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Advance Care Planning and Goals of Care Communication in Older Adults with Cardiovascular Disease and Multi-Morbidity

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Keywords

Advance care planning; Goals of care; Patient-doctor relationship; Communication; Older adults; Cardiovascular disease; Multi-morbidity

INTRODUCTION

Advance care planning (ACP) is relevant for the estimated 85.6 million American adults (>1 in 3) who have cardiovascular disease, including 85% of men and 86% of women older than 80 years. 1 Many of these individuals have more than one chronic condition (ie, multimorbidity). For example, 86% of patients with heart failure have multi-morbidity, with hypertension, hyperlipidemia, and arrhythmias being common.^{2,3} The American Geriatrics Society published guiding principles for the care of older adults with multi-morbidity, emphasizing a person-centered approach that includes patient preferences and current medical conditions.⁴ Although the American Heart Association (AHA) emphasized the importance of ACP in heart failure, ACP and goals of care communication should be integrated into the care of all older adults with cardiovascular disease and multi-morbidity.²

This article defines ACP, discusses the benefits and challenges to ACP in older adults with cardiovascular disease and multi-morbidity, and provides practical steps for clinicians about assessing patients' readiness to engage in ACP, identifying surrogate decision-makers, and asking about values related to quality of life. The authors also provide practical guidance to documenting patients' preferences, translating these preferences into medical orders, and communicating these preferences with other providers.

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What Is Advance Care Planning?

ACP is a process whereby people identify their values and preferences for medical care and designate a surrogate decision-maker in advance of a medical crisis or the loss of decisionmaking capacity.⁵ The goal is to help patients receive medical care that is aligned with their preferences. Table 1 provides common ACP terms and definitions. It is important to note that ACP includes several behaviors, such as considering treatment goals in light of personal values, completing advance directives, and communicating with families and clinicians⁶ (Fig. 1). The ACP process may be started at any age and any stage of illness. ⁷ It may focus on designating a surrogate and discussing preferences for surrogate decision-making (eg. degree of leeway or flexibility when making decisions).⁸ It may also focus on discussions about values related to quality of life and preferences for overall health states that patients may or may not find acceptable (eg, being bed bound or in a coma). Ideally, early, anticipatory ACP conversations between patients, surrogate decision-makers, and health care providers will prepare patients and families for in-the-moment goals of care conversations, such as decisions about the use or nonuse of life-sustaining treatments and unanticipated events.^{2,8} Therefore, over time, ACP discussions and documentation may focus on specific goals of care for medical treatments, such as cardiopulmonary resuscitation (CPR) or the implantation of a left ventricular assist device (LVAD).^{5,9}

The importance of focusing ACP on values identification and ongoing discussions, and not just a one-time documented advance directive, cannot be overstated. ¹⁰ Completing advance directive documents is only one part of ACP (see Fig. 1). Living wills often focus on preferences for life-sustaining procedures, such as CPR and mechanical ventilation in specific medical situations. As patients' clinical condition changes over time, their preferences and values may also change. Furthermore, in addition to CPR, patients and their loved ones may need to make many decisions that are not addressed in advance directives, such as whether to have pacemaker and/or implantable cardioverter defibrillator (ICD) placement; cardiac catheterization; advanced cardiac therapies, such as inotropes or LVADs; or nursing home placement. Values-focused discussions can help patients, surrogates, and clinicians with all the complex medical decisions that patients may face, not only decisions about particular medical procedures, such as CPR.

For older adults with cardiovascular diseases, the presence of other chronic conditions, such as diabetes mellitus, chronic obstructive pulmonary disease, osteoarthritis, cancer, or dementia, affect the individual's prognosis, quality of life, symptom burden, risks related to polypharmacy, and caregiver needs. Thus, ACP for older adults with cardiovascular diseases and multi-morbidity must use a tailored, person-centered approach that takes into account the full picture of patients' health and medical care, rather than being focused on a single disease in isolation.

Benefits of and Challenges to Advance Care Planning in Older Patients with Cardiovascular Disease and Multi-Morbidity

Benefits of ACP include

 Ability to identify, respect, and implement an individual's wishes for medical care, especially if the individual loses decision-making capacity¹¹

 Sense of control over managing one's personal affairs, peace of mind, and decreased burden and conflict among loved ones⁶

- Improved patients' quality of life¹² and satisfaction with their clinicians who initiated ACP conversations¹³
- Decreased use of unwanted intensive medical interventions, hospitalizations, and CPR at the end of life^{12,14}
- Fewer in-hospital deaths, more hospice use, and potentially lower Medicare costs among older adults with advance directives specifying comfort-oriented end-oflife care 15,16
- Reduced stress, anxiety, and depression in surviving family members ¹⁷
- New ability for clinician reimbursement for ACP conversations through the Centers for Medicare and Medicaid as of January 2026¹⁸

Challenges of advance care planning in older adults with cardiovascular

disease—Despite the benefits of ACP and recommendations by the AHA to engage patients in ACP discussions, many older adults with cardiovascular disease and multimorbidity die after extended periods of disability without discussing their preferences with family or clinicians. For example, only 12% of outpatient clinicians, including physicians, nurse practitioners, and physician assistants, caring for patients with heart failure reported having annual ACP discussions¹⁹; only 25% of patients hospitalized with heart failure reported discussing resuscitation preferences with their inpatient physician.²⁰ A recent review found that absent, delayed, or inadequate ACP communication was associated with negative outcomes, including poor quality of life and anxiety, family distress, prolongation of the dying process, undesired hospitalization, patient mistrust of the health care system, physician burnout, and high costs.⁹

Furthermore, there are low rates of advance directive completion in patients with heart failure (41%), severe aortic stenosis (47%), or individuals admitted to a cardiac care unit (26%). ^{21–23} Even when an advance directive exists, there is still poor correlation between what individuals state in an advance directive, what is documented in the medical record, and the care received. For example, among hospitalized patients in Canada, concordance between patients' expressed preferences for life-sustaining treatment and documentation in the medical record was only 30%. ²⁴

Patient and clinician barriers to advance care planning and goals of care communication—Patients face multiple barriers to engaging in an ACP process, such $as^{6,25}$

- Fear of dying or finding it too difficult to think about end-of-life issues
- Fear of upsetting the doctor by desiring to discuss ACP
- Inability to plan for the future due to challenging life/social issues, including lack of an available surrogate decision-maker
- Limited knowledge of ACP or difficulty understanding advance directives

Clinicians caring for patients with cardiovascular disease and multi-morbidity also face significant barriers to ACP discussions. In a study of recently hospitalized patients with heart failure, outpatient clinicians, including cardiologists (22%), often missed opportunities to engage patients in ACP despite patients' comments or questions that could have prompted such discussions. Clinician-reported barriers include lack of patient and family readiness, difficulty understanding the limitations and complications of life-sustaining treatments, lack of agreement among family members about goals of care, and patients' lack of capacity to make decisions about goals of care. Other clinician barriers include lack of time, difficulty discussing prognosis, and discomfort and lack of confidence with ACP discussions. Decause patients with cardiovascular diseases may have highly variable disease trajectories, prognostic uncertainty is inevitable and should not, but often, limits attempts to engage patients in ACP. However, because multi-morbidity in patients with cardiovascular disease is associated with higher mortality, Prognostic tools designed for older adults with multi-morbidity could help clinicians tailor ACP discussions.

Practical Steps to Advance Care Planning in Older Adults with Cardiovascular Diseases

Clinicians can use practical and systematic steps to engage older adults with cardiovascular disease and multi-morbidity in the ACP process. Box 1 provides clinical triggers for multidisciplinary health care team members to initiate ACP conversations. *These triggers reflect the complex needs that patients with multi-morbidity commonly face*.

Box 1

Triggers for ACP conversations in older adults with cardiovascular diseases

- New cardiovascular diagnosis and at (annual) routine visits
- Diagnosis of new medical comorbidities, especially depression or dementia
- Disease exacerbation prompting ED visits, hospitalizations, and other care transitions
- Increased symptoms and/or decreased quality of life
- New or worsening functional impairment or change in health status
- New cardiovascular instability (hypotension, azotemia, ICD shock)
- Consideration of advance cardiac therapy (ie, inotrope, LVAD)
- Changes in caregiver, family, or social situation

Abbreviations: ED, emergency department; ICD, internal cardioverter defibrillator.

Data from Allen LA, Stevenson LW, Grady KL, et al. Decision making in advanced heart failure: a scientific statement from the American Heart Association. Circulation 2012;125(15):1928–52; and Dunlay SM, Strand JJ. How to discuss goals of care with patients. Trends Cardiovasc Med 2015;26(1):36–43.

Key steps to ACP include (1) assessing and addressing patients' readiness and barriers, (2) identifying surrogate decisions-makers, (3) asking about individuals' values related to quality of life and serious illness, (4) documenting ACP preferences, and (5) translating individuals' preferences into medical care plans. These steps, especially in the outpatient and inpatient setting, can be done individually and sequentially over time based on clinician time constraints and patients' clinical needs. Many of these steps can also be completed by multidisciplinary team members (eg, nurses, social workers, nurse practitioners, chaplains, psychologists, physicians, and other trained staff). Table 2 provides an overview of key ACP steps and opportunities for health care team members to initiate ACP discussions across various stages of illness and health care settings. These steps emphasize a person-centered approach that focuses on the individual's personal values and life goals, rather than a single disease, symptom, or treatment decision.

Assessing and addressing patients' readiness and barriers to advance care planning—Engaging individuals in ACP begins with assessing patients' readiness. Studies show that patients are in varying stages of readiness to engage in ACP.^{6,30} Table 2 suggests brief opening questions that explore patients' readiness through understanding their past experiences with ACP and openness to ongoing discussions. Questions should be tailored to the individual's clinical context, such as what a new cardiovascular or other diagnosis may mean to them.

Barriers often need to be addressed before patients are ready to participate in ACP.^{8,31} Table 2 also provides examples of open-ended questions to help identify patient barriers to ACP. Understanding personal barriers (eg, fear of dying, fear of upsetting their doctor, lack of a suitable surrogate decision-maker) that patients experience can help tailor responses and communication to help overcome these barriers. When patients are not ready to engage in ACP, clinicians can ask about any increased medical, functional, or social support changes, such as the death of a spouse, that warrant involvement of multidisciplinary team members (ie, social worker, home health nurses, palliative care team). Most people, even if they are not ready to discuss a particular aspect of ACP, such as identifying a surrogate decision-maker, may be willing to explore nonthreatening topics, such as prior experiences of family and friends or their experiences with prior hospitalizations.

Identifying surrogate decision-makers—Designating and preparing a trusted surrogate decision-maker is the cornerstone of effective substitute decision-making in the event of patients' incapacity. This step is important, because 50% to 76% of people will require substitute decision-making at the end of life. Surrogates, if prepared, are able to provide illustrations of patients' life stories to inform medical decision-making that represents the patients' values. 22

Even if the clinician has limited time, Table 2 provides language to help emphasize the importance of choosing a surrogate and discussing the concept of flexibility or leeway in surrogate decision-making. ¹³ Surrogates need to be asked to assume the responsibility; they need to agree to their role; there needs to be communication and documentation of surrogates as a medical power of attorney in the medical record. ⁸ One challenge of surrogate decision-making is that surrogates may not understand patients' values and preferences,

especially as these preferences may change with changing health.³³ Clinicians can encourage patients and surrogates to have ongoing discussions with changes in health and as ACP is revisited over time.

Asking about values related to quality of life—Clinicians should initiate conversations that help patients articulate their personal values, life goals, and preferences regarding future medical care. Table 2 provides questions for clinicians to help patients describe what quality of life means to them, reflect on trade-offs between quality of life and quantity of life, and consider their preferences for specific life-sustaining treatments. ¹⁰ For example, clinicians can ask patients about their values over time to help guide medical decisions, including whether certain health states would make life not worth living. Clinicians can also teach older adults to ask questions to help them participate in shared decision-making (eg, What are the risks? What are the benefits? What are the burdens?).² These discussions should incorporate asking about patients' understanding of their cardiovascular disease, as well as other conditions, and be tailored to their desire for information about disease trajectory and estimated prognosis.

Translating patient values into specific medical treatment plans—As patients experience worsening health and face decisions related to specific medical treatments, clinicians will continue ACP discussions and move to the next step of goals of care conversations. Best practices for conversations about goals of care for specific treatment preferences with patients with cardiovascular disease and multi-morbidity include^{9,10}

- Eliciting decision-making preferences, including understanding wishes for family involvement in ACP discussions and decisions
- Reviewing previous discussions and advance directives
- Discussing prognostic information and anticipated outcomes for treatment options
- Understanding values, fears, and goals for the future
- Discussing and deciding on a treatment plan based on patients' values

Translating patients' values into specific treatment plans is especially important in the care of older adults with cardiovascular diseases and multi-morbidity. As patients and clinicians discuss patients' personal values related to quality of life, clinicians and the multidisciplinary team can provide recommendations for specific medical treatment plans that weigh benefits and harms in the context of the patients' preferences, all of their medical conditions, and their physical functioning. The treatment plan should align with the patients' values and preferences, help them reach their life goals, and avoid or minimize interactions within and among treatment conditions.⁴

Table 2 provides an example of translating patients' values into specific medical treatment plans. For instance, a clinician may recommend that patients consider ICD placement if they describe that living as long as possible, or to see their children graduate college, is very important to them. Alternatively, a clinician may not recommend an ICD for patients who state that being comfortable is their main priority, including avoiding medical interventions.

Common treatment plans for patients with cardiovascular diseases and multi-morbidity include

- General scope of care options: life-prolonging (ie, CPR and life-sustaining treatments), limited interventions (ie, hospitalization with limitations in the extent of medical intervention), or comfort care (ie, symptom relief)^{34,35}
- Role of hospitalization and/or outpatient services like hospice 16
- Role of CPR, including recommending for or against this procedure³⁶
- Role of cardiac treatments and devices, such as pacemakers, ICDs, inotropic medications, and LVADs³⁷

Clinicians can use Physician Orders for Life-Sustaining Treatment to translate ACP preferences into medical orders, such as CPR, scope of treatment, and artificial nutrition based on conversations with patients or surrogates.³⁵ These orders were designed to be most appropriate for patients with limited life expectancies and for those patients who want to limit specific medical interventions. These medical orders are legal documents that can followed in all settings (ie, home, clinic, hospital, nursing home).

Documenting patient preferences—Clinicians have 2 major roles in supporting documentation of ACP preferences. First, clinicians should use state-specific advance directives to enable patients to formally identify a surrogate decision-maker (ie, medical power of attorney) or document their preferences for future medical care (ie, living will). Clinicians should emphasize the importance of discussing the forms and sharing copies with the designated surrogate, other family and friends, and other clinicians. Secondly, clinicians and teams should help facilitate communication of patients' documented preferences with other health care providers, especially because older adults with cardiovascular disease and multi-morbidity may see a primary care provider and multiple specialists. Clinicians should document the content of ACP discussions in the medical record and alert other involved health care team members. Advance directives and out-of-hospital orders should be officially added to the medical record. Other clinic, hospital, or nursing home—based team members can help share documentation with other providers and across health care settings as well as help scanning documents into the medical record.

Team-Based Approaches to Advance Care Planning

Care teams can work together to systematically identifying patient, clinician, and health care system barriers to ACP and work to incorporate ACP over multiple visits. Existing clinic programs can be modified to support ACP. For example, ACP interventions (ie, patient-centered ACP tools, see later discussion) could be added to existing self-management, caregiver support, or transitions of care programs (ie, after heart failure–related hospitalizations). Because older adults with cardiovascular disease, especially those with heart failure, frequently experience care transitions, it is critical that ACP and goals of care conversations are relayed to all relevant health care team members. As patients engage in ACP and conversations about their goals of care with clinicians from multiple settings (inpatient, outpatient, home health, nursing home), these teams can work together to support ongoing discussions; education and counseling about risks, benefits, and burdens of medical

treatment; and communication with patients, surrogates, and other clinicians as the patients' health status, needs, and preferences change over time.

Patient-Centered Advance Care Planning Tools and Approaches to Goals of Care Conversations

Recent advances in ACP include the development of accessible, evidence-based tools to assist patients and clinicians with knowledge and decision-making related to ACP. ^{38,39} An advantage of many of these patient-centered ACP tools is that they can help engage patients and families in ACP beyond clinical settings, even before seeing a clinician.

For patients

- PREPARE (https://www.prepareforyourcare.org/)⁴⁰ is an evidenced-based, video-based, and easy-to-use ACP Web site in English and Spanish that focuses on preparing patients for communication and decision-making. The Web site creates a tailored summary of the patients' values and preferences that can be used to jump-start the conversation with the clinician.
- ACP Decisions (http://www.acpdecisions.org/) includes ACP videos describing overall goals of care, CPR, and mechanical ventilation that can influence patients' and surrogates' preferences for end-of-life care.³⁴
- The Conversation Project (http://theconversationproject.org/)⁴¹ provides a
 written toolkit with values-based questions to help individuals start ACP
 conversations.
- Making Your Wishes Known (https://www.makingyourwishesknown.com/)⁴² is an evidenced-based interactive computer program that assists individuals with ACP, including advance directive documentation.

For clinicians

- Serious Illness Conversation Guide (https://www.ariadnelabs.org/programs/ serious-illness-care/) is a checklist to assist clinicians with key steps in ACP conversations.⁹
- ePrognosis (www.eprognosis.org) is a Web site with evidence-based geriatric prognostic indices that incorporate multi-morbidity.²⁹

SUMMARY

Clinicians who care for older adults with cardiovascular disease and multi-morbidity can engage older adults in ACP through multiple brief discussions over time. ACP emphasizes choosing a surrogate decision-maker, identifying personal values, communicating values with surrogates and clinicians, translating preferences into specific medical treatment plans, and documenting preferences for future medical care. Although patients and clinicians face specific challenges related to ACP, multidisciplinary teams can incorporate practical steps into brief clinical encounters. Additionally, several patient-centered ACP tools are available to support patients and clinicians in engaging in ACP.

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KEY POINTS

 Advance care planning (ACP) involves a process of eliciting patients' values and life goals over time and then translating those values into appropriate medical care plans.

- ACP can help individuals receive medical care that is aligned with their values and improve patient-reported outcomes.
- ACP should be initiated early in the disease trajectory for patients with cardiovascular disease, even at the time of diagnosis, and account for how other chronic conditions impact their prognosis, personal values, and medical preferences.
- Multidisciplinary teams can promote ACP by
 - Assessing patients' readiness to engage
 - Asking about surrogate decision-makers
 - Engaging patients in discussions about values and preferences

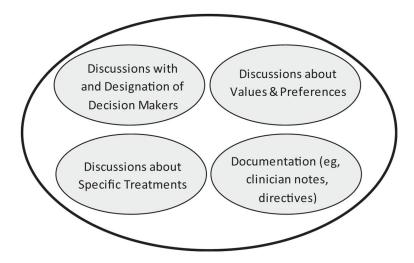


Fig. 1. Multiple aspects of ACP.

Table 1

ACP terms and definitions

ACP Terms	Description of Terms
ACP	Process of considering and communicating personal values and goals related to medical care over time
Advance directive	Legal documents describing preferences for future care <i>and</i> appointing a surrogate to make health care decisions in the event of lack of decision-making capacity
Medical durable power of attorney	Legal document that appoints an agent to make future medical decisions; becomes effective only when patients become incapacitated
Surrogate decision-maker or health care proxy	A decision-maker that makes medical decisions when patients become incapacitated <i>and</i> the patients did not previously identify a medical durable power of attorney (Most states use a hierarchy system to designate a health care proxy, whereas a few states appoint a proxy that is agreed on by all interested parties.)
Living will	Documents an individual's wishes prospectively regarding initiating, withholding, and withdrawing certain life-sustaining medical interventions; effective when patients become incapacitated and have certain medical conditions
Cardiopulmonary resuscitation directive or do-not-resuscitate order	Documents preferences to refuse unwanted resuscitation attempts
Orders for life-sustaining treatment (ie, Physicians Orders for Life Sustaining Treatment)	Medical order set that translates patient preferences for life-sustaining therapies into orders (This form is intended for seriously ill people with life-limiting illnesses and is portable and transferable between health care settings.)

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Table 2

Opportunities for ACP discussions across stages of illness and health care settings

Recommended ACP Steps	Setting and Timing	Description	Who can Initiate ^a	Example Questions
Assessing patients' readiness	At any stage in the illness trajectory and in any setting	Exploring patients' readiness to discuss ACP	PCP and/or cardiologist with assistance from multidisciplinary team (eg, social workers, nurses, facilitators)	At this clinic/hospital, we ask all patients to plan for their future medical care in case they lose the ability to make their own medical decisions. Can we talk about this today? Is there anyone you would want with you when we talk about this? Have you ever completed an advance directive, such as a living will? Can we review this? If you were to fill one out, have you thought about what you might say?
Addressing patient barriers	At any stage in the illness trajectory and in any setting	Identifying and addressing patients' concems related to ACP	PCP and/or cardiologist (with multidisciplinary team)	Are there things that you worry about when you think about planning for future medical care? What makes it difficult to talk about such things with me or your loved ones?
Identifying surrogate decision-makers	At the time of diagnosis or referral to cardiologist	Identifying a trusted person as a surrogate decision-maker to help clinicians apply the patients' values to specific clinical situations	PCP and/or cardiologist (with multidisciplinary team)	Is there someone you trust to help make medical decisions on your behalf, if you are not able to do so? What have you talked about? or What would you tell this per- son is important about your medical care?
Documenting ACP preferences	After ACP discussions, at any stage in the illness trajectory and in any setting	Documenting preferences in the medical record and/or advance directive (ie, medical power of attorney)	Clinician or trained team member involved in the ACP discussions	Because you have chosen (loved one) to help make decisions on your behalf if you are very sick and unable to talk with me, I recommend that you complete the medical power of attorney form to make it official.
Assess understanding of illness and discuss prognosis	During routine care, including cardiac device placement, procedures, or during hospitalization	Understanding the patients' understanding and providing disease trajectory education and prognosis	PCP and/or cardiologist ^a	What have your doctors told you about your illness and what to expect? Many people want to know their life expectancy or how long they may have to live. For each person we never know for sure, but based on your heart disease we do know general estimates. Knowing this information helps some people make medical decisions. Is this something you would want to know?
Asking about values related to quality of life	During routine care, including cardiac device placement or procedures or during hospitalization	Exploring the individual's values and priorities in life and discussing what	PCP and/or cardiologist, ^a hospitalist, palliative care (with multidisciplinary team)	What are you looking most forward to over the next few years. What gives your life meaning?

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Recommended ACP Steps	Setting and Timing	Description	Who can Initiate ^a	Example Questions
		constitutes an acceptable quality of life		Do you know other people with heart disease? How have their experiences been? Are there parts of their experiences that help you decide what type of treatment you would or would not want for yourself?
				I know you were just hospitalized with heart failure. What was that like for you and your family?
				• If you were in this situation again, what would you hope for? What would you be most worried about? Did this situation change the way you may be thinking about your care or ways of living that would or would not be acceptable to you?
Documenting ACP preferences	After ACP discussions, at any stage in the illness trajectory and in any setting	Documenting preferences in the medical record and/or advance directive (ie, living will)	Clinician or trained team member involved in the ACP discussions	Because you have told me what would be important to you about certain life-sustaining medical interventions if you have certain serious medical conditions, I recommend that you complete a living will to help your loved ones and health care providers known your preferences.
Translating patients' values into specific treatment plans	During hospital, ICU, or nursing home admission	Translating values into current medical care documents (ie, POLST form, CPR directive)	PCP, cardiologist, ^a intensivist, palliative care team, nursing home attending	Based on what you have told me about what is important to you in life, how you want to live, and the health states that are/are not acceptable to you, and based on the risks and benefits of this treatment, I would recommend (option).
Communicating with health care providers from other settings	During routine care and care transitions, including use of postacute care (ie, skilled nursing facility or home health)	Facilitating verbal and written communication of patients' preferences, including transfer across settings	PCP, cardiologist, nursing home provider, outpatient palliative care, (with multidisciplinary team)	Based on our conversation today, and the (advance directive we completed/the POLST form I completed), I am going to make a note and place these forms in your medical record. I would like to send a copy to your other providers and your hospital so they know your wishes.

Abbreviations: ICU, intensive care unit; PCP, primary care provider; POLST, Physician Orders for Life-Sustaining Treatment.

Data from Refs. 8,10,31

^aThe primary or cardiology providers may include physicians, advance practice nurses, physician assistants, and can be assisted by multidisciplinary team members, including trained facilitators who may be nurses, social workers, chaplains, health coaches, or patient navigators.