Welcome to our inaugural episode. We are so glad you have joined us today. We are going to discuss the fascinating origins of the modern hospital and how it has evolved to assume its role in health care for all of us. By looking at the foundations of today's hospitals, we may get some sense of where it is going as well as where it's been. As we know here in Washington, written on the National Archives is the Shakespeare quote, "What is past is prologue." We're going to explore that notion today.

To make our journey, we need an expert, and we have one here with us, an economist who has examined our healthcare system and how it works and how it's financed. This is a topic that requires someone who has studied the past but also has an eye for where policy and innovation are heading us in the future for our healthcare system. I couldn't think of a better first guest than Stuart Altman. He has studied and played a role in crafting healthcare policy for decades, and now teaches at Brandeis University, as well as keeping his hand in affecting the nation's health policy. Stuart's long and distinguished career goes back to the 70s where he was the point person for President Nixon's universal healthcare plan. Stuart and I don't go back quite that far, but I did meet him 35 years ago when I was a young and inexperienced senate staffer. Our paths crossed many times over the years as our roles changed, including during his 12-year stint as the head of the Prospective Payment Assessment Commission. During that time, he advised congress and the administration of Ronald Reagan, George HW Bush, and Bill Clinton on the functioning of the Medicare Hospital Payment System and other system reforms. He has served in various roles on the state and federal levels since then and he is currently chairperson of the Health Policy Commission in Massachusetts, where he continues to leave an imprint on health policy in a critically important bellwether state.

His book, *Power, Politics, and Universal Healthcare* reflects his expertise and wisdom in the field and I consider it really mandatory reading for my new employees here at the federation. So, Stuart, we're still buying copies from Amazon.

Well, they just got a new print, a new 500 more copies are out there.

We'll be purchasing some of those. All this is a long way of saying I think we have the perfect person for our topic here today. Welcome, Stuart.

Well, thank you, Chip. It's a pleasure.

Before we chat about the complex role of today's hospitals in society, it may be hard for our listeners to comprehend, but at the turn of the last century, hospitals were either charities, public institutions for the poor, or doctors hospitals, which frequently we're just a few beds attached to a doctor's office. We've really come a long way.
The scene today is quite different, so I wanted to start off with looking back at what are the key factors that have brought us, Stuart, from where we were in 1900 to 118 years later.

Stuart Altman: [03:22] Well yeah, Chip. First, thanks a lot for inviting me. You’re absolutely right. I now teach undergraduates at Brandeis who are very anxious to become physicians and I also teach in the Tufts Medical School. It's hard to believe and hard to think of what the physician of today is trained to do compared to what they were, as you said, at the turn of the century. Healthcare now is a very science-oriented, very technologically sophisticated. You know, you could become a doctor at the turn of the century in America by enrolling in a Sears catalog and getting information. It was not a science based discipline at all.

We took a long time. We were well behind Europe. It wasn't until John's Hopkins in Baltimore began to change his curriculum in the 1890s and then you had the Flexner Report in 1907 that basically said, "If you're going to be trained and be licensed as a physician, you need to understand the science of the human body. You need to understand science." Well, we cut in half the number of trained physicians, but in doing that, it also transformed the practice of medicine. As you pointed out, the hospital of the turn of the century was not the professional scientifically-based institutions we talk about today. But as a result of the change in the training of physicians, and by the way nurses as well, nurses themselves who came out, to their credit, they were primarily religious organizations. These were not professionals. They often were very poorly paid, if at all. We had both a change in the training of physicians, a change in the training of nurses, and ultimately a fundamental change in the hospital.

So by the 1920s, the hospital had transformed itself. It used to be, quite frankly, and it's hard to believe, a place where people went to die, and the hospital of the 20s began to become a place where people had a reasonable chance of coming out alive. It used to be that have you had means, you got your health care at home, and unfortunately the people that went to the hospital were among the poorest. But by the 1920s, the hospital had transformed itself into a place of hope, so you're absolutely right. The science and the change in the practice of medicine that fundamentally changed the hospital of America hit the late teens and into 1920.

Chip: [06:01] Something else I think happened in the 20s too, because hospitals couldn’t do much for people, but as they grew and they could do more in terms of treating people, frankly, there's no free lunch. The question was how was it going to be financed? I know that something happened in the 20s to begin to change that dynamic and maybe you should talk about the hospital finance?

Stuart Altman: [06:25] Absolutely. What happens is that as the hospitals become more scientifically based, as you pointed out, they become more expensive because they need equipment, they need to technology, and so on. At that point in time,
the people who got sick paid for their health care out of their pockets. Beginning of a Baylor University in Texas and then spreading throughout the country, the hospitals began to realize what they needed to do was to help develop the financing system so that when people were sick, there was a mechanism to pay for their bills. Out of that became what we now know is Blue Cross. Blue Cross was created by the hospitals and what it started by the middle to late 1920s was that people would put a small amount of money away, you know, $5 a week or something like that, and the hope was that when they got sick there would be enough money to help support the hospital.

Unfortunately the depression hit, and since most of the money was going to come through their jobs, even then it was an employer-based concept, it didn't grow very quickly. But the key to the funding of American hospitals occur during the second World War, when large corporations wanting to make sure they had an adequate base of skilled labor that would not leave them, so that they can get government contracts to build our planes, and tanks, and so on. They wanted to provide a benefit and some smart person came up with the idea, "Why don't we provide health insurance?" But in order to do that, they had to get approval from the federal government because we had wage and price controls during the second World War, and some people said, "Well, you're going to give them an extra benefit. It's like a wage increase."

They went to Washington, where we are today, and they said, "We would like to give this fringe benefit, this small benefit, but we don't want to think of it as a wage." The government approved that, and so as we have today, health insurance, A is not a wage, it is not subject to income tax. Finally in the 50s, we actually codified this and made it a law. But the key here was to create a financing mechanism that could put money away when they're healthy and working, so that when they were sick, they would get their bills paid. It helped the individual, but it really transformed the financing of the American hospital.

Chip: [09:07] Then the next stage of course was in the 60s when the low income people and the seniors were recognized in policy.

Stuart Altman: [09:14] Well, there was one critical issue that of course most people had no idea. Blue Cross was set up in a way that we called community rating, which means that everyone in the community paid the same premium. Not only that, they, when they went to the hospital, the hospital charged them a per diem regardless of what they had. If you went in for the equivalent of a broken toe, you paid the same as if he had a heart condition. This was called community rating, which means that if you were a 25-year-old, you paid the same as if you were a 55-year-old. Well, that was Blue Cross. They were set up as not for profit insurance companies, franchised, if you will, in each part of the country, so there was one in Pennsylvania, and there was one in Rhode Island, and there was one of Massachusetts.
Well, we had other forms of insurance, Metropolitan Prudential that sold life insurance and automobile insurance. Well, they had a very different concept of insurance. They were based on people that used more paid more. We called that experience rating, which means that if you are more likely to get sick, you're going to have to pay a high premium. Well, who would the more likely to get sick? The 55-year-old or the 25-year-old? Of course it was a 55-year-old. This is the late 50s, our whole health insurance system began to fall apart. Then by the early 1960s, literally hundreds of thousands if not millions of seniors could not get health insurance. At the same time lower income people, who were using government and hospitals for the most part, we had a big public hospital system, they too fell out of the bottom of the barrel, so it was really in part this battle between what I call the experience rating commercial insurance companies and the not for profit Blue Cross plans that were community rating that help create a crisis in America which ultimately led to the passage of Medicare and Medicaid in 1965.

You're absolutely correct. Whence that came about, the financing mechanisms that undergird American hospitals really shut up. Because up to that point, hospitals, even though they had Blue Cross for people, they still had 30, 40% of their patients were not paying their bills. Now, you had a mechanism to help support the hospital at a much greater rate.

Chip: [11:46] Now at the same time, going back to the science part of it, there was something else happening at the same time that the financing was coming online, which was that even though bypass surgery was done on hearts that were clogged a number of years before, it really wasn't until into the later 50s and early 60s that those kinds of treatments became main line and it had to be paid for, and now you had the programs.

Stuart Altman: [12:11] Absolutely. You know, I don't know, the chicken in the egg here, you know? The financing helped support the creation of a technology-driven industry. The technology-driven industry needed the funding to make it work. It's hard to imagine either functioning without the other. Some people said because we fed the industry money, they found the technology. On the other hand, by funding, not only did we fund new technology, we also totally transformed the hospital. There are these old movies of showing someone going to the hospital even as late as the 1960s, and those were hospitals built in the 1920s. You know, we went through the depression, we went through the second World War, into the 50s with hospitals that had built in the turn of the century. So, the result of a combination of some government funding through Hill Burton, which I know you know well, plus the availability of funding, we actually created a new industry in the 1960s and 70s. Then the 1970s when I came, as you pointed out, got very much involved. I saw the whole transformation of the American hospital.
Chip: [13:32] I think, yeah, there really were sort of two things that happening financing wise in terms of capital. One, after Medicare, the doctors hospitals, partly for quality reasons I think, and also because of economies of scale, they became to go by the wayside and were replaced, particularly in areas like in Florida and Texas where populations are starting to grow, with the investor own hospitals, and the nonprofit hospitals, particularly those, the big ones in New York, and Philadelphia, and in big teaching centers, all of a sudden there was all kinds of financing, bond financing for them. The world changed because now there was somebody that could pay the bills and so they were people financing people who Wall Street was willing to pay the cost of this.

Stuart Altman: [14:17] You know you bring that up, I can't help but remember. I was born in the late 1930s. I was born in a doctor's hospital. My brother who’s four years younger than I am was born in another doctor's hospitals. We were the first hospitals in the Bronx to close. I also in the 1950s had a fairly minor operation, which unfortunately turned out to be much more serious because I was in one of these hospitals that really shouldn't have functioned. I'm very happy to tell you that those hospitals closed when they should have closed. But as you pointed out, you're absolutely correct, we to fundamentally change the hospitals. But what's interesting to me, and maybe it's just my age, it didn’t happen that long ago. We're talking into the 70s, still a number of these old hospitals were around and who knows. There's some still around today.

Chip: [15:08] Well, I think one of the things that changed, and this too goes back to the early 50s but really took off, was the joint commission, which was the sort of quasi-governmental, although it was privately funded for the hospitals, a program to accredit hospitals began to take off and then it was institutionalized in Medicare.

Stuart Altman: [15:29] That's exactly right. when Medicare was passed in 1965, this was the biggest revolution in the government's involvement in healthcare that had ever occurred. I give tremendous credit to the people who were asked to implement that law. This was a number of civil servants who came out of the Social Security Administration who knew relatively little about healthcare financing and hospitals. Yes, what they did is they relied on these critical private institutions like the Joint Commission, and they also relied on Blue Cross. So Blue Cross and the mechanisms that Blue Cross used to fund hospitals became the basis on how Medicare paid hospitals and Medicare said that it would approve hospitals only if they were approved by the Joint Commission. In other words, Medicare did not set up a separate governmental unit. It relied on this private organization, and it still does, as you know well. It still relies on the Joint Commission and its quality standards. While the payment system has evolved very differently in Medicare than it does in Blue Cross, the Joint Commission is still a critical arm of the quality measures of American hospitals.
Chip: [16:50] We've sort of covered the beginnings looking at the last century in terms of the science, in terms of the financing, in terms of literally the buildings. We talked about at least the beginnings of an organized way to assure some level of quality. A lot's happened since then regarding that. Before we sort of move on to the reforms that have taken place and the implications of those, we also I think have other functions that the hospitals have, training physicians and doing research. What should we add in the mix here about that?

Stuart Altman: [17:24] Oh, I think that's very important. This country made decisions that other countries have not made and that is that most of the biomedical research that is done in this country is done at universities. There are research labs and stuff like that, but the transformation of that biomedical research into usable research is often linked into our big academic medical centers and our big other institutions. The hospital of today in many parts of the United States is not only a place where care is given, it's also a major research center. Not only that, it is the basis where what we call graduate medical education takes place.

So you have, in hospitals all over the United States, providing three critical functions: patient care, education of the next generation of physicians, and nurses, and others, and the generation of new knowledge and technology that will foster the future of the hospital, which makes our big academic centers and related organizations very complex organizations.

Chip: [18:41] We get into it, if we sort of think about this chronologically. In the 50s, 60s, into the 70s with this stream of, as I said, science, and the capital, and the payment, and the buildings, and beginning to worry about how we should be organized. We had that all over the country. Yes, much like they say about politics, all healthcare is local. There's variation between how it's organized, but basically you had hospitals, and then across the street there was a medical arts building, and they were physicians. The physicians practiced in the hospital and for outpatient care people would go to the doctor's office, but it's still the hospital was the center. Probably in in those days if we looked at expenditures, 60 or 70% of expenditures were either related to the hospital.


Chip: [19:39] Then things began to change as technology changed as well as other factors changed. I'll just take one example, which is when I can remember back in the 70s when my grandparents had their cataracts done, they spent, I don't know, a week or maybe even 10 days in the hospital, and for the first a number of days they had big sand bags that were put on their heads because the ophthalmologists who had done the done the surgery didn't want them even moving their heads for a moment because of the stitches. But the technology changed and by the 80s all cataracts basically were outpatient. I don't want to say it was just zip, zip, but it was a very easily-learned by the ophthalmologists and routine surgery. All of a sudden some were done in the hospital, some were
done in outpatient centers that physicians, that ophthalmologist might have. That's an example of what began to happen, which is technology didn't just improve care, but technology improved so that the delivery mechanism began to change. Now this is for acute care, we haven't gotten to prevention and other areas.

So, the role of the hospital into the 80s into the 90s began to become, as there was more progress in cancer therapy and others, but in heart and orthopedics, more of the intense complicated things, and other things were sort of spun off. These marketplaces which had been pretty much defined by hospitals and medical arts buildings became much more complicated. Our end point here is to get to the understanding of the hospital today. This transition that took place is something that I think should be recognized.

Stuart Altman: [21:33] Yes, absolutely correct. But let's play this one out a little bit, because first of all, you're totally right in terms of the transformation of the practice of medicine. I, as you pointed out, I have really been in the middle of a lot of this in terms of how we finance it, and where the money goes, and so on. I remember very distinctly back in the 80s, when I took over responsibility for ProPac, we were talking about the hospital as a dying industry. That all this care was going to go outside the hospital, it was going to be done by different organizations. Yes, there are organizations out there that are not affiliated with the hospital, but what the hospital did, and I think for the most part for the good, is it decided that it was going to in fact evolve. That it was not going to be just inpatient beds. And it began to build those outpatient capacities, often very much attached to the hospital, but even outside of the walls of the hospital. If you go around the country today, while the inpatient spending is much smaller than it was back in the 70s, the total spending going through the hospital institution is still the largest. In community after community, the hospital is by far the largest employer. It is the main industry in the town. The hospital, really to its credit, it did not die. It is not only an inpatient institution, it is now a major deliver of care, both inpatient, outpatient, telemedicine, and the like. It's very much an evolving industry.

Chip: [23:24] What do you think was the pressure point that brought that about? I mean, was it that they were there?

Stuart Altman: [23:30] Well, I'm an economist and money matters. I think the hospital industry and the people who were responsible for running the hospital saw the handwriting on the wall that if they continued to view the hospital narrowly, with respect to just doing inpatient in a few outpatient services that related to it, that it was going to die. Basically, the leaders of the hospitals of the 80s and 90s, for financial reasons, and they also made a good case for technological reasons, that they were not going to narrowly defined the services that they provided.
Stuart Altman Discusses the Development of the Modern Hospital – Hospitals In Focus Transcript

I think there were absolutely right. If they had continued to focus only on beds and inpatient care, the hospital would not be nearly the economic and medical force that it is today. You know, it’s the money stupid. And it was the technology, but the technology worked against the hospitals. I mean, I used to kid, but I wasn't kidding. You know, by the 90s or into the 2000, you can do open heart surgery at home. Maybe I pushed the analogy a little bit, but we can do things now on an outpatient basis that we would never dream of doing.

Chip: [24:55] Well, actually the point you're making, I mean maybe you still have to do bypass in the hospital, but right now 20% of knees, knee surgery, is done outpatient. It'll be 80 or 90% within a few years. Obviously on the cardiac side, the work that's done with stents, and catheterizations, that's all gone outpatient. It used to be you had to spend at least a night in the hospital with a catheterization and that's not true anymore. These were bread and butter kinds of procedures for hospitals. You know frankly, cardiac care and orthopedic care made the world go round in terms of inpatient services.

Stuart Altman: [25:35] Well, let's be clear about that. Yes, it made the impatient, but hospitals, to their credit and some would be a little concerned about it, have not let this just play out all by himself. Take cardiac care. Cardiac care, which was going outside the hospital and increasingly cardiologists were practicing outside the hospital, that all his died and in fact all of that has now come back into the hospital. Yes, it's on the outpatient side of the impatient. Part of that is the financing mechanism.

Here's me. I mean I'm sorry. I mean, I think that there is this synergy for good and maybe not so good between how we pay for things and where it's done. Much, yes, even though the orthopedic is done outside the impatient, it's still being done on the outpatient units often of the hospital. The hospitals have not lost control of that. Again, I don't fault it, because I think in many cases we get better quality care as a result of that. Maybe a little more expensive than somebody like me would like to see, because when it's done in the hospital, even in an outpatient, it is expensive.

Hospitals by their very nature are, you know, I mean that joint commission you talked about, has to do things that if it was totally separate from the hospital, the costs would be different. But in return, I think we do get higher quality care as a result of that. There's a tradeoff going on, but it is that synergy between the technology and the financing that has adopt. And as I said, the hospital industry itself has not been standing pat.

Chip: [27:20] That is true. So what lies ahead for hospital technology and the financing of healthcare? We continue our conversation with Stewart next week where we will focus on what comes next for hospitals and healthcare in this time of rapid changes and advances. We hope you will join us then and please be sure to subscribe to Hospitals in Focus on Apple podcast, Google podcast, or your
favorite podcast platform, or visit us on our website at FAH.org. We hope you will share your views and tell a friend about us. Thanks so much for listening.