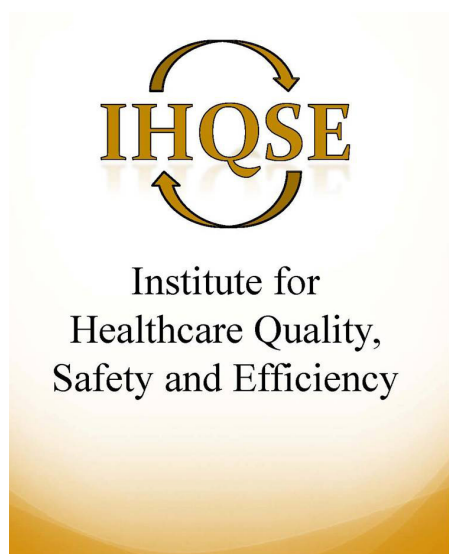


## Institute Trains Foot Soldiers in the Quality and Safety Battle

Think of a well-trained health care workforce and you probably imagine legions of physicians, nurses, pharmacists, respiratory therapists, laboratory technicians and many others capable of diagnosing illness, taking blood, managing oxygen, interpreting tests, and countless other clinical tasks.



But to Jeff Glasheen, MD, domain expertise is only the beginning. Being truly well-trained also means being committed to creating a safer, more efficient health care workplace, Glasheen believes, and he's taken a lead role in helping make that happen.

Glasheen heads the recently launched Institute for Healthcare Quality, Safety and Efficiency (IHQSE), a collaborative effort between University of Colorado Hospital, Children's Hospital Colorado and the CU School of Medicine and College of Nursing. The aim: give health care providers the hands-on training needed to build a system that delivers safe, high-quality care efficiently.

At the core of the Institute's work is a 12-month Certificate Training Program, which began in January. The inaugural class numbers 34

participants, including physicians, nurses, pharmacists, business managers, and financial specialists.

**Study up.** In 22 four-hour sessions, they are learning the skills in leadership, change management, effective communication, teamwork, systems improvement and innovative thinking that Glasheen and others believe are necessary to transform what is too often a fragmented and sometimes dangerously inefficient health care workplace. As part of the course, they will also apply those skills to a series of improvement-oriented projects.

That the current system needs reform is beyond dispute. By various estimates, waste in the form of avoidable hospital readmissions, medical errors, duplication of services, and so on consume up to 30 percent of a nearly \$3 trillion industry, Glasheen said. Millions of patients each year are either harmed or die while they are in the hospital, according to data compiled by the Institute for Healthcare Improvement, the Institute of Medicine and other groups.

"That's not true to the same extent at UCH or Children's Colorado," Glasheen said, "but the same themes exist."

With the proper training, he believes, providers can help both hospitals drastically reduce waste and minimize the numbers of preventable errors to not only maintain but also strengthen their position as national leaders in quality and safety.

**Right here, right now.** The time is right to begin the effort, Glasheen added. The Centers for Medicare and Medicaid Services (CMS) has long been moving toward a "value-based" system that rewards hospitals for quality outcomes and levies financial penalties for errors such as hospital-acquired infections. The pressure on hospitals to wring waste from their processes promises to grow as reimbursement rates from CMS and other payers get steadily thinner.

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"We can wait until the world changes and then try to retrofit three to five years from now," Glasheen said. "Or we can make sure that staff can do what we need to do now."

He acknowledged that UCH and Children's Colorado have done plenty of individual unit-based process- and quality-improvement projects. The Institute aims to train staff from across the entire clinical enterprise who will take what they have learned back to their units and build quality, safety and efficiency teams.

In Glasheen's terms, that approach promotes system-wide change rather than ad-hoc improvements in one unit, clinic or department.

**The long view.** "We're trying to design and support core teams that will do improvement projects over the long haul," said Read Pierce, MD, a hospitalist at UCH and Institute faculty member who wrote the curriculum for the Certificate Training Program. He envisions "embedded" teams working steadily to improve processes, and not just parachuting in for occasional one-off projects.

The program curriculum, Pierce said, is designed to provide the participants with a framework for analyzing system problems and devising solutions. It's built on two key pillars, he said: process improvement and innovative thinking.

The first is essential to taking what already exists and making it better, he said. "For example, we're already a provider of choice for cancer care and many complex pediatric conditions. That's a huge asset, but we can find ways to make care more affordable, the quality better and the processes more efficient."

At the same time, Pierce said, health care is in a period when long-established ways of doing business are being challenged. "We're trying to build a health care system of the future in ways we haven't thought of yet. That's innovation, and that's the harder part," he said.

The coursework is hardly a series of academic exercises. Participants get some didactic material – "theory bursts," in Pierce's words, or "enough information they can take and run with" – but the emphasis is on applying that information to practice.

For example, an exercise to build a structure that could support a marshmallow seems on the surface far removed from process improvement in health care. But put into a team context, it exposed the challenges of communicating, solving problems with limited resources and time, rapidly testing alternative solutions, and making leadership decisions, Pierce said.



*IHQSE Certificate Training Program participants show off their work in the 'Marshmallow Challenge', a team-based activity that teaches process improvement, creative problem solving, communication, and leadership. Left to right: Karen Lovett, RN, David Kuwayama, MD, John Craddock, MD, Stephen Tung, John Song, MD, Nancy Tena, RN, Gwen Kerby, MD.*

**Broad purview.** The program also includes plenty of coaching. Zach Robison, a process improvement consultant at UCH, provides guidance on the nuts and bolts of quality-improvement techniques, such as Lean and Six Sigma, while Gail Armstrong, DNP, an associate professor with the College of Nursing, helps with communication skills. All faculty members are available for assistance on a standing basis.

Another key goal of the program, Pierce said, is to help participants understand the health care environment from a broad operational standpoint. Most clinicians, for example, have a limited understanding of supply chain – the process by which the materials, equipment and supplies a hospital uses get from the manufacturer to the distributor and to the warehouse for delivery to an OR, exam room or procedural area. Yet managing the supply chain efficiently is vital to providing safe, cost-effective care.

"Health care professionals don't often learn about practical business management," Pierce said. "Too often we say, 'My job is patient care' or 'I don't have much to contribute to the business of medicine.' We tend to ignore the people in our organization outside the clinical delivery arena, who we don't see or interact with regularly. Yet health care delivery systems are enormously complex, and we want our clinical leaders to be able to make broad systems changes from a balanced and well-informed point of view."

The ultimate aim of the Institute is to help participants as well as the entire system establish a solid foundation for reasoned change: identifying gaps, devising improvements, collecting data and measuring results.

It may take several years to reach that goal, Glasheen said, but he believes the time and place are right for getting there.

"We have very progressive leadership at the top," he said. "People have thought about it and realized that without capacity, it's hard to effect the changes that we need."

## IHQSE Faculty

- » Gail Armstrong, DNP, College of Nursing
- » Derek Birznieks, MBA, UCH
- » Sarah Caffrey, MBA, Children's Hospital Colorado
- » Ethan Cumbler, MD, UCH, School of Medicine
- » Jeffrey Glasheen, MD, UCH, School of Medicine
- » Dan Hyman, MD, Children's Colorado
- » Patrick Kneeland, MD, UCH, School of Medicine
- » Read Pierce, MD, UCH, School of Medicine
- » Jennifer Wiler, MD, UCH, School of Medicine

[Detailed biographies of each faculty member.](#)