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Studies suggest — and experience repeatedly demonstrates — that strategic investments in the well-being of children yield massive returns, not only to children's health and well-being, but also to the next generation of adults and to their children. Further, the economic benefits to society mirror the health benefits.

In this paper, I explore the connection between the health and well-being of children today and America's economy tomorrow. I also suggest that, as the health care debate in America continues, we can better understand and raise awareness about the programs and services that most effectively deliver health to children. By improving the health and well-being of children today, we will have a healthier population of adults in the future — helping to improve the health care system and strengthen the economy.

I hope this paper plays a role in fueling more radical conversations about transforming health care — from a system that pays for volume and complexity of medical services to a system that pays for health.

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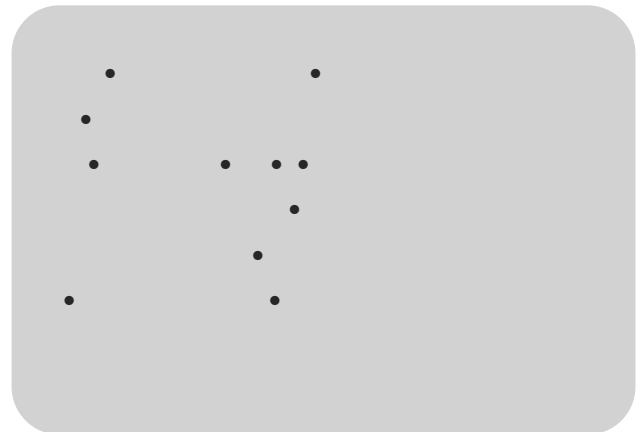
## Children’s health and well-being is everyone’s business.

Today’s working adults and businesses depend on the next generation of productive taxpayers to keep the economy strong and the country safe.<sup>1</sup>

Just as stock investors are advised to buy low and sell high, the United States — which is in dire need of a healthier workforce — should invest in human capital when it costs the least and when the return on investment will be realized for the longest amount of time.<sup>2</sup>

**What is human capital?** “Human capital is defined in the Oxford English Dictionary as ‘the skills the labor force possesses and is regarded as a resource or asset.’ It encompasses the notion that there are investments in people (e.g., education, training, health) and that these investments increase an individual’s productivity.”<sup>3</sup> This is why investing wisely in children’s health and education is like buying stock at a low price: When the current generation of children mature into adults, the return is a highly productive workforce.<sup>4</sup>

America’s health care system is primarily focused on medical services — lab tests, imaging tests, surgical procedures, the prescribing of medications, and so on.<sup>5</sup> However, provision of medical care in totality accounts for only 15% of health.<sup>6</sup> The health of an individual is mostly due to other factors including education, nutrition, safety, security, and individual behaviors. These factors are often referred to as the social determinants of health, or SDOH.<sup>7</sup> While SDOH is a useful term, it can be misleading. SDOH are not supplements to medical care. Medical care is actually a supplement to SDOH.







## The Fee-For-Service Model

In America's health care system today, individuals and insurers (employers and the government) pay for medical services in a predominantly fee-for-service system.<sup>14</sup> There are several drawbacks to a fee-for-service model, including:



## Start “small” for big (and cost-effective) results.

By moving to a “pay-for-health” system of care and addressing the social determinants of health among a specific portion of the population, children, we can have a dramatic impact on the entire health care system.



**Why children?** Children account for only about 7% of total medical care spending yet will soon become 100% of the adult population. The benefit of intervention in childhood is huge. Health trajectories and behaviors can still be readily influenced. These changes can last a lifetime and even impact the next generation.<sup>18</sup>

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**How does this work?** A healthier adult population will spend less on health care, cost less for the government or employers to insure, earn more income, and be more productive members of the workforce.

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**Who will lead this effort?** Children’s hospitals and health systems possess the expertise, trusted relationships, and infrastructure to serve as the stewards of children’s health. Acting as integrators,<sup>19</sup> children’s hospitals can systematically assess gaps and barriers to improved health, working in partnership with others in their communities, states, and even regions to address them.

### Children’s Hospitals: Stewards of Children’s Health

Children’s hospitals across the United States are already addressing the social determinants of health for populations of children. To learn more, including how institutions like Boston Children’s Hospital, Nationwide Children’s Hospital, Nemours Children’s Health, Seattle Children’s Hospital, and Children’s Hospital of Wisconsin are addressing the well-being of children, visit [movinghealthcareupstream.org](http://movinghealthcareupstream.org), a resource created by Nemours Children’s through a grant by The Kresge Foundation.



## Transforming health care begins with children.

As trusted authorities on children's health, children's hospitals treat and care for children and families across the United States every day. As stewards of children's health, children's hospitals can take steps like these to reach even more children, create more health and well-being, and in the process, transform health care for everyone.

### 1. Create a value-based services organization.

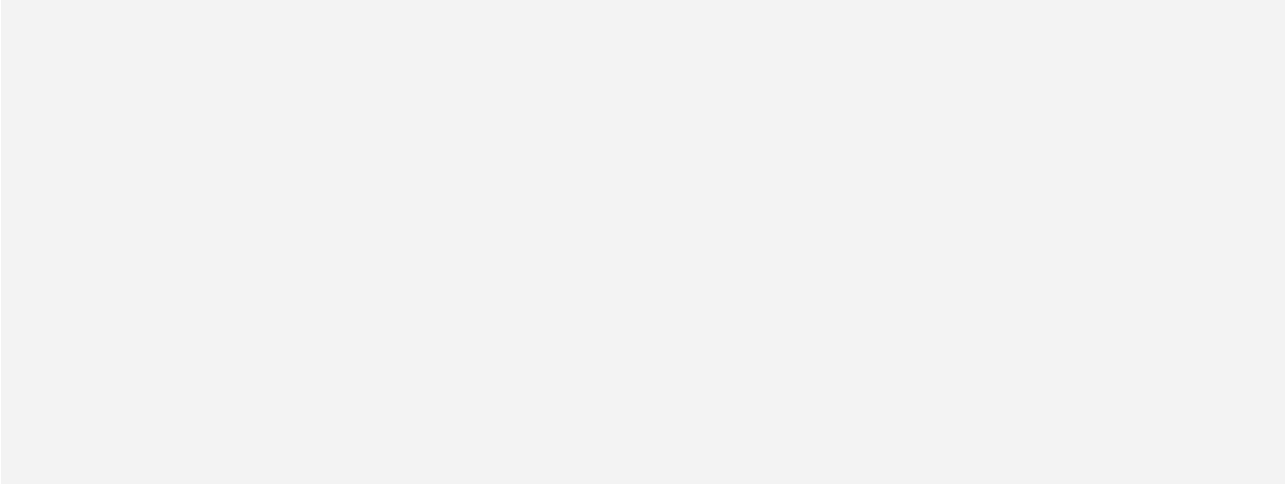
Transforming health care from a pay-for-medical-services industry to a pay-for-health industry requires a complete cultural transformation. At Nemours Children's, we understand that culture cannot be mandated but we believe that structure enables culture. Therefore, we have created the Value-Based Services Organization (VBSO), a structural entity oriented toward becoming a





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## Imagine a World Where ...



Our economy is driven by the power of a truly healthy workforce.

We spend 10% of our GDP on health care instead of 18%, freeing up approximately \$1.72 trillion dollars to invest in our nation's future.

The average American family spends 50% less on health care while enjoying a better quality of life.

These healthy trends and behaviors are passed on to the next generation of Americans at no added cost to society.

If the obstacles to achieving such a world seem insurmountable, consider this:

By making evidence-based changes in the way we “create” healthy children, we not only improve the quality of life for families, we also improve workforce productivity and reduce health care-related costs to individuals, companies and governments/communities.

**We improve the American economy forever.**

1. In a 2017 report, demographer Dowell Myers explains, "In the next 10–20 years, today's children will grow into adulthood but their undersized numbers will struggle to support the U.S. economy as workers, consumers, and taxpayers..." (p.v). He further explains that underinvesting in children reduces their future productivity and details the ways in which the U.S. is currently underinvesting in children. Myers, D. (2017). *T N I a C A a*. Palo Alto, CA and Washington, D.C.: The Lucile Packard Foundation for Children's Health and Children's Hospital Association (CHA). [https://www.lpfch.org/sites/default/files/field/publications/newimportanceofchildren\\_myers\\_1.pdf](https://www.lpfch.org/sites/default/files/field/publications/newimportanceofchildren_myers_1.pdf).
  
2. Regarding the dire need for a healthier workforce, Moody's Analytics published a report with the Blue Cross Blue Shield Association that outlines how the generation that makes up the largest portion of the workforce today, millennials, are sicker than the previous generation at this age, resulting in health care costs that could be up to 33% greater than the previous generation and cost us thousands a year in income due to poor health alone. pg. 3, "The Economic Consequences of Millennial Health," Moody's Analytics, November 6, 2019. Regarding the relatively low cost of investing in children's human capital in comparison to investing in adults, "Thinking of health as a stock that accumulates with investment or deteriorates without investment over time also highlights the importance of investing early in health. Building a strong foundation of health starts in childhood. This is not only because health as a child is the basis of that stock, but also because the opportunity cost of spending time investing in health instead of earning money or doing leisure activities in childhood is significantly less strong than in adulthood. Further, it's clear empirically that poor childhood health is heavily correlated with poor adult health and worse economic outcomes." pg. 7, Chen, Vicki. *T E I a C ' H a*.
  
3. "Human capital is defined in the Oxford English Dictionary as 'the skills the labor force possesses and is regarded as a resource or asset.' It encompasses the notion that there are investments in people (e.g., education, training, health) and that these investments increase an individual's productivity." pg. 1, Goldin, Claudia. *Ha C*. Heidelberg, Germany: Springer Verlag; 2016. Retrieved January 17, 2020 from [https://scholar.harvard.edu/files/goldin/files/human\\_capital\\_handbook\\_of\\_cliometrics\\_0.pdf](https://scholar.harvard.edu/files/goldin/files/human_capital_handbook_of_cliometrics_0.pdf).



12. The rankings featured in UNICEF's Child Well-being in Rich Countries, A Comparative Overview were based on the "average ranking for the five dimensions of child well-being." These dimensions — material well-being, health and safety, education, behaviors and risks, housing and environment — are aligned with the determinants of health and social determinants of health.

13. For examples of how the social determinants of health can be addressed through programming, how effective types of programming are, and the funding methods for these programs, visit:

The Heckman Equation, which offers free access to reports, FAQ sheets, and other resources highlighting Professor James Heckman's groundbreaking work in the impact of early childhood interventions and the ROI of these interventions. <https://heckmanequation.org/>.

Childhood Investment: What Works? by the Program for Children at The National Bureau of Economic Research, which describes and reports on the impact of a variety of programs <https://www.nber.org/themes/childhood/childhoodsummary.shtml>.

Moving Health Care Upstream, which offers a wide variety of tools and resources related to programs, policies and funding of childhood interventions to promote well-being <https://www.movinghealthcareupstream.org/tools-and-resources>.


14. Haelle, T. (March 8, 2016). *Family Success: A New Paradigm for Health Care*. Medscape. <https://www.medscape.com/viewarticle/860003>.

15. For more information on payment models for children's health, see Wong, et al. (June 2018) *Managed Care Value-Based Payment Reform: A Pediatric Perspective*. JAMA, June 2018. Retrieved on January 17, 2020, from <https://jamanetwork.com/journals/jamapediatrics/article-abstract/2676823>.

16. Regarding the government's support for a transition to value-based care, visit The Centers for Medicare and Medicaid webpage on Value-Based Programs available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/Value-Based-Programs>.

17. Waldron, T. (September 30, 2019). *The Future of Value-Based Care: 2019 Survey Results*. The Definitive Blog, Definitive Health Care. Retrieved on January 17, 2020, from <https://blog.definitivehc.com/value-based-care-2019-survey-results>.

18. A long-term evaluation of the Carolina Abecedarian Project (ABC) shows striking effects on adult health and other child outcomes. See Campbell, F. et al. (March 28, 2014). *Ea*

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Nemours Children's Health is one of the nation's largest multistate pediatric health systems, which includes two free-standing children's hospitals and a network of nearly 75 primary and specialty care practices. Nemours Children's seeks to transform the health of children by adopting a holistic health model that utilizes innovative, safe and high-quality care, while also caring for the health of the whole child beyond medicine. Nemours Children's also powers the world's most-visited website for information on the health of children and teens, [KidsHealth.org](http://KidsHealth.org).

The Nemours Foundation, established through the legacy and philanthropy of Alfred I. duPont, provides pediatric clinical care, research, education, advocacy and prevention programs to the children, families and communities it serves. For more information, visit [Nemours.org](http://Nemours.org).

