Systematic Advance Care Planning and Potentially Avoidable Hospitalizations of Nursing Home Residents

Evaluation of a CMS Demonstration Project

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Disclosure

- I do not currently have an affiliation (financial or otherwise) with a commercial entity.

- I am faculty for Respecting Choices Last Steps®. This is an unpaid position.

Objectives

- Describe the systematic implementation of person-centered advance care planning in nursing homes using the Respecting Choices Last Steps facilitation model;

- Discuss the associations between who is offered ACP, resident characteristics, and hospitalization rates; and

- Identify challenges inherent in analyzing the outcomes of a multi-component intervention.
OPTIMISTIC

Optimizing Patient Transfers, Impacting Medical Quality, and Improving Symptoms: Transforming Institutional Care

CMS 1E1CMS331082-04-00

OPTIMISTIC Clinical Model

Unroe et al., JAGS (2015)
Palliative Care Core

• Goals
  ➢ Reduce burdensome treatments, reduce transitions, referral to palliative care and hospice as appropriate

• Strategies
  ➢ ELNEC (End-of-Life Nursing Education Consortium)
  ➢ Symptom Management
  ➢ Palliative Care Consultation
  ➢ Advance Care Planning

OPTIMISTIC Clinical Model

OPTIMISTIC RN Duties

- Acute Change in Condition—INTERACT implementation; mentoring and coaching
- Support NPs – identify patients; communication
- Advance Care Planning – structured targets
- Quality Improvement – transfer root cause analyses; integrate into facility QI efforts
- Education

OPTIMISTIC NP Duties

- Acute Change in Condition
- Transition Visits
- Polypharmacy reduction
- Support RNs in education efforts
Outcomes: External Evaluation

**Design**
Mixed Methods; intervention nursing homes with matched comparison

**OPTIMISTIC Results**
-40% reduction in potentially avoidable hospitalizations
-25% reduction in all-cause hospitalizations
-No negative effect on quality measures

Outcomes: OPTIMISTIC Evaluation

**Design**
-Interviews + focus groups - 63 stakeholders

**Outcomes**
- Universally valued ACP
- Importance of specially trained RNs & NPs with time to focus on ACP
Methods

- Nurse interventionists

- Long stay residents at 19 nursing facilities
  - 100 days or longer
  - Average daily census = 1900 (approx.)


ACP Intervention

- Trained in Respecting Choices Last Steps®
  - Structured interview guide
    - Understanding of medical condition
    - Values and goals
    - Treatment preferences
  - Annual recertification

- ACP Encounter form
### Tools to Document Outcome of Advance Care Planning

- **Advance Directives**
  - Health Care Representative Appointment

- **Facility Medical Orders**
  - DNR = Do Not Resuscitate, Full Code
  - DNH, DNI, NFT

- **Indiana Forms**
  - Out-of-Hospital DNR Order Form
  - POST = Physician Orders for Scope of Treatment
Structured ACP Assignments

• Program
  ➢ 5-10 ACP discussions per month
  ➢ ACP attempt end-point
  ➢ Monthly review
  ➢ Annual ACP updates

Measures

• Resident demographics from MDS
  ➢ Age, gender, cognitive functioning, functional status, diagnosis, hospice,

• ACP discussions
  ➢ Audit + ACP encounter form

• Hospitalizations from Transfer Tracking
  ➢ RN Ratings of Avoidability
Measures

• Documentation of preferences – 3 groups
  1) Do Not Hospitalize & POST Comfort Care orders
  2) Code status only & POST Limited or Full Intervention orders
  3) No ACP

• Excluded
  ➢ ACP documentation from non-OPTIMISTIC staff

Results

• Participants = 1486 long-stay nursing facility residents
  ➢ Average age = 79.2 years
  ➢ 67% female
  ➢ 6% end-stage renal or hospice
  ➢ 69% cognitively impaired
### Relationship between ACP and Hospitalizations

**Bivariate models (N = 1486)**

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<th>Outcome</th>
<th>Advance care planning categorical variable</th>
<th>IRR (SE)</th>
<th>p-value</th>
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Note: IRR = incident rate ratio from negative binomial count model; SE=standard error for incident rate ratio; Ref.=reference category; DNH=do not hospitalize.

### Relationship between ACP and Hospitalizations, adjusted for covariates

**Multivariable models* (n = 1430)**

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Note: IRR = incident rate ratio from negative binomial count model; SE=standard error for incident rate ratio; Ref.=reference category; DNH=do not hospitalize.

* covariates: gender, age, hospice or end stage renal disease, cognitive function score and ADL score.
Discussion

- In the context of a successful intervention:
  - ACP documentation resulting from facilitated conversations did not predict hospitalizations
  - Age and frailty associated with decreased hospitalizations (all and PAH)
    - Increased dementia associated with lower rates of hospitalizations (all)

What is the goal of ACP?
Top 5 Outcomes

(1) care consistent with goals
(2) surrogate designation
(3) surrogate documentation
(4) discussions with surrogates
(5) documents and recorded wishes are accessible when needed

Multi-Component Models
ACP as Culture Change Signal

Limitations

• Hospitalization measure
  ➢ Data Source

• Setting
  ➢ Indianapolis
  ➢ Higher performing facilities
Next Steps

• APPROACHES (Hickman/Unroe)
  ➢ R21/R33
  ➢ 200 nursing homes
  ➢ Advance Care Planning Specialist Program
    ▪ ACP Specialist
    ▪ Team training
    ▪ Policies, procedures, protocols
    ▪ Accountability

Summary

• Systematic ACP formalizes and ensures documentation of current preferences/plan of care

• When controlling for confounders, ACP alone was not associated with hospitalization rates

• In multi-component intervention, difficult to separate out effects of individual components

• Future research directions include new analytic methods
For more information…

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