

2019 Annual Report



*What we feed the minds of children is as important as what we feed their bodies.
We must build on scientific data to provide a digital environment
in which to raise kids who are healthier, smarter, and kinder.*

– Michael Rich, MD, MPH, Founder and Director

The Evolution of the Digital Wellness Laboratory

2019 was a transitional year for the Center on Media and Child Health (CMCH) at Boston Children's Hospital. CMCH was founded in 2002 to examine scientific evidence and conduct research on the effects of media on children's health and development. Over 17 years, CMCH has established itself as a proven source of unbiased research on the positive and negative influences of the media children use and how they use them. American children, on average, are exposed to nearly 12 hours of media content each day and spend the majority of their waking hours with screens. With increased immersion in digital environments, public discourse remains polarized between fear among child advocates and utopian promises from those who create media devices, platforms and

content. Despite the complexities of our digital world, many seek simple answers to screen use questions —“good vs bad” or “how much is too much?” Taking a balanced public health approach to living in a screen media environment, CMCH has earned the trust of both media consumers and producers. CMCH has approached screen media not as a vector of help or harm, but as an environmental health influence, seeking to understand how we are changed by our media use, then promoting the positive and intervening on the negative.

Building on Media Health Effects, our library of rigorous scientific evidence from around the globe, on the world-class reputation of Boston Children’s Hospital and Harvard Medical and Public Health Schools, and on the trust and good will of leading technology, entertainment, communications, and health care companies, CMCH is evolving from an academic health research center into the Digital Wellness Laboratory (DWL). The DWL will provide a “big tent” in which scientists, innovators, and creators can work together toward the wellness of children, families and society.

For the first time, academic disciplines and corporate competitors, stakeholders from disciplines ranging from pediatrics to technology to entertainment, from education to psychology to public policy, will join forces. Scientists and thought leaders can work toward understanding the positive and negative effects of the media children use and how they use them. Educators and innovators can develop user strategies and products designed to optimize human development, physical, mental and social health. The DWL is uniquely positioned to transform our understanding of the ever-changing media and health landscape, leading the world in media-related research, clinical care, education, and innovation focused on the well-being of individuals and society.

This vision for the future is shared by key players in technology, media content creation, education, gaming and play, and health insurance. In November 2019, these founding supporters convened at Boston Children’s Hospital/Harvard Medical School to establish the DWL, articulate long-term goals, and strategize recruitment of peer corporations, foundations and philanthropic donors. The DWL is set to launch in 2020. This ambitious pioneering effort will transform the health of children, families and society by fostering understanding of, innovation in, and humanization of the digital environment.

The DWL's strategic approach

The Digital Wellness Lab will inform parents and educators supporting children and teens, clinicians caring for young people, companies developing products and services, and politicians making public policy by:



1. Investigating and understanding how media technologies impact the health and development of children and society;
2. Developing research-based guidance, strategies, tools, and best practices for media and technology use that support and promote wellness and healthy child development;
3. Informing the development of media technologies and content that support wellness and positive child development;
4. Educating and empowering all stakeholders to perform their roles in ways scientifically proven to improve child, family and societal wellness.

Our Research

Global Growing Up Digital (GUD) – Studying effects of interactive media on kids around the world

With the speed at which technology develops, little is known about the long-term positive and negative impacts of children's media use on their health and development. CMCH is collaborating with the Joan Ganz Cooney Center at Sesame Workshop and the Alberta Teachers' Association to build the Global GUD study. At projected sites in each of the 6 populated continents, two cohorts of children (preschool and early adolescents) will participate in research that collects precise details about their media exposure and assesses multiple developmental and health outcomes. GUD research uses CMCH's multimodal Measurement of Youth Media Exposure (MYME) method delivered through young people's (for teens) or parents' (for preschoolers) smartphones to comprehensively collect all active use and ambient exposure to media. MYME samples participants' behaviors and experiences in real time over one week, collecting current health and development status. Collecting these media exposure and health data annually for ten years will allow us to follow young people's developmental trajectories to help predict and prevent unhealthy outcomes.

More Play Today

Experts see play as an essential activity for fostering a child’s healthy development. More Play Today launched in 2015 with support from Hasbro, Inc., which allowed CMCH to continue to examine how play influences child development. Using a CMCH proprietary method with children in the US and Mexico, More Play Today examined the relationships between young children’s play and their social-emotional development, cognitive abilities, and executive functioning. This is the first study that has investigated play as children move seamlessly between digital and physical environments. Our [More Play Today](#) web pages for parents and caregivers contain science-based information, practical tips, fun videos, and educational infographics. Parents can learn about the benefits of play and help provide their children with healthy opportunities.

“A child’s school readiness was associated with their number play, letter play, and board/card game play in both the US and Mexico.”

Findings from More Play Today were presented by CMCH at the biennial meeting of the Society for Research on Child Development (SRCD) and the annual meeting of the Pediatric Academic Society (PAS). At an SRCD panel, initial findings revealed associations between different types of play and children’s cognitive and social behaviors. A child’s school readiness, for example, was associated with their number play, letter play, and board/card game play in both the US and Mexico samples. At PAS, we presented results showing longitudinal relationships between certain types of play and components of executive functioning. The more time that children spent playing with their parent, the more their memory improved over the course of a year. Our initial findings were highlighted in a press release that was covered by more than 20 news outlets. Two manuscripts reporting this and other findings are under review by two well-known journals.



Our evidence-based guidance

CMCH translates the latest scientific evidence on the effects of media on children’s health and development into educational resources, tools and outreach. Our resources are free to the public and include our informative website, cmch.tv, our social media accounts on Facebook, Twitter, Instagram and YouTube, and the newly launched [Media Moments](#) blog. Media Moments offers personal stories, musings and reflections on living healthfully in our digitally connected world. These posts are meant to spark conversation and foster a community of caring. We partnered with Mediatrix, Inc. to promote the *Ask the Mediatrixian* advice column and the recently launched *Ask the Mediatrixian* podcast. Media Health Effects, our open access library of evidence from around the world, supports our educational outreach and is available to researchers, clinicians and consumers. Currently completing a grant-supported overhaul, Media Health Effects will relaunch in a new, user-friendly format in 2020.

CMCH Clinician Toolkit



The [CMCH Clinician Toolkit](#) allows pediatric providers to assess children and adolescents for physical and mental health issues related to media use. The Toolkit includes screening forms, patient education materials, anticipatory guidance and more. Through the generous support of Harvard Pilgrim Health Care (HPHC), CMCH has been able to continue this project and partner with clinicians to

evaluate materials and receive feedback. We have updated our Toolkit and created two robust, freely available guidebooks to help teens and parents navigate the internet healthfully. Additional support from HPHC and Atrius Health allowed us to expand the Clinician Toolkit in order to serve expecting parents and parents of infants and toddlers. Based on needs identified by a parent focus group, we created a [comprehensive guidebook](#) for parents of young children to help them make healthy decisions around media use for their children and family.

Press Highlights

The Wall Street Journal [Does your kid spend too much time online? Here's when to worry](#)

New York Times [When social media is really problematic for adolescents](#)

US News and World Report [Movie violence doesn't make kids violent, study finds](#)

ABC News Diane Sawyer Reporting [Challenging families to rethink technology consumption](#)

WBUR [What those hugely popular unboxing videos could be teaching kids](#)

Boston Globe [The death of the school dance](#)

Mashable [Why it's time to rethink online safety for kids](#)

Harvard Medical School [Screen time and the brain](#)

The Washington Post [Expert recommendations for a child's 1st phone, from basic to smart](#)

Forge [Don't let your phone get between you and your child](#)

Speaking Spotlights

- American Academy of Pediatrics National Conference and Exhibition
- Massachusetts General Hospital, Grand Rounds Keynote
- American Academy of Pediatric Dentistry
- Private Medical Salon
- Technology Leadership Institute, Keynote
- Harvard Business School
- Harvard-Westlake School
- South Shore Pediatric Hospital Summit
- Technology Leadership Institute, Keynote

Our evidence-based clinical practice

Clinic for Interactive Media and Internet Disorders

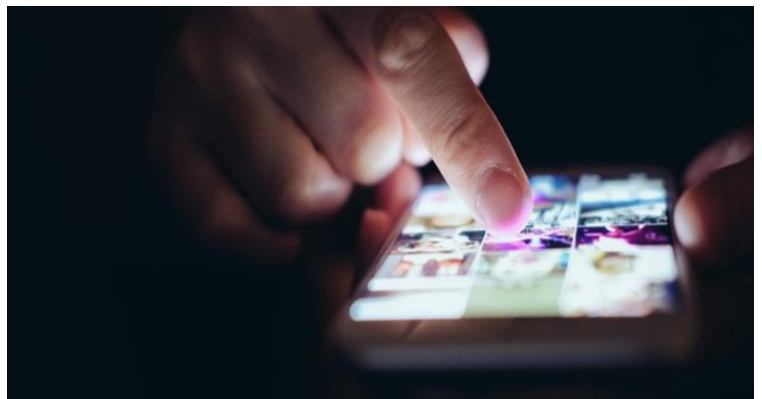


Clinic for Interactive Media
and Internet Disorders

Delivering 21st century health care, the Clinic for Interactive Media and Internet Disorders (CIMAID) launched in 2017 as part of Boston Children’s Adolescent/Young Adult Program. CIMAID is the first dedicated clinical program at an academic medical center, treating Problematic Interactive Media Use (PIMU). The World Health Organization’s International Classification of Diseases is designating Gaming Disorder as a mental health condition, but people with Gaming Disorder make up only part of the population who are struggling with PIMU. At CIMAID, we also see young people who have problematic use of social media, pornography, and information-bingeing with videos or text.

The interdisciplinary clinical team at CIMAID consists of a medical doctor, psychiatrist, psychologist, and social worker. The team evaluates children and adolescents, diagnosing issues from PIMU to obesity to school avoidance, depression, and suicidality. The team identifies issues—such as anxiety or ADHD—that underlie and may drive PIMU behaviors. CIMAID provides each family with a personalized recovery plan to be implemented by the child’s primary care providers or by the CIMAID team. These treatment plans frequently include Media Use Therapy (based on Cognitive Behavioral Therapy and Dialectical Behavioral Therapy), coping strategies, behavioral modifications, and medication.

CMCH is conducting research to characterize these disorders; determine factors that place children at risk; develop and evaluate interventions and train clinicians to identify, intervene and prevent these problems. Our goal is to support clinicians, educators, and families with the information they need to prevent or intervene early on PIMU in young people.



Digital Wellness



We have brought together the most influential tech companies and organizations that hold children’s health and digital wellness as paramount. For the first time, we will collaborate and become stronger, more effective, and innovative. Together we will find the balance between media use and well-being. We will design new and safer technologies for youth and

families. We will be there to guide them, as youth adopt and integrate new devices, platforms, and applications into their lives. We will educate young people on how to use interactive media in healthful ways. We will create and promote options for parents, caregivers, educators, and clinicians to harness media’s power for good.

Many thanks to you, our partners, for your ongoing efforts towards digital wellness.

Michael Rich, MD, MPH, Founder and Director

