



The Doctor Is In: Economic Development Strategies in Health Care



December 2011

Paige Dennard: *Welcome to the Federal Reserve Bank of Atlanta's Economic Development podcast series. I'm Paige Dennard with the Federal Reserve Bank of Atlanta.*

Health care is becoming more and more important to the economic well-being of communities in the United States. Recently, as unemployment has spiked upward, employment in health care has remained stable and often grew. Businesses can get a competitive advantage with healthy, productive employees and contained health care costs. Good health and contained costs bring a community's taxpayers more financial stability as well as a better quality of life. In addition, the growth of the health care sector brings opportunities for innovators and entrepreneurs to create more economic growth.

Today I'm speaking with Dr. Ricardo Azziz, president of the Georgia Health Sciences University and CEO of the Georgia Health Sciences Health System since 2010. GHSU includes the sixth largest medical school in the nation and one of the largest colleges of dental medicine in the country.

Dr. Azziz, thank you for joining me today.



Dr. Ricardo Azziz: Thank you very much, Paige, for the opportunity.

Dennard: *Please talk a little about supply and demand for health care professionals across the United States. What are the biggest supply and demand challenges, why are there shortages, and how can we solve them?*

Azziz: We do have a shortage in the various specialties in health care professions, but I would like to start out by saying that health care professionals vary, they are not all the same. The demand rises from the need for health in a greater number of our populations. Our population is aging; that is also driving the demand for health care professionals. And furthermore, the ability to prevent and treat disease is more advanced, and that actually allows us to implement better strategies.

Now, there is a shortage of a number of these health professionals. Physicians, of course, are in shortage (projected to be 90,000 short by the year 2020), and that comes about from the fact that physicians are an expensive "commodity," if you would, they're an expensive profession to train. Dentists and other dental specialists, we do have a shortage in those, and dental medicine is also very expensive to train. Nurses have also been in chronic shortage, but the problem of nurses is a little bit different than that of physicians and dentists. Physicians and dentists are in shortage because we simply do not have enough qualified applicants in many cases, and two, if we have qualified applicants they don't always go to the type of professions that we want them to have. For example, we often, depending on our health care delivery system, we would like to have lots of primary care, or "gatekeeper" physicians, and lots of physicians are not choosing to do that.

In nursing, the biggest limitation to producing sufficient nurses is not the number of applicants, but actually the number of faculty, professors. We do not have enough professors in nursing, and these individuals generally are older in their professions. Then we have a whole assortment of lots of other professionals—physician assistants, allied health professionals—that are very much part and parcel of this interprofessional care that we provide today to our patients.

So, when we talk about supply and demand, I think we can say overall we need more health professionals, but the demand varies according to which health professional you are talking about, and the strategy, of course, varies. For nurses, we should increase the number of faculty and professors in nursing—that will help us train more nurses. In medicine, we would need to try to guide students and graduates into the professions and the specialties that society thinks they need.

Dennard: *Now looking a little broader, how can a health care system's economic impact on a community be measured, and also tell us how does the level of health care in a community affect efforts to attract companies and encourage them to expand?*

Azziz: Well, health care and health care systems are of enormous economic impact to the communities in which they reside, but actually to the broader community. For example, Georgia Health Sciences University has a direct economic impact to our community of about \$2.1 billion, and an impact across the state of about \$8.3 billion annually. This comes from the fact that our graduates, of course, generate businesses, that our own discoveries generate new companies, we purchase elements from lots of manufacturers within the state or that need to be imported from outside.

But in addition to serving as an economic engine to the communities, we also are a requirement. When a company is deciding to relocate to a community, when an industry is deciding to "set up shop," if you would, in our communities, first thing they will look for is, is there adequate health care that is affordable, that is readily available, that actually meets the needs of that particular industry. And, secondly, of course, is there an educational system that provides them with the employees that they need, the type of trainees. So, those two things go hand in hand, and, of course, that's why health systems are so important to communities, and also why health systems tied to educational endeavors, like an academic health center, are so critical to those communities.

Dennard: *Dr. Azziz, you've identified "technology transfer" as a key strategic focus for the university for the future. Tell us why this is important, and do you believe technology transfer is a viable source of new jobs?*

Azziz: Well, I think the technology transfer really speaks to our ability to take science and innovation, new knowledge, and apply it in a commercial approach, apply it in a practical manner to our communities. It is an important part of generating new jobs because these are the type of jobs that are high paying, they are type of jobs that require staff support, the type of jobs that actually generate even further businesses downstream. So, technology transfer, if done appropriately, is a significant economic impact. Witness what happens in North Carolina and the Research Triangle, in San Diego, California, in Menlo Park, and lots of other areas around the country that have been able to create hubs of technology transfer.

The creation of technology transfer hubs in Georgia really needs to be a multiple hub-and-spoke model. That means that you don't just have one area that has technology development, the technology developments are generated around a critical mass of a particular specialty. For example, in biotechnology, there may be an area—such as ours here in the region in combination with our university, other health systems in the area, the Savannah River National Lab, and so on—creates a hub for biotechnology. Other areas for technology transfer across the state may involve logistics, or core management. So, technology transfer clearly is one of those outputs that universities are fostering, they are critical to the generation of this new knowledge, and they are critical to the future of the state.

Dennard: *Now, what do you feel is the role of research at Georgia Health Sciences University, and how does research contribute to economic development in Georgia?*

Azziz: Research is a critical part of who we are. Georgia Health Sciences University is the state's academic health center and the state's health sciences university. We are one of only two integrated academic health centers in the state of Georgia. An academic health center involves an institution that provides a high level of education, generally in the graduate doctoral degrees, it provides advanced and critical care and service, and it provides research that is tied to these other missions. We carry out about \$90 million worth of research yearly. We have incubators with a number of different companies that we have spun off. So research is a very critical part of our mission.

Now, how does that contribute to the economic development of Georgia? That type of research does two things. One, it generates new discoveries, new approaches that allow us to deal and address with the health issues of the population in order to help them stay healthy, and, of course, in order to treat them if they become ill in a more rapid and efficient fashion. Secondly, these discoveries allow us to generate these commercial ventures, these venture businesses with other partners that allow these companies to develop, to generate new jobs, and then generate more opportunities.

Dennard: *Dr. Azziz, what are the new challenges for health care programs in reaching unserved or underserved groups? And also, how does Georgia Health Sciences University engage with communities across Georgia?*

Azziz: We speak a lot about the challenges of health care programs in reaching the underserved populations, and this is a challenge that actually is affecting and facing this nation in particular. Georgia has a 22 percent uninsured population, one of the highest in the nation. That means that these 22 percent of individuals in Georgia cannot access health care until they are very ill or critically ill, in which case all of us, ourselves and other hospital systems, take care of those individuals. The problem with that from an economic point of view is that you have now allowed these individuals to get so ill that their treatment and their care is very expensive. What we would like to do, of course, is maintain people healthy, or at least treat them in the early stages of the disease.

Now, how are we as a university and as a health system enterprise reaching across the state? We are doing it a number of ways. We, for example, have 800 clinical sites across the state of Georgia that we train our individuals and our students there so that they can bond with the communities; they can leverage the community's assets. But in addition to that, we also try to provide, as the state's academic health center, the needs for these communities across Georgia in regard to health care. You know, does a community need a type of specialist, does another community, for example, need pediatric surgeons, and that community need neonatology, and that other community need specialists in stroke, and so on. And we are able to provide these services as the state's academic health center through a combination of telemedicine, through a combination of traveling physicians, and through a combination, principally, of partnering with local health systems in those areas.

Dennard: *Dr. Azziz, thank you so much for sharing your knowledge and insights, and for joining us today.*

Azziz: Thank you very much. It has been my pleasure.

Dennard: *This concludes our podcast. We've been speaking with Dr. Ricardo Azziz who is the president of the Georgia Health Sciences University. For more podcasts on this topic and others, please visit the Atlanta Fed's website at www.frbatlanta.org. If you have comments or questions, please e-mail podcast@frbatlanta.org. Thank you for listening.*

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