

THE H.I.I.T. FUTURIST

Starting From Scratch: The Need for Fresh Perspectives and New Skills

Jeffrey C. Bauer, PhD

Imagine a world where diseases run their natural course. Hospitals and health professionals don't exist in this world because no one knows how to treat illness or injury. Then, imagine the sudden development of medical science that can cure most problems of human health. Think of a "big bang," where ignorance is translated into sophisticated knowledge in a split-second.

As far-fetched as this scenario may seem, it should appeal to anyone who has ever dreamed of creating a world with safe, appropriate, affordable healthcare. Because healthcare would be coming unexpectedly, out of nowhere, we would need to build a system to deliver it, and we would have the opportunity to design a rational structure from scratch. Perhaps best of all, as creators of this new system, we would not be saddled with the burdens of rehabilitating existing structures, challenging traditions, or threatening established interests. We could do things right from the start.

This vision of creating a new healthcare system is not pure fantasy. Sure, a healthcare delivery system already exists, structurally and economically. Rock-solid physical

plants and well-established exchange relationships contradict the scenario of having a fresh start with nothing to get in the way. However, the explosive development of a new medical science in this scenario is not hypothetical.

"The 21st century realm of medical possibilities will be sufficiently different from that of the 20th century that we can justifiably approach it as something new."

The medical universe is experiencing just such a "big bang." Our fast-growing understanding of health at the level of genes and molecules—an unprecedented perspective—will create new functions that compel us to develop new forms. At the same time, networked computers and related information technologies will enable us to look at every dimension of healthcare as never before. The 21st century realm of medical

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Healthcare Under Construction

We'll all benefit if today's developers of tomorrow's healthcare system approach their work with the excitement of an architect designing a new structure for a vacant lot. Of course, a variety of practical and political roadblocks will get in the way. Fresh perspectives will have to suffice as a substitute for starting from scratch.

Consequently, healthcare's strategic leaders must actively recruit, engage, and empower professionals who have the skills to envision new ways of doing things to produce better outcomes—the planners, engineers, analysts, project managers, and other process improvement specialists whose methods are the focus of this issue of JHIM.

These system-oriented specialists bring fresh perspectives to the challenge of using new scientific and technological building blocks to construct a better healthcare system. They have the skills to move us beyond familiar constraints of the permissible to exciting concepts of the possible. We can learn a lot from their methodologies, such as ideal design, fast-track development, and reverse engineering. They have a different way of thinking that will help us emulate the creative process of building a new structure rather than the more confined job of remodeling an old one. Their primary focus on solutions rather than problems will bring real benefits to healthcare.

Experts in engineering, systems design, and operations improvement also should be members of the healthcare construction team because they are already comfortable with informa-

tion technology and quantitative analysis. Mathematical modeling to explore "what-if" scenarios is a core competency in their educational programs. They are trained to manage by objectives, moving toward predetermined goals within budgets and timelines. They know how to reduce or even eliminate waste with a results-oriented discipline that is desperately needed in healthcare. And they make information technology look good because they know how to use it, for example, in computer-assisted design, project planning, and cost-management programs.

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Starting Clinical Transformation

Although expertise in design-oriented systems analysis and operations improvement finally is being sought to make contributions to healthcare, progressive clinical leaders already have started to apply its principles under the heading of clinical transformation. Indeed, providers with clinical transformation management programs already have created a place for employees and consultants who know how to design care process for safety and lower costs.

Clinical transformation formally addresses the interplay of new concepts of care—such as patient safety and error reduction and

integrated diagnostic centers—and work processes that can produce them efficiently and effectively. Clinical transformation management is the process of finding the best way to produce new health services at a time when medical science is undergoing a revolution. Clinical transformation management seldom should be directed toward finding new ways to provide old health services, and it should never focus on technology for technology's sake.

On the other hand, technology, especially information technology, is increasingly the best solution to healthcare's problems for two reasons. First, health professionals are becoming increasingly scarce and expensive. The supply of qualified caregivers and managers will not keep up with demand, requiring the adoption of technologies that increase worker productivity. Second, the quantity of information needed to support clinical excellence and institutional survival is growing beyond any professional's mental capacity to absorb it.

In light of the declining number of qualified personnel and the growing volume of critical information, cataclysmic failure cannot be far off for health systems that do not apply the skills of engineers, analysts, and process improvement experts to the task of clinical transformation.

It's difficult to imagine a successful healthcare delivery system without industrial-strength IT five years from now. Productivity-enhancing and cost-reducing IT is starting to become a critical success factor, on a par with good management, solid finances, and excellent care.

Health systems should respond by planning the future as if they were starting from scratch, because looming changes will be immense. Medical,

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nursing, and allied health staffs will be providing very different types of care because of the revolution in medical science. Customers will be expecting very different types of service as a result of the dramatic restructuring of the payment system. Competitors will be looking for weaknesses to exploit. Ironically, health systems that do not now

approach the future as if starting from scratch most likely won't be up to scratch before long.

About the Author

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