

# Promoting Colorectal Cancer Screening in Rural Emergency Departments

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# Why the Emergency Department?

- 100 million ED visits per year in the U.S.
- 1 in 5 Americans visit at least once a year (20%)
  - African Americans and other minorities more likely to visit
  - As income decreases likelihood of one or more visits increases
- Wait times for non urgent care are often more than 3 hours
- Teachable moment (heightened attention to health care enhancing receptivity to medical recommendations)

# Why a Rural Emergency Department?

- ❖ Residents of rural Appalachia have a higher incidence and mortality rate from CRC than residents of other regions of the country
- ❖ A primary barrier to screening is limited access to the health care system resulting in infrequent recommendations for screening and inadequate screening education
- ❖ More than half of all rural ED visits are low severity cases
- ❖ More than half of all rural ED low severity cases occur during business hours

# Establishing Feasibility

- Pilot survey of interest at Academic Medical Center Emergency Department
  - 197 women convenience sample of women seated in the ED
    - 15% had never had a mammogram
    - >50% out of compliance with current guidelines
    - $\frac{3}{4}$  were somewhat to very interested in receiving information while they waited
- SEEDS (Sisters Educated in Emergency Departments)

**Hatcher, J.,** Rayens, M.K., & Schoenberg, N.E. (2010). Mammography Promotion in the Emergency Department: A Pilot Study. *Public Health Nursing, 27:* 520-527. Doi: 10.1111/j.1525-1446.2010.00894.x

# Specific Aims

- ❖ Adapt and pilot a tailored intervention to promote CRC screening in a rural Appalachian Kentucky ED in order to
  - ❖ A) evaluate feasibility of providing a cancer screening promotion intervention in an ED that serves a rural community
  - ❖ B) assess the effects of the intervention on barriers to CRC screening, stage of readiness to screen and CRC engagement.
- ❖ Long term goal of the project is to eliminate the inequitable burden of CRC experienced by rural Appalachian residents by increasing screening

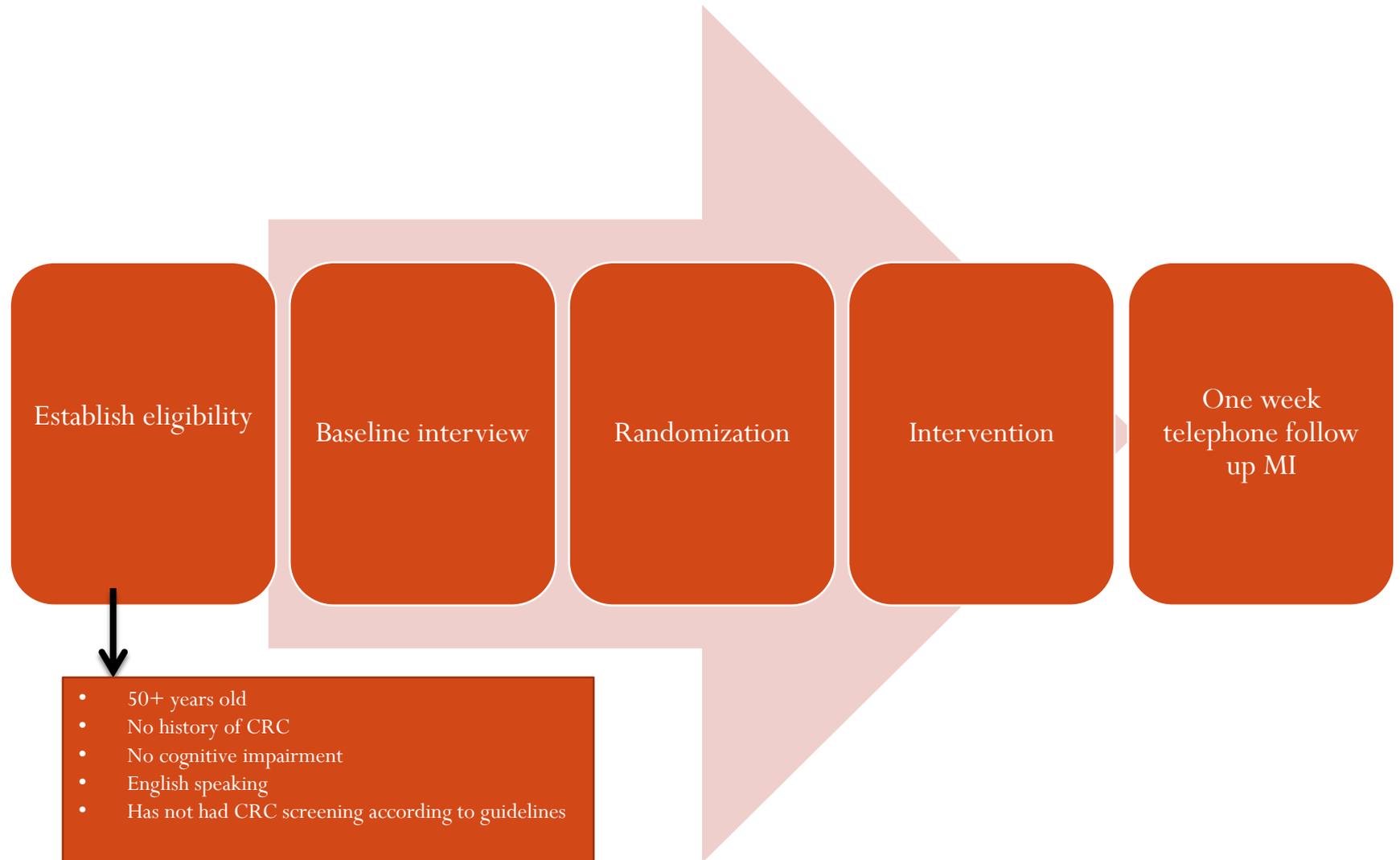
# Setting

- Rural Appalachian KY Emergency Department
  - St. Clair Hospital Morehead KY
    - Largest rural hospital in Northeastern Kentucky
    - Serves 11 rural counties and 160,000 persons
    - 23 bed ED (serving more than 30K per year)
  - Hazard Appalachian Regional Hospital
    - Largest provider of care in Southeastern Kentucky
    - 24 Bed ED (25~35K patients per year)

# Intervention protocol

- Establish eligibility
- Randomize to control or intervention
- Control: Brochure on CRC
- Intervention: Motivational Interview (MI) with resource assistance
- One week follow up: MI reinforcement and resource assistance
- Three month follow-up call
- Six month follow-up call

# Protocol



# Demographics

Variable	Treatment Mean ( $\pm$ SD) or N (%)	Control Mean ( $\pm$ SD) or N (%)	P-value
<b>Age</b>	57.25 ( $\pm$ 8.40); range 50-84	58.44 ( $\pm$ 9.17); range 50-84	.60
<b>Race/ethnicity</b>			
White or Caucasian	93 (96.9)	94 (98.9)	
Hispanic	2 (2.1)	1 (1.1)	
African American	1 (1.0)		
<b>Gender</b>			
Female	62 (64.6)	50 (52.6)	
Male	34 (35.4)	45 (47.4)	.08
<b>Relationship Status</b>			
Single, never married	11 (11.5)	7 (7.4)	
Married/living with significant other	45 (46.9)	52 (54.7)	
Divorced/Separated/Widowed	36 (37.5)	35(36.8)	
Other	4 (4.16)	1 (1.1)	.66
<b>Education</b>			
Less than high school	27 (28.1)	28 (29.5)	
Completed high school or GED	42 (43.8)	41 (43.2)	
Some College	21 (21.9)	18 (18.9)	
Completed College Degree or Post Graduate	4 (4.2)	8 (8.4)	
	2 (2.1)		.46
<b>Income</b>			
$\leq$ \$19,999	28 (29.1)	35 (36.8)	
\$20,000 - \$39,999	18 (18.8)	16 (16.8)	
$\geq$ \$40,000	9 (9.4)	7 (7.4)	
Other	41 (42.7)	37 (38.9)	.87
<b>Health Insurance</b>			
No Insurance	24(25.0)	21(22.1)	
Government Insurance	72 (75.0)	74 (77.9)	.73

# Baseline results

## Barriers to Screening

- Fear (50.8%) of the test result & fear of pain (50.3%)
- Cost (48.7%) regardless of insurance status

## Baseline CRC Screening Status

Ever screened	Treatment	Control
Yes	4 (4.2%)	6 (6.3%)
No	92 (95.8%)	88 (92.6%)

# Conclusions

- Non-urgent ED users are not being screened regularly
- Using ED to conduct this intervention is feasible
- LHWs are effective in this setting
- There are both benefits and challenges to CRC screening promotion in the ED

# Challenges

- Transient population
- Fidelity to the protocol
- Contamination
- Privacy

# Benefits

- Reaching hardest to reach
- Emergency Department Staff
- Community Health Workers

# Discussion & Questions

