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# **Play Promotion for Pediatric Patients:** A Feasibility and Pilot Study of Embedding Prescription for Play in Well-Child Visits

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#### INTRODUCTION

Research has established the importance of play in supporting the social-emotional development of young children. Play not only enhances creativity and problem-solving abilities, but play with others can support the development of social skills. Active play with a caregiver in particular has been shown to be especially valuable as consistent interactions through play can help build strong, trusting relationships.<sup>2</sup> Interactive play with a caregiver can also serve to mitigate the effects of toxic stress, a condition associated with social factors like low socioeconomic status.<sup>3</sup> And yet, families of low socioeconomic status often face barriers to play as they may not have access to play resources.4 Play promotion and education is especially important in Federally Qualified Health Centers that strive to meet the needs of underserved populations.



Well-child visits provide an essential opportunity for pediatric healthcare providers to communicate health information. These visits are especially important for families with children that are too young to attend school, as healthcare professionals may be one of the only sources of information for caregivers. As health advocates, providers can use these visits to communicate information about the attainment of optimal physical, mental, and social health and development for

children. During these visits, pediatricians can also shed light on the diversity of methods of health promotion that support development in children, like learning through play. Well-child visits are therefore a chance for caregivers to learn about the importance of play from someone that they trust.



## PRESCRIPTION FOR PLAY

Prescription for Play (P4P) is a program that seeks to bring learning through play into well-child visits. Supported by The LEGO® Foundation and in partnership with The LEGO® Group, the program provides free LEGO® DUPLO® brick kits and educational brochures to be distributed by pediatricians to 18-to-36-month-old patients and their caregivers. Pediatricians are trained to start a conversation about the importance of play while distributing the kit in each well-child visit and demonstrate different ways for a caregiver to actively engage in one-on-one play with their child.

The P4P project was implemented at Connecticut Pediatrics at Community Health Center, Inc. (CHC), a Federally Qualified Health Center located in Hartford, Connecticut. The Weitzman Institute, established in 2007 to improve healthcare for the vulnerable and underserved through research, education, and policy, conducted a pilot study to better understand the way the program influences behaviors and perceptions of play with both providers and caregivers.

### **METHODS**

The P4P pilot study assessed the feasibility of integrating learning through play into well-child visits at Connecticut Pediatrics at CHC. The study investigated two key research objectives:

- 1 Identify the factors that contribute to the successful implementation of play promotion in well-child visits;
- 2 | Assess the impact of giving caregivers and children a tangible product (e.g., LEGO® DUPLO® kit) that encourages play and reminds them of the brief education they received on play to take home with them.

The study focused on perspectives from both providers and caregivers. The caregivers in the study were parents/guardians of pediatric patients whose child had a scheduled 18-36 month well-child visit during the implementation of P4P. Data was collected using a mixed methods approach using both quantitative and qualitative methods. The study protocol and data collection tools were approved by the Community Health Center, Inc. Institutional Review Board.

The quantitative research procedures involved surveys from both providers and caregivers to explore how the program changed their behaviors and knowledge of play. Providers who were trained in P4P were asked to complete one survey about their experiences. Similarly, caregivers were invited to participate in two surveys, the first offered one month post-visit and the second survey was offered again to the same caregivers at 3 months post-visit. In addition to the surveys, the study also utilized qualitative methods to provide further context to both provider and caregiver experiences with P4P.

The qualitative procedures included 8 provider and 30 caregiver interviews to see how the P4P program has influenced their understanding of the importance of learning through play. Additionally, 11 participant observations were completed to give context to the kit distribution process and note provider and family interactions, behaviors, and moods during the visit in the waiting area, in the clinic, and during check-out.

#### **KEY FINDINGS**

Following participation in the P4P pilot study, providers and caregivers reported a variety of knowledge and behavioral changes. Adjustments in knowledge were particularly strong with 100% of providers and nearly 90% of caregivers reporting change in their understanding of the importance of play (Figures 1 and 2).

One caregiver explained:

"It was a bit eye-opening because I don't think I paid a lot of attention before, and I did not think it was as important."

Study participants also experienced behavioral changes. Within the clinic, 100% of pediatric providers described a change in how often they spoke with families about the benefits of play (Figure 1). For caregivers, these conversations about play with providers

resulted in new behaviors beyond the well-child visit. Caregivers described sharing their new knowledge regarding play with their friends and family, bringing the P4P initiative to a wider community. In addition, behavioral impacts were seen in caregivers' interactions with their own child. In one parent's words:

"It has influenced me to be more hands-on especially now that I know it helps her development even more as opposed to just keeping her busy."

The study also revealed that around 80% of caregivers reported a change in how many days per week they played with their child (Figure 2). In one caregiver's example the blocks quickly became part of the household routine:

"I used [the blocks] almost every day because [my son] was obsessed with them."

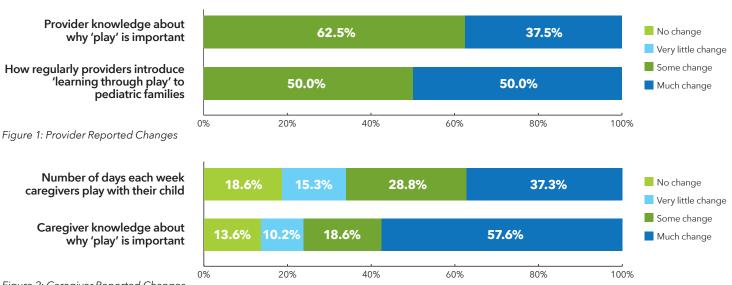


Figure 2: Caregiver Reported Changes

# **EFFECTS ON THE** WELL-CHILD CARE VISIT

In addition to the effects on providers and caregivers, P4P changed the well-child visit itself to be more well-rounded and enjoyable. The P4P kit offered an opportunity to build trust between provider and pediatric families as well as integrate a fun experience for the patient. One provider explained the P4P kit:

"Builds that connection and that bond between the provider and the family. That we care, we have things to give your children and we're giving them to you for a reason."

Providers reported P4P gave them a new tool to measure developmental growth in real-time during the visit, with "the silver lining that it does it in a fun way." Indeed, many caregivers expressed particular appreciation for seeing their child's joy when playing with the kit. A caregiver recalled:

"The most fun part was building the toy with my daughter. I built it and she was taking it apart, and she was all excited."

One area in which caregivers suggested the well-child care visit could improve was explaining the purpose of the LEGO DUPLO duck. While 70% of caregivers recalled having a conversation with the provider about play (Figure 2), some caregivers stated they didn't receive a clear explanation of the P4P kit, creating confusion about its purpose. One caregiver recommended that the program should:

"Give more information about the play program so the parents will know why they are getting the toy."

As a whole, feedback from providers and caregivers regarding the P4P program was positive, with participants emphasizing the new knowledge about play's importance and its connection to development that they gained as a result of the program. Additionally, P4P complements the well-child visit by adding a tool for providers to assess patients' development and introducing a new opportunity to build trust and have fun in a clinic environment. Beyond the clinical visit, caregivers and families who received P4P kits reported taking their new knowledge of "learning through play" and putting it into practice with their children as well as sharing the information with their community. While improvements in explanations were suggested, P4P appears to hold great potential as an engaging way to promote "learning through play" to pediatrics families with young children. After the P4P intervention, a caregiver explained its impact:

"I now know that play is just as important as everything else [children] have to do in their lives."

# **IMPLICATIONS** AND FUTURE RESEARCH

From this pilot study, data suggested the P4P program was an effective intervention to help educate caregivers and providers alike on the importance of play in a child's social, emotional, and cognitive development. Though the results of this pilot study were overwhelmingly positive, this was only a preliminary glance into the effect the P4P program has on caregivers, providers, and children. With the success of the pilot study, the Weitzman Institute plans to conduct a broader study on the P4P program, which will encompass a larger sample size with greater geographical diversity. The study will investigate how five sites across the U.S. implement the program and influence provider and caregiver behaviors related to play promotion.

Additionally, the next phase of the study will measure caregivers' behaviors before and after the P4P kit is given to help support the claim that P4P affects caregivers' behaviors. Lastly, to better understand why some caregivers recalled discussing play with providers and others did not, future studies of the P4P program will further explore the various ways providers are administering the program across different clinics. Understanding the ways providers change and adapt the program may provide suggestions for more consistency in play discussions with all caregivers. Read more about our research at weitzmaninstitute.org/prescription-for-play.

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For more information on the program: Rx4Play.org

