

Improving Outpatient Care in Complex Heart Failure Patients

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Learning Objectives

After the workshop, participants will be able to:

- A. Discuss a number of strategies that could be used in their facility to reduce Heart Failure (HF) hospitalizations.
- B. Identify a population of patients in which telephone titration could be implemented.
- C. Outline an approach that could be used to facilitate transitions to palliative care.

Background

- Need for innovative approaches in HF management
- Minneapolis Heart Failure Telehealth Clinic (MHFTC) initiated in 2004 with VISN 23 Strategic Initiative Funding for telehealth monitoring in high-risk HF patients
- In 2006, separate V23 Strategic Initiative Funding (Chronic Disease Management) for telephone titration and strategies for improving medication titration (ACE Inhibitor/Angiotensin Receptor Blocker/ isosorbide/ hydralazine, beta-blocker, spironolactone, diuretics) in primary care.

What We Do...

- MHFTC is Nurse-managed, Physician-supervised
- Medication up-titration to standard of care, risk factor control over the phone with lab work performed locally or remotely, most-all of cardiology care
- Closely monitor fluid status (outpatient options, IV lasix on observation unit, ultrafiltration being considered)
- Manage and/or screen for other medical comorbidities
- Consult with outpatient and inpatient providers

What We Do.....

- Creative Case Management (addressing issues that impact treatment adherence)
 - Cognitive→GRECC, increased family involvement, initiated vulnerable adult process
 - Lack of information→Patient classes (multidisc. general CHF Class and Advanced Disease Mgmt Class)
 - Social issues→Collaborations with other case managers or home care personnel, HBPC, consults to SW for caregiver, community, financial resources, couples counseling, level of care change
 - MH→Behavior therapy, depression, anxiety, PTSD
 - Behavioral Concerns→Family conferences, set limits, held patient accountable

Analysis Inclusion

- (1) Daily telehealth monitoring and telephone titration patients: Initial cost-savings analyses of 201 patients
- (2) Daily equipment patients: The first 101 patients (60 with reduced left ventricular (LV) function and 41 with preserved LV function) who completed >1 year of follow-up
- (3) Telephone titration: 79 patients (64 with LV systolic dysfunction) who underwent assertive medication titration
- (4) Observation unit management: Patients in the clinic who were at risk for impending admission and were followed by telehealth staff <24 hours on the OBS unit while receiving IV or other therapy
- (5) ACP discussion: The first 54 patients with an average NYHA Class 2.8 who completed a template ACP discussion.

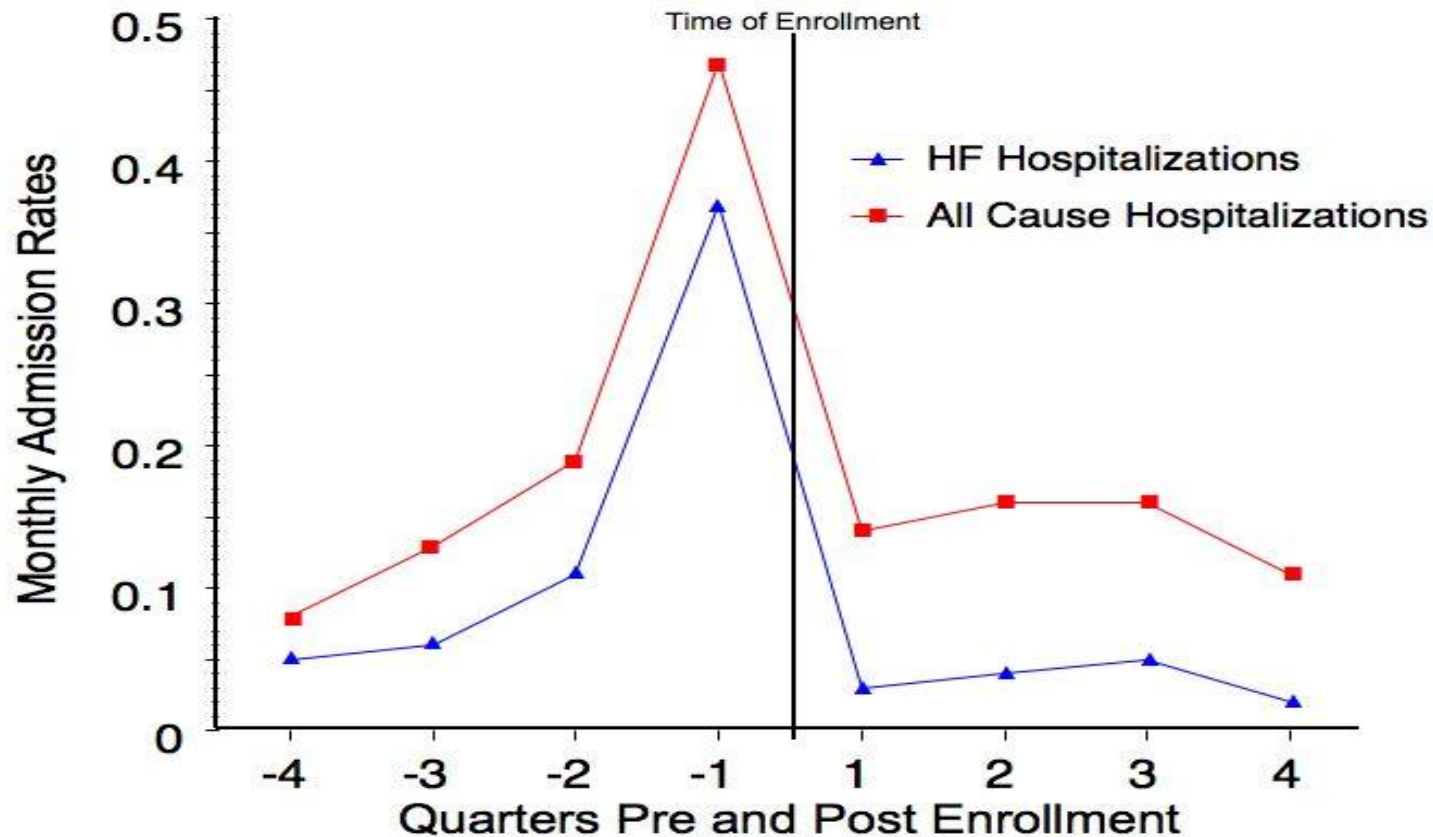
Outcomes: Daily Telehealth Monitoring and Telephone Titration Patients:

- Analysis of the first 201 telehealth and telephone patients pre-and-post enrollment demonstrated a cost savings of \$3,299,575.
 - 73⁰% reduction in total hospital admissions
 - 77⁰% reduction in inpatient LOS (days).

Daily Telehealth Monitoring Patients

- When 101 high-risk daily telehealth patients, salary and *start-up* equipment costs included, a \$602,333 savings was demonstrated (primarily explained by an increase in the number of device and revascularization procedures).
- HF and all-cause hospitalizations reduced and sustained.

Figure 1. Daily Telehealth Monitoring Patients: Hospitalization rates 1 year pre and post-enrollment

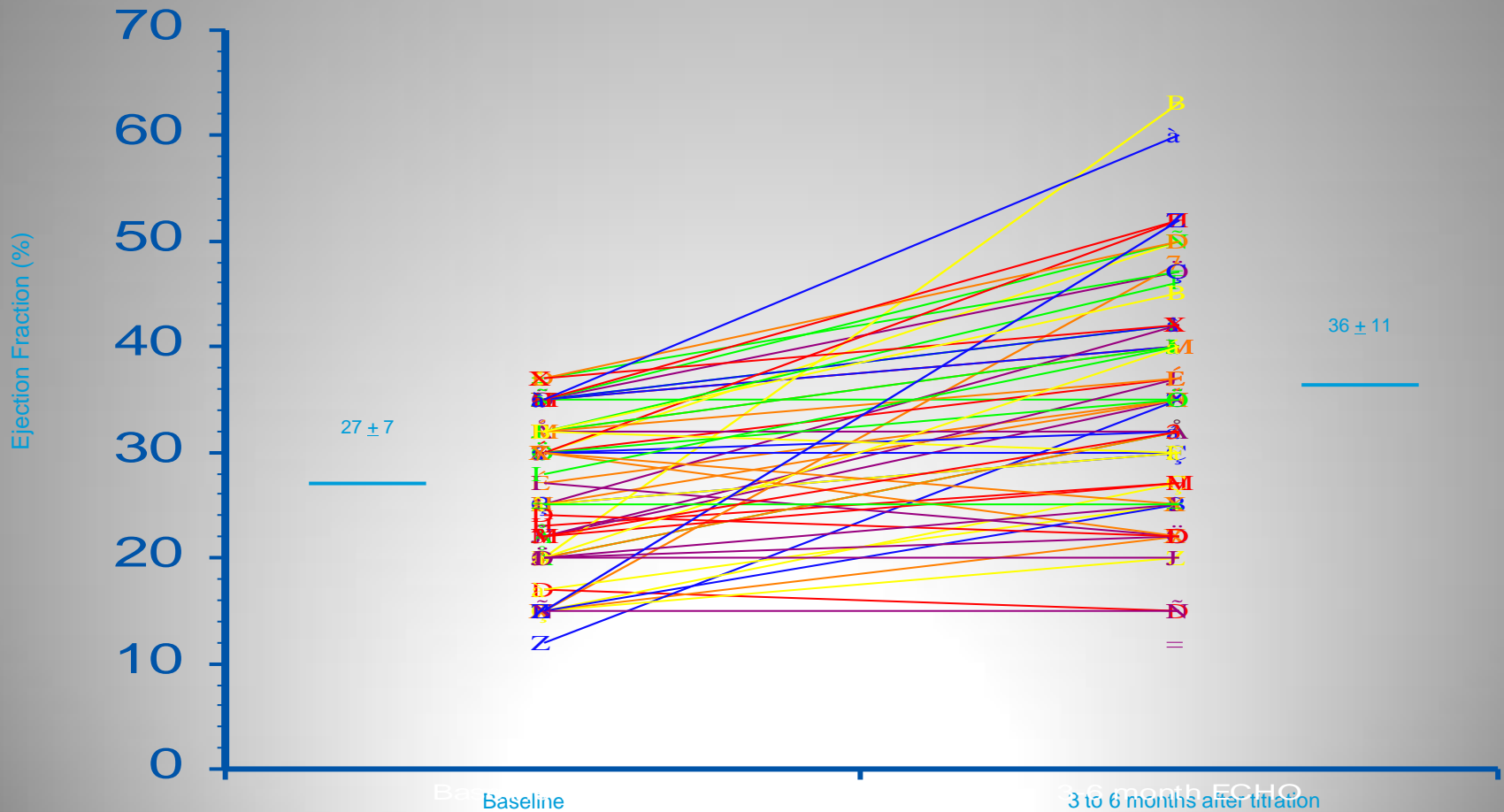


Telephone Titration

- Overall, the EF increased by 10 ± 10 %
- Increased to $\geq 35\%$ in 42 % of patients whose baseline EF was $< 35\%$ and were candidate for device implantation.
- This avoided the need for device therapy in many patients.
- As a result of this project, patients are now generally referred to the CHF Clinic for optimization prior to referral for device therapy.

• **Source: ACC 2009 Poster Abstract. Long Distance Titration of Heart Failure Medications by Telephone Calls. Authors: Anne E. Steckler, Heba Wassif, Judy Wagner, Connie Jaenicke, Thomas Rector, Inderjit S. Anand**

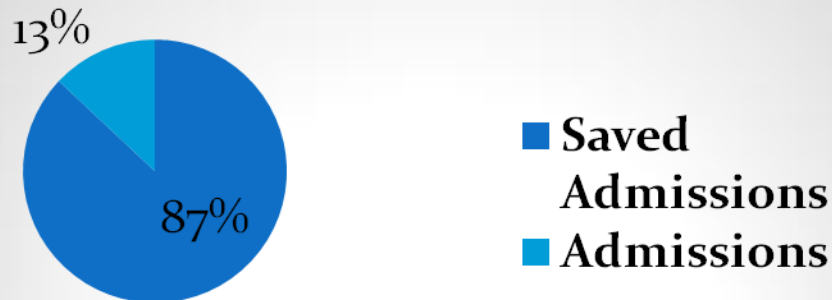
Figure 2. Telephone Titration: Change in EF from baseline to 3-6 months after optimization for patients whose LVEF increases to $\geq 35\%$.



Observation unit management

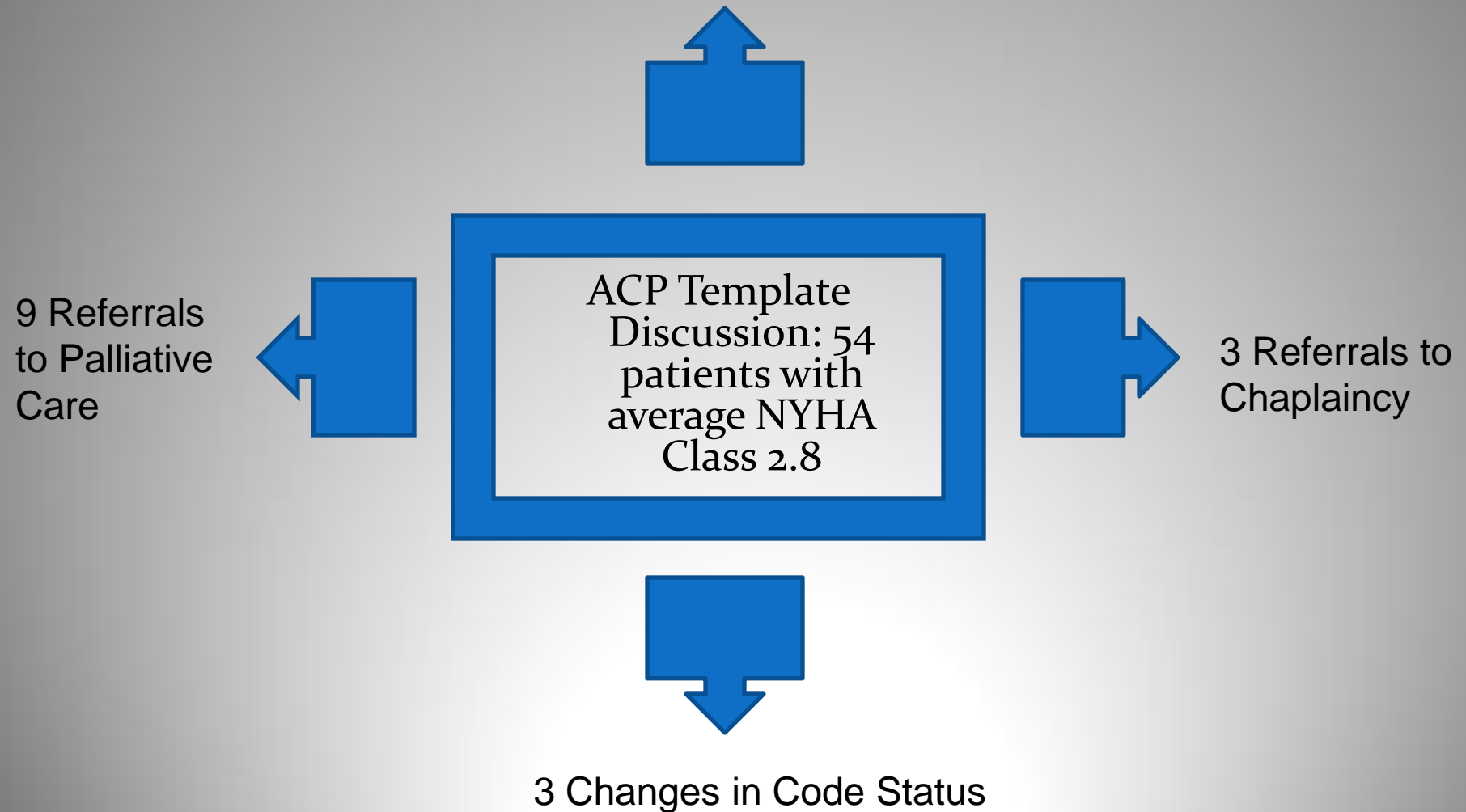
- 37 patients with impending decompensation were followed on the outpatient OBS unit by MHFTC staff on 85 occasions.
 - The clinic was able to save 74 (87%) inpatient admissions at an estimated cost savings of \$504,680.

Figure 3. Observation Unit Intervention



ACP Template Discussion

21 Referrals for Advanced Directive Completion



ACP Template Discussion

- Of the 21 referrals for AD Completion, 3 (14.3%) patients completed the form within 3 months.
- Follow-up calls for those who did not complete the document within 3 months
- Five patients died an average of 142 days after the discussion.

ACP Discussion Conclusions

- Results show an increased rate of advanced care directive completion (ACD), affected patients' desire for change in code status, and increased palliative care team referrals.
- The lower than expected ACD completion rate supports the need for a documented ACP discussion.

- Source: HFSA Abstract 2009. Title: **An Approach for Incorporating Advanced Care Planning into Heart Failure Specialty Care**
Authors: Connie Jaenicke, FNP-BC, Judy Wagner, NP-C, GNP-BC and Viorel Florea, MD.

ACP Template Development

- Core 5 elements developed by Dr. Carol Luhrs, VISN 3 Director of Palliative Care
- Additional elements added for Chronic Disease Program
- Caroline Schauer EPIC and Stanford Models
- Approved by VISN 23 for clinical use

ACP Discussion

Reminder Dialog Template: Advanced Care Planning/Chronic Disease V23

Advanced Care Planning/Chronic Disease V23

This document is intended to guide patient discussions regarding preferences about end-of-life care. These discussions can occur at any time during the disease process, but are most effective if they take place while the patient is relatively stable and early on in the illness. This documentation does not constitute an Advance Directive but merely provides an opportunity for discussion between patients and their clinicians regarding goals for care.

Discussion held with:

Discussion to be re-addressed at:

1) Illness:

Readiness to learn was assessed: * Yes No

Reviewed diagnosis of

Applicable co-morbidities:

Patient verbalizes understanding of his current medical condition: * Yes No .

Patient verbalizes prognosis: * Yes No

Specific questions asked by patient: No questions

Current pain level (0-10):

*

ACP Discussion

2) Goals of Care:

What are the patient's hopes, goals, and expectations?

What are some individual goals related to quality of life?

3) Medical and Legal Decision Maker:

Medical Decision Maker:

- Patient has completed an Advanced Health Care Directive on .
- Patient has not completed an Advanced Health Care Directive.
- Patient has Advance Directive on file at the VA.
- Patient desires to complete an Advanced Health Care Directive (see referral below).
- Patient does not wish to complete an Advanced Health Care Directive.

Identified health care proxy:

Legal Decision Maker:

Patient has a medical Power of Attorney: * Yes No

Medical Power of Attorney on file with VA: * Yes No

ACP Discussion

4) Treatment Preferences:

Patient is Full code DNR/DNI Other code

Patient would like to change to Full code DNR/DNI Other code .

Patient's initial thoughts regarding desire for treatment if he/she were hospitalized with less than a 5 percent chance of meaningful recovery and patient unable to answer questions him/herself:

Major surgery (i.e., open-heart surgery; amputation): Yes No Unknown or Undecided

Feeding tube: Yes No Unknown or Undecided

Dialysis: Yes No Unknown or Undecided

Intubation: Yes No Unknown or Undecided

Ventilator support: Yes No Unknown or Undecided

Antibiotics for widespread infection: Yes No Unknown or Undecided

Extensive diagnostic testing (i.e., coronary angiogram, CT scan, MRI): Yes No Unknown or Undecided

Other scenarios in which the patient would like to clarify his wishes: None

ACP Discussion

5) Options for Care at the End of Life:

Patient preferences (i.e., location, presence of chaplain):

Discussed what hospice care entails should the timing be appropriate:

Patient has does not have an internal cardiac defibrillator.

Discussed shutting this device off at end-of-life if desired, and rationale for doing so.

6) Coping:

Identification of fears:

Communication with family members/family members' responses/level of family support:

Role of spirituality in veteran's life:

Level of peace (i.e., Good, Fair, Poor):

ACP Discussion

7) Referrals options:

Social Work
 Palliative Care Program
 Chaplain
 Hospice
 None at this time.

8) Education handouts given:

Notify Primary Care Provider regarding: re-addressing code status pain management other:

Patient instructed to call with additional comments or questions prn.

Generalizability

- **Other Chronic Disease Programs:**
 - Telephone Titration of medications with remote lab follow-up has the potential to be implemented in primary care or other specialty clinics as well for the management of htn or follow-up of renal patients, for example.
 - The ACP intervention has been disseminated throughout the VISN for use in COPD and Diabetes programs, as well as Dementia and Palliative Care
- **HF Programs:**
 - Protocols/guidelines available: Alterations available that would allow intravenous diuretics to be given over several hours in a specialty clinic (if 24-hour observation unit not available)**HF Programs:**

Taking it to the Next Level

- Barrier: An inability to obtain protocol approval for RN-initiated medication titration in primary care.
- Although the approaches outlined above have reduced admissions, there remains some patients who continue to be readmitted. Ultrafiltration is being considered for outpt use.
- The ACP intervention is an initial step in changing the culture for transitioning all patients to palliative care at the appropriate time.
 - Further modifications of Advanced Heart Failure Group Class
 - Identification of best practices for transitioning patients to palliative care
 - Collaborators?

Take Home Points:

1. Aggressive, long-distance uptitration of HF medication using telephone monitoring is possible in medium-risk patients. This helps to prevent the necessity of implantable devices in a number of patients, and reduces costs.
2. Our experience confirms that telehealth monitoring of HF patients reduces healthcare costs. Additional cost savings can be achieved by early outpatient initiation with IV diuretics in patients with impending acute decompensation of HF.
3. Early ACP intervention can result in an increased rate of advanced care directive completion (AD), address patients' desire for change in code status, increase palliative care team referrals, and improve documentation of patients' wishes in the event that patients never complete an AD.