At first glance, the worlds of process improvement and storytelling appear to have little in common. What could be the connection between, say, figuring out how to start surgical procedures on time and deciding how to spin a good yarn?

Simple, says Jeff Glasheen, MD, director of the Hospital Medicine Group at University of Colorado Hospital. The link is the McGuffin.

IHQSE Director Jeff Glasheen, MD, says process improvement is a means to making big changes in hospital operations and care delivery.

That's the term for a plot device used by writers and filmmakers to advance their narratives. Think the papers of transit in “Casablanca” or the aviary statue in “The Maltese Falcon,” the objects of interest that drive the action of both films.

Process improvement ideas of various stripes play the McGuffin in the broad scheme of hospital and system operations, Glasheen says.

“Process improvement is the means to an end,” Glasheen noted. Whatever the short-term goal of a project – shortening length of stay, minimizing infection rates, reducing wait time for referrals, and so on – the real prize is changes that make health care delivery safer, more effective, and more affordable. The varieties of process improvement are limited only by the imagination of staff and providers.

“There is no one use for a hammer,” Glasheen said.

A force for change. The process improvement hammer is a centerpiece of the Institute for Healthcare Quality, Safety, and Efficiency (IHQSE), a collaborative effort between UCH, Children’s Hospital Colorado, and the CU schools of Medicine and Nursing that Glasheen has directed since its inception in 2012.

Since January 2013, the IHQSE’s year-long Certificate Training Program (CTP) has helped some 38 teams learn the fundamentals for process improvement and apply the lessons in addressing operational issues in clinical settings spanning the ORs, the Cancer Center, the Cardiac & Vascular Center, the Emergency Department, and primary care, just to name a few.

The successes of the CTP have been numerous and varied. A recent effort, for example, reduced the time required to implement palliative care consults requested by providers, with one result being a significant reduction in average length of stay for patients (see accompanying story, this issue). However, the IHQSE ultimately seeks broader objectives, Glasheen said.

“One of the lessons we’ve learned is that it is difficult to sustain and maintain the discipline of the projects,” he said. “We want to take away the heroism of the individual and build a system by which there are multiple ways to continue the improvements.” That might mean getting teams back together periodically to maintain improvements, analyze new data, continue coaching, and identify new opportunities for improvement, he said.
“The idea is not to have project teams but rather to have teams that build new projects,” Glasheen said.

**Enlisting leaders.** Another ongoing goal is to break down the notion that the IHQSE is the special province of people interested in improvement projects that are confined to specific issues in their units, clinics, or work groups, Glasheen said. Each CTP team is led by a physician and nurse, but the work draws in and involves all staff and providers connected to the project – and it’s fundamentally democratic, with everyone involved “questioning and learning together,” as Glasheen put it.

The palliative care project, for example, included physicians from various services, a data analyst, and representatives from Spiritual Care Services and Social Work. Even more broadly, IHQSE leaders continue to emphasize the importance of including executive sponsorship of projects – not to direct what’s done, but to champion project goals, assist in securing resources, and help to sustain momentum when it is necessary to do so, Glasheen said.

“Without executive leadership, change is hard,” Glasheen said. “They can help to remove barriers when team members bump up against resistance.”

In another move aimed at embedding process improvement in hospital culture, the IHQSE – in partnership with the Academy of Medical Educators in the School of Medicine – has also begun working to enhance unit- and program-based clinical leadership teams that receive two-day training courses in the principles of change management, effective communication, teamwork, motivating and leading others, and negotiating their way through complex organizations.

Simultaneously, the IHQSE has launched a one-day “PI boot camp” to train front-line staff and providers in basics of quality and process improvement, so they can join existing project teams. The underlying notion, Glasheen said, is that no matter how motivated or committed they may be, CTP team members will not be able to support all the projects necessary to improve operations.

**Ripple effects.** Read Pierce, MD, associate director for the IHQSE, said he’s pleased that the program has met its initial goal of educating broad numbers of people about the importance of process improvement and giving them the tools to design and implement projects. Work is now well underway, he said, in building teams that can manage multiple projects simultaneously. The third step, Pierce said, will be spreading changes that work in one area to others.

“We’re seeing glimpses of that third step, which is where teams collaborate generously and frequently with one another,” he said. “That’s really exciting.”

Pierce cited the example of a CTP project led by Perioperative Services that initially aimed to start the first surgical case of the day in urology on time. When that succeeded, the team looked to spread the changes to other surgical areas, taking into account the differences in preparing for other kinds of procedures. That phase is underway now, and slated to be complete this fall, Pierce said.

“It’s gratifying to push ourselves to do more than what we set out to do and to find ways to accelerate the turn of the wheel,” Pierce said. But he noted that the Perioperative Services project underscores the importance of training more people to shoulder the process improvement load.

“As we scale that project and move through others,” Pierce said, “the original teams can’t be expected to lead every new project.” One solution is the one-day “boot camps” to develop in others the skills needed to sustain and spread changes, he said. As CTP leaders are promoted to new positions, the CTP also offers the
opportunity for fresh talent to come through for training to ensure that work units sustain the improvements the original team forged.

Three years after its launch, Glasheen looks forward to the IHQSE playing a key role in helping the hospital meet its organizational goals. For example, leaders speak routinely to the importance of reducing average length of stay, but the CTP and other initiatives offer units the skills to accomplish the goal. “We’re now teaching leadership through organizational priorities,” Glasheen said.

The rapid development of the IHQSE also portends new challenges, Pierce cautioned. These include demands on IT for rapid access to data needed to drive improvements and measure their success.

“That’s part of a revolution in how health care is wired,” he said. “We may be generating requests for data faster than the system can accommodate. It’s a challenge we will need to wrestle with.”

The pace of change in health care will also complicate decisions about where to allocate process improvement resources, Pierce said. Average length of stay and 30-day readmissions, which are major priorities today, might be less relevant tomorrow, for instance, as new policy priorities are implemented across the nation.

“It’s hard to look into the crystal ball and know with certainty what types of work, precisely, will pay off in the next five years,” Pierce said. “One of our challenges will be in helping people to cope with that reality and be agile adapting to the changing health care landscape.”