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"10 Years of Research: Critical Issues in the Transition of New Health Care Professionals into the Work Force"

**DAVID LEACH:** Thank you so much, Polly. I'm so sorry I can't be with you. Jackie and I have a place in Asheville and we were really looking forward to visiting North Carolina again. And when you say that your goal is to improve the health care outcomes for citizens of North Carolina, that's great. But mostly I'm sorry because of the importance of this topic. I think for way too long the formal education of nurses has been attenuated and getting this transition into the workplace right is one of the most important things that all of the health care professions can focus on and apply energy to. So I'm very happy to be with you, at least long distance, but I wish I could be there in person.

The objective, quite simple, is to clarify something that you have thought about, really all of your life. I think most of us from the time we learned to tie our shoes thought about competence and then as we became professionals we thought about it more deeply. But it's very important to be clear. We have done a number of things to strengthen the transition of physicians into the work force. We aren't through, by no means perfect. There's a lot of work to be done, but we can share our lessons, mistakes we made, things that worked that might be helpful to you. And also, I think there is a frame way of thinking
about this that might be useful. **(The next slide)**

I think it's important whenever there's a time of great change to sort of get grounded in our values and our experiences that are more enduring. It frees us up so that we can make change more readily. Dee Hock says that "Substance is enduring; form is ephemeral; preserve substance; modify form; and know the difference." And so I think we should begin, first of all, with a moment of gratitude. I never -- I've been a physician for 30 years and I have never anticipated that it would be this satisfying a career. A lot of things have changed and yet there have been some enduring things. So the next slide is a poem by William Stafford, a poet from Kansas who died, and he wrote this a few months before he died. I think that many health care professionals find it attractive; it speaks to them because they hunger for their thread. So think about this thread. The poem is called "The Way It Is."

"There's a thread you follow. It goes among things that change. But it doesn't change. People wonder about what you are pursuing. You have to explain about the threat. But it's hard for others to see. While you hold it, you can't get lost. Tragedies happen; people get hurt or die; and you suffer and get old. Nothing you do can stop time's unfolding. You don't ever let go of the thread."

I've read that poem probably a hundred times, and I always get something additional out of it when I read it again. And I think it is important to think, both at a
very personal level and also at a professional level, about things that we're doing that -- they're so good that we want to drag them into the new world and to be fair about that and to hang onto that, and then to modify other things. And it becomes easier to modify other things if you know they're not part of your thread. *(The next slide)*

I think in the case of medicine the context of our work and your work are similar, but also different. And so some of the particulars in the case of medicine -- each year there's about 16,000 graduates from medical school. They are joined by another 9,000 foreign medical graduates, so that every year about 25,000 graduates enter postgraduate, or what we call graduate training, in the United States. These are formal training programs. Three to seven years duration. The ACGME sets the standards for these programs and accredits about 8,000 residency programs that may have 100,000 residents. We do have leverage, which helps. And the leverage is that while we don't report to the federal government, we're not -- we don't report to the Department of Education, for example, but we -- the federal government does recognize our work in that they give about $6 billion a year towards graduate medical education and that money is contingent on being accredited by the ACGME. So if a major academic center were to lose ACGME accreditation, they'd probably lose about $100 million a year, so that's very heavy leverage. We are cognizant of that.
There are two other heavy levers. One is licensure, and you must be -- spend at least one, and usually two, years in an ACGME program to become a licensed physician. And board certification. And virtually all physicians would like to be board certified and that is contingent on completing a ACGME accredited program. That's an advantage that we have that, as near as I can tell, you don't. It is not -- You could go down the path of trying to get more leverage. I think that it's actually in the -- in professional self regulation it's important but it's not absolutely essential. There's also whole hospital credentialing activity that actually usually recommends it but we have no formal relationships with the Credentialing Committee.

In our work there's a great debate going on, and I think this is sort of at the heart of your debates, as well. Our residents, our post-graduate nursing students are employed and we have learned in the midst of a major anti-trust lawsuit that we appear to be winning. We've won and it's now on appeal, but if we were to lose that, it would be a clear statement that residents are employees and they're not. The National Labor Relations Board has already ruled that residents are employees. Yet, everybody knows the difference between a graduated medical student and the chief resident is so profound that something very meaningful has happened in those intervening years. And they could call it education or not, but it is a learning curve that is much
steeper than it is at any other time in an employee's life. And there are a lot of recognition that residents are, in fact, students, that they're not capable of functioning without supervision when they graduate from medical school. If we were to lose this lawsuit, we also would probably -- it would bankrupt the ACGME and other organizations in medicine, and we would revert to corporate standards, which is sort of what you have now. ACGME sets national standards. The standards are the same for all residents in a given discipline no matter where you are in the country. A corporate standard might be one in which a hospital would train you to do something that it needs done, and our grads would be well trained in that, but you would not become a complete physician or a complete nurse. And if you wanted to move to another hospital, they may or may not have that need. There would not be the sort of uniform recognition that you've been trained in a standardized way. One of the insights that occurs in the formal residency program is that really a program is an illusion that the only things real in a program are the people and the relationships they have, one with the other. And those sense of relationships either facilitate or inhibit learning, and that's very interesting to think about.

Another is the purpose of graduate medical education and it's easy to get off on an educational tangent and realize that it is good to develop people, but the real purpose of graduate clinical education is to improve patient
care, and I think that would be the real purpose of any formal transitional educational programs for nurses. And if you keep your eye on that and gather data about that and demonstrate that teaching hospitals get better outcomes than non-teaching hospitals, the public gets that concept, and they're willing to support it to some extent. It's very clear that one's individual formation is related to the context that they're working in, that if you're working in a sleazy environment, your formation is impaired. You know, if you're working in a highly ethical, competent environment, your formation is enhanced.

Now the other thing that we're all dealing with, nursing and medicine, is the so-called 38/53 problem. I had dinner with Paul O'Neal and he said he knew of no other industry, except health care, that accepted a 38 percent reimbursement on amount of skills. And I told him I thought that was about the right number, since only 53 percent of the time did we get it right, and that's where Glen's work shows that about 53 percent of the time we are actually delivering care that everybody agrees and that there's abundant evidence for is the right care. So that problem is a big problem, and it's going to require that we merge again. It is no one profession can fix that problem.

Now this is the one time I'm actually glad I'm not there because I think I may be way off on my assumptions about nursing, and you could start throwing things. But I would ask you to think about the national context of your
work. From my perspective and my limited knowledge, I think that nurses have variable skills at entry. They're trained, some of them, in extensive programs, some with abbreviated programs and then they show up for work. There are multiple accrediting bodies. My experience with multiple accrediting bodies is that that's a recipe to diminish the effectiveness of either accrediting body. Accrediting bodies, to some extent, are interested in something as crude as market share, and if one accrediting body has a certain set of standards, another could lower its standards to attract more business. It sounds very crass, but I think that this ability to stand a firm line and speak authoritatively requires that the profession have one accrediting body. As near as I can tell, there is no standardized post-graduate curriculum for owners. There may be curricula that are out for different types of specialist nurses but, in general, it's catch as catch can for graduated nurses.

You do have, and I may be wrong in all these assumptions, but you do have corporate, rather than national, standards, and that puts you at the will of particular hospitals who are under tremendous financial pressure, or have a fiduciary obligation to respond to that pressure in ways that help the corporations but may not help the health profession as a whole. As near as I can tell, and I understand that Nancy Spector, who's a great friend and who works across the street from me in her office -- as near as I can tell, licensure is required and that's a very
important potential towards the leverage. And I think, in general, graduated nurses are treated as employees rather than as students. *(The next slide)*

A really relevant question to anybody is how -- how do they think about management or leadership or work, and that the sort of fallback position is using people to get work done, but in fact, there's a slightly different way of framing it that just brings so much more energy to the table. And that is using work to form professionals. And the work that we do, as doctors and nurses, is noble work. It's very noble to help people when they're vulnerable. That is good work. And it does shape you, whether you call it education or not. And using the work that we do in a way that is designed to form professionals, rather than just using people to get work done, brings the whole person to the -- to the arena. When you are using people, you get a little bit of them, but you don't get all of their goodness. When they are, and you are, aware of the fact that this is shaping them, shaping their character, shaping their competence, more energy and more wholeness is present.

*(The next slide)*

The competence business is tricky. G. K. Chesterton, who was a noted author, was once asked by someone, You know, you have a lot of books. What one book would you like to have with you if you were stranded on a desert island? And *(the next slide)* his answer is, *A Practical Guide to Shipbuilding*. We need a practical guide
to competence, a practical guide to physician competence, a practical guide to nursing competence, and sort of isn't there a book we can read on this and sort of do it. And there isn't, in the case of either profession. I think we are doing things and learning by doing, but you're writing that book. You're writing that book today and in your other meetings. It is not written yet.  (Next slide)

I think there are trends in place that could help your efforts and our efforts and can help us partner. One is, in general, there's been a shift from process measures to outcome measures or accrediting bodies. Process measures have always been important, and process measures, the things that say you must have so many months of this, so many months of that, and so many library books, and this is your faculty to student ratio and so on. That tends to express ideal values of whichever profession you're talking about, and it actually ends up separating and fragmenting the various professions. But outcome measures, can the graduated nurse or undergraduate resident demonstrate this particular skill, actually tend to bring us together, especially around the patient's bedside. So that shift from process to outcome may be a unifying force.

Another trend that's helpful is the focus on microsystems. Paul Batalgen has done the most work with this and looking at the unit, the coronary care unit, the labor and delivery unit, the ambulatory pediatric clinic, the operating room, whatever that particular unit is, that's
where health care is actually delivered. That is where it happens, and if you look there, there's usually nurses and doctors working together and potentially, learning together. But in fact, right now that's only potential. It is not actual. But the more we focus on microsystems, the more we're forced to relate to one another in ways that are helpful to the formation of both parties. And so I think that's something that could help.

We are shifting -- We're not abandoning individual competence as an interest, but we realize that context is so important that we have started an initiative on institutional competence. What does it take for an institution to demonstrate good stewardship over the formation of its resident physicians? There's also, because of the IOM and lots of other good reasons, interprofessional learning, and like most of you, I reserve interdisciplinary learning to distinguish gastroenterologists and psychiatrists and interprofessional learning to distinguish doctors, nurses, pharmacists, and so on. And I think that society is getting impatient with the results that we're delivering and they're insisting that we talk to one another and learn together. That's a trend that's helpful.

Evidence-based practice is now a requirement, and that also requires that we work together. Learning portfolios, we adjust. We're in the planning stages of a learning portfolio that's organized around educational objectives for individual learners. That's a dataset that's
owned by the individual, not the program, not the institutions, and that they carry with them for the rest of their life. That kind of database also attracts further learning after graduation and building your portfolio, and it also focuses on -- could focus on interprofessional learning.

The fact that there are shortages of virtually every health professional, especially nurses, makes that sort of a burning platform and people, I think, may be more willing to consider alternative ways of doing business.

So I think these are all trends in place that could help you in your efforts and could help all of us in our efforts. *(The next slide)*

In medicine we, some years ago, identified six general competencies that we expect all physicians to know, independent of their specialty. And the way we did this was through a two-year period of extensive conversations with all the various specialties. And it was really a hoot, and it's extremely important. We accredit 119 different specialties, which were all very fragmented, and they needed to be fragmented. The knowledge base for a retinal surgeon is different than it is for a urologist or a psychiatrist. But we needed some unifying force that could draw all of us together and that had to be real. And we identified -- we started out with 84 competencies and we asked the entire community to rank order them in terms of importance and feasibility of measuring them, and these are the top six.
Patient care and medical knowledge sort of, people assumed, would be there, are there. The other four were sort of interesting. Every physician should be able to analyze their practice and know how to improve it. A deep focus on interpersonal and communication skills was needed. There was a hunger for a return to professionalism and being clear about values in our profession. And systems-based practice. When we first started this systems-based practice, one physician said to me, "What if you're not working in an HMO?" And that showed just how blind we all are to the system that we work in. And, of course, in fact, everybody works on a system and the system has profound influence upon your work. An analogy that helps, in the case of physicians, and I think would help in nursing, as well, is you can be a perfectly functioning kidney but if the heart fails, you're gonna fail. And once we had the six, we allowed the various specialties to speciate them so that under patient care/medical knowledge, that would be different for the different specialties, but they all had to respond to patient care and medical knowledge. We randomly learned that the other four were basically the same. Those skill sets are basically the same across all specialties, which was helpful. And (the next slide)

To reiterate that this brought together 119 different specialties, which should give you courage as you bring together your different communities. And again, a focus on process tends to divide and a focus on outcomes
tends to unify.  *(The next slide)*

So what we learned that might be helpful to you, one of the things we learned is that whatever we measure, we tend to improve, and that very quickly residents want to know what's on the test, and that suddenly becomes the source of learning. And on *(the next slide)* we found that you need different types of measures done over time to really get your arms around it. We've always had cognitive exams. To that we've added 360 degree evaluations, so now patients contribute to the evaluation of residents. Nurses contribute to the evaluation of residents, and medical students and peer residents and supervising residents and faculty. And it really broadens the perspective so that the resident who looks good on rounds but is actually pretty unreliable is detected. They can't get away with that as much any more.

An almost essential evaluation tool is direct observation and evaluation. And this occurs -- medicine has its many -- at the bedside where this is done. Surgeons in the operating room. Psychiatrists use one-way mirrors. But there are -- There's a need to have someone actually observe the learner doing what they're supposed to be learning and judging whether they have learned it or not. And then these learning portfolios, really a collection of assessment techniques, a collection of experiences, that the learner has that may serve particular education objectives. *(The next slide)*
So some of the lessons we've learned is that competence is a habit. It's not happening at the time of exam. That may be essential, but it's not adequate. You really want to know, not just can I do something, or do I know something, but actually do I do it, I have it in my performance on a regular basis. Can you count on me, that's what competence is. It develops along a continuum. The alternative to competence is not necessarily incompetence. It could be someone who's a novice, an advanced beginner, a proficient, an expert or master. There's a depth to competence, as well. It's not an on/off switch. It's more than just knowledge and skill, and it's not enough to know the rules. So (the next slide)

If we look at competence as a habit, we realize that assessment of habits require relationship over time and really relationships over time to make a judgment of an individual's performance. It's not simply passing a test. On (the next slide) It also exposes an assumption that we've lost track of in modern times, that being that our work is a cooperative rather than a productive art. And we've allowed the language of productivity to slip in and be honored in a way that diminishes the fundamental truth of the fact that our work is cooperative work. The quality of health care is dependent on the quality of the relationships. The relationship with the patient, the relationships with other colleagues. In the next slide, if you probe this a little bit more, it's obvious that in
healthcare we are, in fact, cooperating with the body's natural tendency to heal. The outcome isn't totally dependent on us. Likewise, in teaching we're cooperating with the mind's natural tendency to ascend to the truth. The outcome, if that natural tendency is impaired, ain't gonna happen. With management, we're cooperating with people's natural tendency to form communities. And if we don't get that right, and the communities use scapegoating, for example, as a cohesive force, rather than striving for common purpose, it gets pretty ugly. And I think we've lost this message in the modern world where productivity has ascended.

So in the next slide there's an underlying assumption that comes from this. That the quality of life for our patients and ourselves is directly related to the quality of the conversations in our lives. And if you sort of want to know how that's going, just reflect on the quality of the conversations over the last day, two days. What is it like in a hospital now? Are these happy conversations? Are these conversations that are quality conversations, because it affects our patients and it affects ourselves in the formation of all our professions.

(The next slide)

Another lesson is that the important things are hard to measure, and the next slide, Dee Hock who founded the DEFAC Corporation, has listed the criteria for hiring people in this order; integrity, motivation, capacity,
understanding, knowledge, and experience. And he said it has to be in this order because if you lack integrity and are highly motivated, you can get the organization in big trouble. If you lack motivation and yet are brilliant, nothing is going to happen. If you lack capacity, your understanding is limited. Your knowledge is limited, and your experience may be blind. Two people can have the same experience. One of them gets it, one of them doesn't. And yet, in fact, there's an inverse relationship between the ease of measuring and the importance of criteria. It's always pretty easy to measure experience and very hard to measure integrity. So we tend to get lots of measures about experience and knowledge and not pay attention to the really important ones which, I think, are integrity, motivation, and capacity. If you're thinking about a young nurse coming out of school and going into the experience and having no attention paid to the other domain, you can -- it's sort of a black and white world without the technicolor offering that could be there. *(The next slide)*

Knowing the rules is not enough. And we know that learners need to prepare for the unknown. How they think is as important as what they think, and I think will actually be more important over time. Bushsia Fatesia, Syracuse University, has done these cognitive simulations, using computers and scenarios. It doesn't require any medical or nursing knowledge. You're put in charge of running a big city and then all kinds of things happen that
-- the nuclear powerplant melts down and there's a flood, but how you manage these various crises and how you make decisions about what to do is studied in the simulation. And she's used psychiatric residents, surgical residents, and emergency medicine residents and studied them over time. And as much as a surgical resident learns from the first year of training to the fifth year of training, and it's profound how much they learn, they do not change how they think. On her graph they are all red and the psychiatrists are all green and they don't change how they think, relative to their training. And they do think differently. And in her view, CEOs, where she did this original work, are best if they have multiple ways of thinking, if they can think in different ways rather than just one particular way. And I think that's a whole part of education that, in medicine, is ignored and I think it's worth paying attention to again, primarily by measuring it. The residents who she measures over time and teaches actually different ways of thinking seem to end up stronger.

The next slide is a Stacey diagram, which she doesn't like, rather it's Ralph Stacey, but I still find immensely useful. And you'll see on the vertical axis that positive sign is at the bottom and that means that there's widespread agreement. Everybody who's an expert agrees this is the right thing to do versus the top of the vertical axis is negative where virtually nobody agrees that a particular action is the right one. On the horizontal axis, the
positive sign is to the left, and that means there is a deep understanding of the cause and effect relationships. If I do this, this will happen. Whereas, on the right there's no understanding of the cause and effect relation. We teach in what Stacey would call a control zone. And that's a very real zone in medicine. It's the world of clinical guidelines. There is abundant evidence. We know that it's the right thing to do and there's widespread agreement this is the right thing to do. But under-emphasized is the fact that a lot of medicine and a lot of nursing is -- lacks that agreement and there is not that degree of certainty about the phenomenon. You may not know what the patient has or if you do know what the patient has, there may not be adequate evidence or adequate agreement about what to do, and residents and nursing graduates and all of us need to know how to function in this complexity and even in the zone of chaos to understand where -- which of these zones we're in and how we can intervene most effectively, not just the sort of control zone where we tend to pay most of our attention to. (The next slide)

Competence proceeds along a continuum from novice, advanced beginner, competent, proficient, expert, and master. This according to Dreyfus, Betolin added the master category. And basically, on the next slide you'll see this moves from rules and if you ask a medical student or an intern What do you do if you have a patient with a fever, and they will reach in their pocket and pull out a
Washington Manual, and they'll say I do the following five things. It's rule-based behavior. If you ask a master What do you do if you have a patient with a fever, they will say I couldn't possibly answer that without seeing the patient. Their behavior is totally context driven.

And it's very interesting how you get from that rule-based behavior to context-based behavior. And in the case of residents, it's our hope, we think of medical students as novices and the graduated student as an advanced beginner. And we hope by the time they finish residency, they're competent. And then proficient is the first few years of independent practice in which you actually develop the intuitive capacity where you immediately see what's going on. Nurses do this extremely well. They can tell whether patients are sick or not, whether they're crashing or not when they see these patterns emerge. Experts not only see that but they see how -- what they need to do now, in this particular occasion. And then Betolin has distinguished experts from masters by saying experts hate surprise and masters love surprise. As an endocrinologist, if I declare someone has Graves Disease and am proven wrong and I get pouty-wouty, then I'm an expert. If I run around saying that I was wrong about the case; look at this case, isn't this an interesting case, I may be a master. The reason that this transition to the work force is so important is that that moves you from advanced beginner to competent and that opens up a whole new set of your
faculties, as you mature as a professional.

On the next slide, Hubert Dreyfus says, "To become competent, you have to feel bad." So imagine that you are a medical student and you've got all day to examine one patient, and all you have to do is get all the data that there is. You don't have to distinguish chicken pox from chest pain. You just have to get all the data. Now imagine that you're a first-year graduate and you've got ten admissions and you're a bit overwhelmed. You don't have time to get all the data on all ten of those patients. You have got to take a point of view from which to see the case and you have to say this detail is relevant, that detail is less relevant. And you formulate a little hypothesis. You say, The patient's short of breath. I think this is due to pneumonia, and you begin to ask questions that might reinforce that concept that the patient has pneumonia. And maybe you're wrong. Maybe it's a tension pneumothorax and the patient suffers because you're wrong, and you feel that. And Dreyfus says at that point you can take one of two paths. You can go back to rule-based behavior and say On Tuesday night shortness of breath from a pneumothorax and add that to your already thick rule book, or you can go to context-based behavior. But that requires that you actually talk again with the patient about what you overlooked that could have helped you figure out this was tension pneumothorax.

Somehow or other, in that act of feeling bad,
more of your capacities are opened up and it allows you, because your emotions are opened up, it's more than just your intellect -- it allows you to develop these intuitive capacities to see patterns of disease. And so there's a time when the graduated nurse and the graduated resident that they make a mistake and they feel bad, and that's a very important time in their development. It's absolutely a good mentor. And if, for example, I'm a resident who makes a mistake and I don't feel bad, I should probably get a little help so I can feel bad. If I am one, which is more typical, a resident who makes a mistake and then I feel so bad that I think I should abandon medicine and go do something else for a living, I need a little help in putting this into perspective in my own formation. It's a very important vulnerable time and it's almost immoral to have a graduated nurse encounter that without having proper mentorship to get over that and to actually aid in her formation or his formation so that they can become better nurses.  *(The next slide)*

Another reason why this is important is that, while knowledge and skills are a prerequisite, our real value to society comes from our capacity to make good clinical judgments. Learners seek practical wisdom. They know this. And that's why this is not a new concept. Aristotle, whose father was a physician, categorized the versions of learning as episteme, which is a cognitive knowledge; techne, a craft or art; and phronesis, that's
practical wisdom. That is what is learned in this post-graduated period. You can learn cognitive knowledge. You can even learn techne. But practical wisdom takes time and experience. (The next slide)

I asked John Kostis, who's the Chair of Medicine in New Jersey what this word "phronesis" means. And he said it was "knowing exactly which rule to break and exactly how far to break it to accommodate the reality before you." Absolutely elegant definition. And that is so crucial to our values to society. We have to teach people how to do that and it's a formal act of prudence. You're not breaking all the rules. You're just breaking this rule, and you're not breaking this rule all the way. You're just breaking it as far as you need to accommodate the reality before you. But the important thing is you have a mental model of the disease and there's a real patient before you and you always are biased toward reality, towards the real patient, rather than towards your mental model. It's an act of humility and prudence and it's not to be recklessly done, but it has to be done almost every time. And so this is very rich and has been in the formation of a health professional. And to ignore that and just have young nurses on the work force without paying attention to that is serving neither society nor them, nor all of us, very well. (The next one)

In a sense we're talking about improvisation and people don't like to talk in public about how much of
health care is improvisation, that, in fact, that it is, and improvisation engages both rules and values. And health professional formation must pay attention to both of those, and we have paid attention to rules, but not to values.

And the next slide, which will date me, because I did bring Robert Pirsig's book, *Zen and the Art of Motorcycle Maintenance*. He says, and I think when you're talking about competencies, it's important to remember this, that "quality isn't something you lay on top of subjects and objects like tinsel on a Christmas tree...it comes from the cone from which the tree must start." It comes from the inside out. Competence is -- in one sense it is like merit badges that you put on your arm, but in fact, it's much deeper than that. *(The next slide)* Which is why it's so important to have communities that support character development, to paraphrase Aristotle, character is determined by community, and community is determined by character. So my character is determined by my childhood community, family, school, community, and then, in turn, as an adult, I contribute to the communities that I'm in and the quality of that community is affected by the character of all of it. So there's this reciprocal relationship that makes this work important. *(The next slide)*

In Gardner and Csikszentmihalyi and Damon's book, *Good Work*, they say something that's relevant to our work, and that is "Why is it that experts primarily teach techniques to young professionals, while ignoring the values
that have sustained the quests of so many creative geniuses?" We've got to pay attention to our values. *(The next slide)* This is translated into how can we prepare the next generation of health professionals to have values as well as knowledge and skill. And *(the next slide)*

A series of matryoshka dolls. So I'm a human and then I decided to become a nurse. Then I bring my human values into the community of nursing and I am working in a particular institution that has its values, that are shaping me, and I it. And I suddenly have professional societies that I go on to. They have values that are shaping me, and me it, and I live in a society that has particular values that govern and influence all of us. So there's this dynamic going on that can either support human self or crush it, and I think it's important to pay attention to that. *(The next slide)*

I think that this idea of thinking of education as formation, as a shaping, shaped by both internal and external variables, is important. This is a journey to authenticity and it comes from the inside out. Somewhere deep in each of us there's what Jaspers calls "unconditional imperative," which is a command of my authentic self to my mere empirical self that defines who I am. It's timeless. We join a profession and there are shared assumptions in the profession that provides some foundation for action. That's important. But if you want me, all of me, it has to be compatible with my individual values. And first of all, I
have to know what my individual values are and how they play out in the field. And we have to pay attention to that and support that in the formation work we do. *(The next slide)*

The first thing you encounter is that it's very easy and, in fact, normal for me to put on a false self. You see this in adolescents all the time. It's like wearing a set of clothes. Today I'm going to be this way. Tomorrow I'm going to be that way. And I sort of try that out. And there's a variety of reasons why I don't expose my true self, mostly fear. And I get fluent in dealing with this false self. To get to have the whole nurse or the whole doctor show up for work, you have to be in touch with and aligned with your true self, which is part of the work of formation and it's hard to do that.

*The next slide* shows that it's very possible, and usually the case, that only part of me shows up. My intellect will show up. My ego will certainly show up, but to get all of me, it is a much trickier business, and there is some sort of inner teacher that can facilitate that. Parker Palmer refers to that as life on the Mobius strip, and *the next slide* shows a Mobius strip with this remarkable ability to, without crossing a boundary, go from the outside surface to the inside surface and back again. So if you sort of imagine that your finger is riding along the outside of the surface on the left-hand side, and you just follow the lines around, the next thing you know you're on the inside and there's this fluidity that is used as a metaphor
for living the undivided life. There's another representation on the next slide. And that actually is what health care professional formation is all about. *(The next slide)*

If we answered what kind of community might invite the whole person to show up. Frenzy doesn't help. And, of course, frenzy is pervasive. *The next slide* is a section from one of Robert Thomas Merton's journals. "There is a pervasive form of modern violence to which the idealist...most easily succumbs; activism and overwork. The rush and pressure of modern life are a form, perhaps the most common form of its innate violence." *(Next slide)* "To allow oneself to be carried away by a multitude of conflicting concerns, to surrender to too many demands, to commit oneself to too many projects, to want to help everyone in everything is to succumb to violence." Sounds like a health care system to me. *The next slide* concludes the segment. "The frenzy of the activist neutralizes his or her work...It destroys the fruitfulness of his or her work, because it kills the root of inner wisdom which makes the work fruitful." That's part of the problem. We've created an environment laden with frenzy that make it very hard for us to get in touch with our inner wisdom, let alone teach others how to do it. And that's what we have to overcome. *(The next slide)*

If you're foolish to do this work, it's best to work with nature, and I think all humans have three
faculties that are helpful. They all have intellect, which merely has as its object the truth. They have a will, which seeks goodness. And they have an imagination, which seeks beauty. *(The next slide)* This one translates into the work of health care. The empath or the intellect is to discern the truth, what's going here. The will is to make good clinical judgments, and the imagination does so with harmony and creativity and beauty. *(The next slide)*

These values that we could reinforce in health care derive from this in a very natural way. The value of integrity, discerning and telling the truth. The value of altruism, putting what is good for the patient before what is good for the doctor or nurse. The value of practical wisdom or prudence. That is beauty in clinical judgment. And the fourth virtue, arete, which is integrate all of these virtues to excellence.

So the next slide, I think, at the nub of this is the fact that the quality of patient care and the quality of professional formation are inextricably linked. If I am 200 miles away from an academic health center, it's just me and the patient, and I give shabby care to that patient, my formation is made shabby by that encounter. And if I give excellent care, my formation is made excellent by that encounter. You cannot separate those two things. And that is very important principle as you go about your work today and beyond.

I'm gonna flip through this because I think I'm
over time and we’re going to take the next slide, the model, and I'm just going to cover it lightly. This is from Sholom Glouberman and Brenda Zimmerman on complicated and complex systems. And the next slide which is a table with three things. I think it’s actually a very useful frame. I think the formation of health professionals is a lot more like raising a child than it is like sending a rocket to the moon. And Zimmerman has categorized these phenomena into simple phenonemas; recipes, where you can use a simple recipe and a standardized product results. A rocket to the moon, which is complicated and requires rules, requires experts, and it does exist in health care. There are complicated phenomena in health care. And then the third analogy is raising a child. Now if you sent one rocket to the moon, it actually enhances your chances of sending a second rocket to the moon. But if you raise one child successfully, it does not ensure ... because every child is unique. Every patient is unique. Every nursing student is unique. Every resident is unique. And so your values form this work, so if you're sending a rocket to the moon and the engine overheats, your values are not very helpful. You need a technical manual to know what to do. If you're raising a child, a child-rearing book is not that helpful. Your values will allow you to adapt to the child's response, and so you need both rules and values. (The next slide)

I'm gonna skip over this in the interest of time. It was two of our initiatives, competence and reform
of duty hours, to demonstrate these two phenomena, but I think that I'm going to go over them, so we'll go to the next slide after that. Conversations, we'll skip that. The next conversations we'll skip that. Duty hours versus competencies, we'll skip that. I do want to get this one slide that's entitled Particularly important at this time: rules versus values. And we're in an era of performance measures, which is good, but inadequate. Performance measures are based on science. They are rules. They're easy to measure. They're evidence based; did you do it or did you not do it? They assume the Stacey control zone. Competence is much deeper and it involves both art and science. It involves values, as well as rules. It's hard to measure. It's context and evidence based. It proceeds along a continuum and allows you to function in all three zones. **(The next slide)**

We're moving in our world from a world that's qualified to a world that's competent. In other words, I graduated from an institute in an accredited program. I'm board certified. My training largely emphasized medical knowledge. There's no warrants to anybody that I'm competent, but I am qualified to practice medicine. This is a scheme that's very useful to doctors. It's not very helpful to patients. We're moving to a world of competence where I will be declared competent based on my habits, my actual performance, based on a balanced set of measures and attributes. There is an implied warrant there. There is a
kind of a statement that says you can trust me to behave in this way, my habitual behavior. That's very useful to patients and troublesome to doctors. I think that that model could work for nursing, as well. (The next slide)

Community leads to clarity, and clarity leads to courage, and we need courage. And we need clarity, and we need conversations like you're having today to sort of get this right, and to have the courage to do it. (The next slide)

I talked a little bit about postmodernism. I'm going to skip it so it will be there if you want it, but let's move on. And the particularly important slide we're gonna skip, too. We're gonna go back to Dee Hock's quote, "Substance is enduring; form is ephemeral; preserve substance; modify form; and know the difference." The next slide, and I would argue that values are enduring; rules are ephemeral; preserve values; modify rules, and know the difference. And realize that we don't receive wisdom, that we discover it. We discover it after a journey that no one can take for us or spare us. And yet, the next slide, community can help and good conversations about professional values helps. That health care professional formation is never complete. We are all pilgrims, on the way and oriented toward fulfillment.

Now practical things that can be done, my own bias, and I'm not well informed, but I would say that every new nurse needs mentorship for at least three years, and we
have to avoid abandoning our young people. I think faculty, which, of course, with all the health care shortages, you have shortages of faculty. So do all the other professions. But we could pull together in pharmacy, physical therapy, respiratory therapy, medicine. All of these could serve the faculty if we got this right. Using data is something that can be very helpful in persuading hospitals and others about the importance of this work. (Next slide). My favorite mantra is "To teach is to create a space in which obedience to truth is practiced." And the last slide, "To teach or to learn is to create a space or community in which obedience to truth is practiced." And that's what you're doing today.

I'm so sorry I can't be with you, but for all I know, by now you've all left and I'm just ... I enjoyed talking with all of you, or just myself.
Q&A

POLLY JOHNSON: Thank you, David. We have time for maybe two questions, if someone has a question that they want to ask.

POLLY BEDNASH: David, this is Polly Bednash. I have one question for you. Early in your conversation you talked about the general competencies and testing for the general competencies. And one of the areas you focused on is the issue of patient care. Can you talk with me about how you approach that, given the wide array of specialties that you have, and how you address that array of specialties in a form that allows you to test patient care issues in a general way. For nursing that happens to be a burning issue right now at a number of levels, so you might be helpful for us here. Thank you for your answer.

DAVID LEACH: Thanks for the question, Polly, but for patient care we considered that the skill set you need to take of patients. So it did vary across the specialties. But it was basically what to do with your hands, what you do -- can you conduct a proper interview? Can you gather the data adequately? Can you perform a given procedure? And it is really the bedside skills of patient care and if you are a cardiologist, that may mean can you do an echocardiogram. If you're a psychiatrist, it may mean can you manage a particular crisis. But whenever you deconstruct competence, it's artificial, and we chose to deconstruct it into six competencies, because you have to
deconstruct it to measure it. So this is sort of a skill set, and the kind of measures we would use are direct observation of the person to see them performing a procedure or interviewing a patient. Feedback from others who see them in their daily work. There's less of this on the cognitive exam which is more apt to test knowledge, but it can be part of a learning portfolio.

POLLY BEDNASH: Thank you, David, just again, to clarify this. So you really don't have one generalized assessment of competencies for all those. It varies according to the specialty and what you see are the general competencies for that specialty.

DAVID LEACH: That's true. We do have six competencies and, in general, four categories of assessment tools. And it turns out that there are not 119 different. For example, all surgical specialties, the directly observed behavior will include things like proper handling; can you name the instrument? Can you use the instrument correctly? So that assessment tends to be a unifying force that balances the deconstruction of competence from the (inaudible) competence.

POLLY JOHNSON: Patricia, you had a question?

PATRICIA BENNER: Yes. This is Patricia Benner and I work a lot with Dreyfus'

DAVID LEACH: Oh, it's such an honor to meet you. Of course, you did. You did the whole thing from novice to expert --
PATRICIA BENNER: Right, and so I just love your seat on the implications for medical education and I do think it is a real ground for agreement. I'm participating in the Carnegie Foundation study of medical education and nursing education just now, which I know that your group is also involved in, as is AACN. Currently, what the medical group is finding out is that in that three to seven years duration of residency in medicine, there were a lot of really discontented residents who feel like they are used as, let's see, how can I put this nicely? Scutwork is one word that comes out in the very research oriented interviews, but that they get bogged down with a lot of clinic assignments and work that don't meet their educational needs.

DAVID LEACH: Right.

PATRICIA BENNER: And, of course, nursing has been there first, in our apprenticeship programs, but how to create institutional responsibility for formation, because we really will have only as good a professionals as the institutional space allows over time. So I really think that this is a place where we could really work together to create institutions that are more fit for both the values and the professionalism of the practice and not just formed on the corporate model. But I would like your thoughts on how we build into -- how do we keep out of the production mode in that vision for residency, because I agree, nurses need mentorship after graduation. So any thoughts on that
will be most appreciated.

DAVID LEACH: Well, thank you for your question and I've read your stuff and I've been so impressed with it, And you're quite right, the resident -- I think residents and nurses share in common the Holly (inaudible) quote that the health care system is broken and residents and nurses live in the cracks of a broken system. They're the glue that holds it together, that they get things done when nobody else can get them done, when the system doesn't automatically get it done. And the problem with that system is that it's a vigilance-based system with people who are tired, and when we reform duty hours for residents we -- we now survey over the internet a third of the residents every year for two years and we've surveyed 60,000 residents with an 85 percent return rate. And we know our perception of how much non-educational work they're doing just because nobody else is doing it, and in doing the duty hours pays some attention to that, but it still is a huge problem. And I think that you're absolutely right, we could partner on this and sort of define what the essentials are for good patient care and not have us be a vigilance-based system, but rather get systems in place that support patient care and do that not counting on exhausted residents and nurses to pick up the slack when things break down. And so I see a lot of forces in play like this great interest in the Toyota production things that Pittsburgh has demonstrated and others that really are paying attention to the process of
health care and trying to improve it. I think on a given microsystem if we could partner, we could say this is the way we're gonna take care of patients, period, the end. And nobody could trump us. But if we don't partner, then we can play against each other in a way that weakens both of us. And so I agree with you. I think defining the coherent programs that pays attention to the formation of health professionals of whatever age and whatever experience level, on a given microsystem, and just insisting that's the way we're gonna deliver health care. The production types have had it their way for the last, you know, few decades, and this is the result. They're gonna try it a different way and I don't think anybody would stop us. The financial issues are daunting, but when you're -- when you're taking the lives of 100,000 people a year, because of medical error, we've got the attention of the policymakers and the public. And I think there is -- it's a right time for change. I don't know exactly how to do that, but I would be very open with working with any of your groups.

POLLY JOHNSON: Well, I thank you very much, David. It's been a wonderful challenge that you've set in front of us and extremely thoughtful information and for the audience, we will get copies of the PowerPoint for all of you.