

# Growing the Economy:

Children, Health and the American Worker



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# A Message From the CEO



My first paper, “How Children Can Transform the Economy... and Health Care,” explained how strategic investing in child health and well-being could have a powerful impact on the economy and America’s health care system. I asked you, our readers, to imagine a world where our economy is driven by the power of a truly healthy workforce.

I added that the benefits of living in such a world — from improved quality of life for families to greater productivity — was within our reach ... if we invested in children wisely and transformed health care from a system that pays for volume and complexity of medical services to a system that pays for health.

This second paper in the series digs deeper into the relationship between productivity and children’s health, suggesting that Americans have an opportunity to develop the workforce of the future simply by prioritizing health earlier, long before expensive conditions like hypertension, depression, and diabetes develop and undermine quality of life as well as productivity.

My goal is to facilitate a broad conversation about children’s health across industries and areas of expertise. Together, we have the capacity to raise the healthiest, happiest and most productive workforce in American history.

A handwritten signature in black ink that reads "R. Moss". The signature is written in a cursive, flowing style.

**R. Lawrence Moss, MD, FACS, FAAP**  
President and Chief Executive Officer  
Nemours Children’s Health

# Overview

## Productivity Growth Is Essential to Economic Growth

As the Organization for Economic Co-operation and Development (OECD) explained in the 2019 Compendium of Productivity Indicators, “Productivity is commonly defined as a ratio between the volume of output and the volume of inputs. In other words, it measures how efficiently production inputs, such as labour and capital, are being used in an economy to produce a given level of output. Productivity is considered a key source of economic growth and competitiveness and, as such, internationally comparable indicators of productivity are central for assessing economic performance.”<sup>1</sup>

### What drives productivity growth?

Simply put, technology, physical capital, and workforce (labor).<sup>2</sup> As Bureau of Labor Statistics Economist Shawn Sprague explains, “with regard to labor productivity itself, it has become clear that the United States is in one of its slowest-growth periods since the end of WWII.”<sup>3</sup>

### Why is productivity growth important?

According to a Brookings Institution report published earlier this year, the future will be shaped by it: “As the fundamental driver of long-run living standards, weak productivity growth is a serious problem. Lower living standards, bigger budget deficits, fewer jobs, lower wages, and higher inequality await if things don’t improve.”<sup>4</sup>

### How can America increase productivity growth?

Of the drivers of productivity, human capital is arguably the area that we, as a nation, can influence most.<sup>5</sup> Human capital is created largely through health and education, which allow workers to perform well and compete globally for jobs as well as drive American companies to be internationally competitive.

**“Productivity is considered a key source of economic growth and competitiveness and, as such, internationally comparable indicators of productivity are central for assessing economic performance.”**

— Organization for Economic Co-operation and Development (OECD)



# Overview (continued)

## Productivity Growth Is Essential to Economic Growth



Given the importance of health to the economy, the United States must address its low rankings in health if it wishes to remain competitive.

In 2018, the United States ranked 24th in the World Bank's Human Capital Index. This index "measures the human capital of the next generation, defined as the amount of human capital that a child born today can expect to achieve in view of the risks of poor health and poor education currently prevailing in the country where that child lives".<sup>6</sup> Rankings by the World Economic Forum also suggest cause for concern. While the United States ranked second place in the Global Competitiveness Report 2019, a closer look suggests troubling results that may put us at risk of economic decline in the future. Of the 141 countries assessed, the U.S. ranked 14th in "skills of the future workforce" pillar and 55th in the "health conditions" pillar.<sup>7</sup>

These rankings are reflected in the significant challenges employers face related to health, including obesity and addiction. In some areas, addiction issues

(namely, the opioid crisis) are preventing companies from hiring the local workforce and causing them to take their operations overseas.<sup>8</sup>

American employers are also facing challenges related to mental health among the workforce generally with workplace suicides reaching a historic high in 2018.<sup>9</sup>

Work losses related to health are thought to cost U.S. employers more than \$225.8 billion each year<sup>10</sup> with conditions such as cancer, bronchitis, depression, and heart disease resulting in higher average lost productivity costs compared to controls.<sup>11</sup>

These health conditions have taken a toll on the American workforce and its ability to drive economic growth. In its *Report on the Economic Well-Being of U.S. Households in 2018*, the Federal Reserve Bank found that "Over one-third of prime-age adults who are not working cite a health limitation as a reason."<sup>12</sup>



A photograph of two construction workers in a hard hat and safety glasses looking at a tablet. The worker in the foreground is wearing a red hard hat and safety glasses, and is looking down at a tablet. The worker in the background is wearing a yellow hard hat and safety glasses, and is also looking at the tablet. The background is blurred, showing other workers and a construction site.

# An Important Distinction

## Productivity and Efficiency

The difference between efficiency and productivity is important, especially in relation to how the U.S. invests in its economic future. In a 2017 Harvard Business Review article, Michael Mankins, a partner at Bain and Company, explained, “Efficiency is about doing the same with less... Productivity is about doing more with the same.”<sup>13</sup>

If the United States is looking to increase productivity in relation to its competitors, the question is not “how can we maintain current productivity while cutting investment?” Rather, the question is, “how do we improve or increase productivity given what we can invest?”

The answer: Invest America’s existing health dollars more wisely. As we transform payment models to a pay-for-health system, we must also continue to eliminate waste and deliver health services more efficiently, such as through telemedicine, so we can invest the savings in areas of high return, i.e. the social determinants of health.

Investing in areas of “high health return” requires updating our approach to creating health in this country. Specifically, updating current policies to allow and incentivize states, communities, and institutions to invest in infrastructure and programs that will yield the greatest results, including those that address proven, nonmedical drivers of health such as education, nutrition and housing/safety.

# Addressing the Problem

## How Can the U.S. Increase Human Capital?

**“The nation would benefit greatly from a search for policies with broad appeal that could promote labor force participation and higher productivity, with benefits shared broadly across the nation.”**

— Federal Reserve Chair Jerome Powell

Returning to a higher growth rate is critical to maintaining and improving the standard of living in the United States.<sup>14</sup> Jerome Powell, the chair of the Federal Reserve System, spoke directly to the importance of growth and workforce productivity in a 2019 speech: “By promoting macroeconomic stability, the Fed helps create a healthy environment for growth. But these longer-term issues [including low labor force participation by prime-age workers and low productivity growth] require policies that are more in the province of elected representatives. The nation would benefit greatly from a search for policies with broad appeal that could promote labor force participation and higher productivity, with benefits shared broadly across the nation.”<sup>15</sup>

As Chairman Powell calls for policies that support labor force participation, the private sector is attempting to improve employee health through corporate wellness programs. One recent study conducted at a laundry plant, described in *The Wall Street Journal*, suggests that healthier workers are more productive workers. The estimated return on investment, in terms of health program dollars relative to improved productivity, was 76.3 percent.<sup>16</sup>

Assisting with the provision of child care to bolster employee productivity is another approach to investing in workforce participation and employee well-being,<sup>17</sup> with some companies like Patagonia going so far as to provide onsite daycare.<sup>18</sup>

There is yet another approach that could dramatically change the face of the workforce as we know it: addressing healthrelated productivity issues in childhood when it costs the least to intervene and can produce a lifetime of benefits.<sup>19</sup>

As we discuss next, this requires aligning incentives in our payment system so that investing early in human capital is not simply supported, but actually “built-in” to the way we care for our children.



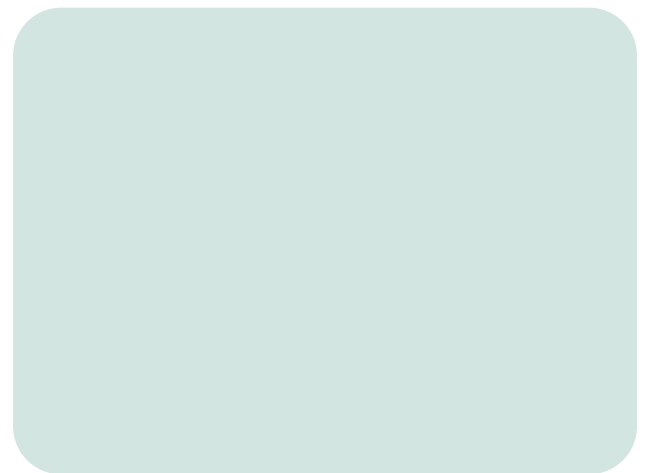
# The Productive Solution

## Create More Human Capital in Childhood

The fact that children are going to become the next generation of employees is easy to forget in the face of significant problems among the current population of working adults. Yet, if healthier in childhood, today's children will grow — in just 5 to 15 years — into the healthier and more productive workforce America needs.

As economist Janet Currie, the Henry Putnam Professor of Economics and Public Affairs at Princeton University and the director of Princeton's Center for Health and Wellbeing, explains, "In the past 20 years, there has been an explosion of research demonstrating that child health is an important form of human capital. Healthier children live longer and healthier lives, get more education, and earn higher wages."<sup>20</sup>

Unfortunately, the current state of child health in the United States — which includes adolescent and teen health — points to a continuation of the current trend of an increasingly unhealthy population and workforce. For example, children in the U.S. ranked 39th for child well-being out of 180 countries, according to a recent national report published in *The Lancet*.<sup>21</sup> The 2017 Youth Risk Behavior Survey found 14.8 percent of U.S. high school students were obese and another 15.6 percent were overweight — factors that place them at risk for chronic diseases



like heart disease, diabetes, and cancers in adulthood and will contribute to the overall cost of benefits provided by future employers.<sup>22</sup>

These findings are especially alarming given that conditions and risk factors like heart disease and diabetes cost U.S. employers \$36.4 billion a year in lost productivity due to absenteeism, according to the Centers for Disease Control and Prevention.<sup>23</sup>



# The Productive Solution (continued)

## Programs That Build Human Capital in Children Deliver Returns the American Economy Needs

Professor James J. Heckman, an economist at the University of Chicago, found “a 7 percent to 10 percent per year return on investment based on increased school and career achievement as well as reduced costs in remedial education, health, and criminal justice system expenditures” based on analysis of The Perry Preschool Project. He found a “13 percent return on investment per child, per annum through better education, economic, health, and social outcomes” as a result of Abecedarian/CARE’s early childhood programs.<sup>24</sup>

A 2020 study by Harvard economists Nathaniel Hendren and Ben Sprung-Keyser found the highest “Marginal Value of Public Funds” to be “direct investments in the health and education of low-income children. In many cases, these policies pay for themselves in the long-run. Children pay back the initial cost as adults through additional tax revenue and reduced transfer payments.”<sup>25</sup>

And while the United States is one of the wealthiest countries in the world, we fall behind “peer” nations, including France, Sweden, and Italy, where investments in social services — including early care, education and family programs — have proven effective. These investments also present the potential to improve outcomes in children and adolescents as well as reduce costly health care interventions in adulthood.<sup>26</sup>



# Three Steps to Greater Workforce Productivity

## Systems, Infrastructure and Policies

America has the resources and know-how to build human capital among all of its children, giving them the opportunity to grow into healthy, productive Americans. As data demonstrates, health outcomes are not determined solely by world-class providers and facilities. We must also adapt our health system to create health for more people, starting at an earlier age. The following steps will facilitate and encourage collaboration, innovation, and communication among everyone with a stake in the health of the next generation — in other words, all Americans.

- 1. Systems:** In the current health care system, states, employers, and individuals spend money based on the number and complexity of procedures. In a true “payfor-health” system, hospitals and providers would be incentivized to create maximum health for the populations they serve.
- 2. Infrastructure:** Electronic Health Records (EHRs) and telemedicine capabilities are two examples of infrastructure that can improve the patient experience and drive better outcomes for children and families. With the right tools at their disposal, parents, educators, clinicians, and social workers can work together, seamlessly collaborating with less friction to create more health.<sup>27</sup>

- 3. Policies:** Some policies hinder the ability of health care providers to update systems and infrastructure. One example is the existing telemedicine policy, which places restrictions on access to providers based on the physical location of the patient and provider.



# Three Steps to Greater Workforce Productivity

## Systems, Infrastructure and Policies



### Systems

We have successfully implemented financially sustainable pilot programs to improve health outcomes by addressing health through team efforts that coordinate care in and beyond the doctor's office.



### Infrastructure

We invest heavily in our EHR and telemedicine capabilities, which allow us to efficiently and effectively collaborate with educators, social workers and even other health systems.



### Policies

Based in Washington, D.C., our National Office of Policy and Prevention provides lawmakers with the data and research they need to update regulations related to infrastructure like telehealth and initiatives related to pay-for-health systems.

# Conclusion

## Imagine an Economy ...



Driven by the world's healthiest and most productive workforce.

An economy in which every child has the chance to fulfill his or her potential to lead, create, and earn based on their innate abilities, thanks to access to the services that foster health, education, and growth. America needs such an economy to compete in the global marketplace.

The future stability, strength, and prosperity of our nation is inexorably tied to how we invest in the health and development of America's children today.

**The future stability, strength, and prosperity of our nation is inexorably tied to how we invest in the health and development of America's children today.**

The private sector and the public sector, in partnership, can take practical, evidence-based steps to improve the future for all American children even if health care, as the president once said, is "complicated."

We have 74.1 million reasons to be optimistic, if we take action now.

# Endnotes

1. The definition cited can be found on pg. 13 of the OECD (2019), OECD Compendium of Productivity Indicators 2019, OECD Publishing, Paris, [https://read.oecd-ilibrary.org/industry-and-services/oecd-compendium-of-productivity-indicators-2019\\_b2774f97-en#page1](https://read.oecd-ilibrary.org/industry-and-services/oecd-compendium-of-productivity-indicators-2019_b2774f97-en#page1).
2. For an explanation of the drivers of productivity growth, see The Productivity Puzzle by Scott A. Wolla of the Federal Reserve Bank of St. Louis <https://research.stlouisfed.org/publications/page1-econ/2017/03/03/the-productivity-puzzle/>
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4. McKibbin, W.J. and Triggs, A. (March 2, 2020). *The future will be shaped by what global productivity does next*. The Brookings Institution. <https://www.brookings.edu/blog/up-front/2020/03/02/the-future-will-be-shaped-by-what-global-productivity-growth-does-next/>
5. Relative to investments in technology, which advances unpredictably, investment in human capital is a factor that can be influenced through programming and policy, as explained by Scott Wolla in *The Productivity Puzzle* (reference provided in Endnote 2).

As Federal Reserve Bank Chairman Powell explained in a 2019 speech to the Citizens Budget Commission, the slowdown in productivity growth must be addressed by investments to increase labor force participation. <https://www.federalreserve.gov/newsevents/speech/powell20190228b.htm>

The World Bank also describes the critical nature of investing in the workforce or human capital to reinforce physical capital investments and drive productivity growth in its answer to Frequently Asked Question #1. <https://www.worldbank.org/en/publication/human-capital/brief/the-human-capital-project-frequently-asked-questions#1>

6. See pg. 3 of the *World Development Report 2019: The Changing Nature of Work*, The World Bank, [www.worldbank.org](http://www.worldbank.org). <https://www.worldbank.org/en/publication/wdr2019>
7. See pg. 598 of 666. The Global Competitiveness Report 2019. World Economic Forum. [http://www3.weforum.org/docs/WEF\\_TheGlobalCompetitivenessReport2019.pdf](http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf).



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10. *Worker Productivity Measures*. Centers for Disease Control and Prevention. <http://www.cdc.gov/workplacehealthpromotion/model/evaluation/productivity.html>
11. For additional information, see *Measuring Health-Related Productivity Loss* by Rebecca J. Mitchell and Paul Bates at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3128441/>.
12. Report on the *Economic Well-Being of U.S. Households in 2018 – May 2019*. Board of Governors of the Federal Reserve System. <https://www.federalreserve.gov/publications/2019-economic-well-being-of-us-households-in-2018-employment.htm>
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27. In the fifth chapter of the 2014 *The Economic Report of the President*, titled “Fostering Productivity Growth”, a special section is devoted to the importance of Electronic Health Records. This chapter also explains that “The telecommunications industry is an important one for fostering productivity growth. Improved telecommunications infrastructure, particularly fast and widely accessible wired and wireless broadband networks, is a critical factor in enabling important technological advances in business, healthcare, education, public safety, entertainment, and more.” <https://obamawhitehouse.archives.gov/administration/eop/cea/economic-report-of-the-President/2014>

In “It’s Time for a New Kind of Electronic Health Record”, published in the Harvard Business Review, John Glasser of the University of Pennsylvania’s Wharton School outlines why EHRs are so important to improving America’s health care system and responding to COVID. <https://hbr.org/2020/06/its-time-for-a-new-kind-of-electronic-health-record>

# About Nemours Children's Health

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, Nemours **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**.

