

Special Article

Quality Improvement Pearls for the Palliative Care and Hospice Professional



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Abstract

Rapid changes in how palliative care clinicians are evaluated and paid present an imperative for clinicians to adeptly and routinely perform quality improvement in usual practice. Like empathic communication and facilitating goals of care discussions, quality improvement skills must be learned, honed, and practiced, so identifying problems and brainstorming solutions becomes a natural component of delivering serious illness care. Using our experience in both failures and successes in performing quality improvement, here we provide a prioritized list of 10 pearls specifically aimed to palliative care and hospice professionals. We aim to demystify quality improvement, highlight areas where rigor and a systematic approach are needed for success, and offer our own lessons learned and mistakes made to promote success for our colleagues and our field. *J Pain Symptom Manage* 2017;54:758–765. © 2017 American Academy of Hospice and Palliative Medicine. Published by Elsevier Inc. All rights reserved.

Key Words

Quality improvement, health care quality, palliative care practice

Introduction

A changing health care environment increasingly focused on value and quality dictates that all palliative care professionals be adept at quality improvement.¹ To date, many palliative care clinicians have been comfortable deferring quality improvement responsibilities to others, viewing performance improvement as an administrative or leadership task, outside the realms of usual responsibilities. Yet, as low-quality care will affect clinicians directly through payment adjustments and impacts on referral volumes, there is increasing interest among clinicians to lead the efforts that improve the systems that produce poor results. Furthermore, palliative care clinicians are challenged with issues of efficiency as demands for services increase,² necessitating a familiarity with quality improvement skills.

In many ways, quality improvement skills provide an advantage in an increasingly competitive landscape. Recent legislation has aimed to keep Medicare pay-for-performance programs budget-neutral, so that

rewards for high-quality care are offset by equal penalties for those performing below comparative benchmarks.³ In such a zero-sum environment, palliative care practices are continuously compared against their peers, and only those who constantly perform better than others will remain sustainable. Current guidance relative to Medicare pay-for-performance programs suggests that those who perform below benchmarks will endure penalties that at first will erase margins (−4%), and if performance is not corrected, will undermine the financial solvency of the practice (−9%).⁴ Even marginal performers face an imperative to constantly improve so to stay ahead of the tide pulling practices to below average. As really poor performers slowly leave, the above-average performers will find themselves as merely average, depending on continuous quality improvement efforts to stem this tide.

Palliative care and hospice professionals face unique challenges in performing quality improvement. Among many more, notable challenges include

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small clinical services often without quality improvement infrastructure,⁵ busy clinical workloads with ever-increasing clinical demands,⁶ diverse backgrounds within teams that may lead to different approaches to quality improvement, inconsistent training in quality improvement (if any) among team members, and high burnout rates inherent to palliative care practice,⁷ which may convey quality improvement as “just another thing to do that keeps me from getting home.”

Here we describe 10 pearls for the busy palliative care professional seeking to evolve quality

improvement from “another thing” to “our thing.” We picked among a long list, prioritizing to a cohort of 10 pearls—in no particular order—that we believe palliative care and hospice professionals should start with in understanding effective quality improvement. This prioritization is reflective of the introductory teachings of many methodologies of approaching health care quality improvement; we blended two major approaches we use, the Institute for Healthcare Improvement model⁸ and the Deming DMAIC approach from Six Sigma.^{9–11} We also include an example project charter (Fig. 1) listing of common

Project Charter

Institution: City Hospital Cancer Center		
Project Title: Reducing the proportion of patients receiving chemotherapy in the last two weeks of life		
Project Sponsor(s): Jane Doe MD	Team Leader: John Doe	
Start Date: 1/1/2017	End Date: 9/30/2017	
Problem Statement:		
<ul style="list-style-type: none"> Analysis determined that for calendar year 2016, the percentage of patients who had chemotherapy within the last two weeks of life was 16%. The comparative benchmark mean showed that 10.4% of patients received chemotherapy in the last two weeks of life over the same reporting period. 		
Aim Statement		
<ul style="list-style-type: none"> By October 1, 2017, city hospital Cancer Center will reduce the percentage of patients receiving chemotherapy in the last two weeks of life to $\leq 10\%$ 		
Scope		
<ul style="list-style-type: none"> The scope for the project includes all patients admitted to the main campus of City Hospital Cancer Center or received treatment in a campus location 		
Measurement		
<ul style="list-style-type: none"> Overall percentage of patients receiving chemotherapy within the last two weeks of life Percentage stratified by disease area, admission and ICU status 		
Organizational alignment / Strategic Priority		
<ul style="list-style-type: none"> The project aligns with the 2017 organizational priority to improve care at the end of life (2b) The project aligns with the 2017 organizational priority to provide patient centered care (3a) 		
Timeline of Major Project Milestones		
<i>Milestone</i>	<i>Responsible Person(s)</i>	<i>Forecast Date</i>
Complete charter and measurement plan	John Doe & Team	2/1/2017
Determine and prioritize root causes	Jane Doe & Team	4/30/2017
Develop, select, and prioritize solution(s)	John Doe & Team	7/1/2017
Pilot / revise / fully deploy solution(s)	John Doe & Team	9/1/2017
Develop sustainability plan	John Doe & Team	10/1/2017
Project Team Members and Roles		
Role...	Name...	

Fig. 1. Example project charter.

terminology used in quality improvement (Table 1) and cite lessons learned and examples of mistakes from our own experiences (Table 2).

Pearl #1: Separate Operational Aspirations and Program Development From Quality Improvement

Often, when thinking of quality improvement, palliative care clinicians and leaders are tempted by visions of larger consult volumes, more clinic space, and expanded teams. In truth, these aspirations are operational in nature, in that they make our jobs easier, our programs more sustainable, or our goals simpler to attain. They lack a laser focus on solving a specific problem that causes harm to the patient population or is a barrier to efficient operations, the defining component of a quality improvement project.¹² Of note, the lack of a resource itself is often not a problem to anyone but you. One could make the argument that limited operational resources, such as too few clinic rooms, harms patients in that outpatient consultations are not timely enough to prevent poor outcomes (e.g., avoidable ED visits). But, to make this argument successfully requires first starting with a compelling problem, then

remaining agnostic (until the very end) to the right solution to solve it. Starting with a big-ticket resource request (e.g., FTE, clinic space) puts the solution before defining the problem, which is the death knell for any quality improvement initiative.

We recommend explicitly separating operational aspirations from quality improvement projects. Naturally, operational initiatives and program development are important endeavors for palliative care programs. But fundamentally, the arguments for such are rooted in financial modeling, returns on investment, deltas between existing and ideal resources, and comparisons to clinical goals. It is not about identifying and then solving a problem critical to the care or safety of patients; you are merely implementing something you believe should exist. For such goals, teams should course full speed ahead, making their case for broad goals (“for the good of all patients at our hospital with serious illness”) and worry less about the time-intensive, problem-based, step-wise approach demanded by quality improvement methodology. Confusion between the two could lead to ineffectively slow program growth (if couched as quality improvement [QI]) or the forced marriage between an operational goal (e.g., hiring a social worker) and the solving of a specific problem (late referrals to palliative care). In truth, most health

Table 1
Common Terminology Used in Quality Improvement

Term	Definition
Health care quality	The degree to which health care services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.
Health care quality measure	Quality measures are tools that help us measure or quantify health care processes, outcomes, patient perceptions, and organizational structure and/or systems that are associated with the ability to provide high-quality health care and/or that relate to one or more quality goals for health care.
Structure, process, outcome	A conceptual model that provides a framework for examining health services and evaluating quality of health care.
Six sigma	Six sigma is a systematic approach to quality improvement that provides organizations with the tools to improve the capability of their systems and processes.
Lean methodology	Simply, lean means creating more value for customers with fewer resources. A lean organization understands customer value and focuses its key processes to continuously increase it.
PDSA	The PDSA cycle (Plan-Do-Study-Act) is a systematic series of steps for gaining valuable learning and knowledge for the continual improvement of a product or process.
Project charter	A project charter is used at the start of a project to communicate the problem, goal, measures, team members, and other key project information. It is typically a single page/slide and should be regularly reviewed by the team.
Problem statement	The problem statement is a brief description of the issue being addressed. It should be concise, supported by data, and have the consensus of the team.
Aim statement	An aim statement is a written and measurable description of your organization's desired improvement. It targets a specific patient population and describes the amount of time needed to achieve the aim. The purpose of an aim statement is to provide QI teams with clear, well defined goals.
Root cause	The highest level cause of a problem. Is typically uncovered with the repeated 6 asking of “why” (and “why” did that happen?).
Cause and Effect diagram	A quality improvement tool that identifies all of the potential causes for a problem. A Cause and Effect diagram are often referred to as Fishbone or Ishikawa diagrams.
Critical to quality (CTQ)	Identified components of a process that contribute most to providing value to the end user, customer, or patient.
Critical to quality tree	A quality improvement tool that provides actionable steps to achieve quality from broad customer requirements.
Spaghetti diagram	A quality improvement tool that provides a visual representation of the physical movement of the actors within a process.
Stakeholder analysis	Identify all potential stakeholders in a process, assess all stakeholders interest and influence on the process, and determine plan for generating stakeholder support for the process.

Table 2
Quality Improvement Pearls and Examples of Palliative Care-Related Errors

Pearl	Lesson	Examples of Mistakes
Separate operational aspirations and program development from quality improvement	Understand and treat the “do something” and the “fix something” projects accordingly	The team forms a QI project to implement a 24/7 oncology urgent care clinic to reduce readmissions.
Define the problem, obsessively, and avoid a focus on solutions	Problems look very different from varying perspectives and need to be clearly defined. Allowing focus on solutions too early will likely result in a suboptimal solution	The team knew this problem was clinic wait times so did not need to discuss. Furthermore, the project could be completed quickly because they knew they just had to revise the physician templates.
Measure, understand, measure again	Understanding the complexities and imperfections in the data is necessary to be able to use them.	Initiating a wait time project, the team charts the problem statement as mean 65 minutes wait time without understanding the data collection process, the median, or the quartile distributions.
Beware of scope creep	Scope creep is to be expected and identified	The project champion gets an expanded role, now overseeing advance care planning across all medical, surgical, and trauma intensive care units, and wants her new areas of responsibility added to the project.
Choose a parsimonious but process-inclusive team, define roles early	A team with suboptimal representation has lower probability of success	The team formed to reduce the high fall rate in the hospital is solely populated with hospitalists.
Include key stakeholders at strategic points	The success of a project is dependent on the buy-in of stakeholders outside the QI team.	To reduce no-show rates for outpatient palliative, the QI team forgets to engage the front desk staff to understand barriers to patients remembering upcoming palliative care appointments.
Prioritize solutions	The easiest solution or the most obvious one may not be the most effective	The palliative care team wants to increase patient satisfaction scores among those discharged from the hospital and requests three physician FTE's and a 10-room clinic wing.
Focus on processes, not people	By focusing on process, we can avoid project contamination with confounders such as staff perceptions or employee attitudes.	In identifying high rates of chemotherapy prescribing near the end of life, the palliative care team focuses on which oncologists perform badly on this metric and aim to educate those “bad doctors.”
Be persistent	Most quality improvement interventions do not work	A palliative care clinician oversees a quality improvement initiative to improve documentation of advance care planning discussions among house staff. She teaches a one lecture and then observes no changes in documentation two weeks later.

system leaders can see through such forced relationships.

Pearl #2: Develop a Project Charter as a Guidance Document

Many view quality improvement as a less formal version of clinical research, such that there is less need for a systematic approach, peer input or review, or the ability to share findings to a wider audience. Quite the contrary, quality improvement initiatives require a discipline and diligence on the level of clinical research from the planning stages on through execution.

A key step in planning a quality improvement initiative involves completing a project charter

(Fig. 1). A project charter is a one- or two-page document shared among team members similar to a protocol used in a research study. It serves three critical functions: provide a centralized place to document decisions, serve as guidance or roadmap for the project, and facilitate communication between team members. Often, organizations have their own templates for quality improvement initiatives; although they can be personalized most documents contain key elements, such as the problem statement, aim statement, team members and roles, process maps, and decisions made.

Successful QI initiatives use the charter as the jumping off point for every meeting, iterate and update the document through the trajectory of the project, and serve as a litmus test to truly check if all team members are on the same page. For example, the problem

statement in a project charter may say, “95% of patients with advanced lung cancer do not have an advance directive documented in the health record within the first three outpatient oncology visits.” In reviewing the document as a team as the first step of a meeting, one person may say, “I think the issue is broader than that, and includes lung and GI cancer patients.” Such as in this case, project charters are helpful tools to uncover perspectives that often swim beneath the usual conversations or may not be obvious to the team until a discussion is spurred.

Pearl #3: Define the Problem, Obsessively, and Avoid a Focus on Solutions

All successful quality improvement projects start with a problem statement. A problem statement is a one- or two-sentence, concise, description of the problem. The statement includes the “where,” “when,” “what,” and “who is harmed” (but not “who is causing the problem” or “why” that problem is occurring).

For example, a problem statement may say, “In the cancer center outpatient palliative care clinic, 25% of medication refill requests are not addressed within 24 hours, leading to delays in pain management.” Importantly, we did not mention that this was anyone’s fault (“who is causing the problem”) or that the problem occurs because of a specific reason (“why”). Neither can be fully known at this point, so attempts at guessing—which, without data can only be a guess—are not helpful and can lead the team astray. As data are collected and the problem refined, the “why” will reveal itself. Notably, too much emphasis on the “who” may turn into a hunt for villains, which misses the overarching goals to improve the system and process.

We recommend developing a problem statement as the first step in a quality improvement project. Then, we expect that teams will iterate this statement over time, rarely ever ending with a statement that matches with what they began. Iterations occur because as teams further explore the problem, they may uncover a different or more compelling problem, refine the prevalence of that problem occurring, or explore a greater harm.

We also recommend not embedding a statement regarding solutions within a problem statement. Often, this occurs right under our noses. For example, consider the problem statement, “Only 10% of cancer patients with significant symptoms have a palliative care consult placed, reducing opportunities for timely symptom management and goals of care conversations.” See the solution embedded in the problem? The problem statement asserts that the problem (and conveniently also the solution) are a lack of palliative care consults. Better said, the problem is about

untimely symptom management and advance care planning. The team may eventually conclude that the solution is more palliative care consults, but they cannot definitively conclude that in the early steps. Doing so makes this endeavor about operations and program growth, not solving a distinct problem.

Pearl #4: Measure, Understand, and Measure Again

An important step in a quality improvement project is knowing how to measure: 1) the baseline state, 2) interim changes, and 3) progress toward the stated goal (aim statement).¹³ However, it is not uncommon to be bombarded by measurement data. The term “paralysis by analysis” appears to be ever more frequently used, and with data systems becoming ever more capable and complex, the trend is likely to increase. Knowing some of the common pitfalls with using data in a QI project can decrease the chance of failure and can provide reliable insight. Make sure to understand the baseline data that has highlighted the original problem. What is the numerator, the denominator, how is it calculated? Understand the source and where appropriate perform validation. Validating data can be as simple as checking a few numbers in a very small sample of charts and this exercise often proves enlightening. The term “guilty until proven innocent,” when applied to data, can be a useful premise. It is important to note that this should not be an exercise in seeking perfection, rather understanding how imperfect the data are so that it can be used appropriately. Another key area when developing PI project measurement data is to understand process, outcome, and balance measures and consider the need for all three. For example, a readmissions reduction project might have percentage of patients completed discharge planning as a process measure, the percentage of patient readmitted within 30 days would be the outcome measure, and mean length of stay would be a balance measure (i.e., a measure we want to make sure that we have not inadvertently impacted with our solution).

Pearl #5: Beware of Scope Creep

One of the largest contributors to the high mortality rate of quality improvement projects is scope creep. It is understandable that when fueled by the energy surrounding a fresh new project, teams are tempted to attempt the most, greatest, and best outcomes imaginable. Organizational change is difficult and failure rates are high, so maximizing the outcomes from an attentive and passionate group may feel like the mission.

For example, very subtly a focus on improving consultations in the medical intensive care unit can drift into maximizing integration among all intensive care units in the hospital. Although a laudable goal, and some may contend an approach that leverages existing work from one setting across seemingly similar settings, it remains the *prima facie* obligation of the quality improvement team to prove why those settings of care have the exact same problem statement, have an overlapping set of drivers of that problem, and will likely benefit from the same solutions.

Typically, a larger project has more moving parts, more leadership that needs to be engaged, more resources needed for the pilot or solution and more variation in the systems that may be impacted. Moreover, once scope creep starts, it is a slippery slope and is difficult to recover. “If you can expand from Clinic X to now include Clinic Y, why not Clinic Z?” This is not to suggest that the project scope should never change. But changes should be deliberate and thoroughly vetted to ensure that perfection does not become the enemy of the good.

To avoid this common mistake, ensure that the scope is clearly defined in the project charter at the start of the project and has the understanding and agreement from the team. At this stage, all stakeholders will acknowledge and agree that these are the time, setting, location, patient population, clinical group, and other parameters for the project. As the project develops and the charter is continually reviewed, the discussion regarding scope change may occur. The project manager can change the scope if all stakeholders can agree or live with the change and if it is formally changed on the project charter.

Pearl #6: Choose a Parsimonious but Process-Inclusive Team and Define Roles Early

The project team is the engine that drives the performance improvement project. The human capital involved is critical to its success. The team construct is definitely not a “one size fits all” but there are roles within the team that should be considered non-negotiable. These include:

Project Champion—Sometimes referred to as the project sponsor, this role is critical for success. The active Senior Leadership representation demonstrates the organizational priority for the project and increases the visibility. This role should be able to authorize resources and help remove roadblocks that may impede the success of the project.

Project Lead—The Project Lead or Manager is responsible for the success of the project. Be

careful when appointing more than one Project Manager or leader. The W. Edwards Deming quote “Divide responsibility and nobody is responsible” applies here. Although all team members have responsibilities appointing a single lead will increase the probability of success. **Process owner**—This role is necessary to ensure that an individual who is close to the process being analyzed is involved in the team discussion and decisions. For example if the team is looking to improve the accuracy of scheduling palliative care referrals, the team lead for the desk staff entering the referrals would be a key process owner. Depending on the project, the team may need more than one process owner. It is also important to include team members who are on the front line of the work being studied; this may include direct and indirect nonclinician support.

Finally, balance the need for including all perspectives but manage the risk of allowing the team to become too large. This can slow progress and can happen when, for example, individuals are included to spare their feelings. Inviting people to make them feel included or valued may be reflect political savvy but often adds unnecessary complexity. We all know team members who take contrarian or critical stances to demonstrate their engagement or intelligence within the group. Like putting solutions before problems, avoid this like the plague. On the team, everybody should have a job to do.

Pearl #7: Include Key Stakeholders at Strategic Points

Frequently, the degree to which a quality improvement initiative succeeds or fails rests outside the capabilities of the immediate team. Sometimes, success depends on buy-in from secondary stakeholders outside the quality team. A secondary stakeholder is a key contributor to the delivery of a process but may not be directly responsible for conducting the process as a mechanism for expressing value to the customer. For example, the administrative team is critical to scheduling and rooming patients before being seen by the clinical team but does not directly provide care to the patient. Another example, a Department Chief approves funds for the quality team to implement a proposed quality improvement project to reduce wait times for patients. Furthermore, the perspectives of patients’ and their caregivers’ may provide valuable insights into a project addressing suboptimal patient satisfaction scores.¹⁴ In these examples, although the stakeholders may not directly implement the quality improvement project, their engagement in the process is imperative to the success of the project.

To avoid project malaise from secondary stakeholders, the QI team must identify and engage these stakeholders early in the process to obtain organizational support for the QI project. The clearest way to identify and engage stakeholders for a project is to develop a Stakeholder Analysis. A Stakeholder Analysis is a document created by the QI team that helps to engage stakeholders generate support and collaboration for the project. To generate an effective Stakeholder Analysis, teams should: 1) identify potential stakeholders, 2) evaluate each stakeholder's role, significance, and position as it relates to the process, and 3) create a plan for engaging these stakeholders to obtain support for the project. Engaging stakeholders early in the process can increase the team's capability and the project's chances of success. The more each stakeholder feels bought into a project, the more they will share in the ownership of the success or failures of that project.

Pearl #8: Prioritize Solutions, Conduct Risk Analysis, and Pilot Before Full Implementation

By the time the project team is looking at potential solutions in a well-run project, a lot of work has already been completed with problem definition, measurement analysis, and root cause detection. At this point, it is understandable to want to quickly implement the fix, but the team should be reminded that the wrong fix will cost time, money, and the energy and enthusiasm of the team. To increase the chance of an effective solution, the team should apply a methodology to select the solution(s) that balance the level of effectiveness and the ease of implementation. A four-quadrant Priority Matrix showing low to high effort and impact along the *X* and *Y* axes can be an effective method for selection. In most situations, teams begin with the solution that has the highest ease of implementation and highest level of potential effectiveness. In the iterative nature of quality improvement, the high ease/high effectiveness solutions are tried in a time-limited trial, then low ease/high effectiveness solutions follow behind. A similar tool can be used as part of the risk analysis.

The discussion and the team's appreciation of the risks inherent in the solution provide the opportunity to mitigate those risks and increase the chances of success. The pilot phase is critical. A well-deployed pilot will generate data and information that can be used to modify the solution before full implementation. Software development professionals know that the earlier a defect can be identified the easier and cheaper it is to address, and this applies to all projects. Having completed these steps, the team should be confident that the solution will be effective and they

will not be meeting as a team to address the same problem a year from now.

Pearl #9: Focus on Processes, not People

By definition, all work being done in the workplace is accomplished through a process or set of processes. Whether it a documented standard operating procedure, such as establishing a checklist in the operating room, or an undocumented on-going business activity, such as ordering necessary office supplies, the work environment is dependent on processes completed by people. Therefore, when thinking about the inputs of a process, it is important to focus on the structure of the process and not only the people interacting with the process to make it operate. Often, project objectives are defined poorly and derailed quickly because the QI team focuses solely on the people that work within the construct of the process and not the process itself. By focusing on process, we are able to avoid contaminating the quality improvement initiative with unnecessary confounders, such as perceptions of human behaviors or attitudes.

The key to focusing on the process is to first clearly identify the process you are attempting to improve. By focusing on the components of a process, and not the people that interact with it, you are able to eliminate any fundamental attribution error¹⁵ that may exist within the process. Fundamental attribution error is the idea that a person's behavior is due solely to their personality (e.g., laziness or apathy) and not affected by external factors around them (e.g., excess workload, unsupportive environment, or lack of training).

To avoid fundamental attribution error, successful QI teams perform rigorous process mapping exercises to get a true sense of the process in which they hope to examine. Using tools such as Swim Lane Process Maps or Spaghetti Diagrams, the QI team can examine the process as a series of actions independent of the people that operate it, identifying inefficient process instead of inefficient people.

Pearl #10: Be Persistent, Embrace Failure, and Fail Forward

The vast majority of quality improvement projects fail to meet their stated goals. Failure results from several problems, many of which have been covered prior (e.g., not defining problem, scope creep, too many team members) but also as a result of the nature of an ever-evolving health care system, and the complexities of resources, culture, politics, and people. Negative changes (leaves for another institution) and positive changes (promoted to another part of the health system) involving quality improvement team

members and leadership are common. Rules and parameters sometimes change, such as the tightening of the annual budget that precludes ongoing support of the quality improvement efforts. Or, the team underappreciates the barriers and roadblocks to sustaining any gains. For example, clinical practice changes may make sense to the small-quality improvement team, but implementation issues (e.g., clinician buy-in, patient participation) may prove too powerful a foe. Changing behavior is difficult, and not all “good” ideas are acceptable or feasible to others.

As failure is encountered, it should be embraced, and not seen as defeat. Those failures guide the next definitions of the problem, subsequent analyses of processes that contribute to those problems, and continued exploration of possible solutions. By nature, quality improvement is as much about the journey as it is the end result.

As Thomas Edison noted “I have not failed. I’ve just found 10,000 ways that will not work.”

Fail in a way that puts you in a better position than when you first started.

Discussion

Palliative care and hospice professionals are uniquely poised to improve quality of serious illness care at their organizations. Our discipline is often viewed by outsiders as change agents within a health system, poised to tackle complex problems deemed impossible by others. Moreover, we have cut our teeth maximizing outcomes with limited resources, stretching what little we are given to spread our influence as far as possible. We are familiar with identifying the ills of the existing care apparatus and developing implementable solutions that propose small changes (e.g., ICU triggers) within a larger strategy (e.g., all seriously ill patients seen by PC specialists). We may also contend that as a young discipline, old bad habits (oftentimes the targets of QI projects) may not have had time to settle in.

These advantages must be matched with a disciplined approach to quality improvement that embraces the science of performance improvement. Modern approaches embrace the complexity of the potential drivers of a problem, requiring improvement teams to spend significant time and effort defining and redefining the problem, understanding what constitutes success, planning for how to measure that success, and embracing failure as an opportunity for learning.

Conclusion

Palliative care has a strong history in performing quality measurement and improvement through Medicare conditions for hospice. In the field of specialty

palliative care, we are well positioned to translate these skills upstream from the end-of-life setting, from the time of diagnosis of serious illness through the trajectory of disease, independent of outcome. As in many other innovations in health care delivery for persons with serious illness, palliative care and hospice professionals can and should lead the way.

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