



## Waiting for the Next Shoe to Drop: Healthcare Reform and Academic Pediatrics

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Healthcare in the US is in the midst of dramatic reform driven by unsustainable healthcare costs.<sup>1</sup> To maintain the traditional missions of clinical care, research, and education, academic pediatric departments must plan for change. Yet, planning is difficult because along with declining clinical revenue there is an increasing burden of chronic disease, a changing workforce, and decreasing Federal research support. A team from the Department of Pediatrics and Primary Children's Medical Center addressed these issues using a planning process to establish a likely scenario, and developed a strategic plan and tactics to deliver high value pediatric healthcare while maintaining economic stability. We share these planning and operating models to give other academic pediatric departments and children's hospitals the perspective of one approach to address a rapidly changing healthcare environment.

### Scenario Planning

In a changing healthcare environment, the question is: "What is the path from HERE, where we are today ... to THERE, the likely situation of the future?" To identify a vision of "THERE," we used a planning tool focused on society, technology, environment, economics, and politics (STEEP).<sup>2</sup> A scenario is not a forecast, but rather a view of our future. Factors in our analysis are specific for Utah and some are applicable across the US.

### Society

The Utah birth rate is declining, slowing the growth rate of the pediatric population. In other states, the pediatric population is declining at a time when children's hospitals have put unprecedented resources into facility expansion.<sup>3</sup>

Although the birth rate is in decline, infants born with congenital and genetic conditions survive at an unprecedented rate, entering their childhood and ultimately adult years with chronic medical conditions. Those children account for an increasing proportion of inpatient hospitalizations and ongoing economic costs.<sup>4</sup>

The pediatric workforce is also changing, increasingly diverse in gender, generation, and values. The majority of pediatricians are women who have complex roles juggling challenges while pursuing demanding professional careers. Current pediatric residents have different generational values, a burden of educational debt, and are educated in an environment of less continuity of care, more transitions, and more supervision. Thus, newly minted pediatricians

are likely less productive than those they replace, challenging the sustainability of a physician-centric health delivery system.<sup>5</sup>

### Technology

Telemedicine has great but not yet fully realized potential.<sup>6</sup> Healthcare teams across the country are implementing alternatives to the traditional office visit with personal monitoring of patients with chronic conditions and point of care testing to avoid the lengthy delays of traditional laboratory process. Computerized decision support is valuable for physicians and, increasingly, for patients and their families.

Technology has also rapidly expanded the amount and reduced the cost of genetic information, but interpreting these data is exceptionally difficult. This tsunami of information and the attendant uncertainty only adds to the confusion.<sup>7</sup>

The National Institutes of Health funding stream for continued expansion and application of scientific knowledge is uncertain.<sup>8</sup> From the heady days of explosive growth of the National Institutes of Health budget to the current post-sequestration fiscal reality, traditional R0-1 funding is declining. There are challenging times ahead for pediatric departments dependent upon large basic science research portfolios.

### Environment

We live in a sea of chemicals and pollutants that likely add to the increasing incidence of obesity, asthma, neurodevelopmental disorders, prematurity, and other chronic conditions. The technology for elucidating the risk from some of the most troubling environmental factors is immature. The National Children's Study is the best prospect for establishing the environmental-genetic inter-relationships that will guide public health policy.<sup>9</sup>

### Economics

The economic policy debates about healthcare spending dominate all efforts to solve the national debt. The transition from fee-for-service to prospective payment shifts the

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responsibility for controlling healthcare cost from insurers to providers. Freestanding children's hospitals are particularly vulnerable because of historically high operating costs, debt burden from construction, and dependence on a volume-model of economic growth.<sup>3</sup>

As government and commercial healthcare reimbursement decline and supplemental Medicaid payment end, the professional income of nearly all physicians also will drop, making educational loan repayment more difficult for those who financed their education with the anticipation of high earnings. Undergraduate and post-graduate medical education is under great pressure as tuition rises and graduate medical education funding falls.<sup>10</sup>

### Politics

Healthcare spending remains mired by legal interpretation and partisan politics. The Affordable Care Act is unevenly applied across the nation as some states fully implement expanded health insurance coverage and others approach the problem of the uninsured incrementally or not at all. The goal of universal healthcare coverage for children is at risk.

### Strategies for the Future

For those considering how to navigate these uncharted waters, we offer some of the strategies and tactics we are pursuing.

- Define the actual cost of providing healthcare. Charge-cost ratios are not sufficient. Contracting for prospective payment is perilous unless you know the cost of inpatient and ambulatory care within cases and across time. We rely on an activity-based accounting system to delineate our costs by mission.
- Embrace the Value Proposition of high-quality care at an affordable and sustainable cost.<sup>1</sup> Learn to manage for a margin that provides sustainable revenue flow, not for the gross profit. This principle applies to both fee-for-service and prospective payment models that likely will be present for many years.
- Link to a vertically integrated health system that includes an insurer. Many children's hospitals have a proud tradition of being free-standing, independent economic entities. In a fee-for-service environment, that position has served them well. However, in a prospective payment environment, isolation creates substantial competitive risks.
- Redesign healthcare delivery for complex and expensive patients with the goal of reducing variability in care and avoiding unnecessary hospitalizations, expensive testing, and treatment. We established levels of care and scope of practice among system hospitals to avoid duplication of services, concentrated the comprehensive management of expensive complex patients, and deployed care process models for common conditions.<sup>11</sup>
- Transform the departmental research model from an emphasis on discovery science to a balanced and integrated portfolio of laboratory science, clinical trials, and health service research that are economically sustainable and competitive in a changing funding environment.
- Educate the current generations of providers for change and the next generation for new systems. Prepare residents for team practice in which they will spend less time seeing individual patients and more time supervising medical assistants, nurses, and advanced practice providers who are working at the "top of their license."
- Address the issue of educational debt. Following a survey of our faculty and residents, which defined a large burden of educational debt, we developed a debt repayment program. Since 2007, the department has paid over \$3 million directly to lenders.

Changes in the healthcare system are real and cannot be wished away. As we enter uncertain times, the traditional missions of clinical care, research, and education depend on the fourth mission, economic sustainability. ■

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