

# A VIDEO DECISION SUPPORT TOOL FOR CPR IN ADVANCED CANCER: A RANDOMIZED CONTROLLED TRIAL



The VIDEO Study

Video Images of Disease for Ethical Outcomes

# Background

- Advance care planning: structured discussion of future wishes
- Verbal descriptions are limited
- Prevalence of low health literacy
- Video offers realistic images

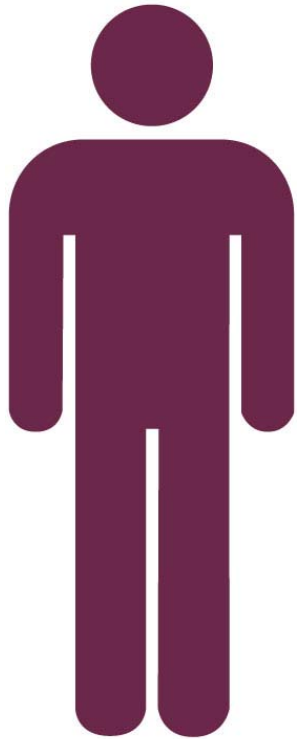
# Background

- Cancer 2nd leading cause of death
- In the advanced stages, whether or not to attempt CPR foreseeable decision point
- Opportunity for advance care planning

# Objectives

1. RCT comparing verbal vs. video depiction on CPR preferences
2. Compare knowledge and the stability
3. Explore predictors against CPR

# Subjects



- 4 Academic Oncology Centers
- Subjects recruited after clinic visit
  - Inclusion criteria:
    - Less than 1 year prognosis
  - Exclusion criteria:
    - Unable to speak English
    - New patient visit

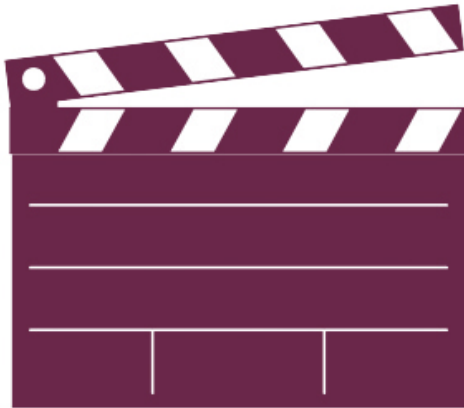
# Methods: Design

## Randomized controlled trial

Verbal description  
(control)

Video after verbal  
(intervention)

# Methods: Intervention



## 3 Minute Video of CPR

Developed and edited with expert panel of oncologists, intensivists, decision making experts, ethicists, patients and families

# Video



# Methods: Intervention

- Outcomes
  - CPR preference (Yes, No, Unsure)
  - CPR knowledge: 3 True/False, 1 Multiple Choice
  - 6-8 week follow-up preference
- Covariates
  - Age, gender, race
  - Health literacy (REALM)

# Methods: Data Collection

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Care preferences immediately after  
Control vs. Intervention  
(Chi square)

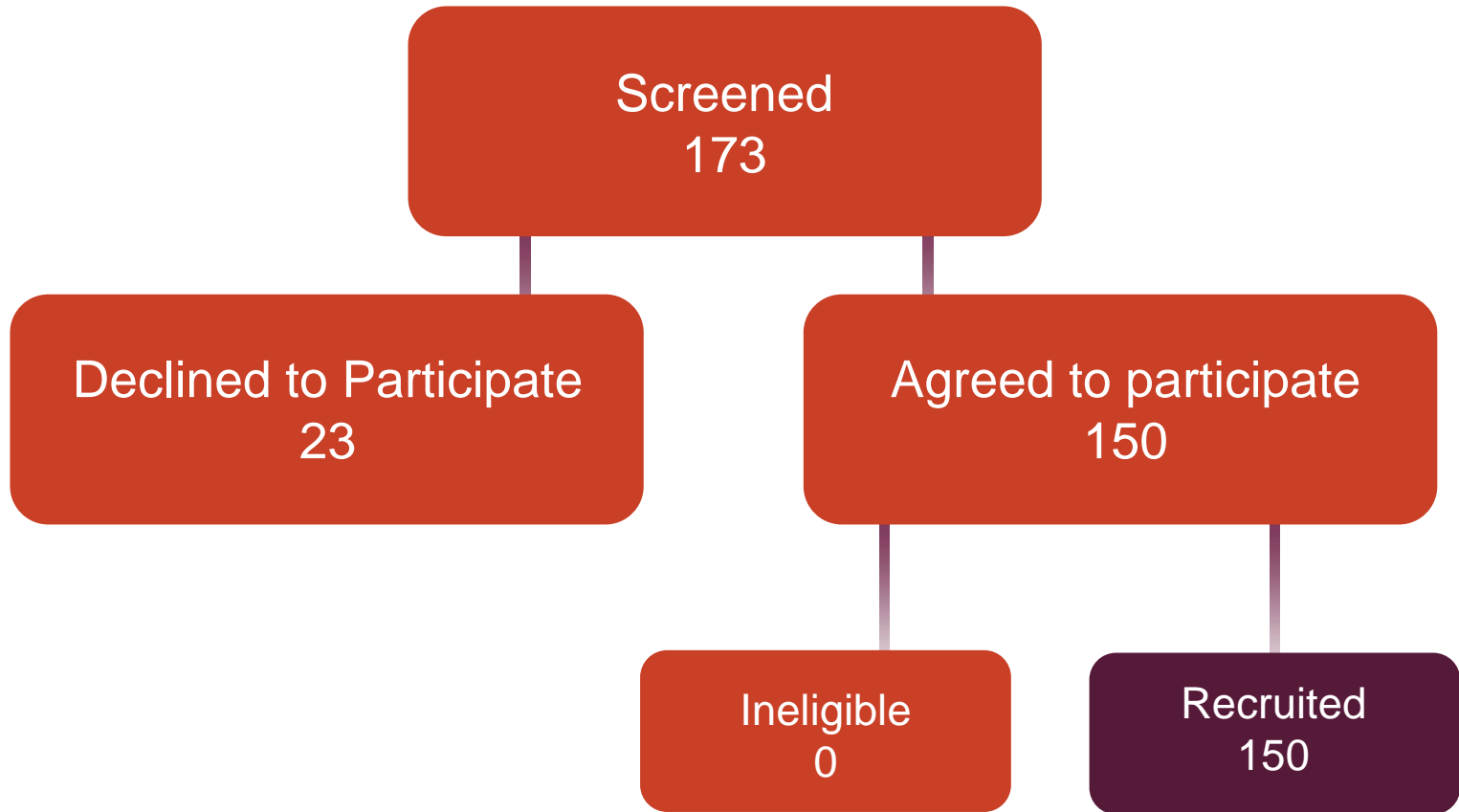
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Mean change in knowledge scores  
(two sample t-tests)

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Predictors against CPR  
(Odds ratios)

# Results



| Characteristics                       | Verbal<br>(N=80) | Video<br>(N=70) |
|---------------------------------------|------------------|-----------------|
| Age, mean (SD), y                     | 62 (10)          | 63 (13)         |
| Women, N (%)                          | 40 (50)          | 34 (49)         |
| <b>Race, N (%)</b>                    |                  |                 |
| Black or African-American             | 30%              | 39%             |
| Hispanic or Latino                    | 8%               | 13%             |
| White (Non-Latino)                    | 53%              | 41%             |
| <b>Type of Cancer (%)<sup>a</sup></b> |                  |                 |
| Breast                                | 14%              | 9%              |
| Colon                                 | 23%              | 24%             |
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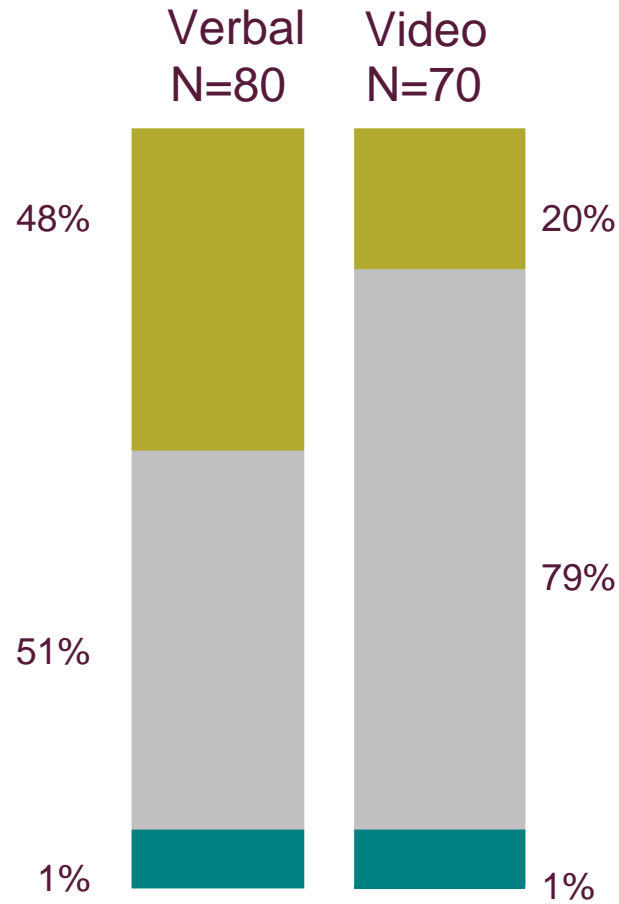
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# CPR Preferences

- Yes
- No
- Uncertain



$P < 0.001$

# Knowledge

■ Baseline  
■ Post Intervention

Verbal  
N=80

$P < 0.001$

Video  
N=70

$\Delta 0.5$

2.6

2.1

FEW

COMPLICATIONS

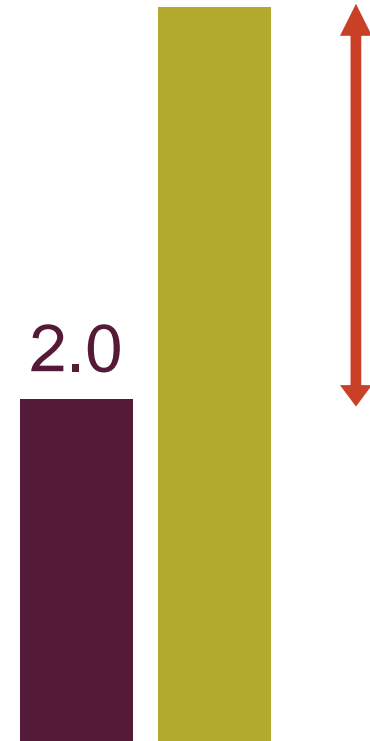
SURVIVE

CPR

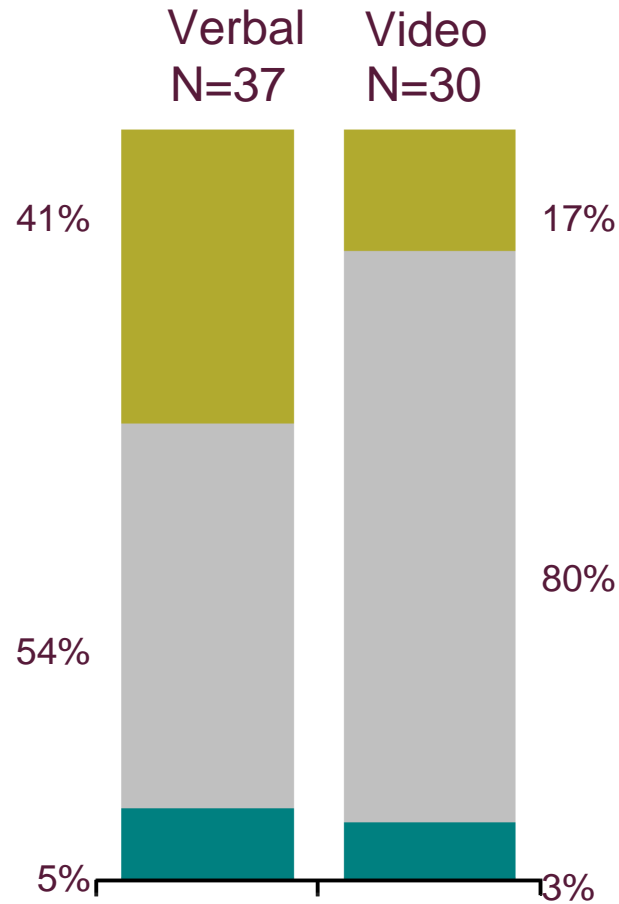
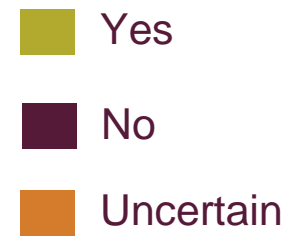
2.0

3.3

$\Delta 1.3$



# CPR 6-8 Week Follow Up



$P = 0.06$

| Randomization   | Unadjusted Odds Ratio (95% CI) | Adjusted Odds Ratio (95% CI) |
|-----------------|--------------------------------|------------------------------|
| Verbal          | 1 [Reference]                  | 1 [Reference]                |
| Video           | 3.5 (1.7-7.2)                  | 4.7 (2.1-10.7)               |
| Race            |                                |                              |
| Non-White       | 1 [Reference]                  | 1 [Reference]                |
| White           | 2.2 (1.1-4.3)                  | 1.5 (0.6-4.0)                |
| Health Literacy |                                |                              |
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| 7-8th Grade     | 3.4 (1.2-10.2)                 | 3.6 (1.1-12.0)               |
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90%

“Helpful”

93%

“Comfortable”

97%

“Recommend”



# Summary

Patients with advanced cancer who saw the video were more informed about their preferences and were more likely to choose against CPR.

Higher health literacy was associated with preferences against CPR.

# Implications

Video may promote more informed decisions by providing more realistic expectations of CPR

Video may reduce effect of low health literacy.

THE RESEARCH REPORTED DURING THIS  
PRESENTATION WAS SUPPORTED BY:

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AHRQ K08-HS018780

THE INFORMED MEDICAL DECISIONS  
FOUNDATION

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THE INVESTIGATORS RETAINED FULL INDEPENDENCE IN  
THE CONDUCT OF THIS RESEARCH