

# 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



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# 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

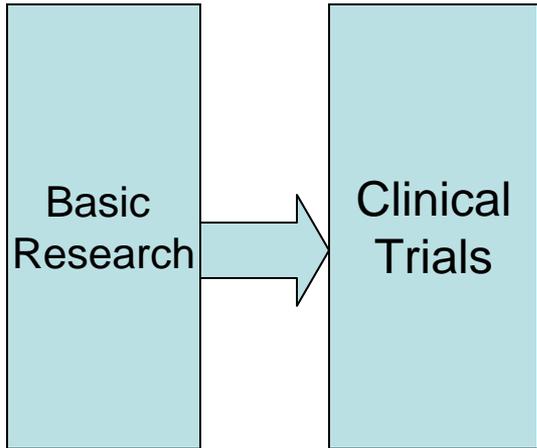


# Problem: “Bench to Bedside”

- Solution (per NIH): Clinical and Translational Science Awards

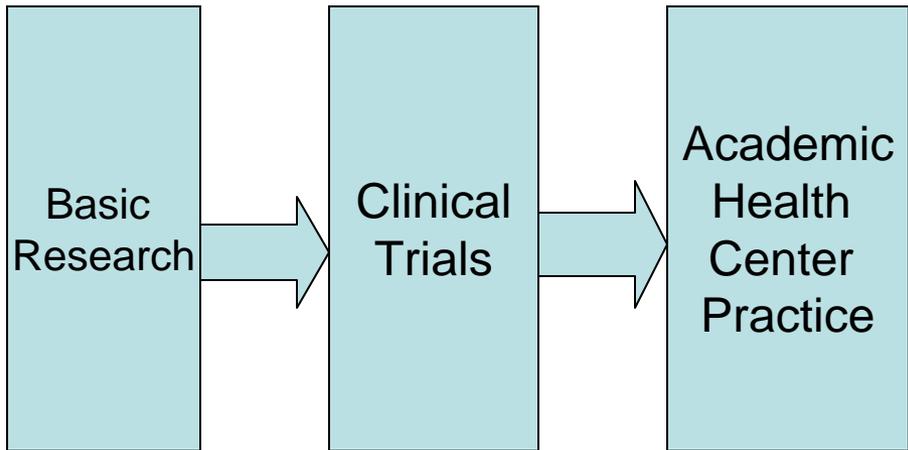


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T1

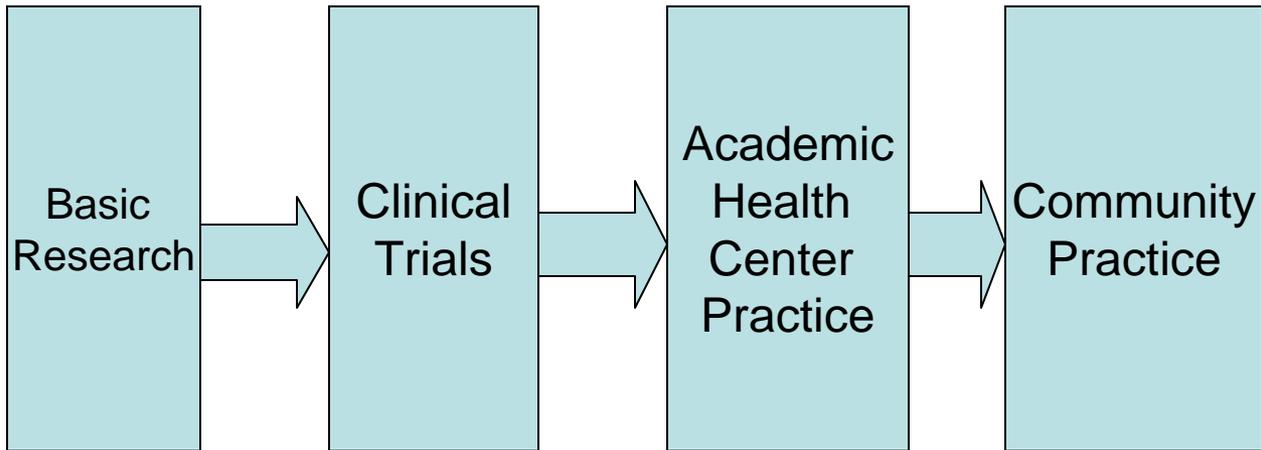
T2



T1

T2

T3

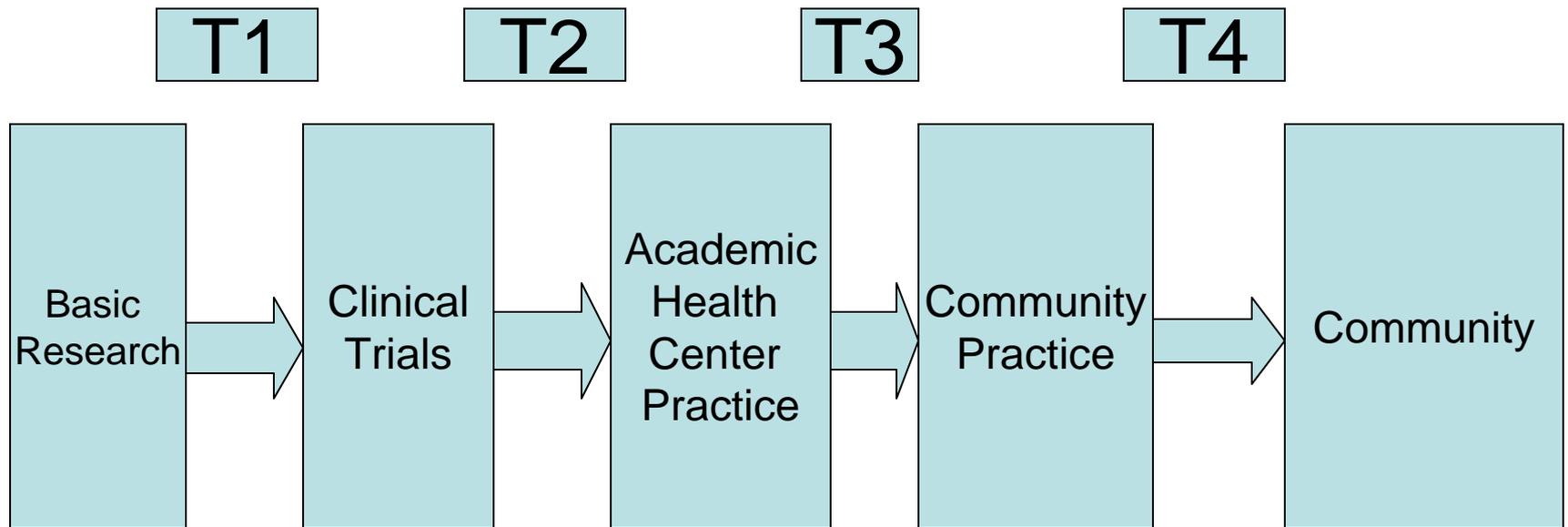


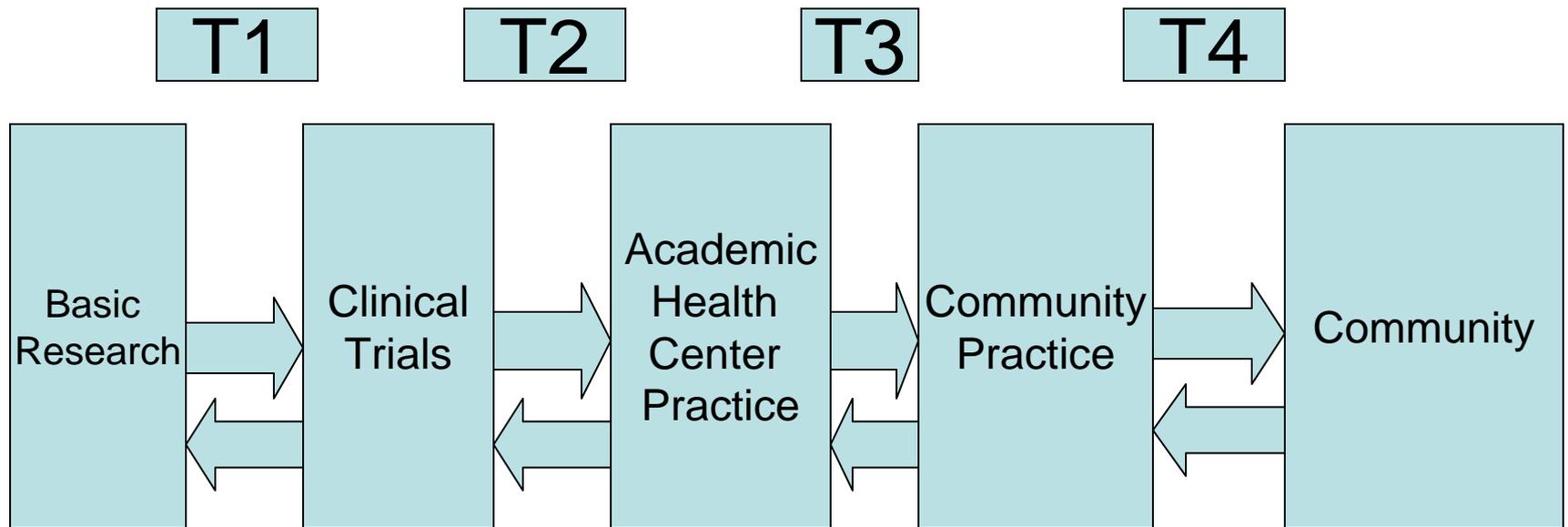
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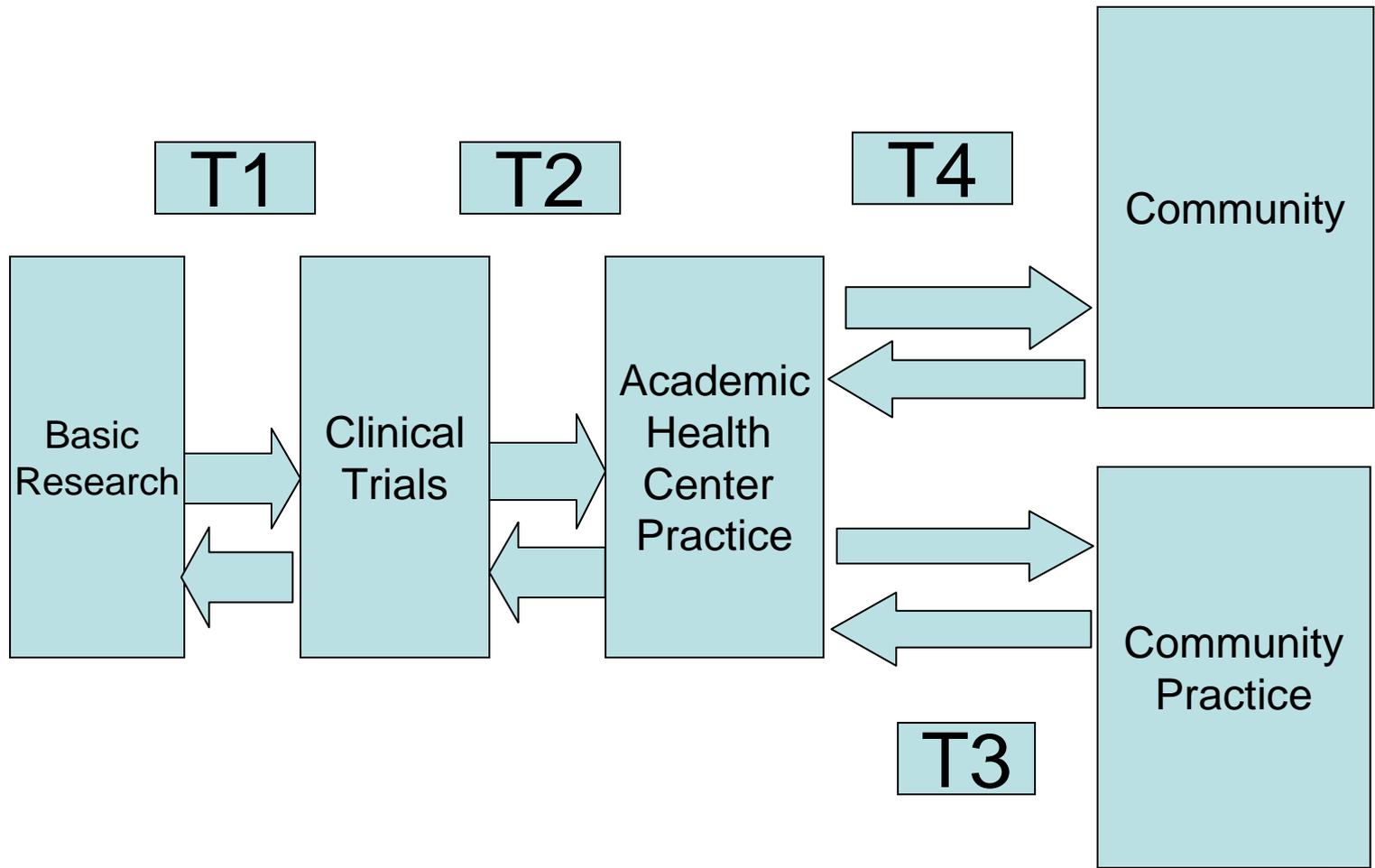
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# Colorectal Cancer Screening Intervention Program



# Colorectal Cancer Disparities

Rate/100,000

	Incidence	Mortality
Black Men	73.1	34.3
White Men	64.4	24.8
Black Women	56.1	24.5
White Women	46.8	17.1



# 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	Recommendation
Client reminders	Recommended
Multi-component using media, education, and enhanced access	Insufficient Evidence
Reducing structural barriers	Recommended
Client incentives (with reminders)	Insufficient Evidence
Small media	Insufficient Evidence
Reduced out-of-pocket expense	Insufficient Evidence
Group education	Insufficient Evidence
One-on-one education	Insufficient Evidence
Client incentives (alone)	Insufficient Evidence
Mass Media (alone)	Insufficient Evidence
Provider reminders/feedback	Recommended



# 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



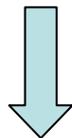
# Overview

- Community-Based Participatory Research
- Randomized Controlled Community Intervention Trial
- 500 African Americans  $\geq$  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

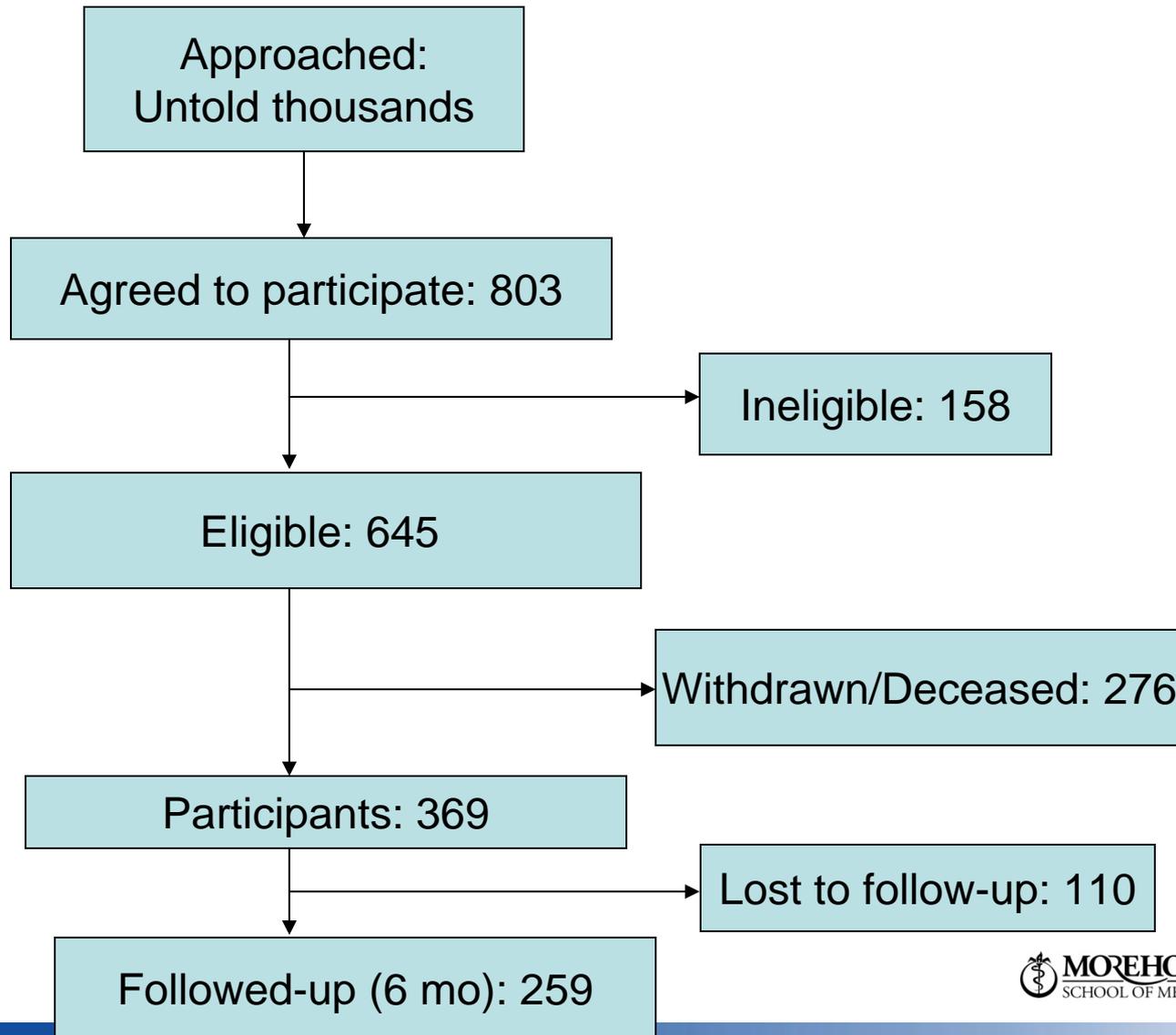


# Participant Recruitment

<b>Total</b>	<b>68</b>
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# Participant Recruitment



# 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

	Control N=88	↓ \$ n=84	1-on-1 n=98	Group N=99
Mean Improve-ment in score	1.67	1.43	5.2	5.0
P < .0001				



# Follow-up at 6 months

<b>Groups</b>	<b># Contacted</b>	<b># Screened for Colon Ca</b>	<b>% Screened</b>	<b>Intervention vs Control (p-value)</b>
Control	63	11	17.5	
Reduced Expense	63	14	22.2	ns
One-on-One Edu.	68	17	25.0	ns
Group Ed	65	22	33.9	.0341
Total	259	64	24.7	





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# Article published – Mission accomplished

- Blumenthal, DS, Smith, SA, Majett CD, and Alema-Mensah, E: A Trial of Three Interventions to Promote Colorectal Cancer Screening in African Americans. Cancer 116:922-929, 2010
- ...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

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



# 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
- Intervenors 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**



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# Diversity ...

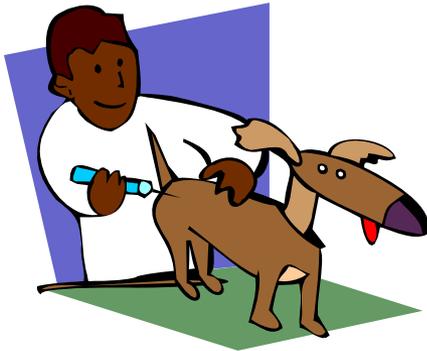
## *Putting it in Perspective*



# Diversity: *in Families*



(Dr. Doolittle)





*R M  
Photos*



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# Diversity: *in Families*



My Menagerie!



# Unity in Diversity *Starts at Home...*



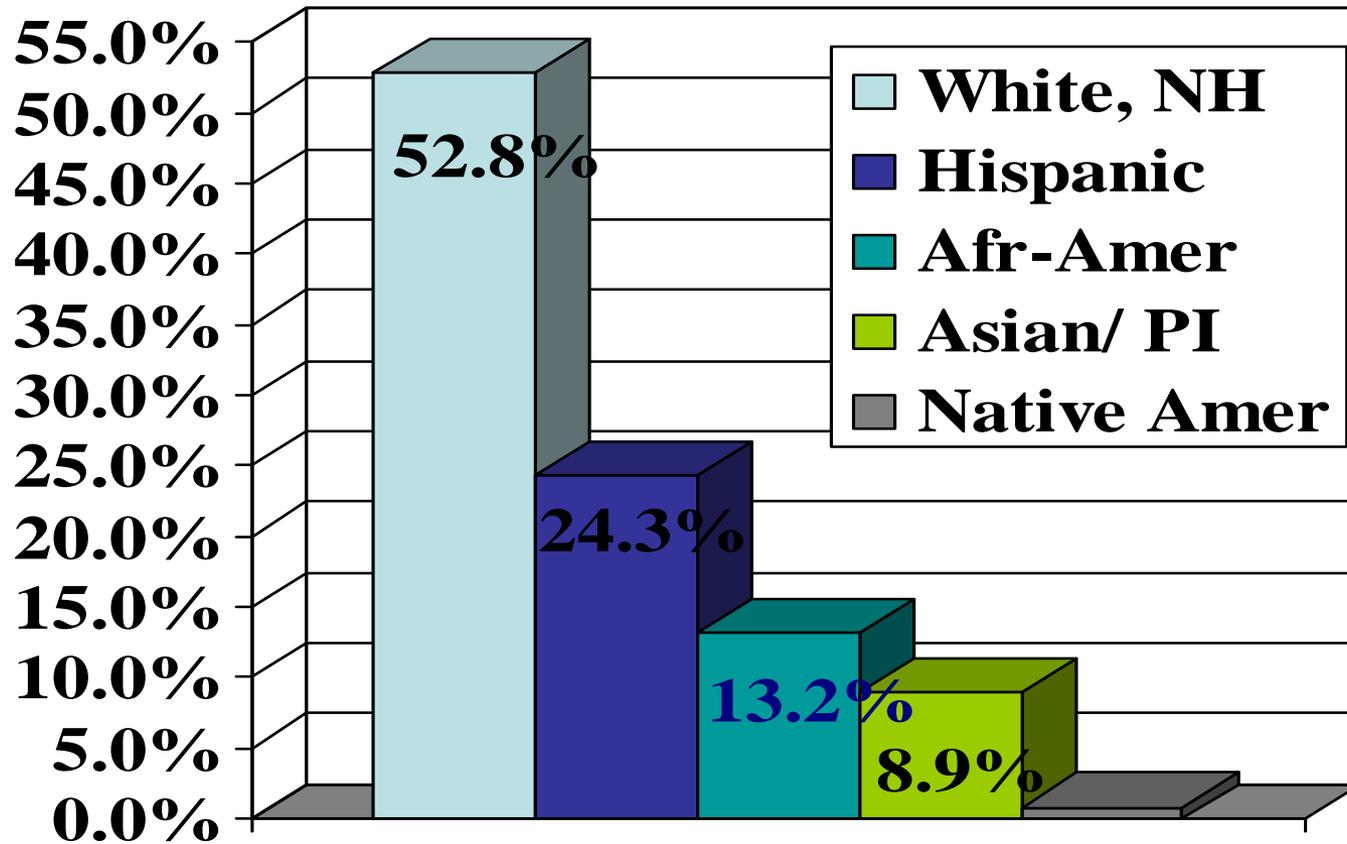
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# Why Cultural Competence?



**Year 2050 Projected US Population**



# 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**

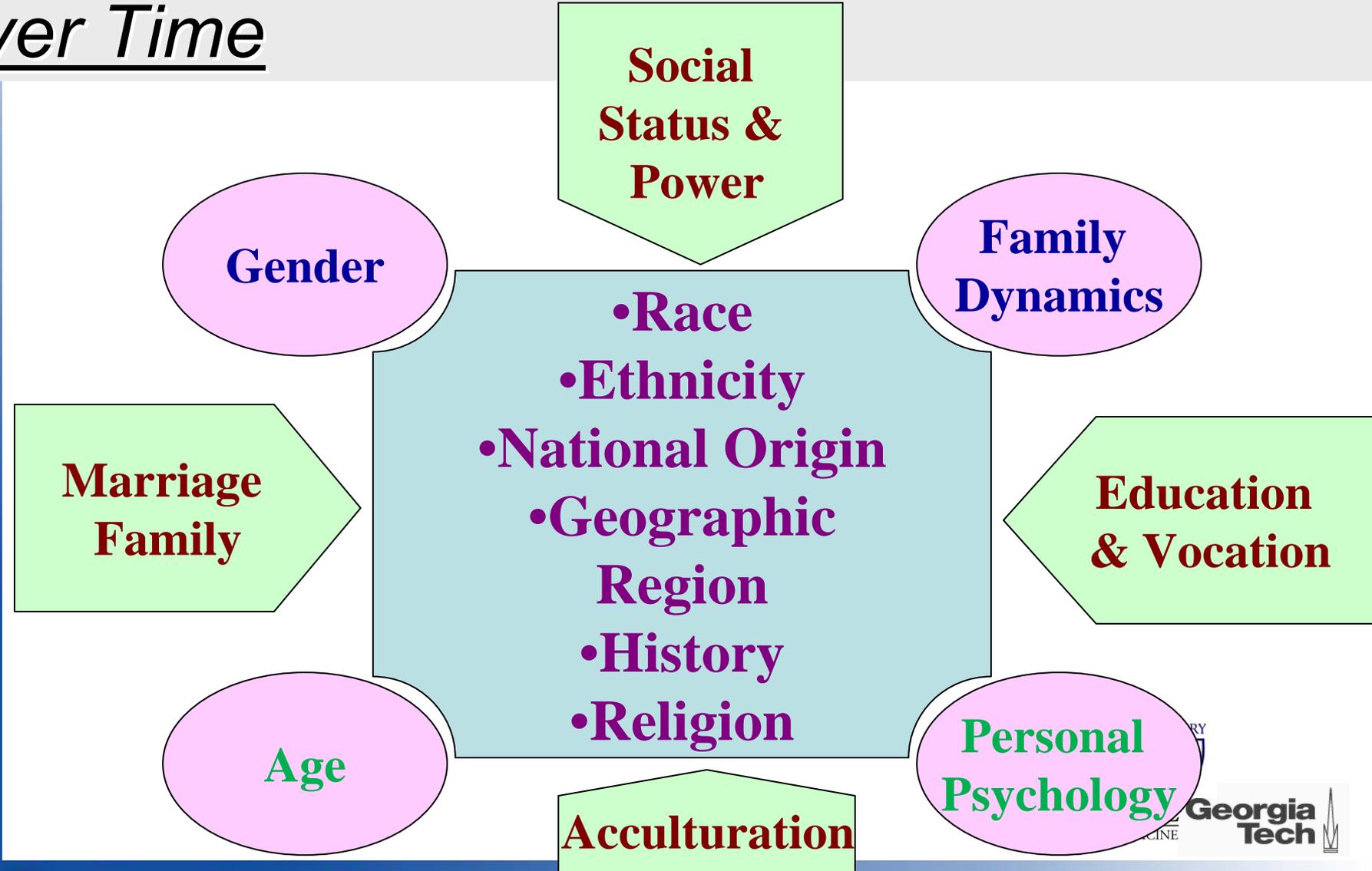


# CRASH-Course Concepts

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



# Culture Expressed Through Individuals Over Time





# *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**

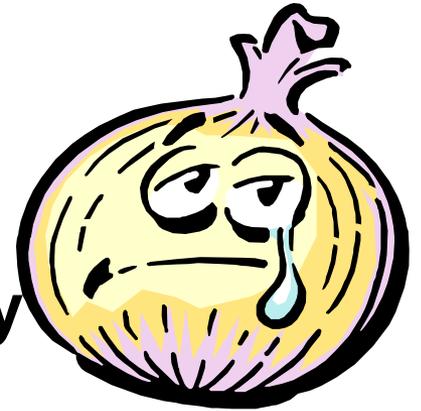


- **Becoming aware of our own cultural norms, values, and “hot-button” issues that lead us to mis-judge or to miscommunicate with others.**





# *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

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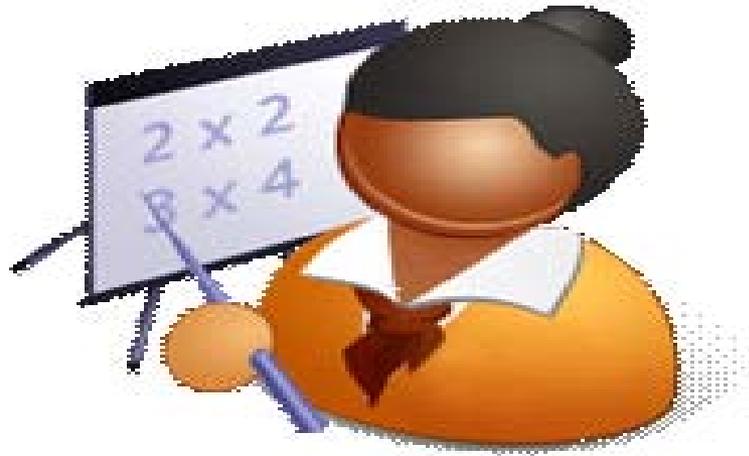


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# Effective Facilitation

**A learned skill**



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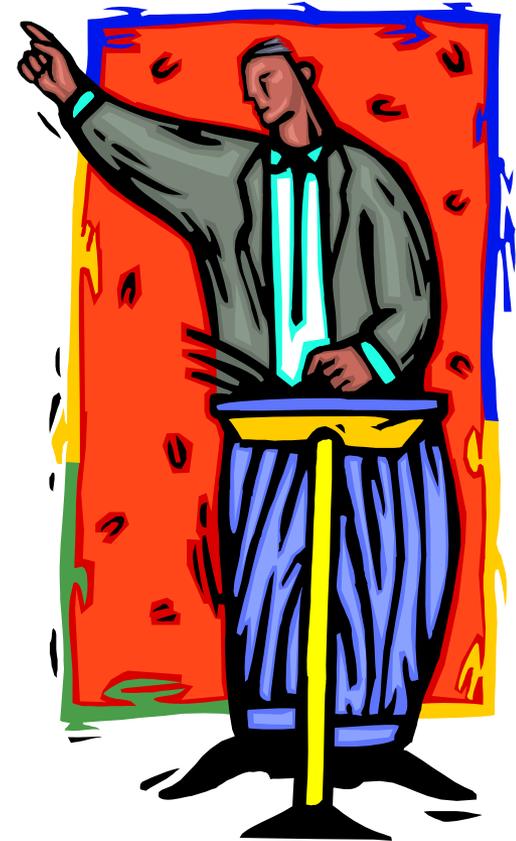
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# Becoming an Effective Presenter

- “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**



# Scribe

- **Beginning**
  - **What is a hook**
    - A dynamic opening
    - A way to reel in the audience
- **My hook story**



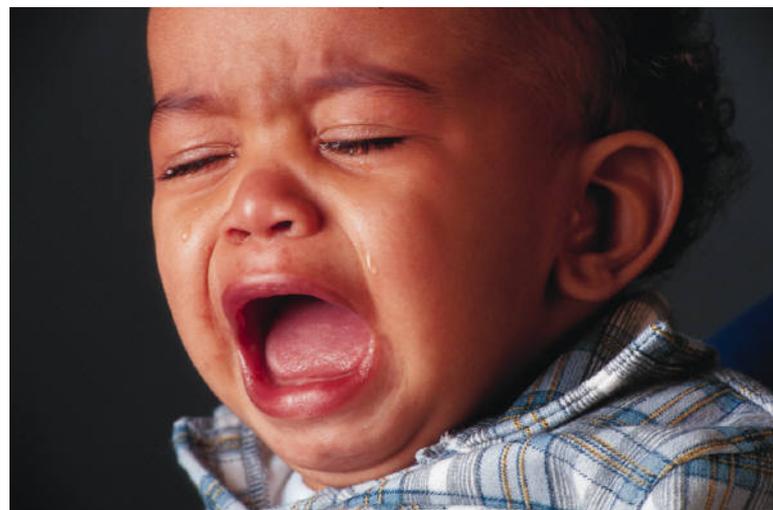
<http://www.youtube.com/watch?v=OBlgSz8sSM>

(Charlie)



# Scribe

- My hook story: “Teething in Babies...Whom does it hurt the most?”
- Your hook story?



# Middle

- 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



*The End*



# 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



[http://www.youtube.com/watch?v=RWX\\_pjylq-g](http://www.youtube.com/watch?v=RWX_pjylq-g)

President Kennedy June 11, 1963



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# 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

	Scripts	Notes	Memory
Pros	<ul style="list-style-type: none"><li>• No omissions</li><li>• Gives confidence</li></ul>	<ul style="list-style-type: none"><li>• Uses skeleton</li><li>• Demonstrates familiarity</li><li>• May use cue card</li></ul>	Exudes intelligence
Cons	Monotone	May lose order	<ul style="list-style-type: none"><li>• May lose focus</li><li>• Subject to emotions</li></ul>



# 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



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# Parting Quote

- “You can speak well if your tongue can deliver the message of your heart”





# Health Literacy

Knowledge is power



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# 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 asks 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 and 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**

