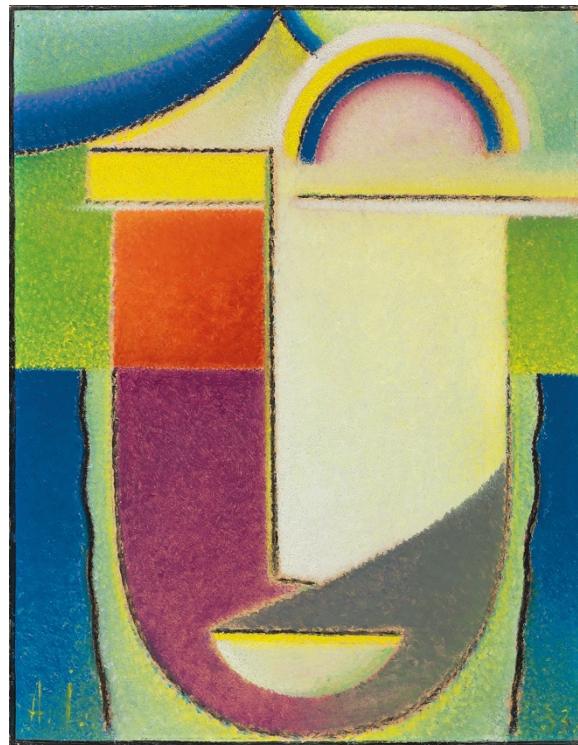




The 9th U.S.-China Health Summit: Building A Sustainable Healthcare System

Harvard Medical School

A presentation given by William A. Haseltine



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The annual U.S.-China Health Summit is dedicated to the advancement of global health by promoting the exchange of knowledge, ideas, and experiences of healthcare leaders from the United States, China, and other countries through high-level strategic dialogues, leadership development programs, and applied research. For the 9th U.S.-China Health Summit, ACCESS Health Chair and President William A. Haseltine gave a presentation on using leadership and technology to integrate distributed healthcare systems. The transcript of that presentation is below.

Gordon Moore (GM): It is my pleasure to introduce Bill. He has a PhD and active career in science, business, and philosophy. From 1976 to 1993 he was a professor at Harvard, where he founded and chaired two the Division of Biochemical Pharmacology and the Division of Human Retrovirology. He has done pioneering work on cancer, HIV/AIDS, and genomics, and he has authored more than two hundred manuscripts in peer review journals. Interestingly, he has founded more than a dozen biotechnology companies. Eight pharmaceutical products have emerged from companies that he founded. He is currently chair and president of ACCESS Health International, a foundation that is active in the United States and abroad. He chairs the Haseltine Foundation for Science and the Arts and the U.S.-China Health Summit. He was named one of the world's twenty five most influential business people by *Time Magazine* and one of the most influential leaders in biotechnology by *Scientific American* in 2000. It is a pleasure to welcome Professor Haseltine.

William Haseltine (WH): Thank you. It is a great pleasure to welcome a predominantly Chinese audience to Harvard during a delicate time in U.S.-China relations. Yesterday I spoke about the consequences, for both of our countries, of trying to restrict the flow of people and ideas that energize our modern world. Today I am going to share with you a personal journey connected to the broader theme of how we can build sustainable, integrated healthcare systems.

Throughout my career, I have tried to use my knowledge and energy to improve human health. First, it was through fundamental research, or pushing the science forward, at the Dana Farber Cancer Institute. I was working there when I realized the importance of products that industry brings to market. After that, I began to create companies and products of my own. When I realized the importance of mobilizing society to confront new problems like HIV/AIDS, I began building a social institution that would do for AIDS what had been done for cancer in the United States and Europe. That is, institutionalize a long acting, societal institutional response that involved politics, public health, and scientific and biomedical progress. That terrible disease was ameliorated and slowed down relatively quickly thanks to efforts made by people around the world.

After running a biopharmaceutical company and bringing products to market, it became evident to me that nowhere in the world, and certainly not in this country, have we fully realized what modern biomedical science can do for populations and for individuals. That is the reason I created the foundation ACCESS Health International. Our vision is to try to make sure that high quality healthcare is accessible and affordable to everyone, no matter their country, no matter their age.

What we have done in a number of countries is implant small groups of highly dedicated people to observe what is happening, interpret what is happening, and look for best examples. They use that information to advise government and private sector leaders who have the desire to improve the health of their countries. We become advisors and, in some cases, implementation partners for people around the world.

I myself have benefited from observing groups that have been implanted in Hyderabad, Delhi, Manila, Jakarta, Beijing, and Shanghai, amongst other places. The Singapore healthcare system was the subject of

my first deep study, which produced a book called *Affordable Excellence*. Singapore produces the highest quality outcomes at the lowest cost in the world today. It is a proof of principle that high quality does not mean high cost. Even including out of pocket and government expenses, they still spend less than five percent of their total GDP on healthcare.

Studying Singapore, I realized they have been struggling for years to solve a problem that afflicts many countries today: an aging society. They decided to build large, high quality hospital systems that limit private practice and provide healthcare to most people, older adults included. While that may have solved one problem, it still remains that massive hospital institutions are not suited to treating people in communities, at home or through clinics and other integrated systems. The system created to solve the problem fell prey to its own institutional inertia.

Now the Singapore government knows that if they want to care for their aging population, they cannot simply build giant hospitals. They have to begin treating people at home. To do that, they have to build an integrated healthcare system and install universal information systems. Designing healthcare systems in emerging economies does not begin with what was right for yesterday. Distributed healthcare systems are the solution right for today and tomorrow.

That is a lesson that China can learn from. We have visited medical cities in China that will be home to five and ten thousand bed hospitals. Because they have too autonomy, they will cost China generations of trouble. They will have power independent of government control to impede change. Even worse, outside Bangalore and other cities, healthcare cities are being constructed that will be populated entirely by sick people. Being with other sick people—especially in hospitals—is an easy way to become sick yourself. A major lesson we have learned about healthcare reform is that healthcare for everybody does not mean everybody in one hospital. It means everybody has healthcare that is accessible to them.

In Hyderabad, India, I studied another example. We were there when the government of Andhra Pradesh decided to give essentially free hospital care to everyone, which at the time meant a single state of eighty two million people. I watched the policy transform the accessibility of hospital care for that entire population. I watched the system go paperless, which was a huge success. Payments delayed by the government for more than a year are now made on time. On a political level, it was enormously popular.

The change in policy made a big difference, but again it created its own problem. People with minor ailments will show up at a hospital expecting free treatment and become angry. The primary care that most people need is not available at all. Unlicensed practitioners provide about seventy percent of care in remote parts of India. The policy has, to be sure, solved the problem of catastrophic illness related bankruptcy that was causing massive suicide in the population. It has been partially successful, but it is not a long term answer. That much you know just by looking at the overcrowded hospitals.

At the same time, the India government caught on to something that most people do not think about: emergency care. Their solution was a public private partnership through which an information technology company developed an efficient ambulance service powered by call centers spread throughout the country. A private foundation runs the service, and a mixture of federal and state government entities pay for it. It is free of charge to anybody who calls, and it serves eight hundred fifty million people. In urban areas, the average wait time is fifteen minutes, and in the countryside twenty minutes. In ten years, they saved three million lives. Half of those were women in childbirth. It has been a major success, yet somehow it remains overlooked.

I was so impressed by the ambulance service that I wrote a book about it, *Every Second Counts*. The ambulance service demonstrates the optimum use of information science, quality control, and continuous improvement. You can measure not just where accidents occur, but how many seconds it takes to pick up

the phone and dispatch an ambulance. A study by McKinsey estimates that in the United States, replicating that solution would save two hundred times our cost in ambulance services. The problem remains to convince countries to implement it. So far only Sri Lanka has. Although Egypt has a similar system, their informatics are poor. More countries must attempt it on a global basis.

Most recently I have completed a deep dive into NYU Langone Health, an American academic healthcare system in New York City, to see what is going on here and what could be done. I chose NYU Langone because it has achieved a remarkable transformation at the systems level, and I am telling you this story today because I want you to apply it.

Let me begin with some numbers. Twelve years ago, the medical center at NYU was about to bankrupt the entire university. Unlike Harvard, NYU does not have an endowment. If one of their units is losing \$150 to \$200 million a year, they have no way to recover. They were protected temporarily by Remicade, a patent that brought in about \$150 to \$200 million in royalties. But they knew that was going to expire.

The quality and safety record of the medical center was poor, ranking number sixty out of ninety academic medical centers. My friend Martha Bradford brought her concerns about their performance to the then chief executive officer of the hospital. Her concerns were dismissed, which says volumes about the extent of the neglect. In national medical school rankings, NYU School of Medicine fell to number forty. Their research budget was dropping at a time when everybody else's was doubling.

How is NYU faring today? By all measures, quite well. They brought in \$600 million in surplus from hospital operations, even after supporting the medical school for about \$200 million a year. NYU Langone ranked number one in quality and safety for three years in a row, and today they remain in the top five. A couple years ago, NYU School of Medicine was deemed the third best medical school in the country—up from number forty. So high a jump in rankings is without precedent. They also have the highest per capita research dollars from the National Institutes of Health of any university in the country, including Harvard.

How did they do that? First of all, they transformed the culture. NYU Langone now fosters a culture of continuous improvement, continuous learning, and unleashing what most people in the health sector already have—a desire to do good. When you run a big company, you realize how rare that is. If you allow people to express that, they will give you the momentum you need to move forward.

Too often we do not know how to activate that innate capacity for doing good. Trying to analyze it myself, I conducted about fifty interviews with the leadership at NYU Langone, from the very top down to the second level of management. One of the things I found most interesting was that the transformation in culture was initiated not by changing most of the staff but changing only a select few at the top. The woman who ran quality and safety when it ranked sixtieth in the country, for example, is the same person who ran it when that system was number one. The difference is that when they see a problem today, they have the ability to actually fix it.

Many leadership lessons can be gleaned from the NYU Langone story. So many, in fact, that I would call my book on the topic, *World Class*, a management book. One of the major lessons is that you have to make sure the board and the executives on the same page. They have to be working together because a board of directors sets the parameters for what is possible and protects whatever change agents you have. A change agent needs protection, especially in a hospital setting. You need protection and you need everybody aligned.

No matter how difficult it is, the second thing you do is focus on changing the culture. It is a day in, day out job. Donald Berwick, in his talk, discussed the positive—and negative—aspects of accountability.

While accountability does not appeal to everyone, without it you cannot produce quality outcomes. Quality outcomes require you to know what is happening. You need to know the fixed and variable costs for every patient. To achieve this, NYU Langone installed an information system that is real time, comprehensive, and transparent horizontally and vertically. Communication with patients is more streamlined, and adjustments to the system are made based on feedback from each and every one. The information system is absolutely essential.

It is true that some of our partners are having a horrible time with information systems. Doctors all over the country complain that information systems interrupt their patient experience. Fundamentally it should work, but nobody is focusing on the processes needed to implement it successfully. Based on my experiences building those information systems myself, I can confidently say that a command control structure is crucial. You cannot build an information system that works in the partners environment because there is no single boss that can make it work.

To have an information system like the one at NYU Langone, you need a very clear vision of what you want to do once you have it. You can quickly know what is happening, measure it, and fix what is wrong. It is not so much about punishing people doing poorly as it is about rewarding people doing well. It is about getting people to understand the problem and work together to solve it. If you are a surgeon, and you know based on the data that your results differ from three or four other surgeons doing exactly what you are doing with your population, you can choose to seek out the ones that are performing better and learn from them.

When I look around the world, I can envision a healthcare solution available to both high income and low income countries. That solution is a distributed healthcare system. Knit together by a seamless, real time, transparent information system, it allows you to know what is going on and where. It allows you to see the distribution of outpatient, in-home, and village level services. I believe a distributed healthcare system powered by seamless information technology addresses the major concerns of public health and to some extent the social determinants of health. Thank you very much.