

# Higher Cost, but Poorer Outcomes: the US Health Disadvantage and Implications for Pediatrics

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Despite spending more than 2.5 times as much on health care as in peer nations,<sup>1</sup> there is a consistent and pervasive pattern of higher mortality and inferior health in the United States.<sup>2</sup> This commentary, based on a symposium at the 2014 Pediatric Academic Societies meeting in Vancouver, highlights factors that may be responsible for these differences, comments on implications for policy, practice, and research, and proposes a call to action.

## THE US HEALTH DISADVANTAGE

A report by the National Research Council and the Institute of Medicine (IOM), *Shorter Lives, Poorer Health* (hereafter called the IOM report), describes major health disadvantages between the United States and 16 comparable, high-income “peer” countries.<sup>2</sup> All of these nations have sufficient national wealth to support a variety of health and social services policies and programs to address the health needs of their populations. Yet the IOM report, along with other reports, revealed significantly poorer outcomes for the US population, beginning at birth, and affecting all age groups.<sup>2-4</sup> The substantially higher US rates of infant mortality, low birth weight, and preterm birth weight have been well known. What is perhaps less well known is that this disadvantage continues throughout childhood and adolescence. Indeed, the probability of children dying before age 5 (8 per 1000) is highest in the United States and US adolescents have higher

all-cause mortality, including mortality from injuries and violence.<sup>2</sup> Compared with peer countries, the prevalence of obesity among US adolescents is more than twice other national means, and the US prevalence of diabetes is in the top third.

## REASONS FOR THE US DISADVANTAGE

What is behind this paradox of spending more and achieving less? Although the reasons undoubtedly include our fragmented health care system and large uninsured population, the pervasive nature of low US rankings suggests something more profound: a fundamental difference between policies and priorities in the United States and other high income countries. The IOM and other reports have pointed to the sharp difference in social spending between the United States and peer nations as a fundamental underlying cause of these differences.<sup>2,5</sup> The United States spends <10% of its Gross Domestic Product on social services, whereas France, Sweden, Austria, Switzerland, Denmark, and Italy spend roughly 20% of their Gross Domestic Product.<sup>5</sup> This includes spending to mitigate against food and income insecurity, which are direct consequences of poverty, for home visiting, and for early childhood development and education, all critical to helping the developing child achieve optimal health.<sup>2,6,7</sup> Inadequate investment in services that address poverty and these broader determinants of health may largely explain the United States’ lag in health outcomes.<sup>5</sup>



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The enormity and complexity of these problems calls for comprehensive policy and practice solutions, and for additional research to elucidate these multidimensional challenges.

## IMPLICATIONS FOR POLICY AND PRACTICE

Reversing suboptimal health outcomes in the United States will require wide-ranging solutions in policy at all levels of government. The IOM report points out that “in countries with the most favorable health outcomes, resource investments and infrastructure often reflect a strong societal commitment to health and welfare of the entire population.”<sup>2</sup> In contrast, the major piece of public policy in the United States (the Patient Protection and Affordable Care Act) represents a major advance in coverage and access to health care, but does not address poverty or social well-being of the population. To remedy this, the level and nature of spending for health and social well-being for children in the United States should be recalibrated to emphasize a life course perspective that identifies and addresses conditions early to prevent or mitigate the need for later, costly health care interventions.<sup>8–12</sup>

Investments could be better used for social services that have been proven protective in other peer nations, such as high-quality early care and education, or for programs that support families with young children, such as paid parental leave, subsidies, income transfers, and other social programs.

In addition to increased attention to policies and funding in various governmental sectors, there needs to be strong collaboration and mutual reinforcement between programs in health and in social sector. This cross-sectoral or “joined-up” government is being done already in some Canadian provinces, as well as in Western Europe, especially in the United Kingdom and Scandinavian countries,

with linkages established between health, welfare, education, and other social agencies to create comprehensive child-centered public policies and programs.<sup>13</sup> This joined-up government is seen as a necessary strategy in strengthening services and improving child outcomes.<sup>14,15</sup> Critical to achieving such cross sector policy action is the development of population-based linked data across sectors. Such linked data have been used for policy relevant research and action in Canada,<sup>16,17</sup> Australia,<sup>18,19</sup> Scandinavia,<sup>20</sup> and in Britain<sup>21</sup> and is a growing focus for US policy.<sup>22</sup>

With such far-reaching policies in place, pediatricians and other front-line child health care providers would be able to assist families more effectively. Importantly, there would be improved funding in areas such as education, welfare, food assistance, and mental health, that are all crucial to health care, and referrals to these community supports could be done more readily.

## IMPLICATIONS FOR RESEARCH

For research to have a major impact on eliminating the US disadvantage in child health, it needs to (1) address the leading causes of morbidity and mortality and (2) achieve a different balance in research funding, with more emphasis on translational research that informs the development of effective policy, system, and service interventions in health care and other services.<sup>23,24</sup> For example, in 2013, 3 leading causes of death and disability, including low birth weight, unintentional injury, and suicide received <2.5% (\$657 million for conditions<sup>25</sup>; total National Institutes of Health spending \$29 billion<sup>26</sup>) of the National Institutes of Health budget.

Similarly, neither understanding the mechanisms whereby social determinants exert effects on all outcomes of health nor developing and evaluating interventions that can prevent these downstream health

effects has been a major focus of study in the United States. Multidisciplinary and longitudinal approaches incorporating a life course perspective are needed to tackle the complex issues of how social determinants result in poor outcomes and to determine how to intervene. Existing evidence of the linkage between early social disadvantage and subsequent diseases in adulthood should provide a rationale for using a life course perspective,<sup>9–12</sup> and modeling the economic outcomes of different intervention approaches for disadvantaged children is another research focus with direct policy relevance.

## CALL FOR ACTION

Generating action to address the US health disadvantage for children, and indeed all populations, will not be easy. There must first be an awakening in our collective understanding that although the United States has many excellent health care systems, and offers excellent care to many individuals, this is not available to all. More importantly, because of lack of focus on determinants of health, the overall US health system is the worst among high income countries when measured by population health outcomes.<sup>2,4</sup> Public awareness of this and some degree of outrage are necessary to spur policy action. It is clear that improvements in children’s health require solutions outside of the health care system, as well as a policy framework and targeted investments across a number of sectors, each with explicit goals and data to measure improvement. Such a call to action is consistent with the American Academy of Pediatrics advocacy priorities, including the new agenda on poverty and its impact on child health.<sup>27</sup>

“That the health of Americans does not meet the standard that now exists in other rich nations is a tragedy for

all age groups, but especially for children.”<sup>2</sup> If the United States hopes

to improve child health outcomes to be on par with other industrialized

nations, it must take action. The time to act is now.

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Dr Fairbrother organized a symposium at the 2014 Pediatric Academic Societies (PAS) Annual Meeting, held in Vancouver on health disparities between the United States and other peer nations, and presented the initial talk on “Why are health outcomes for children and youth lower in the US than in our peer nations? Some reflections on lessons from abroad.” She wrote the first draft of this commentary and oversaw edits; Dr Guttman presented at the 2014 PAS Annual Meeting, held in Vancouver, on “Taking on the wicked problems: lessons from Canada,” contributed to the text, especially the discussion of “joined up government,” and reviewed the manuscript; Dr Klein presented at the 2014 PAS Annual Meeting, held in Vancouver, on “Health outcomes for children and youth in the US: reflections on what pediatrics can do,” contributed to the text, especially in the area of policy implications, and reviewed the manuscript; Dr Simpson contributed to the text and reviewed the manuscript; Dr Thomas presented at the 2014 PAS Annual Meeting, held in Vancouver, on “Pediatricians’ role in public health and community health,” contributed to the text, especially with respect to the implications for practicing pediatricians, and reviewed the manuscript; and Dr Kempe presented at the 2014 PAS Annual Meeting, held in Vancouver, on “Transforming the US child health research agenda in view of the IOM report,” contributed to the text in key ways throughout the manuscript and in particular to the section on implications for research, and reviewed the manuscript.

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