Translating Research into Practice:
The Colorectal Cancer Screening Intervention Program

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Community Engagement & Research Program
Atlanta Clinical & Translational Science Institute

and

Morehouse-Tuskegee-UAB Cancer Research Partnership
Morehouse School of Medicine
Facilitator Training

• 1 ½ day intensive, participatory workshop
  – 3 Modules
    • Principles Knowledge
    • Procedural Knowledge
    • Practical Knowledge
Training Workshop Objectives

To help participants understand

• The burden of colorectal cancer (CRC)
• Local/state CRC screening rates
• Basic concepts of evidence-based interventions
• Selected tools (e.g., cultural competence, effective presentations, health literacy, core skills) to enhance translation of research to practice
• How CCSIP can be used to increase CRC screening rates
Background
A Short History of Scurvy

• 1747: James Lind demonstrates that citrus juice cures scurvy
• 1753: Lind publishes *A Treatise on Scurvy*
• 1795: Citrus juice issued to all ships in the British fleet – as a treatment
• After 1800: Citrus juice used as a preventive
Research to Practice

• 14% of new scientific discoveries enter practice – in an average of 17 years

• Americans receive about 50% of the recommended preventive acute, and long-term care
  – ~50% of eligibles screened for colorectal cancer
  – ~60% of heart attack victims receive beta-blockers
Problem: “Bench to Bedside”

• Solution (per NIH): Clinical and Translational Science Awards
Basic Research → Clinical Trials

T1
Basic Research → Clinical Trials → Academic Health Center Practice
Basic Research → Clinical Trials → Academic Health Center Practice → Community Practice
Colorectal Cancer Screening Intervention Program
<table>
<thead>
<tr>
<th></th>
<th>Incidence</th>
<th>Mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Men</td>
<td>73.1</td>
<td>34.3</td>
</tr>
<tr>
<td>White Men</td>
<td>64.4</td>
<td>24.8</td>
</tr>
<tr>
<td>Black Women</td>
<td>56.1</td>
<td>24.5</td>
</tr>
<tr>
<td>White Women</td>
<td>46.8</td>
<td>17.1</td>
</tr>
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</table>
Screening Tests for Colorectal Cancer

• Fecal Occult Blood Test (FOBT)
• Colonoscopy
• Flexible Sigmoidoscopy
• Flex Sig + FOBT
• CT colonography
• Double contrast barium enema
Recommendation (ACS)

Screen people at average risk for colorectal cancer beginning at 50 years of age by:

1. FOBT annually.
2. Colonoscopy every 10 years
3. Flexible sigmoidoscopy every 5 years.
4. Annual FOBT plus flexible sigmoidoscopy every 5 years.
5. Double-contrast barium enema every 5 years.
# Guide to Community Preventive Services Recommendations

## Colorectal Cancer Screening Intervention

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client reminders</td>
<td>Recommended</td>
</tr>
<tr>
<td>Multi-component using media, education, and enhanced access</td>
<td>Insufficient Evidence</td>
</tr>
<tr>
<td>Reducing structural barriers</td>
<td>Recommended</td>
</tr>
<tr>
<td>Client incentives (with reminders)</td>
<td>Insufficient Evidence</td>
</tr>
<tr>
<td>Small media</td>
<td>Insufficient Evidence</td>
</tr>
<tr>
<td>Reduced out-of-pocket expense</td>
<td>Insufficient Evidence</td>
</tr>
<tr>
<td>Group education</td>
<td>Insufficient Evidence</td>
</tr>
<tr>
<td>One-on-one education</td>
<td>Insufficient Evidence</td>
</tr>
<tr>
<td>Client incentives (alone)</td>
<td>Insufficient Evidence</td>
</tr>
<tr>
<td>Mass Media (alone)</td>
<td>Insufficient Evidence</td>
</tr>
<tr>
<td>Provider reminders/feedback</td>
<td>Recommended</td>
</tr>
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Guide to Community Preventive Services Recommendations

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Colorectal Cancer Screening Intervention Trial: Specific Aims

• Evaluate the effects of education (one-on-one, small group) on colorectal cancer knowledge, attitudes and beliefs

• Evaluate the effects of three different intervention approaches (one-on-one education, group education, and reduced out-of-pocket expense) on adherence to colorectal screening guidelines
Overview

- Community-Based Participatory Research
- Randomized Controlled Community Intervention Trial
- 500 African Americans ≥ age 50
- 4 groups (125 each)
  - Control
  - Small Group Education
  - One-on-One Education
  - Reduced out-of-pocket expense
- Pretest/Posttest (KABP)
- 3- and 6-month F/U on screening
Groups

• Control
  – NCI Pamphlet
  – Resource Directory

• Out of pocket $
  – NCI Pamphlet
  – Resource Directory
  – < $500
    Reimbursement

• Group Education
  – NCI Pamphlet
  – Resource Directory
  – 4 Interactive Group Sessions

• 1-on-1 Education
  – NCI Pamphlet
  – Resource Directory
  – 3 Individual Counseling Sessions
Participant Recruitment

- Churches    34
- Senior Sites 31
- Clinics      3

Total       68
Participant Recruitment

- Approached: Untold thousands
- Agreed to participate: 803
- Ineligible: 158
- Eligible: 645
- Withdrawn/Deceased: 276
- Participants: 369
- Lost to follow-up: 110
- Followed-up (6 mo): 259
Participant Demographics

- **Age**
  - 50-59 24%
  - 60-69 34%
  - 70+ 42%

- **Gender**
  - Male 26%
  - Female 74%

- **Education**
  - High School or less 50%
  - Some College or more 41%
  - Other 9%
## Improvement in Knowledge Scores

<table>
<thead>
<tr>
<th></th>
<th>Control N=88</th>
<th>1-on-1 n=98</th>
<th>Group N=99</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Improvement in score</td>
<td>1.67</td>
<td>5.2</td>
<td>5.0</td>
</tr>
<tr>
<td>P</td>
<td>&lt; .0001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Follow-up at 6 months

<table>
<thead>
<tr>
<th>Groups</th>
<th># Contacted</th>
<th># Screened for Colon Ca</th>
<th>% Screened</th>
<th>Intervention vs Control (p-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>63</td>
<td>11</td>
<td>17.5</td>
<td></td>
</tr>
<tr>
<td>Reduced Expense</td>
<td>63</td>
<td>14</td>
<td>22.2</td>
<td>ns</td>
</tr>
<tr>
<td>One-on-One Edu.</td>
<td>68</td>
<td>17</td>
<td>25.0</td>
<td>ns</td>
</tr>
<tr>
<td>Group Ed</td>
<td>65</td>
<td>22</td>
<td>33.9</td>
<td>.0341</td>
</tr>
<tr>
<td>Total</td>
<td>259</td>
<td>64</td>
<td>24.7</td>
<td></td>
</tr>
</tbody>
</table>
Article published – Mission accomplished


- ...or is it? “What happens next?”
Research to Practice: Fulton County

- Group education intervention given a name: Educational Program to Increase Colorectal Cancer Screening (EPICS)

- County health educators + MSM Community Health Workers implement intervention in 15 county senior citizen centers
Auburn Neighborhood
Senior Center
300 Edgewood Avenue
Atlanta, GA 30303

Bethlehem Neighborhood Senior Center
87 Thayer Street
Atlanta, GA 30303

Cosby Spear Senior Center
355 North Avenue NE
Atlanta GA 30308

Camp Truitt Neighborhood
Senior Center
4320 Hershel Road
College Park GA 30337

Crabapple Senior Center
Crabapple Government Center
12624 Broadwell Rd.
Alpharetta, GA. 30004

Dogwood Neighborhood
Senior Center
1953 Bankhead Highway
Atlanta, GA 30318

Fairburn Neighborhood
Senior Center
109 Milo Fisher Street
Fairburn, GA 30213

Hapeville Neighborhood
Senior Center
527 Kings Arnold Street
Hapeville GA 30354

New Horizons Neighborhood
Senior Center
745 Orr Street, NW
Atlanta, GA 30314

Northside Shepherd Neighborhood
Senior Center
1705 Commerce Drive
Atlanta, GA 30318

Palmetto Neighborhood
Senior Center
510 Turner Street
Palmetto, GA 30268

Roswell Neighborhood
Senior Center
1250 Warsaw Road
Roswell, GA 30075

Sandy Springs Neighborhood
Senior Center
6500 Vernon Woods Dr.
Atlanta, GA 30328

St. Paul Neighborhood
Senior Center
501 Grant Street
Atlanta, GA 30315

Southeast Neighborhood
Senior Center
1650 New Town Circle
Atlanta, GA 30324
## EPICS in Practice

<table>
<thead>
<tr>
<th>Status</th>
<th>% of those needing screening</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Received intervention</td>
<td></td>
<td>554</td>
</tr>
<tr>
<td>Current on Screening</td>
<td></td>
<td>243</td>
</tr>
<tr>
<td>Need screening</td>
<td>100%</td>
<td>311</td>
</tr>
<tr>
<td>Screening after session</td>
<td>37.3%</td>
<td>116</td>
</tr>
<tr>
<td>Have Appointments/Intend to make appointments</td>
<td>33.8%</td>
<td>105</td>
</tr>
<tr>
<td>Refused /Feel no need for screening</td>
<td>12.5%</td>
<td>39</td>
</tr>
<tr>
<td>Could not reach (no reliable phone number/not present at facility)</td>
<td>16.4%</td>
<td>51</td>
</tr>
<tr>
<td>Totals</td>
<td>100.0%</td>
<td>554</td>
</tr>
</tbody>
</table>
EPICS goes statewide in Georgia

• Collaborative project with Georgia Cancer Coalition and Regional Cancer Coalitions

• Funded by Georgia Division of Public Health (CDC Grant)
Lessons from EPICS

• An article in a journal isn’t the goal

• Design the intervention in collaboration with those who are to be intervened upon.

• Take the intervention to the interveners

• When adapting, retain core elements

• Interveners need to put aside their creativity
Dissemination of EPICS

Overall Goal

• Mobilize partners across Georgia by working with coalitions to certify a cadre of trained facilitators to implement EPICS

Expectations of Dissemination Partners

• Recruit and educate low-income African Americans on colorectal cancer early detection
• Host multi-site CCSIP sessions
• Complete and submit quality assurance measures
Cultural Competency

A JOURNEY

Taking culture into consideration
Diversity …

*Putting it in Perspective*
Diversity: in Families

(Dr. Doolittle)
Diversity: *in Families*

My Menagerie!
Unity in Diversity Starts at Home…
Why Cultural Competence?

Year 2050 Projected US Population

- White, NH: 52.8%
- Hispanic: 24.3%
- Afr-Amer: 13.2%
- Asian/ PI: 8.9%
- Native Amer: 0.0%
Risks of Cultural Competency Training

• Conferring False Confidence
  (1 Workshop = “Cultural Competence”)

• Reinforcing Cultural Stereotypes

• Focusing on the Exotic over the Important

• Emphasizing Across-Group Differences over Within-Group Heterogeneity

• Diminishing the Need for Culturally-Representative Health Care Teams
CRASH-Course Concepts

• Culture
• Respect
• Assess / Affirm
• Sensitivity / Self-awareness
• Humility
Culture Expressed Through Individuals Over Time

- Race
- Ethnicity
- National Origin
- Geographic Region
- History
- Religion

- Gender
- Family Dynamics
- Marriage Family
- Education & Vocation
- Age
- Personal Psychology
- Social Status & Power
- Acculturation

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Showing Respect

- Using Titles (Mr., Mrs., Doña Maria, Dr., Deacon, Rev., etc.)
- Asking Permission before Touching
- Avoiding Inappropriate Eye-Contact
- Respecting Personal Boundaries and Space
Assess

• Health Beliefs
• Health Knowledge
• Health Literacy
• Health-Seeking Behaviors
• Health-Relevant Relationships
Sensitivity

- Behaviors that might cause offense
- History, politics, or religious issues that might affect your interactions
- Differences in explanatory models of health, disease, and the human spirit
- Health beliefs or behaviors that you might misinterpret
- Health beliefs that might cause the patient to misunderstand you.
Self-Awareness

- Becoming aware of our own cultural norms, values, and “hot-button” issues that lead us to mis-judge or to miscommunicate with others.
Humility

- Recognizing that none of us ever fully attains “cultural competence”
- Making a commitment to life-long learning
- Peeling back “layers of the onion” of our own perceptions and biases
- Being quick to apologize and accept responsibility for cultural mis-steps
- Embracing the adventure of learning from others’ first-hand accounts of their own experience.
CRASH-Course Concepts

- Culture
- Respect
- Assess / Affirm
- Sensitivity / Self-awareness
- Humility

Atlanta Clinical & Translational Science Institute

Emory School of Medicine

Georgia Tech
Effective Facilitation

A learned skill
“Be still when you have nothing to say; when genuine passion moves you, say what you’ve got to say, and say it hot!”
Preparation: P.S.S.

- P
  - Plan
- S
  - Scribe
- S
  - Surrender
Plan

• Purpose
  – Write it down
  – Refer to it

• Research
  – Data
  – Latest news
  – Little known facts
  – Expert opinions
Plan before presenting

• **Brainstorm**
  – Carry paper
  – Write all thoughts
  – Review and delete

• **Logistics**
  – Room
    • Podium, microphone, equipment (laptop, LCD projector, speakers), bathroom location
  – Audience
Example of Planning

• Vice Presidential Debate
  – Moderator: Gwen Ifill
  – Topics: Foreign & domestic policy

• Question of concern
  – AIDS in America
  – AA women 15X > to die

• Answer of concern
  – “Oh really, I was unaware of that fact”

• YOU MUST REVIEW ALL FACTS AND FIGURES!

This is not an endorsement for either individual so DON’T complain
• Beginning
  – What is a hook
    • A dynamic opening
    • A way to reel in the audience
• My hook story
http://www.youtube.com/watch?v=_OBlgSz8sSM

(Charlie)
Scribe

• My hook story: “Teething in Babies…Whom does it hurt the most?”

• Your hook story?
Middle

- Use points
  - Logical progression
  - Not *too* many
  - Tell a story make a point
    - Speak of what you believe in
  - Write *colorfully*
  - Use humor
    - Too much= joker
      - People will hear, not listen
End

• End
  – Restate your points
  – Final food for thought
Scribe
(Open it-close it method)

• O=Open
• P=Point
• E=Explanation
• N=Numbers/data
• I=Illustration
• T=Take home
• C=Close it
Example of Scribing

• John F. Kennedy
  – Speech on civil rights
  – June 11, 1963

• Effective introduction, body, ending
President Kennedy June 11, 1963

http://www.youtube.com/watch?v=RWX_pjylq-g
Surrender (Delivery)

- Check appearance
- Arrive early
  - Circulate & greet
- Exude energy
  - Purposeful movements
  - Eye contact
  - Vary pitch, speed, cadence
  - Use silence
- Share your personality
  - Do not copy
- Script, notes, or memory?
## The Good and the Bad

<table>
<thead>
<tr>
<th></th>
<th>Scripts</th>
<th>Notes</th>
<th>Memory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pros</strong></td>
<td>• No omissions</td>
<td>• Uses skeleton</td>
<td>Exudes intelligence</td>
</tr>
<tr>
<td></td>
<td>• Gives confidence</td>
<td>• Demonstrates familiarity</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• May use cue card</td>
<td></td>
</tr>
<tr>
<td><strong>Cons</strong></td>
<td>Monotone</td>
<td>May loose order</td>
<td>• May loose focus</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Subject to emotions</td>
</tr>
</tbody>
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Please Don’t Err to This Degree!

http://www.youtube.com/watch?v=BpEckWHSvXk

Clinton/King
Exercise

- Rhyme and Chime of public Speaking
- Dr. Seuss speech
- Great Speech demonstration
Parting Quote

• “You can speak well if your tongue can deliver the message of your heart”
Health Literacy

Knowledge is power
Health Literacy: Definition

The degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions (IOM).
Health Literacy

- Approximately one-half of American adults (90 million individuals) cannot understand basic health information
- 47% of Americans have poor reading skills
- Inadequate health literacy is associated with adverse health outcomes
Health Literacy and Health Outcomes

- Low health knowledge
- Low adherence to risk reduction behaviors
- Difficult self-management of chronic disease
- Poor medication adherence
- Poor health status

- Inability to navigate the health care environment
- Increased hospitalizations
- Increased healthcare costs
- Increased mortality
- Increased medical errors
Inadequate Literacy

- Minorities
- Older adults
- Individuals with low income and education levels
- Individuals that did not learn English as their primary language
Tips for Addressing Inadequate Literacy

- Use simple words, talk slow
- Use short sentence when writing
- Use pictures
- Offer to assist individuals with filling out forms
- Encourage people to ask questions
- Do not assume that people with a high school education or higher can understand written health information
- Ask the person to repeat the instructions back to you
CCSIP Facilitator
Core Competencies
Ten Core Competencies:
Skills all CCSIP Facilitators should have

- Communication skills
- Interpersonal skills
- Teaching skills
- Knowledge skills
- Service coordination skills
- Advocacy skills
- Capacity Building Skills
- Organizational skills
- Cultural competency
- Ethical considerations
Core Skills and Competencies

Knowledge Base
- You don’t have to know all the technical terms, all the anatomy & physiology of disease
- Basic information about **WHO** is at risk; **WHAT** they are at risk for; **WHY** they are at risk; **WHEN** they should be screened; **HOW** they access the screening; and **WHERE**

Service Coordination Skills
- Know your client/community
- Refer to Social Workers
- Refer to County Health Department
- Make reliable referrals
Core Skills and Competencies

Advocacy Skills
- Individual Advocacy
  - Identify Barriers
  - Offer Solutions
  - Assist in Barrier Resolution
  - Think about improved patient-provider interactions
- Community Advocacy
  - Participate in legislative process - local, statewide, national

Capacity Building Skills
- Create opportunities to share knowledge - develop a cadre of like-minded folks to spread the word
- Community residents can be extra eyes and ears and hands for you -- increase your ability to do more
Core Skills and Competencies

Organizational Skills
- Calendar- activities are conducted in timely fashion
- Each information piece should thoughtfully benefit your client
- Resources for Effective, Reliable referral (nurture resources)
- Knowledge of disease of focus
- Record keeping/data collection

Cultural Competency
- Knowledge of an respect for community

Ethical Considerations
- Privacy and Confidentiality
Desired Characteristics

• Health Professional or non-professional with passion for improving community health

• Willing to effectively translate colorectal cancer information into practical, culturally relevant teaching strategies

• Able to communicate on diverse educational levels