Achieving 80% by 2018: Improving Colon Cancer Screening Rates in North Carolina

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Chair, NCCRT
Numerous events, accomplishments, and decisions have converged.

Together, they have created an extraordinary opportunity to achieve our goal of 80% colon cancer screening rate by 2018.
We Are Making Progress

*Increasing Decline in Colorectal Cancer Death Rates, 1970-2010*

**Decline per decade:**
- 3%
- 11%
- 15%
- 25%

![Graph showing the decline in colorectal cancer death rates from 1970 to 2010.](image-url)
Colorectal Cancer

<table>
<thead>
<tr>
<th>Year</th>
<th>Screening Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>30.2%</td>
</tr>
<tr>
<td>2013</td>
<td>32.6%</td>
</tr>
<tr>
<td>2014</td>
<td>34.5%</td>
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<tr>
<td>2015</td>
<td>38.3%</td>
</tr>
</tbody>
</table>

An additional 279,990 FQHC patients screened!
Colorectal Cancer Screening* Prevalence Among Adults Age 50 Years and Older by State, 2012

*Either a fecal occult blood test within the past year or a sigmoidoscopy or colonoscopy within the past 10 years (includes diagnostic exams). Data Source: Behavioral Risk Factor Surveillance System Public Use Data Tapes 2012, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention. ©2016 American Cancer Society CancerStatisticsCenter.org
The nation has become energized by the goal of 80% by 2018.

So what will it really take?
Colonoscopy and Stool Testing are Both Critical Strategies

Every system achieving 80% is relying on stool testing as well as colonoscopy.

Both approaches are critical.
We Must Make High Quality Colonoscopy as Widely Available as Possible

• The increase in CRC screening rates between 2000 and 2010 resulted from a **36%** increase in colonoscopy rates.

• Getting to 80% demands that colonoscopy must be available to everyone.
COLONOSCOPY: Good for 10 years

FIT: Only good for one year
Improving Colonoscopy Quality

- Not all colonoscopies are created equal.
- Failure to achieve adequate polyp detection rates compromises the effectiveness of a screening program.
Three Key Components of Colonoscopy Quality

1. Screen the right patients at the right intervals.
2. Maximize bowel prep quality and patient show rates.
Patient Navigation: The Key to Better Show Rates and Better Bowel Preps

• Navigators have been proven to significantly improve colonoscopy show rates and quality of bowel preps.

• Lynn Butterly, MD, in New Hampshire has proven that patient navigation can reduce no-show rate and inadequate bowel prep rate to essentially zero.
Colonoscopy navigation is now proven to be cost effective and should become a care standard.
The Most Important Measure of Quality Colonoscopy: Adenoma Detection Rate

- **Definition:** The percent of screening exams with at least one adenoma detected

- **Current Targets:**
  - ADR should be:
  - ≥ 30% male screening patients
  - ≥ 20% female screening patients
ADR and Risk of Interval Cancer

Cumulative Hazard Rate vs Months

- ADR < 11.0%
- ADR 11.0–14.9%
- ADR 15.0–19.9%
- ADR ≥ 20.0%
ADR and Outcomes: Kaiser

- Data from 314,872 colonoscopies performed between January 1, 1998 and December 31, 2010
- 136 gastroenterologists
  - To be included, GI had to have completed > 300 colonoscopies and 75 or more screening examinations during the study period.
- ADRs ranged from 7.4% to 52.5%.
- 8730 colorectal cancers diagnosed
Every Health System Must Commit to Improving System-wide ADR

- Every system must participate in a colonoscopy registry.

- Registries must monitor:
  - Show rates
  - Prep quality
  - Cecal intubation rates
  - ADR
Standardized Colonoscopy Reporting and Data System (CO-RADS)

SPECIAL REPORT

Standardized colonoscopy reporting and data system: report of the Quality Assurance Task Group of the National Colorectal Cancer Roundtable

David Lieberman, MD, Marion Nadel, PhD, Robert A. Smith, PhD, Wendy Atkin, PhD, Subash B. Duggirala, MD, MPH, FAAFP, Robert Fletcher, MD, MSc, Seth N. Glick, MD, C. Daniel Johnson, MD, Theodore R. Levin, MD, John B. Pope, MD, Michael B. Potter, MD, David Ransohoff, MD, Douglas Rex, MD, Robert Schoen, MD, Paul Schroy, MD, Sidney Winawer, MD

Portland, Oregon, USA
We Must Also Ensure that Anyone Can Be Offered a Home Stool Blood Test

- Even if you recommend colonoscopy for all, some people won’t get one, can’t get one, or shouldn’t get one.
- Using colonoscopy exclusively will, inevitably, lead to a screening gap.
Stool Blood Testing Remains Important in the “Age of Colonoscopy”

• Colonoscopy is now the most frequently used screening test for CRC.

• However, when provided annually to average-risk patients with appropriate follow-up, stool occult blood testing with high-sensitivity tests can provide similar reductions in mortality compared to colonoscopy and some reduction in incidence.

Evaluating Test Strategies for Colorectal Cancer Screening: A Decision Analysis for the U.S. Preventive Services Task Force
Advantages of Stool Blood Testing

• Stool blood testing:
  - Is less expensive.
  - Can be offered by any member of the health team.
  - Requires no bowel preparation.
  - Can be done in privacy at home.
  - Does not require time off work or assistance getting home after the procedure.
  - Is non-invasive and has no risk of causing pain, bleeding, bowel perforation, or other adverse outcomes.

Colonoscopy is required only if stool blood testing is abnormal.
### Adherence to Colorectal Cancer Screening: A Randomized Clinical Trial of Competing Strategies

Many Patients Prefer Home Stool Testing

<table>
<thead>
<tr>
<th></th>
<th>Completion Rate</th>
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</thead>
<tbody>
<tr>
<td>Colonoscopy recommended</td>
<td>38% completed</td>
</tr>
<tr>
<td>FOBT recommended</td>
<td>67% completed FOBT</td>
</tr>
<tr>
<td>Colonoscopy or FOBT</td>
<td>69% completed a test</td>
</tr>
</tbody>
</table>
Colonoscopy for Positive Test is Critical

Patients who select stool blood testing must also be prepared to accept follow-up colonoscopy if the stool blood test is abnormal.
Fecal Immunochemical Tests (FITs) Should Replace Guaiac FOBT

- FITs:
  - Demonstrate superior sensitivity and specificity.
  - Are specific for colon blood and are unaffected by diet or medications.
  - Some can be developed by automated readers.
  - Some improve patient participation in screening.

Fecal Immunochemical Tests (FIT)

• FIT tests are based on the immunochemical detection of human hemoglobin (Hb) as an indicator of blood in the stool.

• Immunochemical tests use a monoclonal or polyclonal antibody that reacts with the intact globin protein portion of human hemoglobin.

• More user friendly!
FIT was More Effective for CRC Screening than FOBT

<table>
<thead>
<tr>
<th></th>
<th>FIT</th>
<th>FOBT</th>
</tr>
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<tbody>
<tr>
<td>Participation</td>
<td>6157(60%)</td>
<td>4836(47%)</td>
</tr>
<tr>
<td>Pos. rate</td>
<td>5.5%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Polyps</td>
<td>679</td>
<td>220</td>
</tr>
<tr>
<td>Adv. Adenoma</td>
<td>145</td>
<td>57</td>
</tr>
<tr>
<td>Cancer</td>
<td>24</td>
<td>11</td>
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</table>

- Population based random sample of 20,623 individuals, 50-75 yrs (Netherlands)
- Tests and invitations were sent together
- 1 FIT (I-FOBT) vs. 3 G-FOBT samples

### FITs Available in the US

<table>
<thead>
<tr>
<th>Name</th>
<th>Manufacturer</th>
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<tbody>
<tr>
<td>InSure</td>
<td>Clinical Genomics</td>
</tr>
<tr>
<td>Hemoccult-ICT</td>
<td>Beckman-Coulter</td>
</tr>
<tr>
<td>Instant-View</td>
<td>Alpha Scientific Designs</td>
</tr>
<tr>
<td>MonoHaem</td>
<td>Chemicon International</td>
</tr>
<tr>
<td>Clearview Ultra-FOB</td>
<td>Wampole Laboratory</td>
</tr>
<tr>
<td>Fit-Chek</td>
<td>Polymedco</td>
</tr>
<tr>
<td>Hemosure One Step</td>
<td>WHPM, Inc.</td>
</tr>
<tr>
<td>Magstream Hem Sp</td>
<td>Fujirebio, Inc.</td>
</tr>
</tbody>
</table>
Hemoccult ICT, HemeSelect, InSure, Fit-Chek, and MagStream 1000/Hem SP have been evaluated in large numbers.

Levi Z, Ann Intern Med. 2007; 146:244-55
Older Guaiac-Based Tests Not Recommended

Hemoccult II and similar older guaiac tests should no longer be used for colorectal cancer screening.
Remember: Stool Collection Should Be Done AT HOME!

- Stool collected on rectal exam may not be sufficient or sufficiently representative of stool collected from a complete bowel movement.
- There is no evidence that any type of stool blood testing is sufficiently sensitive when used on a stool sample collected during a rectal exam.
- Therefore, HS-gFOBT and FIT should be completed by the patient at home, and NOT as an in-office test.
New Recommended Testing Options

- FIT-DNA (Cologuard)
- CT colonography
- Septin 9 is an FDA-approved blood test for individuals who are non-adherent to other options. Not clearly recommended by USPSTF.
FIT-DNA: Cologuard

- Recommended and paid for every 3 years.
- For one-time testing, sensitivity of 91% compared to 73% for FIT alone.
- Cost is about $500.
- Requires mailing of whole stool specimen but appears to have relatively high acceptability.
C-T Colonography

- High sensitivity for polyps over 6 mm.
- May be less sensitive for serrated (flat) polyps.
- Requires a prep.
- In most mature programs, patients with abnormal C-T colonography go right to colonoscopy on the same day.
10 components of the strategic plan to achieve 80% by 2018
1. The 80% by 2018 campaign has gone viral.
2. We’re not getting anywhere near 80% without relying on our nation’s primary care clinicians.
3. Approaching this state-by-state has broad appeal.
4. Engaging health care plans is difficult but critically important.
5. Hospitals and Cancer Centers can be the difference between our reaching this goal or not.
10 Components of the 80% by 2018 Strategic Plan

6. Working with large employers and CEOs is a strategy worth exploring.

7. We need to use tailored messages to reach the unscreened.

8. Financial barriers persist as major obstacles to screening.

9. Finding the right set of complementary strategies is a key goal.

10. We must floor the accelerator right now and keep pedal to the metal for the next four years.
1. The 80% by 2018 Campaign Has Gone Viral

- The world loves a good goal. As public health stories go, this one works really well.
- Organizations are eager to pull together to get something important done.
More and More Organizations Are Signing the Pledge
More Organizations Are Taking the Pledge
More Organizations Are Taking the Pledge

1,250+ and counting!
Pledges in all 50 states, Washington, D.C., Guam, and Puerto Rico!
The 80% by 2018 campaign has been included in the Cancer Moonshot initiative.
Strategic Goal 4 – Strengthen Prevention and Diagnosis

“Cancer prevention and early detection improves life expectancy and reduces the need for costly treatments. Increasing colorectal cancer screening rates to 80 percent would prevent more than 200,000 deaths in this age group by 2030.”

- Cancer Moonshot Task Force Report
80% by 2018 Featured on Broadway
Little Rock’s junction bridge went blue
Unprecedented Momentum in Buffalo

• Every major hospital system and insurer in Buffalo united to sign the pledge.
• Buffalo’s mayor is only the second mayor to sign the pledge.
Columbus, Ohio Glowed Blue for a Night
80% by 2018 Lights Up Chicago

Health Care Service Corporation (Blue Cross Blue Shield of IL, TX, OK, NM, and MT) used its building lights in Chicago to promote 80% x 2018.
Even Niagara Falls Went Blue!
Organizations at 80%

<table>
<thead>
<tr>
<th></th>
<th>Medicare Advantage plans</th>
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<tbody>
<tr>
<td>28</td>
<td></td>
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<table>
<thead>
<tr>
<th></th>
<th>Community health centers</th>
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<td>19</td>
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<table>
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<tr>
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<th>Commercial health plans</th>
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</table>
Let’s pledge to maintain this momentum …

… on the road to 2018.
2. We’re Not Getting to 80% Without Relying on Primary Care

• The basics of screening have not changed:
  - Health insurance facilitates screening.
  - Everyone needs a primary care clinician.
  - The principal determinant of screening is whether or not a primary care clinician recommends screening.

But this is asking a lot.
What Must a Primary Care Practice Do to Improve Screening Rates?

• Have strong leadership and champions.

• Have the capacity to measure and report screening rates in real time:
  - By practice
  - By clinician
  - By patient

• Have a system to contact patients who are out of date with screening and invite them to participate.
What Must a Primary Care Practice Do to Improve Screening Rates?

- Identify a screening policy
  - Financial/insurance considerations
  - Availability of colonoscopy

- Provide some form of patient navigation
  - Ideally, navigation for colonoscopy should be provided by colonoscopy group

- Develop a reliable network of colonoscopists
  - Reliance on FOBT/FIT substantially reduces the number of colonoscopies
Two Types of Navigation

1. **Primary Care Navigation**: The major focus is patient outreach, sending reminders, problem solving, ensuring patients are completing stool tests, and making the handoff to colonoscopists,

2. **Colonoscopy Navigation**: This should be provided by colonoscopy group, with a goal of perfect prep and perfect attendance.
3. Approaching this State-by-State, Territory by Territory Holds Broad Appeal

- Numerous states are in the process of forming state Colon Cancer Screening Roundtables or Coalitions
- Cities, states, and territories love competition – no one likes being at the bottom of the list.
Let’s Be Little League: Everyone’s a Winner

• Some areas are out in front. Some are far behind.
• But the playing field is not even.
• We will celebrate the first state to reach 80%

... but we will celebrate, with equal joy, every state that is working hard to get the nation closer to our 80% goal.
4. Engaging Health Care Plans is Critically Important

- Health care plans have a broad agenda and many demands.
- Although improving HEDIS measures is a valued goal, controlling health care costs, reducing readmissions, and managing chronic illness may be viewed as more urgent goals.
- Competition with other plans may be intense.
Characteristics of High Performing Plans

• Leadership – a commitment to achieve very high screening rates
• A champion – or more than one
• A commitment to measurement and reporting of screening rates
• Implementation of population health management
• Reliance on both stool testing and colonoscopy
• Incentives and accountability for primary care providers
• Elimination of patient cost sharing
5. Hospitals and Cancer Centers Can Make the Difference

80% by 2018 offers a unique opportunities to build integrated systems that can prevent over **200,000 colon cancer deaths** by 2030.
Five Steps to Hospital Leadership of 80% by 2018

1. Recognize and overcome barriers to participation.
2. Identify a champion (or champions).
3. Publicly commit to achieving this goal.
4. Assemble a team.
5. Implement the 80% by 2018 Strategic Plan.
6. Engaging Large Employers and CEOs is a Strategy Worth Exploring

- To more effectively impact health care plans, we will need to more effectively engage with their customers – employers and CEOs.
- Employers have a wonderful opportunity to help the nation achieve a critical public health goal.
7. We Need Tailored Messages to Reach the Unscreened

• We have conducted market research with a large group of unscreened Americans.
Barriers to Consumer Screening – Factors

#1: Affordability

- “I do not have health insurance and would not be able to afford this test. I do not feel the need to have it done.”

#2: Lack of symptoms

- “Doctors are seen when the symptoms are evidently presumed, not before.”

#3: No family history of colon cancer

- “Never had any problems and my family had no problems, so felt it wasn't really necessary.”

#1 reason among 50-64 year olds & Hispanics

Nearly ½ uninsured

#1 reason among 65+ year olds
Barriers to Consumer Screening – Factors

### #4: Perceptions about the unpleasantness of the test
- “I do not think it is a good idea to stick something where the sun don’t shine. The yellow Gatorade I cannot stomach.”

### #5: Doctor did not recommend it
- “I fear it will be uncomfortable. My doctor has never mentioned it to me, so I just let it go.”

### #6: Priority of other health issues
- “I just turned 50 and I am dealing with another health issue, so it’s on the back burner.”

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#1 reason among Black/African Americans; #3 reason among Hispanics
There are several screening options available, including simple take home options. Talk to your doctor about getting screened.

Colon cancer is the second leading cause of cancer deaths in the U.S., when men and women are combined, yet it can be prevented or detected at an early stage.

Preventing colon cancer, or finding it early, doesn’t have to be expensive. There are simple, affordable tests available. Get screened! Call your doctor today.
Tools are Available on www.NCCRT.org

There are a wide range of tools available for download.
8. Financial Barriers Persist as Major Obstacles to Screening

• To substantially increase screening rates, strategies to reach individuals without health insurance and on Medical Assistance must be developed.

• Federally Qualified Health Centers and academic primary care clinics serve as the safety net for many low income individuals.
9. Finding the Right Set of Complementary Strategies is a Key Goal

• Should we focus on working with primary care to implement population management?

• Or should we work on tailored messages to the unscreened?

• Or would it be better to focus on working with hospitals or health care plans?
Here’s the painful truth:
There is nothing we can do to reach 80% colon cancer screening rates by 2018

... except everything.
10. We Must Floor the Accelerator and Keep Pedal to the Metal for the Next Two Years

• We have made the commitment to increase CRC screening rates by 15% in five years … and we only have two years left to do it.

• Every member organization needs to participate in a national plan but also have their own plan to pursue the interventions that they are uniquely positioned to do.
So will we achieve 80% by 2018?
Here’s What We Know

1. This is the most successful public health campaign of its type in history.
2. We’re moving the needle nationally.
3. We’re moving the needle in FQHCs.
4. We won’t know exactly how this turns out until 2020.
5. The first wave of indicators is exciting!
No matter how this turns out, our work will not end in 2018.
We’ll need to stay focused to maintain and continue making progress.
We’ll go as fast as we can, as long as it takes, to save lives and achieve something amazing.
Our goal is big …

… but so is the potential impact.
If we can achieve 80% by 2018, 277,000 cases and 203,000 colon cancer deaths would be prevented ... … by 2030.
In North Carolina, 696,400 people need to be screened to achieve 80%.
But if we can achieve 80%, 7,909 cases and 5,796 deaths would be prevented by 2030.
I CAN see it!
Thank You