Mark Masselli: This is Conversations on Health Care. I am Mark Masselli.

Margaret Flinter: And I am Margaret Flinter.

Mark Masselli: It's the dog days of August and Margaret and I are on vacation but we planned ahead and we are bringing you a brand new episode for your listening ears.

Margaret Flinter: Alright Mark so let's jump right into today's show and introduce our guest. Today, we will be speaking with Dr. William Hanson whose new book is titled Smart Medicine: How the Changing Role of Doctors Will Revolutionize Health Care published by Palgrave Macmillan. We are very happy to welcome Dr. Hanson to our show today.

Mark Masselli: You can hear all of our shows on our website www.chcradio.com. You can subscribe to iTunes to get our show regularly downloaded. Or if you would like to hang on to our every word and read a transcript of one of our shows, come visit us at www.chcradio.com. If you are a social media aficionado, you can become a fan of Conservations on Health Care on Facebook and also follow us on Twitter.

Margaret Flinter: And as always, if you have feedback, email us at www.chcradio.com, we love to hear from you. Let's check in with our producer Loren Bonner with the Headline News.

Loren Bonner: I am Loren Bonner with this week's Headline News. President Obama is touring the Midwest this week. He used his first town hall meeting in Minnesota as an occasion to spark confidence in his health care overhaul. The President says the mandate in the Affordable Care Act that requires everyone to carry health insurance is what's right for Americans.

Barack Obama: You can't not have health insurance then go to the emergency room and each of us, who have done the responsible thing and have health insurance; suddenly we now have to pay the premiums for you. That's not fair.

Loren Bonner: The new law experienced its greatest setback today when last week a Federal Appeals Panel declared the individual insurance mandate in the law unconstitutional. The suit was brought on by 26 states nearly all led by Republican governors and attorneys general and the National Federation of Independent Business. Pam Bondi, Florida's Attorney General, fully supported the recent ruling.

Pam Bondi: It's truly a victory for liberty, it's a vindication of our argument that the forced purchase of insurance, if upheld, would truly obliterate the constitution's limits on federal power.

Loren Bonner: The panel did however say that the law's expansion of Medicaid is constitutional ruling against the States. The question of mandatory health insurance will ultimately be settled by the US Supreme Court. The Affordable Care Act is making Medicare stronger for seniors according to the Department of Health. HHS boasted that one million seniors have used the new Medicare wellness visit and 17 millions have used the no co-pay preventive tests. The law has also saved seniors more than $460 million on prescription drugs because of an agreement with the pharmaceutical industry to offer a 50% discount for brand name prescription drugs in the Medicare donut hole.

(Music)

Mark Masselli: This is Conversations on Health Care. Today, we are speaking with Dr. William Hanson, Professor of Anesthesiology and Critical Care and Medical Director of the Surgical Intensive Care Unit at the Hospital of the University of Pennsylvania. Dr. Hanson has just authored a new book Smart Medicine: How the Changing Role of Doctors Will Revolutionize Health Care. Welcome Dr. Hanson.

Dr. Hanson: Thank you for having me.

Mark Masselli: You know your book Smart Medicine is the second book in what you call a series on the future of medicine and you nicely put this into context by _____04:02 changes medicine has gone through in this country from the era of the founding of the first hospital in Philadelphia in the mid 18 century all the way through to the discussions in the latest redesign of the primary care delivery space patient-centered medical homes. But you know, underlying all of this, I was picking up this theme that you kept on returning to a number of times about the population that tomorrow's providers will be caring for. They are kind of presenting a disease burden which you characterized as due to discretionary unhealthy lifestyles, choices like smoking, poor diet, insufficient exercise, too much alcohol. Tell me what revolution in medicine is out there to address these chronic diseases and how are tomorrow's providers prepared to manage these conditions.

Dr. Hanson: Well I think one of the things that we have done a reasonably good job of but maybe not as good a job as we could is tying the effects of some of these choices to the long term outcomes. The first disease where we had a strong correlation between a discretionary choice and health care outcomes with smoking and if you look back even to the point when my father was a medical student most physicians smoked and in fact some of the tobacco companies advertised the fact that most doctors prefer this brand or another. It became clear through the '60s and '70s that there was a strong correlation between smoking and lung disease and cancers and then we had surgeon general like Koop making that part of their health care pedestal. We have a number of

diseases that we now see and of course in my lifetime as a practicing physician, obesity has become one of those diseases. Essentially brand new, we have had to retool our hospitals with larger and sturdier chairs, wheelchairs, beds, operating room tables. There are new health care specialties surrounding the care of the obese and the complications of obesity are essentially due to, when I say discretionary choices I mean we as a society have chosen to support diets that predispose us towards obesity. So I think that we will need to educate more and earlier about obesity and you are seeing children now being counseled in the school system when they are overweight and I think we need to choose healthier foods for our school systems and for ourselves.

Margaret Flinter: You know Dr. Hanson, I really appreciated the historical perspective you give in your book and you set yourself in your own training in that historical perspective and in a few minutes, we will probably talk about training the next generation as we like to do on this show. But I thought you told just a particularly poignant story not about the next generation but maybe about the generation right before or the generation that sometime in the next 15 years or so might be heading toward retirement. You told the story of a cardiothoracic surgeon who had had a satisfying practice and made a good lifestyle and living for himself doing bypass surgery and that had kind of evaporated and here was a guy with incredible training and skills left doing locum tenens shifts applying for noctarnalist, a new word in health care, physician maybe with your hospital. What are we hearing from that generation and is there anything in place to help those folks adapt and really transition in these last decades of their careers to a new style of medicine?

Dr. William Hanson: That was a very interesting encounter, the one that I described in the book. We think of neurosurgeons and cardiac surgeons as being sort of at the apex of the training system and sort of individual saviors and I think that that's the way that they thought of themselves going through their careers. And here is this gentleman who suddenly found himself without a job in his mid to late 50s and looking for something that was kind of work that most of us would really probably prefer not to do working at night covering an intense care unit. I think there are a lot of people in a number of different areas of medicine and that would include op situations in this area, some primary care practitioners who have not found a way to end their careers gracefully because now practice rates have gone up or because the calls on their time are such that they can't keep up. And in fact, recently in the New York Times there was an article about a physician who was a primary care physician who was trying to sell his practice which was something that one used to do and couldn't find a buyer because that kind of practice doesn't really exist in the same way any longer with electronic medical records and other things so a solo practitioner who didn't have really someone to sell his practice to. So the world is changing very rapidly around us. I don't think as a profession we have found good answers for some of those folks although some of them have found creative solutions. We are finding that more doctors are electing to be employed by health systems where

once they wanted to be independent practitioners. That's a major sea change. There are people going into locum tenens work where they don't have a practice per se that they are bound to but they go to where there are openings for periods of time when someone goes on vacation. But I think that one of the messages there is that the world of medicine is changing so quickly that it's hard to keep up and we are seeing a generation of older physicians who grew up in an era of paper documentation and individual practice and in an apprentice training model and younger generation of physicians that are growing up with electronic medical records and electronic systems and constrained or controllable hours.

Mark Masselli: Well, you have hit on a key point that the world of health care is turning on its head for older providers and yet, you started your book off by giving a portrait of the class of 2014 who are entering the University of Pennsylvania School of Medicine. Can you give us, flush that out for us a little more about what we might see in that medical student and you sort of referenced iconically a number of TV type of doctors and I guess they don't sound like they are the Marcus Welby or the Star Trek Dr. McCoy. Where do they fall on that continuum?

Dr. William Hanson: Well, I think that the thing that surprised me in looking at this class, and I was at the White Coat Ceremony, the Initiation Ceremony for the entering class of medical students last year is that they are not too different from the ones that came into my class or probably a generation early. These are outstanding students, many of them with not only an undergraduate degree, in some cases they have a master's or a PhD in other areas. Many of them have done service work either in the US or internationally. They speak and present themselves well. These are the cream of American students and they still want to come into medicine which gave me cause for lot of optimism at the future of the field. Are they Marcus Welby or are they Dr. McCoy? I think they are probably something in between. I mean they come in with the same aspirations to do good works and to take care of other people like Marcus Welby but they are very fast with electronic devices like smartphones and computers and computerized equipments, many of them will be working with the things like robots or high technology devices in the intensive care unit. So they are spanning that discipline but the difference is they are entering a world where they can expect to work 80 hours a week or possibly 60 hours a week in the future whereas the previous generation trained often times 36 hours at a stretch. They are learning to come in and work as teams whereas we were taught to be individuals. So they start with team building exercises on day one of medical students so very different sort of operating principles. Many students are now doing a lot of their classes online with things like iPads or on the Internet.

Margaret Flinter: Well, that's very interesting, and we also have been inspired by both the intelligence and the service commitment whether it's our AmeriCorps, Community HealthCorps folks we have in our organization, residents, or new clinicians coming into practice. I would like to pick up on that theme of medical

simulation training and just the radical difference in training that the students have. So probably a fair bet to say that you heard somewhere in your first weeks of training that the history was 90% of the diagnosis, right, and you had your gown at your side and went through all the history taking, still the case for tomorrow's doctors or really is it going to be all technology driven and I am particularly interested in your thoughts on the effect of that on cost up or down. Certainly technology sometimes drives cost down and sometimes in the other direction in health care, usually the other direction; any thoughts on that?

Dr. William Hanson: That's an interesting issue. I would certainly say that technology has been a large part of the increase in health care cost and I think that in my personal opinion and humble opinion here that's been because there has been no emphasis on cost efficient care, not a major emphasis on cost efficient care at the frontlines and there has been a lot of rewards and incentives for technology development on the part of innovators and companies so that we have developed these widely creative solutions that are admittedly expensive and that might include something like a robotic approach to a surgical technique.

Mark Masselli: This is Conversations on Health Care. Today, we are speaking with Dr. William Hanson, author of the new book Smart Medicine: How the Changing Role of Doctors Will Revolutionize Health Care. I really liked your analysis of how technologies have influenced new specialties in the field of medicine. And talk about the transition from telephones to text messaging to social networks and the role systems like IBM Watson could play, I assume play is not playing jeopardy but as sort of mobile health becomes more ubiquitous around the world, what new technologies and professional roles do you envision?

Dr. William Hanson: Well it's funny. I just had a discussion about this yesterday with somebody who is working as a technology writer. I think we will begin to see technology, medicine used to be sort of a cloistered hidden environment for patients. They would go something magical or special would happen because their doctor took care of the problem and the patients weren't expected to have any medical information or knowledge about a disease or the drugs and basically turn the care over to the doctor. Nowadays, we have very informed consumers, patients who come in with lot of information about the medications they are taking, about the diseases they think they might have; this is an informed consumer population like it's never been before. There are also applications and I use word applications here in the sense of like an iPhone app that are being developed outside of medicine that will have an impact on medicine. So if you think about fitness applications that are used and available in some of the mobile phone source, those sorts of things are going to begin to overlap with medical applications so that you will have fitness information integrated with disease or health information in a continuum. And I think that that's going to really change the way people think about disease and health and who owns what part of those problems. But I also think that we are going to see new technologies as a result of the increasingly mobile medical workforce. So we have specialists now who

have access to their patients' information through their smartphone, through their iPad, people are tele-consulting on issues in Africa and we have dermatologists who look at lesions that were photographed in Africa moments before. So I think that there is going to be a real sea change in all of those areas as information diffuses out of the hospital and responsibility comes to be assumed to a great extent by patients for their own care.

Margaret Flinter: Well that is very exciting work and we follow it closely. Let me take us back maybe for a moment away from technology back to human nature and personality. I thought you had a fascinating analysis from your perspective some of the characterological differences if you will between people who are drawn to primary care and people who are drawn to specialists. I don't think you would stick by this as a black and white categorization of the thinkers and the doers. But certainly you were saying there are real differences and it behooves us to look at what is satisfying to people and what they enjoy doing it may explain why still the majority of nurse practitioners go into primary care versus subspecialties. But I am curious to your thoughts as you look at that incoming class of medical students and I am sure you are asked to advice often on futurist issues in medicine, should we be looking at these things, looking at these characterological differences between people as we try and solve the problem of the shortage of primary care providers in the United States?

Dr. William Hanson: Well I think that some of the way, medicine's a big tap, there is a lot of room for people of a whole range of different inclinations, people who are fundamentally researchers and answer seekers and people at the other end of the spectrum who really enjoy the human-to-human interaction that occurs in an office. There are financial aspects to what we produce. There has been an emphasis in many academic medical centers on specialist care as being sort of a greater weight or importance than primary care which is sort of arbitrary, it could be other way around. And there are many students as you well know leave medical school with a great deal of debt and more liquid specialists tend to be the specialists, subspecialty areas again and this is sort of an arbitrary aspect to the way we reimburse care in this country today. I do think that we need more primary care practitioners and I do think that that needs to be a partnership between the medical schools and the government. And I actually saw something recently when somebody proposed that the government make medical education free so as to have greater control over the amount of debt that medical students leave their schools with and therefore emphasized primary care training. But I think that those are the sorts of things that they are going to help us get what we need in the way of much larger number of primary care practitioners in the coming era.

Mark Masselli: Dr. Hanson, we like to ask all of our guests this question. When you look around the country and the world what do you see in terms of innovations and who should our listeners at Conversations on Health Care be keeping an eye on?

Dr. William Hanson: If you look back at history, you see eras over and over again where the medical community had a theory of medicine that guided their care. And if you look back 100 years ago or more to the era when Washington was treated with bloodletting, the theory there was the theory of the vapors and the humors and that people had diseases because they were too hot or cold or moist or dry and bloodletting was way of treating of somebody who thought to have too much moisture and to be too hot caloric. That theory was upended. But then going forward you see dictionaries of medical diseases that include terms like dropsy and coryza and number of terms that we now think as being quaint and archaic but that's what people actually thought a disease was in that era. We now think of things like prostate and breast cancer as being diseases but with the coming genomic era with the ability to actually look at the underpinnings of those diseases, we will find that we reclassify much of what we now call by one name into other names and we will probably look back at this current era as being quaint 50 or 100 years from now too. So I think that's the kind of thing that we need to think about as we understand more about genomics and what the genes are doing in response to the environment. That's where I think our next area of bold innovation is likely to occur also using things like stem cells and nanotechnology.

Margaret Flinter: Today, we have been speaking with Dr. William Hanson, Professor of Anesthesiology and Critical Care and Medical Director of the Surgical Intensive Care Unit at the Hospital of the University of Pennsylvania. Dr Hanson, thank you so much for joining us today on Conversations.

Dr. William Hanson: Thanks. It's been my pleasure.

Margaret Flinter: Each week, Conversations highlights a bright idea about how to make wellness a part of our communities and everyday lives. This week's bright idea focuses on one country's unique efforts to combat dementia. South Korea has one of the world's fastest growing elderly populations and Alzheimer's and other forms of dementia afflict of 9% of its elderly population. On top of this, the disease has been riddled with shame and fear in a country with a long tradition of respect for its elders. To deal with this, South Korea has started a campaign to address dementia. Over the past few years, thousands of people have been trained as dementia supporters, trained to recognize symptoms but also to care for individuals with dementia. Hundreds of neighborhood dementia centers have sprung up to help identify the onset early, to educate families, and to give the individuals the opportunity to be taken care of at home in their own families. Many of the trained workers include children and young adults. For instance some schools offer community service credits for students efforts which include things like direct care, foot massage at nursing home, art therapy, physical therapy, dance. And the government is playing a strong role; they have developed a database that allows families to register and track their relatives in case at any time they wander off and are lost. To finance the campaign, South

Korea created a long term care insurance system subsidized with a 6% increase in National Health Insurance premiums. Building a system of support and education focused on prevention, treatment, and respect, and developing a system to finance those efforts all in support of those who may suffer one day from dementia, now that's a bright idea.

(Music)

Margaret Flinter: This is Conversations on Health Care. I am Margaret Flinter

Mark Masselli: And I am Mark Masselli, peace and health.

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