Welcome to Conversations on Health Care with Mark Masselli and Margaret Flinter. Mark is the Founder, President and CEO of the Community Health Center, Inc., a provider of primary health care services for the uninsured and underserved in 13 cities and 218 service locations in Connecticut. Margaret is Senior Vice President and Clinical Director of CHC and is a Family Nurse Practitioner by profession.

Conversations on Health Care is a weekly look at the people and ideas that are transforming the delivery of health care in America and this week, Mark and Margaret, will be speaking with Dr. Frederick Southwick, author of Critically Ill: A 5-Point Plan to Cure Healthcare Delivery. In the Tech Report segment, Marianne O'Hare looks at a computer chip designed to help prevent heart disease. And we begin with this week's bright idea.

(Music)

Margaret Flinter: Each week, Conversations highlights a bright idea about how to make wellness a part of our communities and everyday lives.

Mark Masselli: When the Federal Health Reform measure goes into effect in 2014, millions of Americans are going to be added to insurance rules, adding pressure to primary care systems that already are experiencing a shortage of practitioners. It's expected that community health centers will become vitally important when used for serving the health needs of these additionally insured Americans. The Blue Shield of California Foundation, one of the California's largest health care grant making organization, sees this as a critical time to bolster community health centers to better accommodate the wave of new patients, while maximizing opportunities presented with the Affordable Care Act. Since 2003, when they launched the Clinic Core Support Initiative, the Foundation has donated $47 million to clinics throughout California to improve their ability to provide quality care to the underserved population. CEO, Peter Long, last week, announced an additional $7 million grant to strengthen the state's network of community health centers.

The money is being earmarked to assist existing clinics with operating funds, assist some clinics in better utilization of electronic medical records and create a database from the state's highest performing health clinics to provide a model of excellence for other clinics to strive towards including training the next generation of community health center leaders. A health foundation, funding improvements to clinics and health care training to improve access to quality care for our most vulnerable citizens, now that's a bright idea.

(Music)

Mark Masselli: Today, Margaret and I are speaking with Dr. Frederick Southwick, Professor of Medicine at the University of Florida in the Infectious Disease Division. He is also a Harvard fellow at the Advanced Leadership Institute and author of Critically Ill: A 5-Point Plan to Cure Healthcare Delivery, which comes out soon. Dr. Southwick, welcome to Conversations on Health Care.

Dr. Frederick Southwick: Thank you Mark.

Mark Masselli: As an internist and infectious disease specialist for over 30 years, you have seen a lot of misdiagnosed and medical errors during that time. In fact, your former wife was at one time a victim of a series of medical errors that almost cost her, her life. And I think it's well known that the medical errors or mistake cause probably over 100,000 deaths per year. Could you start off with the larger picture and shape up the dimensions for our audience of what the costs are to the health care system both in terms of human toll and financial cost as well?

Dr. Frederick Southwick: Yes. I think Mark these are the key elements and one of the primary motivators for me to write this book. And the case that I describe in the book about Mary I think reflects that human toll. This is only one person, one family. So if there are 100,000 deaths, there are probably over a million injuries that are very profound, probably more than that, and not only that, each individual has at least 10 close family members or friends that are profoundly impacted by that death. And they never -- I can tell you from my own personal experience, you never forget what happened to a loved one. That remains with you the rest of your life. But also the caregivers that make these errors due to poor systems they are what we call second victims. They also suffer. If a nurse gives a wrong medication and it kills the patient, imagine how that nurse feels. In general, they actually, in most cases they leave the profession and move on because they cannot deal with the suffering and pain that they actually caused.

And then if you look at the finances, I actually broke down the cost of Mary's care. If it had been routine, her care would have cost about $16,000 while if because of the complications and errors the actual cost was more like $95,000. If there are 100,000 deaths, it's somewhere in the order of $20 billion to $30 billion in losses. So these are huge amounts of money that we really can't afford, and on top of that, much more to me a greater concern is the personal cost of these kinds of injuries and deaths.

Margaret Flinter: Dr. Southwick, you begin each chapter of your book with a compelling detail or a question from the experience of your former wife and the medical crisis and near-death from a series of disasters. And it's a very gripping personal story. But you make the point that you blamed the doctors initially in her case for their mistakes but then you start to really understand the systemic nature of the underlying problems in care delivery so you started seriously studying other models like in automobile manufacturing. What can we learn from

those systems like manufacturing systems that can fundamentally help improve health systems and safety?

Dr. Frederick Southwick: I think what happens to all families are they blame the person who specifically cared for their loved one. And that's exactly what I did until I understood that these caregivers, I mean they were partly to blame but, they were victims of very poor systems. And I actually heard a talk by a very outstanding person in the field Steve Spear who is in MIT. He talked about the DNA of Toyota and how it could be applied to health care. And I have to tell you this was 15 years after the episode. I started crying because I realized that I had blamed those individuals rather than blaming the systems as well. And what we have learned is in most situations, errors are not caused by bad people, they are caused by bad systems.

So now what can you learn? Well Toyota I think have been the leaders for over 60 years in an effort to improve quality, to reduce defects in their cars. And there are three key elements of Toyota. First of all, protocols; every procedure must be carefully outlined and done in the same way and each of those protocols can be improved and perfected. So that's the first. The second is customer-supplier relationships. In Toyota, one of the key customers is for instance if you are the part supplier for a frontline worker on assembly line, that assembly line person is your customer and you respond to them very quickly when they need something. And this is a major problem in health care that we don't understand who the customers are and we don't respond properly. And the third and very, very important is constantly improving, looking at your processes, empowering everyone on the front lines, middle management whatever, looking at the processes and deciding how they may be improved. In this way, Toyota has dramatically reduced the cost of their cars, and at the same time, improved, dramatically improved, the quality of their cars. If we could do the same thing in health care, we could dramatically improve the quality of care and reduce the errors.

Mark Masselli: Dr. Southwick, in addition to your research and ideas about using other industries like Toyota and lean processes, you are also starting to look at other disciplines from the world of sports. How do you envision medical teams using playbooks and what other ideas from the world of professional team sports can also be brought to tackling the problem if you will be in health care.

Dr. Frederick Southwick: At the University of Florida, we have had a number of championship teams. And I was actually an athlete, I played football at Yale and lacrosse at Yale. Championship athletic team, the team that wins, makes the fewest errors. And what's powerful about that from an American standpoint is virtually everyone at sometime in their lives has played a team sport or they watch team sports. Therefore, we already understand how to work in teams, we already understand the concept of protocols because the playbook is a protocol and that's exactly what we need in health care. We in health care know so much

and our vocabulary is so different that we need to look through the eyes of our patients and that is a very important customer-supplier relationship. And the third key element is what's called in sports, game film. The coaches video all games and then play them back to the players later and they go over what went well and they go over what could be improved. Now, if each of us in health care would look at ourselves and say what went well and what we could improve, we could get better and better and better and really improvement is an iterative process. In other words, it's small steps, it's continually getting feedback and then improving based on that feedback.

Margaret Flinter: Dr. Southwick, you wrote the book with a long time nursing colleague Dr. (09:40 inaudible). You seem to clearly see that the further empowerment of nurses is one critical milestone in improving the quality of care and safety for patients. I wonder if you would share with us what are your ideas or best practices on further leadership governance and autonomy systems that really do empower nurses, not just nurses, empower all members of the medical team that take care of patients.

Dr. Frederick Southwick: As I analyzed this situation, I realized nurses are the frontline of care, they are the ones that are with the patients the majority of the time and doing other treatments. And therefore, if the systems are bad, they are the ones that make the error because the systems are bad and they suffer the consequences. And most important, nurses have no conflict of interest. In other words, they get paid to care and empathize and comfort their patients. So, one of the things that I found that's most important is to always focus on the patient. And since nurses do that, I encourage them that they be the patient advocate. When they see themselves in that role, they are much more willing to speak out.

One of the huge problems in health care is what I call the command and control model of leadership; in other words, the head of the hospital commands everybody below them to do things. This simply will not work when it comes to high quality systems and everybody in manufacturing, in fact, the military now has realized that you have to empower those on the front lines to be leaders and to speak out and make suggestions for improvement, and those high above have to listen to those suggestions and help to implement them. Nurses, virtually all caregivers, have to understand that each of us contributes in a different way and each of our contributions is equally valuable. In fact, in some cases, I believe nurse's care is the most, I do believe, is the most valuable part of patient care. They should be willing always to speak out when there is something that's not going right with their patients. And one of the ways we have emphasized that is we always on work rounds, we schedule our rounds so that the nurses know, the bedside nurses know when we are going to be there and we create a huddle and we make sure that the nurse is in that huddle and when you have a circle, then everybody feels much more equal.

Mark Masselli: What a great approach! We are speaking today with Dr. Fredrick Southwick, Professor of Medicine at the University of Florida, Harvard fellow in the Advanced Leadership Initiative and author of a soon to be released book, Critically Ill: A 5-Point Plant to Cure Healthcare Delivery.

Now your approach has been really to sort of the bigger picture how to eliminate types of waste and ineffectiveness in the current system. You have also been very critical of the overuse of testing. How is the reliance on expensive and unnecessary test endangering our patients?

Dr. Frederick Southwick: One of the big problems is that physicians who order most of these tests have not worried about cost or worried that much about or minimized the likelihood of a complication from a test or a procedure. And what's happened is they don't think about what the likely effect of their procedure is going to be or their test is going to be. In other words, they don't ask themselves how will I change my management if this test is positive or if this test is negative. Many of the times it turns out that they are simply confirmatory and are what I call icing on the cake; they really don't benefit. So, MRIs are actually very safe unless you happen to have a pacemaker but other procedures are not. For instance, cardiac catheterization, very commonly used today, and that procedure has a certain known side effect. For instance, I have seen several patients bleed into the back of the retroperitoneal area. And what's happened is when you increase the capacity to do cardiac catheterizations, it's been shown that the (13:35 inaudible) will do more of these procedures and some quite often they are not necessary, in other words they don't really change the therapy significantly. So the test becomes overused and the more you do that, the more likely you are to have a complication.

Margaret Flinter: Dr. Southwick, you are obviously a lifelong learner, and I really enjoyed reading about a labor-intensive, you described, a course you took I think at the Kennedy School and you said it taught me the fundamental campaign techniques used by politicians and unions and reformers to organize people. So tell us, how are you going to use the art of persuasion to move things forward not just in one teaching hospital or in one profession but really across the country as we enter this period of time when the Affordable Care Act hopefully will be implemented. What's the art of persuasion you are going to use?

Dr. Frederick Southwick: In order to organize people to change how they think about the world, you have to actively involve them and recruit them to take action. So a good organizer is a person who meets people one-on-one, finds that we share values together and then develops a leadership group then steps back and allows that group to create a strategy and tactics to bring about a change that they think is important within an institution. This chapter to me is the most important for health care because the culture right now I think is caregiver focus. And one of the key elements, and I have actually been working. We have a campaign at the University of Florida now based on these principles called the

Physician “I Promise” Campaign, and each physician is working, as an individual, is promising to in some way enhance our patients’ experience when they are in the hospital. And what we have done is I have empowered a leadership group of young physicians who are very energetic, very talented and we have created together a series of forums. We had a doctor-patient communication forum and we recruited patients to describe their personal experiences interacting with physicians and we have had a second forum on doctor-nurse communication and we had nurses describe how they see a communication with physicians and how that could be improved. And by doing this throughout the country, I think we can dramatically change the attitudes.

One of the sad things to me that I just don’t understand is that so many people in our country are against universal coverage. We know it’s been well shown that if we talk about deaths; we know that those are not covered because they lack health care coverage. We know there are 45,000 deaths per year due to lack of coverage. How can we as a people not be concerned about our fellow man. And similarly, what we are doing in physicians, we are asking physicians to get outside of themselves and to focus on our patients, focus on working better with our nurses, focusing on teamwork, and that’s what we as a nation need to do. We need to focus on teamwork, on being a community and caring about everyone and not just ourselves.

Mark Masselli: Well, you are right on about the access and certainly about the change of culture that’s needed in the system. I know at our health center, we are a patient level 3 patient-centered medical home, but we are still looking at how to improve that. We brought together the Dartmouth Institute with the GE Lean Manufacturing people and really looking through the process of how do we build a high quality, safe, efficient and patient-centered primary care. And you are very focused in on patient-centered care, doing more to respect the dignity of every patient while at the same time making it more efficient and streamlined. Talk to us a little bit about that.

Dr. Frederick Southwick: We have worked on this the most is a rounding system that I developed and it’s based on athletic principles we call Gatorounds because of the University of Florida mascot is the gator.

Mark Masselli: We got that one.

Dr. Frederick Southwick: Yeah. And Gatorades, we call it Gatorounds, after Gatorade. One of the key elements of all athletics and all systems is the fundamentals and one of the key fundamentals is how we communicate efficiently. So what we did is we created very efficient and whenever possible, we actually try to do all rounding in the patient’s room. So one of the things that I emphasize is obviously athletics means teamwork. A key member of the team has to be the patient and somehow this is ignored, who is going to take care of themselves 95% of the time. So if we don’t include them in the team, when they

leave the hospital, they aren't going to know what to do. And I think perceiving them as a member of the team makes them more equal because after all it's their body, it's their life and we really need to listen to what their concerns are so that they will comply, so they will follow the treatment plan.

Margaret Flinter: Dr. Southwick, one more sort of question I would like to go at relative to the people who provide the care and you have talked about burnout as a huge concern. It's a huge concern along the whole continuum of care and I thought you made the great observation that if a patient or their family sees their caregivers looking exhausted and harried, beware, because that burnout can have a direct impact on quality and safety as well. Tell us about this five point plan you have written about and how that might really increase the vitality and wellbeing for the whole health care team.

Dr. Frederick Southwick: Anyone who influences others to improve the care of our patients is a health care leader and that means everyone in the system can be a leader. Now, when everybody feels empowered to bring about change, they develop a new autonomy, a new sense of significance that makes their job so much more enjoyable. So that was one key, is leadership I realize. Then obviously we need to understand manufacturing, athletic systems, we need to understand the nature of human errors and how to assess those human errors and create systems to improve them. And then one of the most important elements, the fourth element is teamwork. Many doctors and particularly physicians I think don't understand how to work well in teams. The sole practitioner model, the Marcus Welby model still persists in the minds of many physicians. We need to understand that we have to work in teams and be coaches rather than dictate what goes on. And then the fifth element, which we have talked about, is learning how to bring about cultural change. Each of us can campaign to bring about cultural change.

So if you create a positive culture, if each of us feels we are a leader and are autonomous, if each of us is within a system that is efficient and reduces waste, if each of us is in a system that minimizes errors and each of us feels part of a team and has a team spirit, we will create a true joy at work. And each of us will become more focused on the ultimate goal which is improve the well being of our patients.

Mark Masselli: Well said. Dr. Southwick, we like to ask all of our guests this final question. When you look around the country and around the world, as it relates to improving health care, who should our listeners at Conversations be keeping an eye on?

Dr. Frederick Southwick: Well, one of the things that I think you will notice is that most of the dialog is by politicians, administrators, economists, and the actual caregivers and the patients are not speaking out. And my hope is that through this book, and through interviews such as yours, that we will begin to hear those

that are on the frontlines that are either benefiting or being harmed by the care and those who are giving the care and are affected by these systems that we have, will begin to actually speak out on what is needed to improve patient care.

Mark Masselli: We have been speaking today with Dr. Frederick Southwick, Professor of Medicine at the University of Florida in the Division of Infectious Diseases and Harvard fellow at the Advanced Leadership Institute. He is also the author of Critically Ill: A 5-Point Plan to Cure Healthcare Delivery, which comes out soon. Dr. Southwick, thank you so much for joining us today on Conversations.

Dr. Frederick Southwick: Thank you, I enjoyed talking.

(Music)

Marianne O'Hare: I am Marianne O'Hare with this Tech Report. A genomics researcher has developed a tool that has helped scientists across multiple countries and dozens of heart studies identify what could be the next target area for preventing and treating heart disease, the world's leading killer. Dr. Brendan Keating of the Center for Applied Genomics at Children's Hospital of Philadelphia designed a chip that could cross reference up to a million potential gene variance per person and which ones were likely to lead to heart disease.

Dr. Brendan Keating: 2000 heart genes, about 50,000 markers and then it was genotype in about 210,000 individuals across 60 different studies.

Marianne O'Hare: Meaning, a possible new treatment using anti-inflammatories to either prevent or treat the illness.

Dr. Brendan Keating: It's very tough right now to assess an individual risk based upon that. But it just gives us a very strong indication that that information is a key mediator in coronary heart disease.

Marianne O'Hare: The Cardio Chip, a prime example of how open source science and technology are intersecting the speed of discoveries for the source of illnesses and possible preventive treatments and cures. I am Marianne O'Hare.

(Music)

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