

### Transcript Details

This is a transcript of an educational program. Details about the program and additional media formats for the program are accessible by visiting: <https://reachmd.com/programs/conversations-on-health-care/toward-medical-education-portals-for-anyone-anywhere-a-look-at-nextgenu/7040/>

### ReachMD

www.reachmd.com  
info@reachmd.com  
(866) 423-7849

---

Toward Medical Education Portals for Anyone, Anywhere: A Look at NextGenU

Mark Masselli:

This in Conversations on Health Care. I'm Mark Masselli.

Margaret Flinter:

And I'm Margaret Flinter.

Mark Masselli:

Well, Margaret it's been a busy couple of weeks in the courts with the healthcare law continuing to undergo legal challenges from a number of sectors with some recent decisions in several district courts for many more controversial interpretations of the Affordable Care Act.

Margaret Flinter:

Well that's right Mark. On the heels of the Supreme Court's Hobby Lobby decision that allowed closely health corporations to refuse to cover certain birth control methods based on religious beliefs, there were lower court rulings on some challenges to the healthcare laws tax subsidies for people who are seeking to buy health insurance on the Exchanges.

Mark Masselli:

The US Circuit Court of Appeals for the District of Columbia ruled that based on a literal interpretation of the language in the Affordable Care Act, states that did not set up their own Exchanges are not allowed to provide subsidies to those residents gaining coverage on the federal exchange.

If that decision is upheld by the Supreme Court, millions of Americans would not only lose their subsidy to make coverage affordable, they would no longer be required to own insurance under the individual mandate and could lose insurance coverage altogether.

Margaret Flinter:

Well, this is far from the final word Mark, but that ruling could have devastating consequences. I think it needs to be noted though that a second ruling on the matter in a US District Court in Virginia upheld really the same thing. The legality of the tax subsidy saying that the IRS does have within its purview the ability to authorize subsidies for government mandated programs.

So essentially, we have a diametrically opposed view from the DC Circuit Court decision. We're kind of used to those diametrically opposed views coming out of Washington these days.

Mark Masselli:

We are and hopefully on a subsequent show, we're going to have Jonathan Gruber on, who was cited in that US District Court in Washington's ruling and we'll hear from him, his thoughts on it. It's left quite a lot of confusion though Margaret. Millions of Americans have gained coverage during the first open enrollment, and at least 75 percent of those Americans are receiving some sort of tax subsidy to offset the purchase of that insurance. So the majority of those who gain coverage could be impacted by these decisions. Americans stand to lose some 36 billion dollars in premium subsidies if the DC Court decision is upheld.

Margaret Flinter:

And the Urban Institute paints a pretty grim picture if this scenario does play out Mark. Essentially, the Affordable Care Act, I hate to say it this way, but people are saying it becomes a blue state law in which only those folks in states, who set up their own insurance exchange, can take full advantage of the law's promise and that is to find a way to ensure that all Americans are covered. So lots more

to follow in this incredibly fascinating story.

Mark Masselli:

Another story that's unfolding is the ongoing crisis with the tens of thousands of immigrant refugee children being dispersed around the country while they await some kind of immigration hearing. It's a humanitarian crisis that's unfolding right within our borders, and there's no simple solution to this problem either, though I read with great interest that George Will, the conservative columnist said, just let them in. We can manage that here in America.

Margaret Flinter:

Well, we were glad to see that because others such as the federal government had been overwhelmed by the numbers of children entering the country and so much political discussion, some backlash across the country over what to do with these children. But the fact remains, they're here, they're children, they need to be treated in a humanitarian way and from what we're reading, many of them have escaped just unimaginable violence and threat in their home countries.

Mark Masselli:

Numerous organizations like Save the Children are stepping in to assist in the process to see to it that they're needs are met and that children are properly cared for. So another unfolding story that we're keeping our eye on Margaret.

Margaret Flinter:

And our guest today has her eye on global public health issues as well. Dr. Erica Frank is the Canada Research Chair in Preventive Medicine and Population Health and a Professor in UBC School of Population and Public Health. She's also the Founder of NextGenU.org, a free global online university that's been developed to meet the growing need in the health sciences, an interesting approach to the need to train more healthcare workers around the globe.

Mark Masselli:

Lori Robertson will also be checking in from FactCheck.org.

Margaret Flinter:

And no matter what the topic, remember, you can hear all of our shows by going to [chcradio](http://chcradio.com).

Mark Masselli:

And as always, if you have comments, please email us at [chcradio.com](mailto:chcradio.com) or find us on Facebook. We love hearing from you.

Margaret Flinter:

We'll get to our interview with Dr. Frank in just a moment.

Mark Masselli:

But first, here's our producer, Marianne O'Hare with this week's headline news.

Marianne O'Hare:

I'm Marianne O'Hare with these healthcare headlines. House and Senate negotiators announced an agreement on legislation that would allocate 17 billion dollars to overhaul the Department of Veterans Affairs sprawling and beleaguered healthcare system. But the deal doesn't give the department everything officials there had said is needed to fix the problems. The agreement set off a rush on Capitol Hill to gather signatures for members of conference committees working on the bill, so it could be put to vote in front of the full House and Senate before lawmakers adjourned for August recess. The legislation ends as sometimes \_\_\_\_\_ (05:07) standoff over how much to spend to begin to fix the department and it would help ensure that veterans who face long waits to see doctors at the department's facilities could get appointments more quickly with private physicians. The agreement came about from some rare haggling across party lines, something not seen much in Capitol Hill these days.

Medicare's Hospital Insurance Trust Fund, which finances about half the health program for seniors and the disabled won't run out of money until 2030, four years later than projected just last year and 13 years later than projected the year before the passage of the Affordable Care Act. Unlike Medicare, however, the part of Social Security that pays for people getting disability benefits is in far more immediate jeopardy. The Disability Insurance Trust Fund is projected to run out of money in 2016, two years from now.

On Medicare, the news was mostly positive. Medicare, considerably stronger than it was four years ago, according to Health and Human Services secretary Sylvia Burwell. She noted the recent slow growth of the program's spending will likely mean that Medicare Part B premium charge to beneficiaries, currently \$104.90 per month, will remain the same for the third year in a row. That's zero growth. But whatever reason, no one can test this slow-down has been dramatic. Medicare, which covered an estimated 52.3 million people in 2013, spent 582.9 billion, and for the second year in a row, per beneficiary costs were essentially unchanged.

And how we train our doctors. An expert panel recommended completely overhauling the way government pays for the training of doctors saying the current 15 billion dollar system is failing to produce the medical workforce the nation needs. They're recommending substantial changes according to health economist and former Medicare administrator, Gail Wilensky. The federal government mostly via the Medicare program currently provides more than 11 billion per year in payments to support the training of doctors who've graduated medical school. Most of that goes to the hospitals that sponsor interns or residents. There are persistent problems with uneven geographic distribution of physicians, too many specialists and not enough primary care providers.

HPV, the virus that causes most forms of cervical cancer, there's a vaccine for that, but you wouldn't know it from the numbers of teens receiving it. Though the vaccine against human papilloma virus is highly effective in preventing certain forms of cancer, the number of preteens getting the vaccine is still dismally low, according to the Center for Disease Control and Prevention. One of the top five reasons parents listed they hadn't vaccinated their children was that it hadn't been recommended to them by a doctor or a nurse. Federal health officials have for several years been recommending that all preteen boys and girls be vaccinated around age 11 or 12, before the initiation of sexual activity. But data from the national survey released shows only 57 percent of young women ages 13 to 17 and only 35 percent of young men have received one or more of the dose.

I'm Marianne O'Hare with these healthcare headlines.

Mark Masselli:

We're speaking today with Dr. Erica Frank, Professor at the University of British Columbia School of Population and Public Health where she's Canada Research Chair in Preventative Medicine and Population Health. She's also Founder, President, and Research Director at NextGenU.org, the world's first online portal to free accredited higher education in health science as well as in other disciplines.

Dr. Frank has been the Co-Editor in Chief of the Journal of Preventive Medicine and served as the US President of Physicians for Social Responsibility and she earned her master's in public health from Emory University, her medical degree from Mercer University, and her residency at the Yale School of Medicine. Dr. Frank, welcome to Conversations on Health Care.

Dr. Frank:

Thank you so much.

Mark Masselli:

We are in this midst of radical transformation in healthcare and how we deliver it, how we teach it and disseminate it. You've been instrumental in creating the world's first online university focused in on health sciences and this is an area not generally associated with online learning by traditionalist in the health industry, although we're seeing this proliferation of MOOCs, massive open online courses being generated from a host of prestigious universities around the world.

So tell us what's different about NextGenU and what was the genesis for the idea?

Dr. Frank:

We're the world's, essentially the world's first free university. We're the first portal to free accredited higher education. So the first place you can go to and get credit from a university for taking a course for free, which is different from MOOCs right. They give courses for free, but don't give credit, or they give those courses for free and then you can get a certificate if you're willing to pay.

So all of that's bundled together for NextGenU. And then we also have a lot of other characteristics that are different from MOOCs. Some shared with traditional education. For example, we provide mentored activities and peer activities, especially important, of course, in the health sciences where there are a lot of skills that you need to practice.

And we have evaluation built in quite thoroughly, both in a qualitative and quantitative way. We're ad free. We're free of other barriers as well, like time and place. So there are quite a number of differences from MOOCs. We like to refer to ourselves actually as a doohickey. A Democratically Open, Online Hybrid of Internet-aided, Computer-aided, and Human-aided Education. So for your radio listeners that does indeed, the acronym spell out doohickey.

Mark Masselli:

I love it.

Margaret Flinter:

You know Dr. Frank, it seems to me, for all sorts of kind of immediately obvious reasons, this has the potential to be a global game-changer in terms of the democratization of access to education and I'm intrigued by the massive level of cooperation that must have been required to pull this enterprise together.

I understand you have government agencies from different countries, partnerships with numerous universities and international

agencies, all offering resources to make this a successful and sustainable endeavor.

So I wonder if you would share with our listeners some of the primary stakeholders that you've engaged and involved in this project, the agencies and countries you're working with, what are these global collaborations, and how are you marshalling and pulling together all of these resources?

Dr. Frank:

So how we started was we noticed, like lots of people did, that there are all these remarkable free learning objects that have been posted on the web by government specialty societies, peer-reviewed organizations, and universities. Those are our four sources for our accredited training. And we pair them with competencies that have also been already established by expert organizations.

So that's pretty inexpensive to do that pairing. And then we work in partnership, as you said, with lots of organizations, governments, universities, and specialty societies to accredit and fund and organize these trainings.

So how this plays out, for example is, in Sudan we have just launched a family medicine residency program, which we have a memo of understanding with the government of Sudan and the University of Gezira, the largest of their 30 medical schools to train 10 thousand family medicine residents over the next five years.

We work in partnership with the university, which does the admissions and guides the residents, sets them up with the clinics and the mentors, and we work with the government of Sudan, which pays for the resident's time, which pays for the clinics, which pays for the patients to go to them. And we have a grant from Grand Challenges Canada to work on that, and a similar project in Kenya.

One other example to give might be in Ecuador, where we're working with the Accreditation Council and Graduate Medical Education International and the American College of Preventive Medicine to create a globally available preventive medicine residency. And we're doing similar kinds of initiatives in over 100 other countries including in the US and Canada.

Mark Masselli:

You know, maybe a few more details about the size currently of how many registered users you have. And I'm sure there's this conflict that goes on with the traditionalist in terms of how effective this training will be so you might want to walk our listeners through some of the battles that you've had to fight and how those have been resolved.

Dr. Frank:

So I'm a Canada Research Chair as you pointed out, and this is what a lot of what I spend my research time doing is examining the efficacy of this new kind of educational model. And we've done multiple pilots. The three that we've done in North America, having been trained and taught in North America, and having that be the gold standard for many people for training in medicine and public health in the world, that's where we wanted to do our proof of concept.

So we did two \_\_\_\_\_ (14:21) of pilots. One at the Uniformed Services University of the Health Sciences in Bethesda, Maryland and at University of Missouri with our emergency medicine training. And we demonstrated at both Bethesda and at Mizzou that NextGen users do as well as or better than traditionally trained medical students at two of the most highly resourced emergency medicine training programs in the world.

That was very encouraging and then we also did a flipped classroom at Simon Fraser University with our Environmental Health Course, one of the core MPH courses and found that students, again, performed identically on knowledge tests, but reported liking the course even better substantially higher, like 20 percent higher course evaluations.

So we've been very pleased in terms of the proof of concepts that it's performed magnificently in North America and it's performing quite wonderfully at our pilot sites in less developed countries as well.

The main foundation of our sustainability is generosity in terms of learning objects, course creators who assemble the course's books with expertise in the area who are willing to spend about a month's worth of time over whatever time period they're willing to give to help us assemble the course.

But we also have more traditional academic sources. We just received a 15 and a half million-dollar endowment from the Annenberg Physician Training Program. We've gotten three grants from Grand Challenges Canada. One from NATO - Science for Peace Program. One from WHO.

So because our burn rate is so low for our core expenses, about a third of a million dollars a year, that's the equivalent of a couple of fairly fancy faculty members at most academic institutions. And we're able to run all of NextGenU with that kind of funding.

So we've been attractive to funders and to donors and we don't have a whole lot of maintenance costs so we're pretty sustainable at

this point.

Margaret Flinter:

Dr. Frank, I want to maybe draw a little analogy to one of our innovations our organization launched the first in the country postgraduate formal residency training programs for new nurse practitioners back in 2007.

From the start, all of the organizations that have developed these residencies have had to really grapple with issues that I imagine you're grappling with too, which is training not just to clinical complexity, but really training people to a model of transformative care, which means you really need to be in settings, which have embraced transformation and innovation.

And I'm curious how are you managing that very tricky area of making sure that the students get the mentoring experience or the clinical practice experience in organizations that really have embraced that level of innovation and transformation that we're looking to see going forward?

Dr. Frank:

So we have built in mentored and peer activities. For example, ran the Preventative Residency Program at Emory University for a dozen years before I came here. And we used the ACGME Competencies, Accreditation Council and Graduate Medical Education Competencies to form the structure of our residency program and identify learning objects and activities that our residents needed to do.

We do the same thing with NextGenU. And there are competencies that require mentored activities. Our highest use of NextGenU is indeed, as you're suggesting, but institutions adopting the courses and using them for their students.

So the institutions, as they always do, identify mentors and have collected a cohort of peers, right, other students, and so that's how those pieces end up getting assembled. We essentially hand an institutional or learner a course in a box and they have to identify someone who will let them shadow them, have typical clinical experiences with them, and evaluate them at the end. We provide the evaluations.

Mark Masselli:

We're speaking today with Dr. Erica Frank, Professor of the University of British Columbia School of Population and Public Health where she is the Canada Research Chair in Preventive Medicine and Population Health. She's the Founder President and Research Director at NextGenU.org, the world's first online portal to free accredited higher education in health sciences.

Dr. Frank, in addition to NextGen, you focused much of your professional attention on preventative medicine conducting quite a bit of research in that area and you have a particular focus of study on how practitioners own prevention behaviors impact their patients, and you found some interesting results in that area. How important is do as I do in getting patients to practice better prevention in healthcare.

Dr. Frank:

My main research for the last couple decades have been on this link between physicians personal and clinical health practices. And we found an extremely strong and consistent link between what docs do ourselves and what we talk to our patients about.

So for example, as you know I'm riding my Exercycle as we talk. This is the kind of thing that if a physician manages to overcome barriers and to figure out how to do it for themselves, it makes them, we have found, more believable and more motivating to their patients.

So that research has been on identifying that link between what doctors do ourselves and what we talk to our patients about, and then trying to encourage physicians to have healthier habits so that we can have a healthier population as a result.

Margaret Flinter:

But Dr. Frank, among all of the things you've done, you're also a past president of Physicians For Social Responsibility, a winner of the Nobel Prize for Peace and certainly an organization we have long, long admired.

In fact, it's Founder, Dr. Jack Geiger has been a guest on this show and we recently honored him at our annual Weitzman Symposium and he's, of course, a pioneer in the area of tackling the social determinates of health. I'd love to link work that you're doing now with NextGenU.org and the mission of physicians for social responsibility. What's the synergy in the mission of these two organizations?

Dr. Frank:

Well, for me as a specialist in Preventive Medicine and Population Health and as someone whose research and work has focused on education around health and wellbeing, they're pretty inseparable actually.

This is both true in practical terms. We have a Climate Change and Health Course as well as our Environment Health Course with

NextGenU that PSR is a co-sponsor of. And it's also true in more philosophical ways.

Both NextGenU and Physicians for Social Responsibility are interested in, primarily in addressing the gravest threats to humanity and in trying to redress them through Health Sciences Education and through rational approaches to dealing with the terrible problems now and increasing problems that are going to be coming from climate change.

So that's one of the areas where we have a great deal of overlap. But yes, generally both philosophically and practically, there's an enormous amount of overlap between Physicians for Social Responsibility and NextGenU.

Mark Masselli:

And you talked a little bit about your passion for climate change and its impact in global health. Tell us a little bit about how you've integrated this into any of your course structures for people, or is that sort of a side passion that you have? How is it that the next generation is both having better living, not through chemistry, but through exercise and in good habits, and also having a broader context of what health is for populations by focusing on issues around climate change?

Dr. Frank:

Yeah. Unfortunately, both in Canada and in the United States, there have been varying threats, both commercial and governmental to the rational acknowledgement of and dealing with climate change. That's part of the reason why PSR focuses on it and part of the reason why NextGenU focuses on climate change with our climate change course too.

It's a part from me, it's just another one of, perhaps one of the most important ones, but another one of the rational set of facts that people need to consider and make decisions based on if they want to live a healthy life and if they want for future generations to have that opportunity too.

Margaret Flinter:

We've been speaking today with Dr. Erica Frank, Professor at the University of British Columbia School of Population and Public Health where she is the Canada Research Chair and Population Health and the Founder of NextGenU.org. You can find out more about her work by going to [www.nextgenu.org](http://www.nextgenu.org). Dr. Frank, thank you so much for joining us on Conversations on Health Care today.

Dr. Frank:

Thank you. It's my great pleasure.

Mark Masselli:

At Conversations on Health Care, we want our audience to be truly in the know when it comes to the facts about healthcare reform and policy. Lori Robertson is an award-winning journalist and managing editor of FactCheck.org, a nonpartisan, nonprofit consumer advocate for voters that aim to reduce the level of deception in US politics. Lori, what have you got for us this week.

Lori Robertson:

Well, the Urban Institute is out with a new report that looks at how the Affordable Care Act has affected the number of uninsured. Its survey data showed that the number of uninsured adults dropped by eight million between September and June. The open enrollment period for the Affordable Care Act Marketplace began October 1. The percentage of uninsured in the United States was an estimated 13.9 percent in June compared with 17.9 percent in September the survey found.

The drop in the percentage of uninsured was more pronounced in states that expanded Medicaid under the ACA. In those states, the rate of uninsured was 10.1 percent in June, a six percentage point drop from September. Meanwhile, the states that haven't expanded Medicaid, there are currently 24 of them, have an uninsured rate of 18.3 percent, down slightly from a 20 percent rate in September.

These are, of course, only estimates from a survey taken a few months after the first open enrollment period under the healthcare law. The data don't include a breakdown of the sources of insurance for the previously uninsured. They do, however, show that the insurance gains overwhelmingly occurred in families whose incomes were below 400 percent of the federal poverty level. That's 95,400 dollars for a family of four this year, making those families eligible for subsidies on the insurance marketplaces or Medicaid coverage.

The survey, which has been taken quarterly since 2013, is funded by the Robert Wood Johnson Foundation, the Ford Foundation, and the Urban Institute. And that's my FactCheck for this week. I'm Lori Robertson, managing editor of FactCheck.org.

Margaret Flinter:

FactCheck.org is committed to factual accuracy from the country's major political players and is a project of the Annenberg Public Policy Center at the University of Pennsylvania. If you have a fact that you'd like checked, email us at [chradio.com](mailto:chradio.com). We'll have FactCheck.org's Lori Robertson check it out for you here on Conversations on Health Care.

Mark Masselli:

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

Medical errors are believed to be responsible for about 100 thousand deaths per year. The medication errors play a big part in that number. In a study just released in the Journal of American Medical Informatics Association showed that a newly designed electronic medication alert system had a significant impact on the reduction of prescribing errors.

Dr. Alissa Russ:

We focused on alerts that are presented to physicians during the medication ordering process. So when they're in an electronic health record how the alerts are displayed to them. And we found that there were changes that we couldn't make and how they were displayed that saved them time and reduced prescribing errors.

Mark Masselli:

Dr. Alissa Russ is a human factors engineer focusing on how clinicians and patients interact with the healthcare system. She conducted a study at Roudebush Veterans Affairs Medical Center in Indianapolis. She notes that the overworked clinicians can have trouble discerning subtle differences in medications in the electronic medical systems.

So they decided to change the design of the alert system in the electronic medical records of patients creating a simpler, more easy readable alert system for clinicians.

Dr. Alissa Russ:

We addressed a variety of errors in terms of usability, so errors that might be...that they couldn't see the alert because it was hidden from the screen. The other errors in terms of reducing prescribing errors, really just gets back to providing the key information at the right point in time and not overloading the providers with information.

Mark Masselli:

The clinical trial showed a marked reduction in medication errors and a better handle on understanding potential adverse drug interactions ahead of time, noting that a good alert design may offer better cognitive support for clinicians during busy patient encounters.

Dr. Alissa Russ:

So in this study we focused on three basic types of alerts. Those for adverse reactions where a provider is ordering a medication that the patient had an allergic reaction to. We also looked at drug-drug interactions, and then we also warned providers about cases where patient had low creatinine clearance or impaired kidney function.

Mark Masselli:

The results were so convincing they're expanding the trial to further test design ideas that make the process even more seamless for clinicians prescribing multiple medications every day. A simpler, clinician-faced approach to reducing all too common prescribing errors yielding better outcomes for patients and their health practitioners. Now that's a bright idea.

Margaret Flinter:

This is Conversations on Health Care. I'm Margaret Flinter.

Mark Masselli:

And I'm Mark Masselli. Peace and health.

Margaret Flinter:

Conversations on Health Care, broadcast from the campus of WESU, at Wesleyan University, streaming live at WESUFM.org and brought to you by the Community Health Center.