

The Need for Private Funding and Investment in Pediatric Research

Gardner Capital

Date

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Abstract

- Our commitment to pediatric research focuses on advancing scientific knowledge rather than directly funding pediatric care, thereby preserving the autonomy of institutions and mitigating concerns about potential buyouts—a prevalent issue in today's healthcare landscape.
- Despite its designation as the leading institute for pediatric research, the National Institute of Child Health and Human Development (NICHD) contributed only 17% of the total funding for pediatric research in 2020 (Gitterman, 2022). This highlights the critical need for additional private funding, as both industry and government sources are insufficiently available.
- Investing in pediatric research today is pivotal for addressing the health challenges of future generations. By focusing on early-life interventions, we aim to improve health outcomes for adults in the long term.

The growing interest in private equity investment in pediatric research represents a critical opportunity to advance the health of future generations. While recent trends in healthcare consolidation raise concerns about the potential compromise of clinical autonomy and care quality, our focus is distinct. We emphasize that private equity investment in pediatric research does not directly impact pediatric care, threaten institutional autonomy, or contribute to the trend of healthcare buyouts. Rather, it provides essential funding where industry and government resources fall short, addressing gaps left by traditional funding sources.

In 2020, the National Institute of Child Health and Human Development (NICHD), named the principal institute for pediatric research, accounted for only 17% of total pediatric research funding, highlighting a significant underfunding issue. Private equity can fill this gap, ensuring continued progress in understanding and treating conditions that affect children and, by extension, future adults. In addition, much pediatric medicine is applicable to adult medicine, especially when unique diseases are present, as they usually develop in childhood. This approach supports a life-cycle perspective, where early investment in pediatric research yields long-term health benefits across an individual's life span.

Pediatric research faces unique challenges, including financial, regulatory, and ethical barriers, compounded by a shrinking pediatric research workforce. Despite these obstacles, private equity investment offers a viable solution by providing necessary capital and fostering innovation. It allows researchers to overcome barriers to clinical trials and expand their studies, particularly in areas where industry-sponsored research is limited.

The Upward Mobility Fund's investment in pediatric research is a long-term endeavor that seeks to address funding gaps without promoting consolidation of healthcare. Long-term support will allow fellows of this program to see the results of their research without the concern of future funding. Doctors and researchers will have more freedom to explore innovative technology and testing while providing them with the time to build upon previous research, potentially over a great span of a child's pediatric years.

Keywords: Pediatric research, private equity investment, funding gaps, life-cycle approach, clinical trials, NIH, NICHD, healthcare consolidation.



Current State and History of Pediatric Research Funding

- In mid-1900s, NIH, by Congress's request, started a program to prioritize pediatric research, including children in clinical research. Pediatric research would begin contributing to metrics of progress just as adult research. These specific metrics and measurements were supposed to evaluate the effectiveness and progress of pediatric research initiatives, but when the NIH reported on pediatric research in 1996, performance metrics were not discussed. However, advances in pediatric research and the Pediatric Research Initiative were reported.
- In 2003, the Pediatric Research Equity Act was implemented, mandating the inclusion of participants of all ages in human subject research.
- In 2008, NIH implemented the Research, Condition, and Disease Categorization to improve consistency in reporting, making pediatrics and perinatal spending its own category.
- In 2014, Pediatric Cancer became a sub-category of special interest under the Research, Condition, and Disease Categorization.
- In 2016, Pediatric Cardiomyopathy became a sub-category of special interest under the Research, Condition, and Disease Categorization.
- In 2018, Childhood Obesity became a sub-category of special interest under the Research, Condition, and Disease Categorization.
- In 2018, the NIH Pediatric Research Consortium was established.
- The COVID-19 pandemic negatively affects the application for grants in pediatric research in 2019-2020, but in 2022, it resumed to average numbers.
- By 2021, pediatric engagement in medical care and research is at an all-time high as demonstrated through the increased involvement of children under the age of 18 in published studies.



About Gardner Capital

Since 1992, Gardner Capital has been committed to improving the quality of life of families by collaborating with community partners. These efforts provide not only critical care for families and patients but also foster the work of researchers tackling rare and life-threatening diseases. This dual focus ensures that support extends beyond immediate needs to the long-term health and potential of future generations, highlighting the importance of sustained investment in both healthcare infrastructure and innovative research practices.

GCRE is committed to providing startup, venture and mission focused capital in specific areas of Pediatric Medical Research – with a total funding commitment of \$30mm – and funding amounts between \$50,000 and \$500,000. The Fund will partner with top tier research hospitals to provide early-stage funding in research focused on individualized medicine, genomics and cellular messaging systems.

Why pediatric research?

Gardner Capital's commitment to pediatric medical research stems from a profound understanding that investing in children's health represents more than an immediate intervention—it's a strategic approach to long-term human potential. At the same time, we recognize that the current landscape of financial support does not match the greatness of opportunity and innovation.

Pediatric research often leads to unexpected discoveries that benefit all age groups. The field is ripe for innovation, but early-stage researchers often struggle to secure funding for novel approaches. Because children's systems are more responsive and adaptable, studying treatments in pediatric populations can reveal new therapeutic approaches that might not be evident in adult studies. This "reverse translation" from pediatric to adult medicine has historically led to several groundbreaking medical advances.

However, there are unique barriers in pediatric research that make the process of receiving funds challenging. Gardner Capital wants to provide an opportunity to meet these goals and fuel innovation that may typically not be possible. The distinct challenges of pediatric research and medicine often deter traditional funding sources, creating an opportunity for targeted private investment to make a significant impact.

Gardner Capital recognizes that the field of pediatric medicine is ripe for innovation, but early-stage researchers often struggle to secure funding for novel approaches.

By providing support at this crucial stage, we can:



- Enable researchers to pursue promising but unproven hypotheses
- Support the development of child-specific medical devices and treatments
- Encourage new approaches to chronic childhood conditions
- Bridge the gap between innovative ideas and traditional funding sources

This strategic focus on pediatric research represents an opportunity to fundamentally reshape the future of medicine while addressing critical current needs in children's healthcare.

Objectives

Through this comprehensive investment strategy, we're working to build a foundation for long-term advances in children's health while simultaneously developing new pathways for medical innovation that could benefit patients of all ages.

We hope to support:

- Early-career researchers with groundbreaking ideas
- Innovative startup-style research teams
- Investigators working outside traditional research frameworks
- Passionate innovators ready to challenge existing medical paradigms

Our approach extends beyond simply providing capital—we aim to foster a research community that encourages bold thinking and unconventional approaches, particularly in areas such as rare disease treatment, preventative medicine, and developmental health interventions. By supporting early-career researchers and startup-style investigations, we hope to accelerate the development of breakthrough treatments.



Confounding Variables of Pediatric Care and Research

Impacts of COVID-19 Pandemic

The impact of the COVID-19 pandemic exacerbated a great number of unmet needs in the field of pediatric care in the United States, but it also highlighted the vulnerabilities and deficits in pediatric healthcare. It revealed significant disparities in access to services, mental health resources, and preventative care for children across different communities at a time where there were "significant increases in children's diagnosed anxiety and depression, decreases in physical activity, and decreases in caregiver mental and emotional well-being and coping with parenting demands" (Lebrun-Harris, et. al.).

Increased Pediatric Patient Engagement

In recent years, the rate at which children and adolescents are involved in medical and clinical decision making has increased, allowing for better pediatric representation in research and clinical studies. However, mere involvement is not the same as meaningful participation, and many children are used through tokenism. Many studies *involve* pediatric patients in their projects, but only a few research projects *include* pediatric patients ((Teela et al.). This means that studies may have pediatric participants, but they have no influence or added impact to the results. Breaking through this tokenism and performance inclusion is difficult, and funding is one of the greatest barriers to reaching meaningful involvement of children in research. Researchers need more tools and funding to engage pediatric patients meaningfully, and without meta-research on the methods necessary for protecting pediatric participants is necessary.





Annotated Bibliography

"Pediatrics Private Equity." Physician Growth Partners, 26 July 2024, www.physiciangrowthpartners.com/market-update/pediatrics-private-equity-fall-2023/. Accessed 30 Aug. 2024.

Lebrun-Harris, Lydie A., et al. "Five-Year Trends in US Children's Health and Well-Being, 2016-2020." JAMA Pediatrics, vol. 176, no. 7, 14 Mar. 2022, pp. 1–11, https://doi.org/10.1001/jamapediatrics.2022.0056.

Vitiello, Benedetto, et al. "The Interface between Publicly Funded and Industry-Funded Research in Pediatric Psychopharmacology: Opportunities for Integration and Collaboration." Biological Psychiatry, vol. 56, no. 1, July 2004, pp. 3–9, https://doi.org/10.1016/j.biopsych.2004.03.011. Accessed 8 Apr. 2022.

Gitterman, Daniel P., et al. "Making the Case for Pediatric Research: A Life-Cycle Approach and the Return on Investment." *Pediatric Research*, 7 July 2022, https://doi.org/10.1038/s41390-022-02141-5. Accessed 19 Oct. 2022.

Speer, Esther M., et. Al. "The state and future of pediatric research—an introductory overview." *Pediatric Research*, 24 January 2023, https://doi.org/10.1038/s41390-022-02439-4.

