Clinical Quality Improvement for Cancer Screening

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A few acronyms to get us started..

- BRFSS: Behavioral Risk Factor Surveillance System
- FIT: Fecal Immunochemical Test
- FOBT: Fecal Occult Blood Test
- NCCRT: National Colorectal Cancer Roundtable
- USPSTF: United States Preventive Service Task Force
Breast Cancer 101

FACTS (2009)

• Most common cancer in women

• Death rates have been steadily decreasing since 1990

• 3,441 women were diagnosed with breast cancer in Colorado

If diagnosed early on, almost 98% of women will survive breast cancer
Breast Cancer in Colorado
Mammogram Screening Rate Among Women (Age 50 and Over)
Late Stage Cancer Incidence (All Ages), by Health Statistics Region

Data Sources and Notes:
Mammogram Screening Rate - Percent of females aged 50+ who have had a mammogram in the past 2 years, 2012, Colorado BRFSS, Health Statistics and Evaluation Branch, Colorado Department of Public Health and Environment.

Late Stage Breast Cancer Incidence: 2008-2012 Age-adjusted incidence rates for cervical cancer diagnosed in late stage only, Colorado Cancer Registry, CDPHE.

Number of Diagnosed (Breast Cancer Diagnosed in Late Stage), 2008-2012. Colorado Cancer Registry, CDPHE.

Map Created October 2014
Cervical Cancer 101

FACTS

• **149** women were diagnosed with invasive cervical cancer in Colorado. *(2009)*

• Cervical cancer was once one of the most common causes of cancer death for American women—increased use of pap test caused the death rate to decline by ~70%

*Cervical cancer can take years to develop, but is preventable if caught early*
Cervical Cancer in Colorado
Pap Test Compliance and Late Stage Cancer Incidence, by Health Statistics Region

Data Sources and Notes:
Pap Test Screening Compliance - Percent of females aged 18+ who have had a Pap test in the past 3 years, 2012, Colorado BRFSS, Health Statistics and Evaluation Branch, Colorado Department of Public Health and Environment.

Late Stage Cervical Cancer Incidence: 2006-2012 Age-adjusted incidence rates for cervical cancer diagnosed in late stage only, Colorado Cancer Registry, CDPHE.

Number of Diagnosed (Cervical Cancer Diagnosed in Late Stage), 2008-2012, Colorado Cancer Registry, CDPHE.

Map Created October 2014
Colorectal Cancer 101

FACTS

• 2nd leading cancer cause of death (men & women combined)

• The estimated direct medical cost of CRC care in 2010 was $14 billion

50% of the expected new CRC cases and deaths were prevented between 2003-2007 because of screening
Colorectal Cancer (CRC) in Colorado
Screening Compliance, Number Diagnosed, Late Stage Incidence, and Poverty by Health Statistics Region

CRC Screening Compliance*
- 47% - 48%
- 49% - 62%
- 63% - 70%

Number of Diagnosed CRC**
N = number

Late Stage CRC Incidence Rates***
- 37.9 - 47.1
- 47.2 - 53.2
- 53.3 - 60.7
- 60.8 - 70.0
- 70.1 - 78.3

% of Population Between
138% - 400% of FPL****
- Higher than state average
- More than one standard deviation higher than state

Data Sources and Notes:
* CRC Screening (colonoscopy in 10 yrs; sigmoidoscopy in 5 yrs and FOBT in 3 years; FOBT in 1 year), ages 50-75, 2010 and 2012 combined, Colorado BRFSS, Health Statistics and Evaluation Branch, Colorado Department of Public Health and Environment.
**Number of diagnosed CRC, ages 50+, 2010-2012, Colorado Cancer Registry, CDPHE.
*** Age-adjusted incidence rates per 100,000 population for late stage CRC diagnosed in Regional or Distant stage only, ages 50+, 2010-2012, Colorado Cancer Registry, CDPHE.

Created by: Health Statistics and Evaluation Branch CDPHE, August 2014
"I'd have been here sooner if it hadn't been for early detection."
Clinical Quality Improvement: Cancer Screening

• Establish Foundational & Sustainable Practices

• Reach your entire clinic population systematically to ensure every client is touched and followed up on

• Enable all clinic staff to understand and participate in cancer screening activities
  – Change of social norms regarding who does what, how, and why

Managing & improving work processes to streamline clinic operations and deliver optimum care
Cancer QI Components

• Ensure different screening options are available
• Baseline Assessment
• Infrastructure Review
• Resource Review
• Clinic Policy Creation/Modification
• Staff Training
• EHR modifications
• Clinic Champion

*Clinics without an EHR can, and should, still participate in systems change activities
Part 1: Conduct a Baseline Screening Assessment

*Provider assessment and feedback* is an evidence-based strategy to increase cancer screening rates

• Basis of an internal gauge towards improvement or maintenance of preventive screenings

• Establishes the process for future assessments, and also provides guidance for other screening assessments that can be completed and tracked (ex: breast & cervical)

*Provides quantitative and qualitative data to inform systematic changes*

*Used to build reporting capacity (NQF/UDS)*
Part 2: Infrastructure review & development

Developing an *office policy and workflow* is an evidence-based strategy to increase cancer screening rates

- Design process to fit the way people function
- Provide tools/reports to facilitate workflow
- Identify steps to implement policy
Part 2 (cont.) More infrastructure!

Developing an *office reminder system* is an evidence-based strategy to increase cancer screening rates.

For Physicians:
• Chart prompts
• Ticklers and logs
• EHR reporting
• Staff assignment

For Patients
• Education
• Posters/Brochures
• Reminder postcards, letters or calls
Part 2 (cont.) Communication

Developing an effective communication system is an evidence-based strategy to increase cancer screening rates.

For Office:
- Clear roles and responsibilities
- Ensure family history is collected in a meaningful way

For Patients:
- Stage-based communication
- Shared decisions, informed decisions, and use of decision aids
Where can you start?

Adhere to appropriate screening guidelines and ensure all screening options are available for your patients

- **Breast**: Beginning at age 40 or 50
  - Biennial screening mammography for women aged 50-74 (USPSTF) OR
  - Annual mammograms starting at age 40 and continuing as long as a woman is in good health (ACS)

- **Cervical**: Beginning at age 21
  - Pap test in past 3 years
  - Pap and co-HPV test in past 5 years (after age 30)

- **Colorectal**: Beginning at age 50 or earlier if personal/family history
  - FIT/FOBT within 1 year
  - Colonoscopy within 10 years
  - Flexible sigmoidoscopy or double contrast barium enema (DCBE) within 5 years
FIT/FOBT 101

FOBT/FIT is a low cost, easily accessible option
  – Used Annually, has excellent comparison to colonoscopy in reducing mortality of CRC
    • If high sensitivity FOBT or FIT

• Identify your current FOBT/FIT
  – Is it a low-sensitivity FOBT?
    • These are no longer deemed clinically appropriate
  – Is it a high-sensitivity FOBT? Is it a FIT?

• FOBT/FIT should be done ANNUALLY

• **Digital Rectal Exam or DRE is no longer acceptable for CRC screening**
Types of FOBT and Sensitivity for Cancer or Adenomas

<table>
<thead>
<tr>
<th>FOBT version</th>
<th>Sensitivity for Cancer</th>
<th>Sensitivity for Adenomas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hemoccult II Sensa (guaiac based-high sensitivity)</td>
<td>50%-79%</td>
<td>21%-35%</td>
</tr>
<tr>
<td>Fecal Immunochemical Test or FIT (high sensitivity)</td>
<td>55%-100%</td>
<td>15%-44%</td>
</tr>
<tr>
<td>Hemoccult II (guaiac based-low sensitivity)</td>
<td>13%-50%</td>
<td>8%-20%</td>
</tr>
</tbody>
</table>

NOTE: High quality CRC screening programs don’t use in-office FOBT at the time of digital rectal exam as screening for colorectal cancers

DISCLAIMER :: The information captured in this chart is a snapshot/summary of multiple articles that have investigated the differences in sensitivity of the different types of stool tests (all used colonoscopy as their reference point). http://nccrt.org/wp-content/uploads/FOBTCliniciansReferenceFinal.pdf
WILL THESE CHANGES REALLY HELP OUR SCREENING RATES???????
Success: High Plains Community Health Center

- The overall CRC screening compliance rate nearly doubled (16% to 30%)

- The total volume of clients screened for CRC increased, from 348 to 726 clients
Success: Summit Community Care Clinic

- The overall CRC screening compliance rate quadrupled (10% to 52%)
- The percent of clients receiving a colonoscopy increased (4.4% to 13.4%)
- The percent of clients receiving FIT kits increased (5.7% to 38.7%)

Clinic Results (P1, P2, P3)
Statewide BRFFS Screening Rate (2008 & 2010 combined)
NCCRT Screening Goal
In Summary...

Clinical quality improvement helps

- Identify where you are (ie current cancer screening rates)
- Identify current policies, procedures and workflow
- Systematic approach for population-based health
- Increased cancer screening rates

Evidence-based strategies
Benefits for YOUR clinic

• Good patient care and cancer screening resources
• Increase clinic reimbursements
• Reimbursement for staff time
• Technical assistance
• EHR modifications for improvement in reporting and data measurement
• Replicate process for other diseases...
How I can help.....

• Identify areas of **clinical quality improvement** and **evidence-based strategies** to increase cancer screening rates at **YOUR clinic**!
  – Identify resources to help your clinic switch to a high-sensitivity FOBT/FIT

• **Promote cancer month awareness**, prevention and early detection
THANK YOU FOR YOUR TIME TODAY!

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