATION MANAGEMENT: Data

• Use the functionality of EMR!
• Registries
• Health Maintenance
• Reach out to targeted population, ages 50-75, who are due for screen
## Health Maintenance Report

### Health Maintenance

<table>
<thead>
<tr>
<th>Service</th>
<th>Date Due</th>
<th>Completion Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza vaccine</td>
<td>9/1/2016</td>
<td>2/2/2016, 10/8/2014, 1/28/2013</td>
</tr>
<tr>
<td>Lipid disorder screening</td>
<td>2/12/2018</td>
<td>2/12/2013</td>
</tr>
<tr>
<td>Diabetes screening</td>
<td>2/2/2021</td>
<td>2/2/2016, 6/12/2014, 12/12/2013, 2/12/2013, 2/12/2013</td>
</tr>
<tr>
<td>Tetanus adult (Td q 10, TDAP once)</td>
<td>2/2/2026</td>
<td>2/2/2016</td>
</tr>
<tr>
<td>Colon cancer screening</td>
<td>7/7/2026</td>
<td>7/7/2016, 7/7/2016</td>
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### Health Maintenance Modifiers

- Hepatitis C Screening
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TRACKING REFERRALS

• Referrals
  --From Provider for screening
  --To and From outside GI
  --To Lab, for FIT**

• Documentation in EMR, update of Health Maintenance Portal
FOLLOW-UP

• If additional testing and/or surgery needed, follow-up with PCP
• Referral to surgery, imaging, etc.
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QUALITY IMPROVEMENT

• What is the CRC screening rate in your organization? What percentage of eligible patients are up to date on CRC screening?
• What percentage of colonoscopies had good preps?
• What is “no show” rate for both colonoscopy and FIT testing?
• What percentage of outside referrals get appropriately tracked and recorded in EMR?
Referrals June 2014 - June 2016

Colonoscopy Referrals 952

Performed 498 (52%)

Not Performed 334 (35%)

Normal 205 (41%)

Polyps 279 (56%)

Advanced Lesions 11 (4%)

Tubular Adenoma 168 (60%)

Hyperplastic 98 (34%)

Cancer 1 (0.2%)

Poor Prep 13 (2.6%)

FIT test given 124 (37%)

Pending 120 (13%)

Not retrieved 2 (1%)
Questions
For more information contact:

nccrt@cancer.org

New webinars coming soon! Check nccrt.org for updates.

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Facebook: http://www.facebook.com/coloncancerroundtable