

A Cluster Randomized Pragmatic Trial of an Advance
Care Planning Video Intervention in Long-Stay Nursing
Home Residents with Advanced Illness: PROVEN
What Would we Have Done Differently



PRagmatic Trial of Video Education in Nursing Homes

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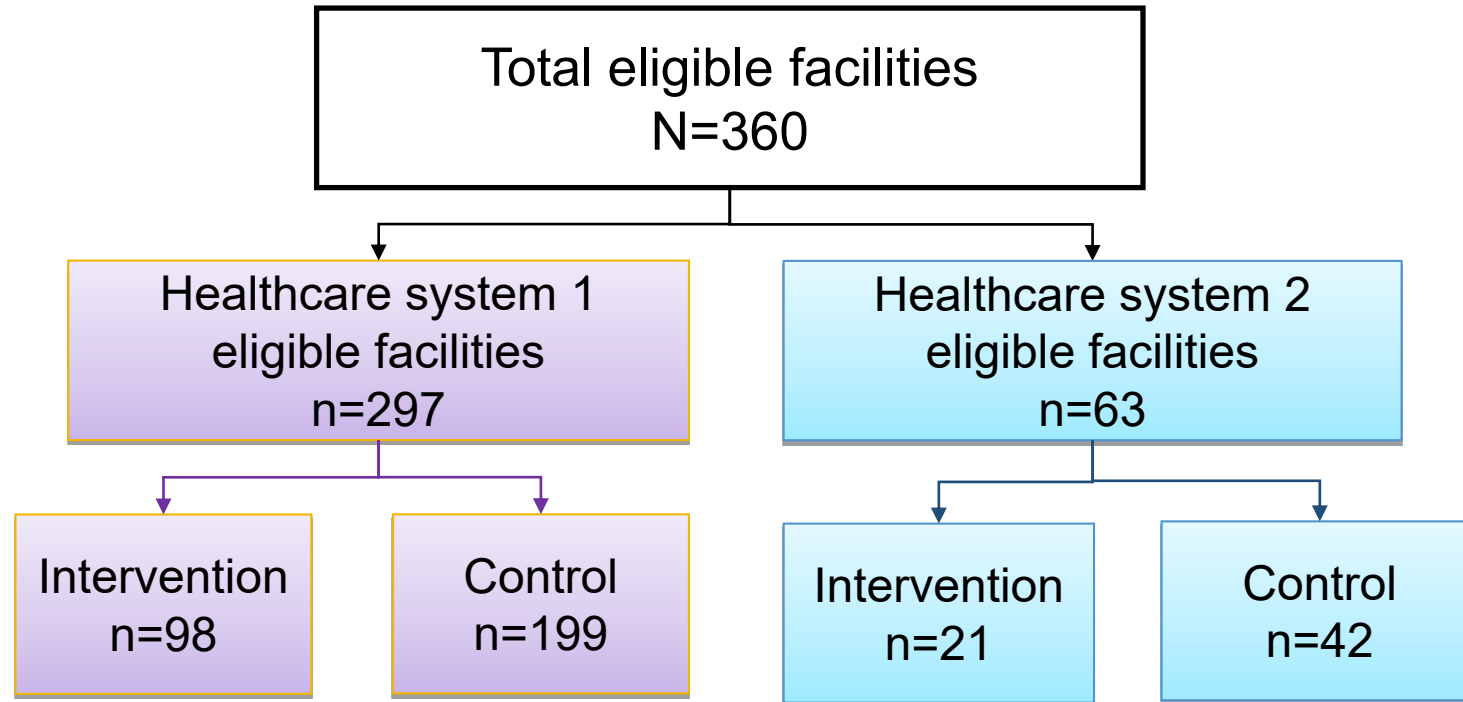
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PROVEN

- A pragmatic cluster RCT of an advance care planning (ACP) video intervention embedded within two NH healthcare systems

Facilities



Patient Participants

- Enrollment: 02/02/16-05/31/18
- 12-month f/u each resident; ends 06/01/19
- Population
 - All patients in NH during enrollment period
- Target population: advanced illness
 - Greatest opportunity to benefit from ACP
 - **Medicare beneficiaries**
 - > 65, long-stay (>100 days)
 - Advanced dementia, CHF or COPD (>50% 6 mo. Mortality)
 - Met criteria during enrollment period

Intervention

- Suite of 5 videos
- Tablet (2/NH) or on-line
- 2 Champions/NH
 - Social Worker
- Offer video to resident or proxy:
 - Baseline
 - Admission
 - Q6months
 - Ad hoc
- Could choose video
- English or Spanish



*Goals of Care for Any Patient**

This video helps patients understand and make decisions about their goals of care.



Goals of Care for Patients with Advanced Dementia

This video helps family members understand and make decisions for patients with advanced dementia.



*Decisions about Hospice**

This video helps patients and their families understand and make decisions about hospice care.



*Decisions about Hospitalization**

This video helps patients understand and make decisions about hospitalization.



*General Information about Advance Care Planning for Healthy Adults**

This video helps generally healthy patients understand and make decisions about their long-term health goals.

Monitoring Fidelity and Adaptations

- Video Status Report linked to resident-level assessment data
- Created facility reports
 - % targeted residents offered/shown a video
- Q2month calls with ACP champion, HCS senior project manager, implementation team
- January 2017 steps take to increase fidelity
 - Calls increased to q1month and made 1:1
 - List of actual residents not offered video reviewed
 - Site visits by senior project manager

PROVEN: Primary Outcome

- No. hospital transfers/1000 person-days alive among long-stay (> 100 days) Medicare beneficiaries ≥ 65 with advanced dementia, CHF or COPD
- Medicare Claims
- Transfers = admissions, observation stays, emergency room visits
- Up to 12-month follow-up

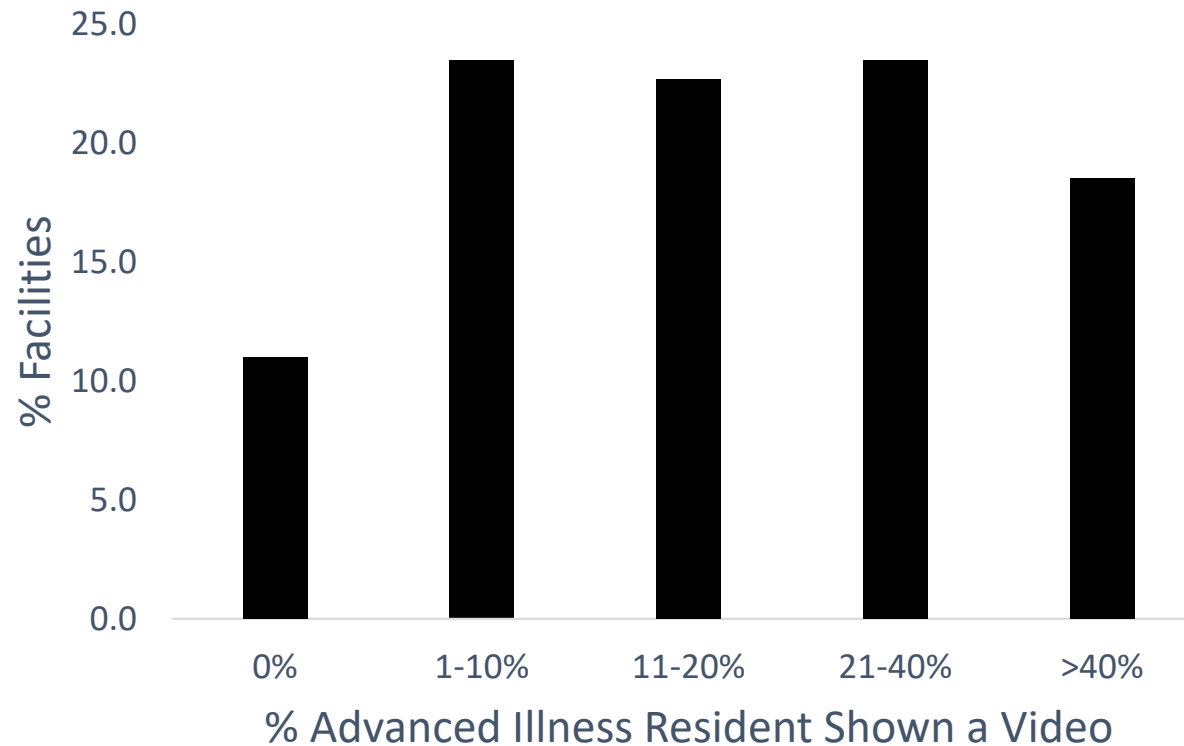
Results: Outcomes

Primary Outcome	Intervention N=4171	Control N=8308	Marginal Rate Difference (SE) (95% CI)
	Rate (SE) (95% CI)		
Hospital transfers/1000 person-days alive	3.7 (0.2) (3.4-4.0)	3.9 (0.3) (3.6-4.1)	-0.2 (0.3) (-0.5,0.2)
Secondary Outcomes	Percent (SE) (95% confidence interval)		Marginal Risk Difference (SE) (95% CI)
≥ 1 hospital transfer	40.9 (1.2) (38.4-43.2)	41.6 (0.9) (39.7,43.3)	-0.7 (1.5) (-3.7, 2.3)
≥ 1 burdensome treatment	9.6 (0.8) (8.0,11.3)	10.7 (0.7) (9.4,12.1)	-1.1 (1.1) (-3.2,1.1)
Enrolled in hospice*	24.9 (1.2) (22.6, 27.2)	25.5 (0.9) (23.3,27.2)	-0.6 (1.5) (-3.4, 2.4)

**Excluded residents enrolled in hospice at baseline*

Fidelity

- 55.6% advanced illness residents (or proxies) offered a video
- 21.6% advanced illness residents (or proxies) shown a video
- Variability across facilities



Post-Hoc Analysis of Decedents

Outcomes	Intervention (N=923)	Control (N=1,925)	Proportion Difference (95% CI)
Any hospital transfer in the last 90 days life	3.8%	5.7%	-1.71 (-3.21, -0.09)
≥3 hospital transfers in the last 90 days of life	1.8%	3.0%	-0.83 (-1.71, 0.14)
≥1 late transition*	7.6%	10.0%	-2.22 (-5.29, 1.26)
Acute hospitalization in the last 3 days of life	4.6%	5.9%	-1.09 (-3.48, 1.03)
Intensive Care Unit Admission in last 90 days	14.7%	18.2%	-3.51 (-6.78, -0.51)

Health Care System Leadership Reactions

- **Positive**

- In some facilities staff found the videos useful
- Did observe a benefit among decedents even though few saw video
- No complaints among staff or administrators

- **Negative**

- Video system not fully integrated into daily operations
- Training program not part of basic orientation
- No direct connection between videos and Physician orders

Summary

- Both Nursing Home companies had a reason to want the intervention to work since were moving to adopt payment risk
- Senior leadership expressed interest but did not reinforce message
- Other palliative care initiatives begun by one company also failed to take hold
- Perhaps wholesale adoption outside of a trial might have increased implementation and engagement