

## PODCAST 289: GEISINGER'S MOBILE HEALTH PILOT

By Mark Graban



*David J Schoenwetter, DO, FACEP and Kathleen Sharp, MBOE, MBB, led Geisinger Health System's Mobile Health Paramedics Program during its successful pilot phase.*

Two guests joined me for episode 289 of the Lean Blog Podcast: David J Schoenwetter, DO, FACEP, and Kathleen Sharp, MBOE, MBB, who spoke with me about some work they collaborated on at Geisinger Health System.

Geisinger Health System is an integrated health services organization in northeastern and central Pennsylvania. Dr. Schoenwetter is currently the Director of the EMS division and the Medical Director for the Geisinger Mobile Health Paramedics Program.

Kathleen is currently Director of Optimization at McLeod Health, but was the Senior Performance Innovation Consultant at Geisinger before she moved to that role. Kathleen is also a Master Black Belt and is currently working on an advanced certification.

There is some debate about when Kathleen was first introduced to Lean. As she explained, she was given formal training about ten years ago when the organization she was working for decided they wanted to go on a Lean journey and hired a Lean sensei.

***“It was really a fantastic experience because I can’t even truly say I recall learning it.”***

***-David J Schoenwetter***

“I was very excited that I was selected to be part of that I and went home, told my husband about it, and he just smiled at me,” Kathleen said. Her husband, who works for an engineering firm, told her that he had been teaching her Lean for as long as they’d known each other, just without the Lean

terminology. “So, my husband takes credit for me learning Lean, but formally it was through a sensei at work,” She explained.

David’s introduction to Lean was similarly vague. He was doing work at Geisinger under an initiative called Pride, and as a result connected with an innovation consultant, Kathleen herself, who was working on Geisinger’s award-winning Mobile Health Paramedic Program.

“It was really a fantastic experience because I can’t even truly say I recall learning it,” David said. “The way that the program evolved with Kathleen’s leadership on the improvement side, we really just sort of morphed Lean through the entire development of the program.”

### **The Mobile Health Paramedic Program**

The Mobile Health Paramedic Program is one of Geisinger’s many innovation activities. Under the program, paramedics are dispatched to a patient’s home to provide medical intervention or follow-up care when the services the patient needs are not available through existing resources. The pilot included just three employees based out of one town, Pittston, Pennsylvania.

According to a 2015 press release from Geisinger, during the pilot phase from March 2014 to June 2015, 42 hospitalizations, 33 emergency department visits, and an estimated 168 inpatient days were prevented. The program allows Geisinger to bridge gaps in care for several key patient populations—those who frequent the emergency department, medically complex

patients and patients diagnosed with heart failure—by using mobile equipment and audio-visual technology to connect with care providers.

### **Program Planning and Goals**

As David explained, the goal of the program was to have a rapidly deployable, clinical, very nimble and flexible resource that can address patient needs in a timely fashion.

***“It did take some courage on the part of leadership to support the program, because when the program was successful as we designed it, it reduced emergency department visits, and reduced admissions.”***

***-Kathleen Sharp***

“The question that we were posing is, how can we utilize that same resource [Emergency Medical Services (EMS)] to have a different outcome? Because we don’t want all our patients to go to the emergency department, we certainly don’t want anyone to go to the emergency department unless they’re going to truly gain value from that visit,” David explained. “It was definitely a disruptive change model.”

It’s a change that is also naturally disruptive to the usual fee-for-service system of most health care providers.

“The program was really focused on the value of the care,” David said. “That was the beauty of it being a pilot, we really knew the

target was to address utilization and make sure patients were getting the most appropriate care. The care that they were utilizing was going to give them the greatest degree of benefit rather than pushing them into the standard systems that were already present.”

“It did take some courage on the part of leadership to support the program, because when the program was successful as we designed it, it reduced emergency department visits, and reduced admissions – those are revenue drivers in the current world. So we were asking for support for the program, for something that was also going to drive away revenue,” Kathleen said. “We give a lot of gratitude to the leadership for being willing to let us pilot this to demonstrate that this works – and it does – so that we’re ready for where payment [trends are] going.”

### **Right Care, Right Time, Right Place**

David explained that rather than deciding what is the right care, the right time, and the right place at the outset, they focused on understanding the patient’s needs.

“We didn’t always know going in with every single patient encounter what was going to be needed, but we had built in the flexibility, the resources, and the connectivity, so that the people rendering the care to the patient were able to address what was needed by the patient at that time,” David said. “They were able to really tailor care, moving through the whole process that was very, very patient focused.”

Kathleen added that they invested the time upfront to investigate

not just outcomes, but also the characteristics would be important to the program from a service perspective and from a workplace perspective.

Kathleen also mapped out adjacent healthcare providers to determine who would be affected by the program downstream. This helped make sure the program was an integrated part of care without competing or duplicating services.

### **Building Healthcare Bridges**

David explained that the Mobile Health Paramedics Program focused on acute, episodic care. Acute care, being the opposite of chronic or longer-term care, is when the patient needs active but short-term treatment for a severe injury or an urgent medical condition.

“But if you wake up today and your ear hurts really bad, we may all agree that you’re not going to die from it, but it’s today and it’s acute. It happens to be severe pain, but that was the focus of the program,” David said. “The key was to develop that integration back as the patient slides between their acute, episodic needs, and their chronic care and wellness; and really bridging those gaps.”

Because they were dealing with diseases that are chronic diseases with acute episodes, like congestive heart failure, they certainly received training from the teams that manage those problems chronically David said. He said that the director of heart failure for the Geisinger Health System really embraced the program as a tool to help his patients with acute exacerbations of their conditions.

“It’s the bridge between those acute, episodic events of the patient and then back into their steady state, if you will, for the management of their chronic health problems,” David explained.

“The paramedics also served as a bridge to strengthen and bolster the relationship with their primary care, which is not how we typically think about a paramedic’s role, because we think of them often as the point between care in the home and the emergency department. Here they’re really

***“For Lean practitioners, one of the things we can often get caught up in, a pet peeve of mine, is when I hear people refer to resistance as something to be overcome, because resistance is just more information in an unpleasant form.”***

***-Kathleen Sharp***

providing that integration with their primary care physician, their

care manager if they have one assigned, and other services such as their cardiologist. It becomes part of an integrated team, which Geisinger is well known for,” Kathleen said.

### **Early Lessons Learned in Pilot**

This new program is a unique way of using the paramedic skill set, Kathleen explained. They get to see and hear the end of the patient story, whereas normally their involvement ends at the emergency department door.

“One of the early lessons, was in how we prepare paramedics for this particular role. With having three very interested, enthusiastic paramedics, that were engaged with this work, they were able to tell us, here’s the things that you have left out,” Kathleen said. “And so the paramedics taught us those elements, which was very helpful because when you have any type of turnover, or when someone is on vacation, you have somebody filling in, that allowed us to build the standard work.”

“They were so engaged because literally when they said, ‘We need to do this this way,’ it was fixed in



**David J. Schoenwetter, DO, FACEP**  
Medical Director  
at Geisinger Health System  
[linkedin.com/in/david-schoenwetter-4650138b](https://www.linkedin.com/in/david-schoenwetter-4650138b)



**Kathleen Sharp, MBOE, MBB**  
Director of Optimization  
at McLeod Health  
[linkedin.com/in/kathleensharp](https://www.linkedin.com/in/kathleensharp)

as long as a day or in as little as ten minutes, they were able to just really be so immersed, which of course is very much on the Lean mentality,” David added. “They were doing this new work, in this small group, where as they were learning this works this doesn’t, this is smooth this is not, this is not a great way to get in touch with people we should do this instead, They were able to implement those things in a matter of a 24-hour period. It really just took the email going through so that all three of them read it, and then the standard work had changed in such a way that they could do their job better.”

### **Stakeholder Pushback**

I asked about the discussion with stakeholders and the paramedics themselves, wondering if Kathleen and David received much pushback.

David first explained that the program only used paramedics, and not EMTs, and that Kathleen’s mantra was that she was there to help with the process, but that she was not there to give clinical advice, often saying that she didn’t even know how to take blood pressure.

“Now in the end the paramedics got tired of hearing that and they actually taught her how to take a blood pressure so then she could no longer say that,” He said.

Aside from the clinical advice issue, David said he thought that commonly, at least in healthcare, pushback is just a lack of understanding and that the truth of the matter is they don’t completely understand what they’re being asked to do.

“Nobody likes to fail, so when

you’re not really sure about what you’re being asked to do, or how you’re being asked to do it, or what even the end game is, I think it is very common to say, ‘Well, that’s not really my job, this person should do it, or that person should do it,’” he said.

“And Dr. Schoenwetter and I would have conversations about pushback, and he gave a lot of room and latitude and acceptance to make it safe for them to service problems. For Lean practitioners, one of the things we can often get caught up in, a pet peeve of mine, is when I hear people refer to resistance as something to be overcome, because resistance is just more information in an unpleasant form,” Kathleen said. “if you take it in that way, you can learn.”

***“The patient can still be the dynamic, multifaceted, person that they are and you can utilize Lean... I give a lot of credit to the Lean improvement methodology for being able to cycle through this and do the iterative approach, and continuing to make things better and better.”***

***-David J Schoenwetter***

### **Results and Outcomes**

Of course, there were a lot of lessons to be learned from the results and outcomes of the program.

“The primary results we were

looking at is an adjustment in utilization, so what were these folks admission rates, re-admission rates, ED utilization, total cost of care, avoided services—now avoided services, anybody in healthcare will tell you that is a tough one, when you try to figure out what you’ve saved by not doing something, how do you know you were not going to do it—those types of things,” David said.

One of the strengths of the program that David pointed out was that the paramedics had access to the final clinical decision maker. One example he shared was when the paramedics were dealing with heart failure patients. In those cases the paramedics could speak to either the nurse coordinator for the cardiologist, or directly with the cardiologist themselves. This gave the paramedics a direct pathway to get the information, the treatment, the guidance, etc., to ensure patient safety.

“Finally, was of course is the patient satisfaction, the voice of the customer. Because of the structure of the program, I will almost admit I think we kind of cheated. I mean by the very nature of the program we’re talking about,” David confessed. “During the hiring process, we were looking for individuals who were comfortable doing this work, and they’re paramedics so they’re used to being in people’s homes, and we generally didn’t have them on the type of time crunch that many other healthcare providers are under, so they were really positioned to get outstanding patient experience results, and then they delivered. We have just had fantastic patient experience results.”

“While this was not an objective or a deliverable, we weren’t looking

for attention or awards, we did receive both," Kathleen added. "The Wall Street Journal did do a feature article on the program, and it was recognized as the Emergency Care Innovation of the Year in 2015. And Geisinger was also recognized as one of the most integrated, innovative healthcare systems based on recognition for this particular program."

**"I think a struggle of every healthcare provider whether you're a physician, a case manager, a nurse coordinator, an advanced practitioner, etc., is what resource can help you really get more done, because there's an infinite amount of work to do."**

**-David J Schoenwetter**

Links to *The Wall Street Journal* story, and other media coverage, as well as some outcomes charts provided by David and Kathleen are available at [leanblog.org/289](http://leanblog.org/289).

## Sustainment

With great outcomes from the pilot, Geisinger is now working to figure out where the program is expandable.

"We're looking to find out where we have better opportunities to integrate between our care team and the patient. We don't feel that we have maximized the capacity of the program; I'll go one step further to say we've done the analysis and we're not maximizing the capacity of the program,"

David said. "So we're going to really target where our clinical and patient experience yield is, and then focus on getting to the providers, because this is really a dual resource."

David explained that it's clearly a resource to the patient who wants to have the care come to them in a non-harried manner, but it's also beneficial to the provider.

"I think a struggle of every healthcare provider whether you're a physician, a case manager, a nurse coordinator, an advanced practitioner, etc., is what resource can help you really get more done, because there's an infinite amount of work to do, and really, before we're going to be better at interfacing with the providers to give them another resource to help their patients," David said. "We know we can provide clinical value, so just being able to make patients' care and their experience better that's not as much of a challenge, the challenges are where is that going to fit in to a healthcare system that is so multifaceted, it's care delivery, it's finance, it's experience, it's geography, it's all these different things"

## Stealth Lean

What isn't part of the new approach is Lean jargon, and Kathleen and David both pointed out how Kathleen's lack of jargon use during the pilot helped its success.

"It's basically using the language in a way that is not going to distance yourself from the audience that you're trying to reach," Kathleen said. "At the time, we were building the program the organization had not selected any particular methodology, and so I didn't want people to be

distracted by, 'Oh, is that a Lean tool? Is that a Six Sigma tool? Is that Theory of Constraints? Is that appreciative inquiry?'"

"I didn't want that to be the dialogue, I wanted the movement of the work to be the focus. So, I put aside the Lean terminology, but used the concepts and the principles that were appropriate to apply to this particular set of work. And it was very effective."

Geisinger has since adopted and embraced Lean as their primary improvement methodology.

## Lean in Healthcare

I asked David about his thoughts on recent articles from other doctors pushing back on Lean saying that it was not appropriate for healthcare settings. David said that he had certainly pushed back on Kathleen about certain things, saying that patient care is not like manufacturing filing cabinets and so on, but that the win is when you look at improving processes.

"The patient can still be the dynamic, multifaceted, person that they are and you can utilize Lean." David said. "I feel we've demonstrated tremendous success actually using it, we've done much better care for our patients than we were doing, which is in no way to imply we were doing poor, but you can still see just the measurable improvement that we were doing, and I give a lot of credit to the Lean improvement methodology for being able to cycle through this and do the iterative approach, and continuing to make things better and better."

"And for the Lean practitioners, I would challenge them, that when they are getting that resistance from

physicians, take it in as information in its most unpleasant form. Are you being clear enough? Is there another way that you can approach it? And are you really responding to the values that the physicians are trying to get out of whatever that initiative is around? That resistance I think made me a better Lean facilitator," Kathleen said.

David added that physicians do really see themselves in healthcare as an advocate for their patients.

"Unfortunately, I think it's just a true statement that the way healthcare has evolved in the United States — I haven't seen much international so I can't speak to it — there so many different factors that are not advocating for patients. So, I don't want to make this that some physicians are stubborn because they're just stubborn, but I think a lot of them are resistant to the change because they've

seen plenty of changes that have come along that have not really benefitted their patients."

***"I wanted the movement of the work to be the focus. So, I put aside the Lean terminology, but used the concepts and the principles that were appropriate to apply to this particular set of work. And it was very effective."***

***-Kathleen Sharp***

"One thing that was very helpful was that we had embedded a measurement system, because you only have one day one of capturing measurement," Kathleen said. "That really helped with building credibility."

She said that it's also helped in her career as I work with other physicians. Though she can't speak clinically, using the language or data, leading with respect and wanting to help, and making sure the definition of value is the same for everyone involved was helpful.

"And it was really critical that we had a good, solid feedback loop; so as the paramedics would call me and ask me a question about process, sometimes that would overstep into something that I wasn't sure if that had a clinical impact or not; so we developed a very quick rapport, and so [David] knew I wasn't going to be overstepping with guidance or advice that I was giving operationally to go forward. That went a long way toward helping us to work through any other items that we might disagree on," Kathleen said.



[www.leanblog.org](http://www.leanblog.org)  
[www.markgraban.com](http://www.markgraban.com)

## CONNECT WITH MARK GRABAN



[facebook.com/mark.graban](https://facebook.com/mark.graban)



[@MarkGraban](https://twitter.com/MarkGraban)



[linkedin.com/in/mgraban](https://linkedin.com/in/mgraban)



[youtube.com/user/mgraban](https://youtube.com/user/mgraban)