SIM End of Life Projects

Evaluation Report

Vendors:
Healthcentric Advisors
HopeHealth Hospice & Palliative Care
(formerly Hope Hospice & Palliative Care Rhode Island)

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This project has been supported by the Rhode Island State Innovation Model (SIM) Test Grant, as approved by the Centers for Medicaid and Medicare Services
Executive Summary:

Decision-making at the end of life is an important issue that requires trained practitioners and engaged patients and family members. Advance care planning (ACP) is the process by which patients, clinicians, family members, and other stakeholders identify patient preferences for end-of-life care in the event that the patient is no longer able to communicate their wishes. Despite recognition of its importance, most clinicians indicate that they do not conduct these discussions because they are uncomfortable doing so, with 29 percent saying they receive inadequate support and training in advance care planning (Fulmer et al., 2018).

With clinicians facing an increasing emphasis on both patient satisfaction and reimbursement opportunities for identifying end-of-life care needs, it is important for them to develop the skills necessary to conduct ACP conversations. These skills should foremost be interpersonal, but as the healthcare industry continues to embrace technology, clinicians may also turn to digital tools to help support their efforts. The Rhode Island State Innovation Model Test Grant (RI SIM) initiative elected to fund three different projects to meet the needs of clinicians and families to address emerging concerns surrounding end-of-life. The evaluation of two of these projects is described below.

The Complex Care Conversations Training (CCCT) project was designed to ensure that clinicians are prepared to help patients and families who are facing complex care decisions and end-of-life choices by communicating the necessary information to make informed decisions regarding their treatment plans. HopeHealth Hospice and Palliative Care (HopeHealth) achieves this by training clinicians throughout Rhode Island on ACP and complex care conversations. The training promotes experiential learning, including defining the role of the clinician in complex care conversations, prognostication, goals of care, and delivering serious news.

Healthcentric Advisors (HCA), in partnership with Rhode Island Improving Care Coalition (the Coalition) and Care New England, implemented a project to facilitate end-of-life discussions and ACP among Rhode Island residents. The project empowered patients by increasing awareness about ACP and supporting patients in discussions about healthcare wishes with loved ones and clinicians.

A mixed-methods evaluation design was used to assess the impact of the two projects on several key evaluation questions. When examining their combined effects, there is definite support for the basic logic model that was created to guide the evaluation. The programs are on track to meet their enrollment targets in interventions designed to increase the confidence of clinicians, patients, and families in their ability to engage in ACP conversations. Between the two programs, over 500 clinicians of different types and specialties across the state were trained to facilitate ACP discussions, but there are still many clinicians that could benefit from this training.

The assessment of the trainings documented that clinicians, patients, and families felt more knowledgeable and comfortable engaging in end-of-life and ACP discussions.
Survey data as well as qualitative interview data provide convergent evidence that as a result of the training, individuals felt more prepared to tackle these tough conversations.

As a result, there was a notable increase in the use of ACP billing codes as assessed using available claims data for analysis. Across both programs there were significant increases in the rates with which trained clinicians used the CPT 99497/99498 codes when comparing baseline quarters with post-intervention/program quarters. Survey data provided by HopeHealth on the 3-month impact of the Complex Care Conversations Training highlight that despite reported barriers such as time, the training did have profound impacts upon their practice related to ACP discussions.

Healthcentric Advisors’ program had a substantial impact through their community engagement efforts. Using multiple media platforms, they provided outreach and education on end-of-life issues to over 500,000 individuals.

The evaluation supports several recommendations going forward:

1. Future efforts to examine program impacts can benefit from longer timeframes and more accurate data. The All-Payers Claims Database (APCD), which was utilized for this evaluation, has at least a 6-month data lag for a complete claims set, primarily delayed by Medicare claims submission, which can experience even longer delays. This necessitates much longer timeframes post-program implementation to conduct meaningful analyses. Additionally, data accuracy for tracking of referrals may not be high, resulting in a lack of clarity of the validity of the data and the interpretability of subsequent results.

2. Outreach and education in academic settings would provide a stronger baseline of knowledge for clinicians entering the workforce. This would increase confidence of clinicians and could increase the likelihood of these vital conversations taking place with patients.

3. Social media has proven to be a strong vehicle for reaching and educating the community about ACP. Direct outreach is a valuable tool for increasing ACP awareness and utilization, as there were challenges reported in engaging primary care offices in ACP. Community knowledge of ACP can be a strong driver of future discussions within families and with clinicians.

4. To counter the difficulties in engaging practices and practitioners, the placement of an ACP quality measure within the Aligned Measures Set through the Office of the Health Insurance Commissioner (OHIC) could help necessitate incorporation of ACP into practice workflows and promote routine discussions of these vital interactions regarding patient end-of-life wishes. This could also impact costs related to unnecessary procedures at end-of-life.
**Introduction:**

In early 2017, Rhode Island’s State Innovation Model Test Grant (RI SIM) put out a Request for Proposals (RFP) focusing on Patient Engagement and End-of-Life. Guided by the SIM Patient Engagement Workgroup and with the intention to maximize the impact of SIM patient engagement funds, all applicants were directed to submit proposals that addressed one or more of the physical or behavioral health focus areas outlined in the initial SIM Operational Plan. Additionally, all proposals were required to include one or more of the following strategies:

- Maximize relationships and coordination between existing population health efforts within communities
- Focus on the specific points of interaction between targeted populations (e.g., adolescents) and the objective or goal of that interaction (e.g., engaging them in their reproductive health, healthcare, or their privacy rights)
- Address patient ‘disengagement’ or lack of participation in their own healthcare
- Focus on populations with the highest-risk and greatest known disparities
- Focus on prevention, detection and diagnosis, triage and treatment, and/or end-of-life
- Improve patients’ health literacy and ability to self-manage their own health and health choices (specifically in the health focus areas listed above)

There were nine responses to the RFP and four vendors’ projects were awarded. Three of those projects included a focus on end-of-life and two, which are described in this report, served as the focus of the state evaluation efforts related to end-of-life. The third project, which focused on building the capacity to upload advance care directives into the state Health Information Exchange (CurrentCare) operated by the Rhode Island Quality Institute, was not included in this evaluation report and is currently in a pilot phase. The ability of providers and ultimately individuals to directly upload directives should create synergy with the two programs described in this report to encourage increased use of advance care directives.

The rationale for focusing on multiple end-of-life projects is reflective of the fact that decision-making at this time is an important issue that requires trained practitioners and engaged patients and family members. Advance care planning is the process by which patients, clinicians, family members, and other stakeholders identify patient preferences for end-of-life care in the event that the patient is no longer able to communicate their wishes.

According to the National Hospice and Palliative Care Association (https://www.nhpco.org/patients-and-caregivers/advance-care-planning/), advance care planning decisions include the following:

- Discussing information on the types of life-sustaining treatments that are available.
• Deciding what types of treatment a patient would or would not want should he or she be diagnosed with a life-limiting illness.

• Sharing personal values with loved ones.

• Completing advance directives to officially record the types of treatment the patient would or would not want should he or she be unable to speak for themselves.

Advance care planning discussions are an important part of ensuring patient satisfaction and dignity. A survey of healthcare clinicians published in Journal of the American Geriatrics Society (Fulmer et al., 2018) showed that 99 percent of clinicians found ACP discussions helpful and important. An important additional context is that the Centers for Medicare and Medicaid Services (CMS) finalized the creation of new codes in the 2016 physician fee schedule which allow clinicians to bill Medicare for end-of-life conversations. The CMS reimbursement rates range from $80 to $86 for the first 30 minutes and about $75 for each additional 30 minutes.

Despite recognized importance and reimbursement opportunities, that same survey demonstrated that only 14 percent of clinicians actively bill Medicare for advance care planning conversations.

Just under half of respondents said they did not conduct these discussions because they were uncomfortable doing so, with 29 percent saying they receive inadequate support and training in advance care planning.

With clinicians facing an increasing emphasis on both patient satisfaction and reimbursement opportunities for identifying end-of-life care needs, it will be important for them to develop the skills necessary to conduct advance care planning conversations. These skills should foremost be interpersonal, but as the healthcare industry continues to embrace technology, clinicians may also turn to digital tools to help support their efforts.

The RI SIM project elected to fund three different projects to meet the needs of clinicians and families to address these issues, with two assessed in this report.

Project Descriptions:

**Project 1: Complex Care Conversations Training (CCCT)**
HopeHealth Hospice & Palliative Care (HopeHealth, formerly Hope Hospice & Palliative Care Rhode Island) is the second oldest, not-for-profit hospice and palliative care provider in the US, the largest provider in Rhode Island, and one of only a few organizations nationwide with both an outpatient and home-based Palliative Care program. HopeHealth is also the major teaching affiliate of the Warren Alpert Medical School of Brown University for hospice and palliative medicine. A recognized leader, HopeHealth has extensive experience in end-of-life care and goals of care conversations.
HopeHealth leveraged their expertise by implementing an education program that supports clinicians in carrying out patient engagement activities with their patients with advanced illnesses. The overarching goal of this initiative was to increase engagement among clinicians, patients, and families in advance care planning and to improve the health literacy of patients and families around goals of care and treatment options in the face of advanced illness.

To support this, HopeHealth established the following goals as outcomes of the training:

1) Clinicians will have additional and more effective communication with their patients that are seriously ill, related to goals of care and advance care planning
2) Seriously ill patients will report greater satisfaction as related to end-of-life planning
3) Clinician satisfaction will be improved using learned tools and strategies for having complex care conversations
4) Patients will receive the right care, at the right place, at the right time, and per their wishes

The project built on HopeHealth’s pilot training program aimed at increasing and enhancing clinician/patient communication regarding serious illness. Planning, design and evaluation for the pilot began in Fall 2016 with the pilot launching in January 2017, working in partnership with Coastal Medical leadership. Coastal Medical is Rhode Island’s largest physician-owned and physician-governed primary care practice. HopeHealth created a coordinated project plan to deliver the Complex Care Conversations Training to clinicians throughout Rhode Island, including a full curriculum designed for small groups of participants in a single intensive 8-hour session. The project plan incorporated tools and communication strategies used to train clinicians in how to have advance care planning conversations with patients and effectively engage their patients around end-of-life decision-making. The project anticipated 30 training sessions for 10-12 clinicians per session over the project term, directly impacting the complex care conversation skills of roughly 480 clinicians and indirectly benefitting over 144,000 patients and family members cared for by these trained clinicians each year.

As part of HopeHealth’s communication and marketing strategy, they collaborated with representatives from Coastal Medical and University Medicine to promote participation, registration, baseline data collection, and evaluation of clinician needs. Registration, program promotion, logistics, accreditation, and evaluation were supported by staff of the Alpert Medical School Office of Continuing Education. Continuing Medical Education (CME) credits were provided through Alpert Medical School, and additional Continuing Education Unit (CEU) credits were secured for social work, nursing, nurse practitioners, and physician assistants. HopeHealth worked with the Alpert Medical School Office of Continuing Education to target audiences statewide by advertising on the Alpert Medical School CME website, distributing electronic announcements, and sending publicity via mail.
The CCCT project was designed to improve the quality of life for persons who are facing serious, progressive illnesses by empowering the physicians and other clinicians involved in their care with the education and skills they need to have effective complex care conversations.

The SIM-funded program’s measurable objectives were as follows:
1. 480 clinicians will complete the training program over the 2 year project term.
2. There will be an increase in the number of conversations between clinicians and their patients with serious illness, and their families.
3. There will be an increase in advance care planning (ACP) documentation for those patients whose clinicians have completed the training.
4. Patients who have participated in ACP with their clinician will report that their end-of-life preferences were understood and respected.
5. Clinicians participating in the Complex Care Conversations training will report increased satisfaction in caring for patients with serious advanced illness.
6. There will be an increase in appropriate referrals of seriously ill patients for specialty palliative care, and these referrals will happen earlier, resulting in an increased average palliative length of service (LOS).
7. There will be an increase in appropriate referrals of seriously ill patients to hospice, and referrals will be made earlier, resulting in an increased hospice LOS.

**Project 2: Advance Care Planning Training Program for Consumers and Clinicians**

Healthcentric Advisors (HCA), in partnership with Rhode Island Improving Care Coalition (the Coalition) and Care New England, implemented a project to facilitate end-of-life discussions and ACP among Rhode Island residents. The project empowered patients through increasing awareness about advance care planning and supporting patients to discuss healthcare wishes with loved ones and clinicians.

This was accomplished through:
- Consumer education and outreach, with targeted engagement of the Spanish-speaking community through partnership with Progreso Latino, and of the faith community through the Rhode Island State Council of Churches. This was accomplished through a series of the Institute of Healthcare Improvements’ Conversation Project events, as well as small group education sessions in the community; 
- Providing educational resources in physician office practices and across care settings to promote ACP and its incorporation into everyday workflows and practice; and
- Implementation of an ACP group medical visit pilot project for Medicare beneficiaries within primary care practices, focusing on patient education around ACP and increasing their understanding
and confidence in having these important discussions with both family members and clinicians.

Together, these parts combined to maximize resources, reach the largest number of Rhode Islanders, and produce actionable outcome measures that can inform future work and promote sustainability.

The implementation plan for the ACP Training program included curriculum development, outreach to consumers and physicians, and the 12-month ACP group medical visit pilot project. Resource development was focused on developing communication and educational materials for consumer and clinician education and outreach components, and for the ACP group visits. Consumer education focused on dissemination of information through various communication methods, such as print, radio, social media, and digital platforms through a website, with an emphasis on the Latino community via a subcontract with Progreso Latino. Significant work was put into developing a website (https://healthcentricadvisors.org/myccv/) in both English and Spanish with resources and tools on ACP for consumers and clinicians. The website includes pages that provide specific content for faith-based communities and for veterans.

Community outreach was executed through small discussion groups aimed at learning how to talk to clinicians and loved ones about healthcare wishes, and included formalized, structured programs for community leaders and individuals consistent with the Institute of Healthcare Improvements’ Conversation Project.

Clinician outreach was largely focused on bringing the developed materials to clinician groups within Care New England, one of the primary healthcare systems in Rhode Island. Materials were provided to clinicians, centered on the benefits of having early ACP conversations and how to bill and code for ACP-specific services provided.

The last part of the project to be implemented was the Pilot ACP Group Visits. The visits targeted physician practices as a method of outreach and engagement to those practices’ patients, with a specific focus on the Medicare population. The pilot ACP group visits were conceived of as sessions of small groups of patients engaged together in completing ACP and related documentation, mimicking a successful format used in prior community engagement activities by HCA.

Primary activities included:

- Developing a physician recruitment plan with physician advisors, with a minimum target of 25 practices over the length of the pilot (months 6-18 of project implementation).
- Rolling recruitment throughout the project by a clinical coordinator in collaboration with two physician advisors on staff.
- Practice education for 1-2 nurse care managers per practice to support the pilot.
- Training for 30 primary care clinicians and their staff on ACP billing codes.
- Collaborating with practices to facilitate group sessions using the developed curriculum.
- Administering pre- and post-surveys to practitioner participants to measure baseline and follow-up knowledge and confidence related to ACP.

**Expected Effects:**

After reviewing the program contract and undergoing discussions with appropriate stakeholders, including HCA and RI SIM staff, the primary expected effects of the programs were:

1. Clinicians will have additional and more effective communication with their patients related to goals of care and advance care planning (ACP)
2. Patients will report greater satisfaction as it relates to end-of-life (EOL) planning
3. Patients and families participating in the group visit pilot will have increased knowledge of and confidence in participating in EOL/ACP discussions with their caregivers and primary care clinicians
4. Clinician satisfaction will be improved using learned tools and strategies for having complex care conversations
5. Patients will get the right care, at the right place, at the right time, and per their wishes
6. The project will increase statewide awareness of ACP by engaging the public in educational opportunities around ACP and how they can express their end-of-life wishes to family and medical professionals

Together, these parts combined to maximize resources, reach the largest number of Rhode Islanders, and produce actionable outcome measures that can inform future work and promote sustainability.

**Resources Required by project:**

**HopeHealth Hospice and Palliative Care**

In the HopeHealth Hospice & Palliative Care project on Complex Care Conversations Training, HopeHealth utilized the following staff positions:

1) Project Coordinator – Y1 – 20 hrs/wk, Y2 – 24 hrs/wk
2) Palliative Care Physicians (as trainers/facilitators) – 5.5 hrs/wk
3) Palliative Care Nurse Practitioners (as trainers/facilitators) 5.5 hrs/wk
4) Project Lead/Project Manager time-12 hours/month

The program also utilized materials created by CORE Healthcare Consulting Group as training materials. This required a licensing fee to CORE and production of the materials in-house at $1750/month, with a portion billed to RI SIM, which reflected training sessions provided using SIM funding. (HopeHealth has utilized other funding sources to provide additional training sessions.) In addition, there was a fee associated
with CME/CEU registrations, evaluation, etc. at $450/session, payable to the Alpert Medical School Office of Continuing Medical Education.

**Healthcentric Advisors**

In the Healthcentric Advisors program, the following staff were required:

1) Program Coordinator – 570 hrs (2 years)
2) Program assistant – 602 hrs (2 years)
3) Manager of analytics – 270 hrs (2 years)
4) Communication coordinator – 665 hrs (2 years)

The program also required educational and promotional materials, marketing budgets, and subcontracts with numerous partners.

**Program Activities:**

**HopeHealth Hospice & Palliative Care core activities:**

- **Development of the Project Plan:** The project built on HopeHealth’s pilot training program aimed at increasing and enhancing clinician and patient communication regarding serious illness. Planning, design, and evaluation for this pilot began in the fall of 2016 working in partnership with Coastal Medical leadership. HopeHealth created a coordinated project plan for the Complex Care Conversations Training to clinicians throughout Rhode Island.

- **Curriculum Development:** As described in the project description, HopeHealth developed the curriculum for the CCCT based off if an earlier pilot project.

- **Hire Part Time Program Coordinator:** HopeHealth recruited, hired, and onboarded a part-time program coordinator to assist with program details, scheduling, materials and project implementation.

- **Baseline Data Collection and Analysis:** HopeHealth worked in collaboration with Coastal Medical to assess baseline data and capture information from their respective electronic health records to evaluate program efficacy. This included data on:
  - All adults (>17 years old) with serious or life-threatening illnesses, including advanced cancer, chronic obstructive pulmonary disease (COPD), and congestive heart failure (CHF), or other serious illness.
  - Baseline data on palliative referrals and length of stay, hospice referrals and length of stay, readmission rates, and the completion of advance care planning (ACP) documentation and use of ACP reimbursement coding.
**Clinician Facilitation Recruitment:** HopeHealth identified six additional clinicians to be trained as facilitators. HopeHealth then trained and certified these facilitators to use the training model and materials and lead future clinician trainings. These individuals complement the existing team of HopeHealth hospice and palliative medicine trained facilitators.

**Implement Communications/Marketing Strategy:** HopeHealth collaborated with representatives from Coastal Medical and University Medicine to promote participation, smooth registration, baseline data collection, and evaluation of clinician needs. Staff of the Alpert Medical School Office of Continuing Education supported registration, program promotion, logistics, accreditation, and evaluation. HopeHealth also collaborated with the Alpert Medical School Office of Continuing Education to promote course publicity and advertising through the Alpert Medical School CME website, electronic announcements, and mailed publicity. HopeHealth actively recruited additional clinician partners and groups to participate in trainings.

**Clinician Training:** HopeHealth scheduled and promoted monthly clinician trainings, and distributed a pre/post assessment survey to participating clinicians. Given clinician tendency to self-rate skill highly in complex care conversations prior to receiving the training, the pre-training assessment was also administered post-training as a self-reflection of prior skill. HopeHealth then conducted a follow-up survey three months after the training, as well as collected quarterly data, where feasible, to track trained clinician use of ACP codes, palliative care referrals, hospice referrals, and hospice average LOS among trained clinician’s patients. The SIM Project Manager aggregated and reported all data, which was incorporated into this report.

**The Healthcentric Advisors core activities:**

**Initial activities:**
- Hosted kickoff with core project team and RI SIM staff
- Finalized detailed project work plan
- Engaged all project support staff and subcontractors
- Drafted collaboration and marketing plans
- Established communication plan
- Finalized evaluation plan, inclusive of the measurement strategy, data collection, and reporting requirements, in collaboration with RI SIM staff

Following refinement of the plan, project implementation included the following activities:

**Project Implementation Year 1**
- Coordinated and engaged ongoing subcontractor relationships
- Engaged stakeholders and consumer subcommittee members across all RI counties
- Established ongoing meeting schedule for subcommittee
- Performed environmental scan to identify existing activities, campaigns, and materials
• Leveraged previously developed materials from Healthcentric Advisors’ My CCV Campaign and from the Coalition’s end-of-life education material
• Identified existing survey tools to measure consumer and clinician ACP knowledge and confidence
• Developed materials for consumer and clinician education and outreach components
• Developed curriculum for pilot on ACP group visits
• Coordinated with Institute of Healthcare Improvements (IHI) to plan and prepare content for the four public forums
• Hosted monthly subcommittee meetings

• Consumer Education and Outreach:
  o Disseminated information through existing communication vehicles and infrastructure
  o Disseminated information to the Latino community through Progreso Latino
  o Disseminated information to faith communities
  o Utilized Healthcentric Advisors’ website as an online resource center for consumers
  o Disseminated information through articles, op-eds, and commentary in newspapers and online journals throughout the state
  o Coordinated with state agencies, including the Office of the Health Insurance Commissioner, the Executive Office of Health and Human Services, and the Department of Health to promote ACP as a public health priority, measure of quality, and a component of patient-centered medical care
  o Hosted two open public forums

• Clinician Education and Outreach:
  o Disseminated information through existing communication vehicles and infrastructure, such as Healthcentric Advisors, the Coalition, and subcommittee members
  o Utilized Healthcentric Advisors’ website as an online resource center for clinicians
  o Established a social media presence and utilized low-cost, targeted online advertisements
  o Disseminated information through 24 articles, op-eds, blog posts, website posts, and commentary in newspapers and online journals throughout the state

• Piloted ACP Group Visits:
  o Developed a physician recruitment plan with physician advisors, with a minimum target of 25 practices over length of the pilot (months 6-18)
  o Carried out rolling recruitment throughout project by a clinical coordinator in collaboration with two physician advisors
  o Provided education to 1-2 nurse care managers per practice to support the pilot
  o Provided education to 30 primary care clinicians and their staff on ACP billing codes
o Collaborated with practices to facilitate group sessions using developed curriculum
o Administered pre- and post-surveys to practitioner participants to measure baseline and follow-up knowledge/confidence related to ACP

• Collaboration:
o Collaborated with other RI SIM Patient Engagement/End of Life vendors (HopeHealth, RIQI) as appropriate, including but not limited to regular End of Life Vendor meetings.

Project Implementation Year 2
• Continued consumer education and outreach activities
• Hosted two open public forums (for a combined four total over the duration of the project)
• Continued clinician education and outreach activities
• Continued Pilot ACP Group Visits with a target of approximately 500 patients reached through an estimated 35 practices by the end of the 12-month pilot
• Ongoing subcontractor coordination and management
Evaluation Design and Methods:

The evaluation focused primarily on using quantitative data sources and methodologies, including surveys, program tracking, and reports from electronic health records where available. Key informant interviews (interview guide in Appendix A) were included as a qualitative addition utilizing a convergent approach in which questions were designed to confirm quantitative data trends and provide additional, open-ended opportunities to inform the key evaluation questions. Interviews were conducted with clinicians trained by the evaluated programs as well as individuals responsible for conducting the training. Key informant quotes and themes are incorporated into the report to support the convergent, mixed-method approach to the evaluation. Data extracts were available from the All-Payer Claims Database (APCD) in Rhode Island. However, due to the limited availability of timely Medicare claims data, the full database was only current through calendar year 2018 and provided limited utility for the purposes of examining pre-post program differences compared to commercial and Medicaid claims. As the Quality Improvement Organization contracted with CMS for the state of Rhode Island, Healthcentric Advisors was able to extract data from their internal system related to ACP code usage for Medicare beneficiaries to allow for another comparison methodology.

Overall Purpose:
The goal of this evaluation was to assist the RI SIM project in determining if the following project goals were achieved:

1. Improved clinicians’ abilities to effectively communicate with their patients who are seriously ill related to goals of care and advance care planning
2. Earned a high level of satisfaction of seriously ill patients related to end-of-life planning
3. Enhanced clinician satisfaction and confidence in engaging in complex care conversations
4. Assessed statewide awareness of, and patient engagement in, end-of-life discussions and use of ACP
5. Addressed impacts upon system usage with respect to palliative care

Evaluation Questions:
The following overarching evaluation questions guided the evaluation of the RI SIM effort:

- Assess clinicians’ ability to communicate with patients regarding advance care planning;
- Assess patient engagement and satisfaction related to end-of-life and advance care planning;
- Assess the reach of the statewide campaign to increase awareness of advance care planning;
- Assess use of advance care planning; and
- Assess impacts of program on system usage.
The table below lists the overarching evaluation questions and their related sub-questions to be used as the focus of the evaluation.

**Table 1. Fundamental evaluation questions for End of Life Projects**

<table>
<thead>
<tr>
<th>Evaluation Question</th>
<th>Specific sub-questions</th>
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| **Assess clinicians’ abilities to communicate with patients regarding advance care planning** | 1. Practitioner knowledge of and confidence in ACP discussions  
2. Clinician comfort in having end-of-life conversations with patients with serious illness  
3. Clinician satisfaction in completing end-of-life conversations |
| **Assess patient engagement and satisfaction related to end-of-life planning and advance care planning** | 4. Patient participation in ACP group visit pilot  
5. Patient and family knowledge of and confidence in participating in end-of-life/ACP discussions with their caregivers and Primary Care Providers (PCPs)  
6. Patient and family evaluation of effectiveness of ACP group discussions  
7. Patient satisfaction in end-of-life conversation |
| **Assess the reach of campaign to increase statewide awareness of advance care planning** | 8. Number of consumers reached through consumer education and outreach component  
9. Participation in stakeholder and consumer subcommittee |
| **Assess use of advance care planning** | 10. ACP CPT Codes billed for participating clinicians (Codes 99497, 99498)  
11. Practitioner participation in ACP group visit pilot  
12. Number of trainings executed  
13. Number of clinicians trained  
14. Number of unique practices with one or more trained clinicians |
| **Assess impacts of program on system usage** | 15. Average number of patient days in palliative care (pre and post, by practice)  
16. Proportion of seriously ill patients receiving palliative care (all patients)  
17. Average number of patient days in palliative care (pre and post, all patients)  
18. Proportion of seriously ill patients referred to hospice (by practice) |
Program reach and enrollment:

Healthcentric Advisors Advance Care Planning Training:
Patients’ communication of their preferences to family members and healthcare clinicians is a cornerstone of patient-directed end-of-life care, yet these conversations often occur in stressful situations or too late in the course of the treatment, at the point when the patient has diminished capacity to make decisions based on his or her own values and wishes. Despite the importance of and need for advance care planning (ACP) conversations in clinical care, clinicians often lack the training to initiate meaningful conversations with patients, and clinicians and patients alike often lack the comfort level for such conversations. To address the known gaps in end-of-life care conversations and advance care planning, Healthcentric Advisors, the Improving End of Life Care Coalition (doing business as the Improving Care Coalition), Care New England, and their partners at the RI Council of Churches and Progreso Latino implemented a multifaceted project that includes both consumer knowledge and engagement in advance care planning.

The consumer engagement component was a coordinated group effort of the partner organizations under the direction of the Improving Care Coalition and Progreso Latino for the Hispanic community. The RI State Council of Churches provided guidance for effective engagement of the faith community. The physician office group ACP visit pilot was an effort of Care New England to prepare patients in the Rhode Island Primary Care Physicians Corporation and Care New England Medical Group practices to have discussions with their clinicians. Visiting Nurses Association (VNA) of Care New England provided the clinical coordination for the pilot. Healthcentric Advisors provided program management and analytic support.

By March 31, 2019, the ACP Training Program enrolled 23 practices, near its initial goal of 25 practices. With several months remaining in the program and continued outreach planned, it is anticipated that the project will reach its target. Outreach continues to enroll new practices as well as support those practices previously engaged. A new presentation, which has been well-received, provides a useful reference for management of the billing and coding issues commonly associated with ACP discussions.

In enrolled practices, 36 out of 81 practitioners in the practices participated in the group visit pilot. This represents 44% of the eligible practitioners. During recruitment for the group visits, HCA learned some significant lessons regarding best practices and recruiting, and after many iterations of the recruiting process they arrived at a best practice. Engaging directly with the provider, sending letters from the provider on their letterhead to their patients, and making subsequent follow-up calls to those patients was the most effective recruitment method for participants. While this was the most effective process, it was not readily accepted by the providers. Many of them preferred to simply hang flyers in their offices, which resulted in poor patient participation. They also preferred not to share patient information for this outreach, even when it was supported by their administrative staff.
After discussing these recruitment barriers with RI SIM leadership, HCA decided to strategically shift implementation of the pilot group visits to focus on two smaller physician group practices. One group practice had ACP as a stated requirement for attaining their PCMH certification, and one did not. Of the three PCMH practices in that group, two were engaged and held pilot group ACP visit sessions. The group of practices without the requirement did not fully engage and did not hold any resulting pilot group ACP visits. They were receptive to a train the trainer session for their nurse care managers; however, it has not been scheduled to date.

Other factors impacting recruitment for the pilot project included: too many competing priorities, time constraints, and hesitancy by providers and patients to have these important conversations.

Recommendations for future ACP efforts would be to:
- engage nurse care managers and other licensed practice staff to lead these efforts. In many cases, when end-of-life discussions are brought up by patients it is these staff that are having the discussions with them under the supervision of providers.
- have a more focused effort with one or two medical groups where clinician, community, and patient education sessions coordinate, leading to meaningful discussions within the practices. This campaign should include an aggressive community awareness program in both social and traditional media platforms.

**HopeHealth Complex Care Conversations Training:**
The Complex Care Conversations Training (CCCT) project provides an opportunity for clinicians to effectively increase patient engagement in their own healthcare, specifically with respect to their end-of-life wishes. HopeHealth’s specialty palliative care practitioners leveraged their expertise to implement a comprehensive training program for Rhode Island clinicians designed to increase their ease and effectiveness in difficult conversations with all patients, especially regarding delivering serious news and creating goals of care in collaboration with seriously ill patients and their families.

HopeHealth offered the CCCT curriculum at their Providence site in small groups of participants over a single intensive 8-hour session. CMEs and CEUs were provided at no cost to the participant. The program incorporates tools and communication strategies to train clinicians in how to have advance care planning conversations with patients, and how to effectively engage patients around end-of-life decision-making. The training uses hands-on experiential learning and role-playing with provided scripts to define the role of the clinician in complex care conversations, teach prognostication skills, develop person-centered goals of care, and deliver serious news. The project anticipated offering 30 ongoing training sessions for 10-12 clinicians per session over the project term, with an estimated direct impact on the complex care conversation skills of more than 480 clinicians thereby indirectly benefitting over 144,000 patients and family members cared for by these trained clinicians each year. As of June 18th, 2019, there have been 31 training sessions conducted, with one more planned prior to the completion of the project. HopeHealth anticipates conducting additional training past the duration of the RI SIM project term using other funding sources.
As can be seen in the table below, to date, HopeHealth has trained 508 clinicians and exceeded the targeted goal of 480 clinicians by the end of the program.

**Table 2: SIM Complex Care Conversations Trainings and Attendees**

<table>
<thead>
<tr>
<th>Training Date</th>
<th>Location</th>
<th>Total Attendees</th>
<th>Ordering Clinicians (MD/DO/RNP/PA)</th>
<th>Other Attendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/23/2017</td>
<td>HopeHealth</td>
<td>7</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>10/18-19/2017</td>
<td>HopeHealth</td>
<td>12</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>11/14/2017</td>
<td>HopeHealth</td>
<td>19</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>12/6/2017</td>
<td>HopeHealth</td>
<td>21</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>1/16-17/2018</td>
<td>HopeHealth</td>
<td>14</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>2/5/2018</td>
<td>HopeHealth</td>
<td>22</td>
<td>1</td>
<td>21</td>
</tr>
<tr>
<td>2/13-14/2018</td>
<td>HopeHealth</td>
<td>16</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>3/6/2018</td>
<td>HopeHealth</td>
<td>17</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>3/19-20/2018</td>
<td>HopeHealth</td>
<td>24</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>4/7/2018</td>
<td>HopeHealth</td>
<td>20</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>4/12/2018</td>
<td>HopeHealth</td>
<td>25</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>5/15/2018</td>
<td>HopeHealth</td>
<td>23</td>
<td>6</td>
<td>17</td>
</tr>
<tr>
<td>5/22-23/2018</td>
<td>HopeHealth</td>
<td>17</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>5/29-30/2018</td>
<td>Brookdale, S. Kingstown</td>
<td>15</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>6/6/2018</td>
<td>Brown Medicine, E. Prov</td>
<td>11</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>6/12-13/2018</td>
<td>HopeHealth</td>
<td>15</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>7/18-19/2018</td>
<td>HopeHealth</td>
<td>21</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>7/27/2018</td>
<td>HopeHealth</td>
<td>22</td>
<td>0</td>
<td>23</td>
</tr>
<tr>
<td>8/7/2018</td>
<td>St. Elizabeth Home</td>
<td>12</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>8/21/2018</td>
<td>HopeHealth</td>
<td>18</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>9/11/2018</td>
<td>Warwick Library</td>
<td>18</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>9/22/2018</td>
<td>HopeHealth</td>
<td>10</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>10/17-18/2018</td>
<td>HopeHealth</td>
<td>15</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>11/6/2018</td>
<td>HopeHealth</td>
<td>11</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>12/5/2018</td>
<td>HopeHealth</td>
<td>23</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>2/23/2019</td>
<td>HopeHealth</td>
<td>9</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>3/19/2019</td>
<td>HopeHealth</td>
<td>19</td>
<td>19</td>
<td>14</td>
</tr>
<tr>
<td>4/9/2019</td>
<td>HopeHealth</td>
<td>7</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>5/18/2019</td>
<td>HopeHealth</td>
<td>6</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>5/30/2019</td>
<td>HopeHealth</td>
<td>23</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>6/4/2019</td>
<td>HopeHealth</td>
<td>16</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td><strong>SIM Total</strong></td>
<td></td>
<td><strong>508</strong></td>
<td><strong>157</strong></td>
<td><strong>362</strong></td>
</tr>
</tbody>
</table>
As shown in the figure to the right, the most frequent clinician type enrolled in the CCCT program were registered nurses (48%), followed by social workers (23%), and doctors (18%). This represents a reasonable clinician target for the program given the likelihood of different clinician types engaging in complex care conversations. It is a strength of the program to provide these skills to a diverse yet appropriate clinician population which can impact individuals across the state.

Examining clinician specialty, we also note that although there is broad representation of different specialties engaged in the training, the majority represented by internal medicine. There appears to be a lack of specialists who may benefit from this training, notably cardiologists, intensive care, or renal specialists, who at this time have not engaged in the training. There also appears to be a low percentage of oncologists, and it may be a worthwhile future evaluation effort to assess physician specialty engagement as compared to a representative sample of the state population of the different specialties, prioritized by their likelihood of needing to engage in end-of-life discussions.
Impact on clinicians’ ability to communicate with patients regarding advance care planning:

One of the major goals of the programs was to enhance the abilities of clinicians to engage with patients regarding advance care planning. If clinicians feel confident and comfortable in that setting, it should lead to more, and more productive, conversations. In the Advance Care Planning Training program led by HCA, direct engagement with patients and families was mirrored by a focus for participating clinicians on billing and its associated complications. For those clinicians enrolled in the ACP Training, 48% expressed high levels of knowledge of and confidence in their ability to engage in ACP discussions.

The Complex Care Conversations Training has a much stronger focus on enhancing clinician confidence in engaging in ACP discussions through teaching communication skills specifically aimed at eliciting patient and family preferences in the course of care. As can be seen in the table below, which includes pre- and post-training evaluations from 270 attendees, there were statistically significant changes in the proportion of individuals reporting somewhat skilled/comfortable to very skilled/comfortable across every indicator (Chi Square significance all p < .05). It is important to note that the “pre” training assessments were actually conducted in a reflective manner following the training given the propensity of individuals to rate their skills very high prior to engaging in the training. During the course of the training, trainees gain a greater appreciation of prior deficiencies.

Overall, clinician-rated skill/comfort grew from 39.3% to 84%. This was a pattern borne out across all the item-level responses. This indicates a high degree of value from this intensive training. It would be advisable to have practices engaging in both the provider training and patient outreach efforts in order to implement best practices around ACP. Having the knowledge and the confidence in the skills should translate to greater usage of ACP conversations and billing codes as well as greater patient satisfaction.

“'I do think it made me feel more comfortable to be able to do this. I think when you approach these delicate situations with patients [...] the anxiety can increase, your level of discomfort can increase. Again, having been able to learn from people who are really good at doing this and be able to role play with them, I feel very comfortable. I really do feel like it carried over into my clinical work. Within the next week, I had a number of complex care conversations I had to have with patients. Now, it really did feel like the training and the education I had received during that session really helped me in my work. Part of it was I just felt more confident.’”
Table 3: Complex Care Conversations SIM Pre-Post Training Outcomes (N=293)

Participants were asked to rate their ability/comfort level with the following aspects of complex care conversations:

<table>
<thead>
<tr>
<th>Self-Rated Assessment of Ability/Comfort Before Training</th>
<th>Self-Rated Assessment of Ability/Comfort After Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not skilled/Uncomfortable</td>
<td>Slightly Skilled/Somewhat Uncomfortable</td>
</tr>
<tr>
<td>Talk with patients about their values and care preferences along the continuum of illness</td>
<td>7.8%</td>
</tr>
<tr>
<td>Facilitate a goals of care meeting</td>
<td>13.0%</td>
</tr>
<tr>
<td>Align intention</td>
<td>11.6%</td>
</tr>
<tr>
<td>Communicate serious news</td>
<td>16.0%</td>
</tr>
<tr>
<td>Make a balanced medical recommendation incorporating patient priorities</td>
<td>17.7%</td>
</tr>
<tr>
<td>When suggesting limiting certain interventions replacing with something else (i.e. symptom management etc.)</td>
<td>16.7%</td>
</tr>
<tr>
<td>Determine decisional capacity</td>
<td>16.4%</td>
</tr>
<tr>
<td>Use &quot;the empty chair technique&quot; to facilitate substituted judgment decisions</td>
<td>23.5%</td>
</tr>
<tr>
<td>Communicate prognosis using ranges and in a way that acknowledges uncertainty but rather a vehicle to &quot;get the patient something they value&quot;</td>
<td>22.5%</td>
</tr>
<tr>
<td>Focus on the process and detach from outcome</td>
<td>15.7%</td>
</tr>
<tr>
<td>Overall ability/comfort level with the above 11 aspects of complex care conversations</td>
<td>16.3%</td>
</tr>
</tbody>
</table>
These results were supported by qualitative interviews performed with clinicians trained in the CCCT program as well as the CCCT facilitators. Interviewees reported enhanced feelings of confidence, as evidenced from the quotes above. The interviewees were also highly complementary of the training protocol and design, citing the role play as a significant strength.

“It's one thing to be taught the theory about it, which is very important, but then to be able to take it and even just role play it. The more you do something, for me at least, my comfort level grows. By the end of the eight hours of training, we have done such a good number of role-playing what we were being trained and educated on. I felt a lot more comfortable being able to do that in a clinical setting.”

“Then they also did a lot of role play during these trainings, where we created potential situations that we could face, and being able to do role plays in the moment with the instructors [where] they are giving guidance and direction. We just really felt like it was relevant to our work in the hospitals. It didn’t just stay abstract. We really got down to the nitty-gritty, got down to the concrete examples. We really felt like it was just a good way to develop our skills and very applicable to what we do day-by-day.”

“I really think that they had an excellent curriculum. They really laid out not just theory, which was important in of itself. I always appreciate having theory behind why we do what we do. They also gave really practical hands-on tools like easy-to-follow steps, also handed out-- I forget the word I'm looking for here, but not handouts, because they're like little guides on plastic that we can carry with us just to look at in the midst of a busy day. That's hands-on practical tools that they gave us. We really appreciate it.”

“When you're on a script they know you're on a script. It feels very fake ...Find the words that work for you, but here's the information that you need to gather so that you can make a recommendation that is really based on what this person values, that is aligned with their core values in life, so that you really understand what's going on with them from a patient story perspective.”

As evidence in the quotes above, an emergent theme of the qualitative analyses was that the training protocols being used across the two projects are definite strengths. The training had clear value in enhancing the comfort and confidence of clinicians in engaging in meaningful discussions.
The interviewees also expressed their appreciation for the training in raising their awareness of their prior behavior in these discussions, and some left wishing they had this training earlier in their career. This supports the need for collecting reflective “pre” assessments in the quantitative survey. The quotes below reflect the common finding that individuals initially perceived themselves to be competent prior to the training, but after the training better understood all their initial deficiencies.

“One of the breaks, one of the doctors I look over and she's got her head on her arm...She's slumped over the table. I thought, "Oh, no, she's hating this and that." I said, "Hey, are you okay?" She's like, "I just don't understand why somebody didn't tell me these things earlier in my training. This would have made my job so much easier." I stood there, with my mouth open. I was like, "Oh, I'm so sorry." Right. Great. Wonderful."

“I think it's great for my staff to have a break from sort of the daily clinical grind to do something a little different, switch gears. I think we've been very excited to impart these skills and to watch people say, "I can't believe, oh, my gosh, I do that I shouldn't probably do that anymore." People are really humble. The nice thing about the curriculum is there's a lot of reflective time [...] you need to create those learning tension points, because everybody coming to the training is like, "I can do this really well. I'm a wonderful nurse, doctor, whatever."

“It's only when they start to sort of read some of the clinical vignettes, then they are like, "Oh, yes, doesn't sound too good." They see themselves in it, and then they're suddenly vested in trying to learn to do it a little bit better or differently.”

“Going through that training for us really made the invisible visible, because all of a sudden you understood why certain conversations went better than others. It wasn't left as much up to chance. It really solidified and consolidated all the things that we were doing intuitively if you will, but it really made it [clear] this is why this works. Here's how if you do this more consistently it will work more of the time, and that was really fascinating.”

This theme of the qualitative interviews provides an opportunity to consider the importance and potential value of incorporating the ACP and CCCT training into professional training curricula. This would help ensure that emerging professionals enter the field with a greater understanding and appreciation for these end-of-life discussions, and other complex care conversations.
Patient engagement and satisfaction related to end-of-life planning and advance care planning:

One of the goals of the Healthcentric Advisors training was to impact patient and/or family engagement and satisfaction with advance care planning conversations. As part of the evaluation of the ACP Training program, patients and/or families were surveyed (n= 126) to assess their knowledge and confidence in engaging in End of Life/ACP discussions with their caregivers and PCPs, as well as their overall assessment of the effectiveness of the ACP group discussions. Overall, there was outstanding support for the program’s impacts upon the patients and families, with 97% of those surveyed reporting that they felt that they ACP group discussions were effective at facilitating these challenging discussions. They also reported high levels of knowledge of and confidence in engaging in the EOL/ACP discussions with their caregivers and PCPs. Having the patients and families receive training and encouragement to engage in the discussions, in conjunction with similar trainings happening among the PCPs, should enhance the quality of and receptiveness to those discussions by both parties, resulting in increased frequency of occurrence and benefit of the conversations.

Reach of campaign to increase statewide awareness of advance care planning:

The consumer engagement component of the project was a coordinated group effort by the Improving Care Coalition and Healthcentric Advisors. Reaching communities facing health disparities was a strong focus of the project, especially in the Spanish and faith communities. Progreso Latino was the lead in the Spanish community, and the Rhode Island State Council of Churches provided guidance for effective engagement of the faith community. As of March, 2019, the community campaign reached over 8,000 individuals and completed 8 Conversation Project events in both English- and Spanish-speaking communities. The project team continued to seek out opportunities in the community to educate beneficiaries on the importance of advance care planning up to the end of the project term in June 2019.

In the group ACP visit pilot component of the project, VNA of Care New England provided clinical coordination in physician office settings for the visits. The initial approach focused on Care New England practices (RI Primary Care and Care New England Medical Group), however, the test grant shifted its focus due to difficulty engaging clinicians and patients in the process. A mini-pilot was conducted beginning March 2019 with three Comprehensive Primary Care Plus (CPC+) practice locations. These practices have an advance care improvement activity component attached to their work to become Patient-Centered Medical Homes (PCMH). Two out of the three practices engaged and conducted sessions. Attempts to engage the third practice in a similar fashion were unsuccessful, but the practice was receptive to efforts to conduct an ACP train-the-trainer session for their nurse care managers.
The project’s social media efforts were consistently strong and used a tailored approach to coincide with current events and holidays in order to engage families in ACP conversations. Outreach efforts utilizing in-person community events and social media methods reached a combined total of 597,781 individuals since the start of the project. The program shared articles, videos, and information pertinent to end-of-life and advance care planning across websites and through social media platforms of project partners. Spanish-language materials were developed by Progreso Latino to further spread awareness of advance care planning in the Latino community. Project partners also provided analytics based on their social media efforts.

The table below provides details regarding the highly successful consumer outreach component of the Healthcentric Advisors program.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Current Progress</th>
<th>Time Period</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Campaign Process Measures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumers reached through community campaign (Total)</td>
<td>597,781</td>
<td>Jul-2017 - May-2019</td>
<td>2,000</td>
</tr>
<tr>
<td>Social media posts</td>
<td>589,674</td>
<td>Jul-2017 - May-2019</td>
<td>NA</td>
</tr>
<tr>
<td>Community events</td>
<td>8,107</td>
<td>Jul-2017 - May-2019</td>
<td>NA</td>
</tr>
</tbody>
</table>
Impact of the projects on use of advance care planning billing codes:

**HopeHealth Complex Care Conversations Training**

The HopeHealth program was able to provide data on system usage only for those practitioners within their affiliated systems due to the lack of availability of data from other trained clinicians. Therefore, usage data will be presented for HopeHealth and Coastal Medical clinicians.

When examining the impact of the Complex Care Conversations Training, there was a significant increase in documented ACP conversations (CPT codes 99497 and 99498) among HopeHealth clinicians from before to after the training. This validates another step in the basic logic model developed for the project, with training leading to increased comfort and confidence leading to more conversations, and eventual increase in use of the appropriate billing codes.

A similar pattern was observed when examining data from Coastal Medical, supporting a significant growth in use of ACP codes following the implementation of the CCCT project among their clinicians.

**Healthcentric Advisors ACP Training**

Medicaid and commercial claims were assessed using APCD data. Given delay in delivery of Medicare claims data from CMS to the state systems, and the importance of the Medicare population as a primary target of these interventions, Healthcentric used their own collected data as the Quality Improvement Organization for New England to provide metrics on Medicare utilization of ACP CPT codes. The APCD was used to extract the commercial and Medicaid claims data related to the use of appropriate ACP codes from periods pre- and post-project implementation (implementation occurred in September 2017). As can be seen in the table, prior to program implementation there was an average of only 8.3 uses of ACP CPT codes per month by trained providers. Following program implementation and training, that monthly average rose to 19.83,
representing a statistically significant (p < .05) increase of code usage among trained providers.

Healthcentric Advisors was able to gather information on the use of Medicare billing codes 99497/99498 using Medicare FFS Part A claims. Using 2017 Q3 as the project implementation date, there is a corresponding growth in Medicare ACP CPT usage from 53.3 per quarter among trained providers to 160 per quarter following project implementation and training, representing statistically significant growth (p < .05).
Impacts of the projects on system usage:

Project vendors were initially going to collect data on referrals and hospice and palliative care length of service to gauge program outcomes. However, there were numerous limitations when examining the data, which prevented them from being useful for analytic purposes. Given patient privacy and confidentiality concerns, the data were only available from Coastal Medical, and they cannot be causally linked to project implementation. The potential inconsistency of the data and lack of their availability from other practices and clinicians led to HopeHealth and RI SIM staff agreeing to retire the collection of data for this metric, effective February 1st, 2019. Ideally, future evaluations of the program would be able to access the outcomes-related data from a broader set of clinicians from sources such as the APCD.

There were also extensive efforts by HopeHealth to find a way to engage patients directly to provide feedback. However, privacy and sensitivity concerns around contacting patients who have had a complex care conversation made this nearly impossible. Contacting a patient who may have died, or contacting their loved ones, raises concerns around sensitivity and privacy concerns from other practices about releasing identifiable patient information for end-of-life patients to HopeHealth precluded outreach to any patients apart from those receiving care at HopeHealth and Coastal Medical practices. HopeHealth successfully conducted outreach to many of their patients’ families, but they had an extremely small response rate, resulting in data that were too limited and potentially biased to include in this report. Finding a way to better assess patient experiences would be a valuable contribution to future evaluation efforts.

Beyond the hard metrics associated with claims and length of service, there was a considerable effort by HopeHealth to collect 3-month data from individuals (n=116) who participated in the training program, in order to assess how the training impacted their actual practice. The table below highlights many of these impacts, although some caution is warranted in interpreting these data given that only 27% of the trained clinicians participated in this follow-up survey.
### Table 4: 3-Month Impacts of CCCT program

<table>
<thead>
<tr>
<th>I have incorporated the following into my practice as a result of attending this training:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning the patient’s story and priorities before discussing treatment options.</td>
<td>62.1%</td>
</tr>
<tr>
<td>Improving the flow of the conversation and providing more opportunity for the patient to express how they are feeling and what their desires are.</td>
<td>70.7%</td>
</tr>
<tr>
<td>Ensuring patients’ goals are understood.</td>
<td>69.0%</td>
</tr>
<tr>
<td>Building trust, being respectful, and seeking permission from patients before beginning a conversation with patients.</td>
<td>62.9%</td>
</tr>
</tbody>
</table>

**Training Impact on Practice:**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>It has improved my patient communication.</td>
<td>66.4%</td>
</tr>
<tr>
<td>I have learned to accept outcomes other than what I deem as successful.</td>
<td>52.6%</td>
</tr>
<tr>
<td>Patients seem more comfortable discussing their true goals with me and my staff.</td>
<td>37.1%</td>
</tr>
<tr>
<td>I am more comfortable making recommendations.</td>
<td>38.8%</td>
</tr>
<tr>
<td>No Impact</td>
<td>3.4%</td>
</tr>
<tr>
<td>Other</td>
<td>3.4%</td>
</tr>
</tbody>
</table>

**Barriers to practice change:**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>2.6%</td>
</tr>
<tr>
<td>Time</td>
<td>45.7%</td>
</tr>
<tr>
<td>Team Collaboration</td>
<td>30.2%</td>
</tr>
<tr>
<td>Lack of honesty with patients about their prognosis and life expectancy by physicians and nurses</td>
<td>25.9%</td>
</tr>
<tr>
<td>Other</td>
<td>12.1%</td>
</tr>
</tbody>
</table>

**Since completing the Complex Care Conversations Training:**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I am better able to identify patients who would benefit from a goals of care conversation.</td>
<td>91.4%</td>
</tr>
<tr>
<td>I have increased the number of care conversations,</td>
<td>75.0%</td>
</tr>
<tr>
<td>I am better able to respond to patient’s and family’s emotions.</td>
<td>88.8%</td>
</tr>
<tr>
<td>I ask for and incorporate “the patient story” when making a medical recommendation.</td>
<td>85.3%</td>
</tr>
<tr>
<td>When suggesting limiting interventions, I replace with something else like symptom management.</td>
<td>73.3%</td>
</tr>
<tr>
<td>I talk with patients/families about their preferences along the disease trajectory rather than just at the very end of life.</td>
<td>82.8%</td>
</tr>
<tr>
<td>I feel more comfortable communicating serious news.</td>
<td>79.3%</td>
</tr>
<tr>
<td>I am more able to focus on the process rather than the outcome.</td>
<td>87.1%</td>
</tr>
<tr>
<td>I have found greater personal and professional satisfaction in caring for patients with serious advanced illness.</td>
<td>84.5%</td>
</tr>
</tbody>
</table>

Overall, the results speak well to the program’s impact at 3 months, with most of the respondents endorsing multiple impacts upon their actual practice. Strengths of the program are the clinicians’ resultant feelings of confidence in their abilities to identify the
need to have more conversations, and to incorporate patient and family perspectives into those conversations. Areas for further growth and refinement include the clinician feeling more comfortable making recommendations and accepting outcomes which they personally don’t deem as successful. These are challenging issues, which require acceptance, time, and continued practice to feel more comfortable.

The largest barrier to practice implementation remains time, but it is worth noting that team collaboration and lack of honesty regarding prognosis remain sizable barriers. It is possible that further peer support and mentoring may be able to address some of the remaining barriers beyond time, and a greater usage and understanding of the billing options which are available may help to slightly reduce the time and cost barriers.

**Summary:**

This report details two distinct, yet highly related SIM projects. When examining their combined effects, there is definite support for the basic logic model that was created to guide the evaluation. The programs are on track to enroll their targeted populations in interventions designed to increase and improve the abilities of clinicians, patients, and families to engage in ACP conversations. Over 500 clinicians of different types and specialties across the state were trained to facilitate ACP discussions between the two programs, but there are still many clinicians that could benefit from this training. The HCA project reached over 500,000 individuals through its mixed-media outreach efforts to educate individuals and families regarding end-of-life discussions.

The assessment of the trainings documented that clinicians, patients, and families felt more knowledgeable and comfortable engaging in end-of-life and advance care planning discussions. Survey data as well as qualitative interview data provided convergent evidence that demonstrated that as a result of the training, individuals felt more prepared to tackle these tough conversations.

Subsequently, there was a definite increase in the use of ACP billing codes using available data for analysis. Across both programs, there were significant increases when comparing baseline quarters with post-intervention/program quarters in the rates with which trained clinicians were utilizing the CPT 99497/99498 codes. Survey data on the 3-month impact of the Complex Care Conversations Training highlight that, despite barriers such as time, the training did have profound impacts upon practices related to ACP discussions.

The HCA program was highly successful at providing community outreach and education to over 500,000 consumers using social media and community events. This outreach, when combined with enhanced provider trainings, should facilitate more complex care conversations.
Next Steps, Recommendations, and Sustainability:

As the two programs seek sustainability beyond the RI SIM project, funding consideration should be given to ensuring that end-of-life and advance care planning topics become a de facto part of training for appropriate professionals during their formal education. Discussions with Institutes of Higher Education that are training and preparing future professionals (e.g., nurses, physicians, nurse practitioners, physician assistants, social workers, etc.) should be encouraged to find ways to incorporate this training into their standard curriculum. This will ensure some base level of knowledge for the new workforce while efforts continue to train the existing workforce. There is evidence that a shortage of trained palliative care physicians is imminent, highlighting the need to ensure that clinicians of various specialties have adequate training to work in complex care and end-of-life scenarios (Health Affairs, 2019, Vol. 38(6)).

The programs made some efforts related to making materials available on the web or through other more accessible sources. Having online resources, refresher materials, and/or training opportunities will increase the accessibility of the information to a broader audience.

It is important to continue engagement with the Office of the Health Insurance Commissioner in Rhode Island to encourage the adoption and appropriate use of ACP-related billing codes, as well as to ensure the ongoing training on the use of those codes at practice sites. Inclusion of an ACP quality measure within the Aligned Measure Set would play a strong role in ensuring appropriate discussions regarding end-of-life were occurring and should have a resulting impact upon costs.

Future efforts to examine program impacts can benefit from longer timeframes and more robust data in referrals and length of service outcomes. The APCD has at least a 6-month data lag and presents even longer delays when Medicare data are required for a complete analysis. This requires considerable timeframes post-program implementation to conduct a meaningful analysis. Data accuracy for tracking of referrals in existing claims may not be high, resulting in a lack of clarity of the validity of the data and the interpretability of any subsequent results. Adequate assessment of referrals would require additional data sources beyond medical claims data.

Finally, given the complementary nature of the two projects, they should be encouraged to continue to collaborate in meaningful ways. This will help to avoid any duplication while also providing potentially synergistic results when clinicians receive training across the two programs.
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List of Acronyms:

RFP: Request for Proposal
SIM: State Innovation Model Test Grant
CCCT: Complex Care Conversation Training
ACP: Advanced Care Planning
LOS: Length of Service
HCA: Healthcentric Advisors
EOL: End of Life
PCP: Primary Care Physician
PCMH: Patient Centered Medical Home
APCD: All-Payers Claims Database
OHIC: Office of the Health Insurance Commissioner
# Appendix A

## Interview Guide for SIM Evaluation on Provider Burnout & Satisfaction, and the Value-Add of the Program

2 days before the interview—send email with some background on the program & summary of the main focus of the questions & the single item burnout measure

** We will tailor the interview guide for each person selected based on their participation.

A version of this will be said at the beginning of the call:

“Is this __________? Great, my name is Skye Leedahl from the University of Rhode Island. Thank you for agreeing to talk with me today. I am going to ask you some questions related to ________________ (insert the specific initiative) that was funded by the SIM grant. Do you remember the project? (If not, provide additional information about the project). Just as a brief background, the SIM stands for ‘Rhode Island State Innovation Model’, which was a funded-initiative that began in 2015 thanks to a CMS grant. The overall purpose of the grant is to promote positive changes to the healthcare system and improve Rhode Island’s population health. Today in this about 20-minute interview, I want to just focus on your participation in ________________ (insert the specific initiative) related to if and how the project contributed to job satisfaction, burden, and value-add of the initiatives.

I will be recording our phone call for analysis purposes. Is it okay to begin recording?”

### Concept: Reasons for participation

1. Why did you originally sign up to participate in _________________ (insert initiative) and/or how did you get recruited to participate in?

2. What were your expectations for the program at the outset?

### Concept: Benefits of program participation

3. How specifically did you benefit from this funded initiative?
   (use examples as needed: a training was provided, a staff person was provided, a dashboard was added, a resource was provided, being able to make a call in to the service)

   a. Potential probes to get more information, if needed:
      i. What are the significant components of the funded-project that you benefitted from?
      ii. Since you now have ________________ (insert whatever it was the program provided), what benefits are you noticing?
iii. If you participated or if the entire staff did, has that changed your ability to practice? (use with, for example, MHFA training)
iv. Has your program participation made your work or a colleague’s work easier to complete?

Additional questions for the Complex Care Conversations participants:

3a. Do you feel that the Complex Care Conversations Project contributed to your knowledge and confidence with advance care planning discussions? and

3b. Do you feel the project contributed your comfort in having end of life conversations with patients with serious illness?

3c. Do you feel the project contributed to your satisfaction in having end of life conversations?

Concept: Value-Add of the program

4. Without _______ (insert whatever helped them) or if it were to go away, how would that change your work life?

Concept: Job satisfaction

5. Has the program contributed to your job satisfaction in any way? If so, how?

   a. Potential probes to get more information, if needed:
      i. Would your job satisfaction improve or decrease if __________ (insert the thing that changed as a result of the program) were to change?
      ii. For either case, what changes might improve satisfaction in the future?

6. Has your program participation led to more or less administrative work?

   a. Potential probes to get more information, if needed:
      i. Has the program changed/streamlined your practice’s policies, procedures, and/or workflows?

Concept: Provider burnout

7. One of the things we are interested in is provider burnout, do you think this program has added to or reduced your burden? Please explain why.

8. Using the measure of burnout that I sent to your email, how would you rate your level of burnout? (The options are 1-5).

9. Are there other venues where provider satisfaction/burnout is being addressed that we should coordinate with moving forward?

Concept: Additional Ideas
10. Is there anything else you’d like to add that we haven’t talked about yet related to your participation in the SIM project?

“Thank you for taking the time to talk with me today. I really appreciate your time.”