

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

## Phase 1 Evaluation Report



**PRODUCED BY:**

Weitzman Institute  
Community Health Center, Inc.  
Middletown, CT

**ACKNOWLEDGEMENTS:**

This report was developed through funding provided by the LEGO Foundation. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the LEGO Foundation.

We would also like to acknowledge the student researchers that helped with data collection and analysis. Lastly, we would like to acknowledge the providers at Connecticut Pediatrics @ CHC for allowing us to conduct this pilot study and dedicating their time and effort to support the developmental outcomes of their patients.

**RECOMMENDED CITATION:**

Panjwani S, Anderson-Badbade S, Oo M, Velez I, Beckham J. Play Promotion for Pediatric Patients: A Feasibility and Pilot Study of Embedding 'Prescription for Play' in Well-Child Care Visits, Phase 1 Evaluation Report. Weitzman Institute, Community Health Center, Inc.; 2022.

For further information about this document, please contact:

Sonya Panjwani, MPH  
Research Scientist  
Weitzman Institute  
Email: [panjwas@chc1.com](mailto:panjwas@chc1.com)

# Table of Contents

Executive Summary.....	2
Introduction.....	3
Importance of Play.....	3
Caregiver Involvement in Play.....	3
Disparities Related to Play.....	3
Role of Healthcare Providers.....	4
Prescription for Play Program.....	4
Methodology.....	5
Quantitative Data.....	5
Qualitative Data.....	6
Results.....	7
Quantitative Data.....	7
Qualitative Data.....	14
Summary, Conclusions, and Recommendations.....	17
References.....	20
Appendices.....	21
Appendix A. Provider Feasibility Survey.....	22
Appendix B. Caregiver One-Month and Three-Month Survey.....	43
Appendix C. Provider Semi-Structured Interview Guide.....	61
Appendix D. Caregiver Semi-Structured Interview Guide.....	65
Appendix E. Participant Observation Tool.....	69

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

## Executive Summary



In collaboration with



inspiring primary care innovation

Supported by  
The LEGO Foundation

## Description

This study was conducted through a collaboration between the Weitzman Institute of Community Health Center, Inc. (CHC) and The LEGO® Group, with an goal of making the promotion of ‘learning through play’ fun, easy, and popular for pediatric providers as well as caregivers. The ‘Prescription for Play’ program is a social impact program of The LEGO® Group, financed by The LEGO® Foundation, designed for healthcare providers in the U.S. seeing 18- to 36-month-old patients. The program offers free LEGO® DUPLO® bricks for providers to distribute to these patients and their caregivers. This study encompasses a feasibility and pilot study at Connecticut Pediatrics @ CHC as a first step in an overall goal to promote ‘learning through play’ for pediatric patients.

## Purpose

The purpose of this study was two-fold: 1) identify the factors that contribute to the successful implementation of a process workflow designed to promote play and 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.

## Research Questions

1. What factors influenced successful implementation and maintenance of ‘Prescription for Play’ within Connecticut Pediatrics @ CHC?
2. Is ‘Prescription for Play’ superior to the status quo at influencing providers’ behaviors and behavioral predictors regarding play promotion?
3. Is ‘Prescription for Play’ superior to the status quo at influencing caregivers’ behaviors and behavioral predictors regarding play engagement?
4. In what ways did the feasibility of ‘Prescription for Play’ vary for patients 18 to 36 months of age within Connecticut Pediatrics @ CHC, across subpopulations and by other potential effect modifiers?

*“Play is the work of the child...I think, especially in our practice, now more than ever, especially when we talk about the importance of physical and mental health and developmental importance of meeting developmental milestones to ensure the overall health, happiness and success of a child plays super important.”*

-Pediatric Provider, Connecticut Pediatrics @ CHC

## Key Findings

- ❖ All providers (100%) experienced a change in how regularly they introduce learning through play to pediatric families.
- ❖ All providers (100%) experienced a change in knowledge about why play is important.
- ❖ In addition to achieving the goal of embedding play conversations in patient visits, results show that the program was beneficial beyond the program goals, making the well-child care visit more comprehensive.
- ❖ One-month and three-month post-visit, the approximately 80% of caregivers experienced a change in the number of days each week they play with their child.
- ❖ Nearly 90% of caregivers experienced a change in knowledge about why play is important.
- ❖ Caregivers are sharing information related to learning through play with their social circles, extending the reach of the program to other community members.

# Introduction

## Importance of Play

Research has established the value of play to children's learning, social-emotional development, and overall healthy brain development.<sup>1</sup> Play provides children with the space to express their creativity, while also developing dexterity and physical, cognitive, social, and emotional strengths.<sup>2-4</sup> Further, play allows children to develop new competencies, leading to enhanced confidence and problem-solving abilities.<sup>5-7</sup> When play is child-driven, it allows children to make their own decisions, move at their own pace, and discover their own interests.<sup>5,6,8</sup> Through engagement with others, children can develop social skills, such as how to work in groups and share. In contrast to passive entertainment, active play promotes optimal development, preparing children academically, socially, and emotionally to lead us into the future.<sup>1</sup>

## Caregiver Involvement in Play

Caregivers involvement in play can serve as a mediating role in children's developmental trajectory.<sup>2</sup> Loving, consistent interactions through play tells children that their adult caregivers are paying attention to them and can help build enduring relationships.<sup>4,9</sup> Less verbal children have the opportunity to express their views, experiences, and frustrations through play, giving caregivers the opportunity to see the world from the child's vantage point. Through interactive play, caregivers are also afforded the opportunity to communicate more effectively with their children and build a nurturing, social-emotional bond.<sup>1</sup> Through positive caregiver interactions, play can serve as a remedy to toxic stress and can help keep stress levels at or near baseline.<sup>10</sup>

## Disparities Related to Play

Despite the benefits of play, disparities exist that impede children's ability to engage in play, particularly affecting those of lower income families.<sup>11</sup> For example, socioeconomic factors may prevent children from having access to play resources. Lower income families are typically comprised of single heads of households or two working caregivers, compromising the time and energy caregivers have to engage in play with their child.<sup>1</sup> When food and shelter are at risk, caregivers may not prioritize free and creative playtime. In cases where parents do make time to play with their child, social, emotional, and economic stressors can prevent caregivers from being fully present, limiting their ability to develop a strong bond with their child.<sup>11</sup> As previously described, play is important for cognitive development; children of lower income families are at a disadvantage due to their inability to have equal accessibilities to engage in play.<sup>12</sup> Consequently, this disadvantage compromises their ability to adjust to the school setting, enhance learning readiness, and learn behaviors and problem-solving skills, further contributing to cycles of poverty.<sup>13</sup>

# Introduction

## Role of Healthcare Providers

Healthcare providers are at the forefront of disseminating health information. In early childhood before children attend school, healthcare professionals may be the only source of information for caregivers to promote healthy growth and development, especially for lower income families.<sup>10</sup> Pediatric healthcare professionals are committed to the attainment of optimal physical, mental, and social health and well-being for children and can play a role in advocating for broad-based solutions to promote play.<sup>1</sup> Pediatric providers can educate parents about the value of play while simultaneously refuting that effective play requires expensive toys.<sup>11</sup> Additionally, providers can emphasize the importance of parental presence and attention for supporting their child's growth and development and that one-on-one play is an effective way to be fully present with their child.<sup>10</sup> Thus, interventions aimed at promoting play could leverage healthcare professionals as a medium to disseminate these critical messages related to play promotion through active engagement with caregivers.

## Prescription for Play Program

Prescription for Play is a social impact program of The LEGO® Group designed for healthcare providers in the U.S. seeing 18- to 36-month-old patients. The program offers free LEGO® DUPLO® brick kits, which includes a set of LEGO® bricks as well as an educational brochure, for providers to distribute to their patients and their caregivers. The purpose of this program is to promote learning through play for pediatric patients and encourage caregivers to actively engage in play with their child. Providers are encouraged to have a conversation about play during the patient visit and model play with the child. Providers are also encouraged to discuss with caregivers different ways to play with their child, outside of the brick kit, and to follow up with caregivers during subsequent visits.

This study presents the pilot phase of the Prescription for Play project. The program was implemented at Connecticut Pediatrics @ Community Health Center, Inc., a Federally Qualified Health Center located in Hartford, Connecticut. The clinic focuses on serving uninsured and underserved populations through a team-based care approach. Providers were trained to implement the program and develop a process workflow to carry out the program.

## Methodology

This pilot study employed a one-group posttest design to assess the feasibility of implementing a process workflow for play promotion within pediatric well-child care visits. This study sought to answer the following research questions:

1. *What factors influenced successful implementation and maintenance of 'Prescription for Play' within Connecticut Pediatrics @ CHC?*
2. *Is 'Prescription for Play' superior to the status quo at influencing providers' behaviors and behavioral predictors regarding play promotion?*
3. *Is 'Prescription for Play' superior to the status quo at influencing caregivers' behaviors and behavioral predictors regarding play engagement?*
4. *In what ways did the feasibility of 'Prescription for Play' vary for patients 18 to 36 months of age within Connecticut Pediatrics @ CHC, across subpopulations and by other potential effect modifiers?*

Two participant groups were included in the study. The first group consisted of providers from Connecticut Pediatrics @ CHC, and the second group was made up of caregivers of pediatric patients whose child had a scheduled 18- to 36-month well-child care visit during the implementation period. Data collection tools included provider surveys, two caregiver surveys (one month post-appointment and three months post-appointment), provider interviews, caregiver interviews, and participant observations. Each data collection tool is described in the subsequent sections, and a summary of each data collection tool is provided in Figure 1.

## Quantitative Data

### Provider Surveys

A survey was administered to providers implementing the Prescription for Play program at Connecticut Pediatrics @ CHC to assess program implementation as well as behavioral predictors. The survey was administered from January 21, 2022-February 21, 2022. Providers were invited to complete the survey via email following a semi-structured interview they participated in (described on the next page). The survey consisted of a series of questions focused on changes in providers' knowledge, interests, beliefs, and perceptions related to helping families learn through play. All 8 providers ( $n=8$ ) that implemented the program completed the survey for a response rate of 100%.

### Caregiver Surveys

Caregivers of patients that had a well-child care visit during the implementation period were invited to participate in two surveys to assess the program implementation process and behavioral predictors for engaging in play with their child. The surveys were administered from December 21, 2021-March 7, 2022. The first survey, completed at least one month after the well-child care visit, consisted of a series of questions related to changes in caregivers' knowledge, interests, beliefs, and perceptions related to playing with their child. A total of 62 caregivers ( $n=62$ ) completed the first survey for a response rate of 20.3%. The second survey, completed at least three months after the well-child care visit, asked similar questions to understand how caregivers' knowledge, interests, beliefs, and perceptions related to playing with their child had changed over time. Those caregivers that completed the first survey were invited to complete the second survey; a total of 34 caregivers ( $n=34$ ) completed the second survey for a response rate of 54.8%. Caregivers were given a \$20 Amazon gift card for completing the first survey and a \$40 Amazon gift card for completing the second survey.



## Methodology

### Qualitative Data

#### Provider Semi-Structured Interviews

Providers implementing the Prescription for Play program at Connecticut Pediatrics @ CHC were invited to participate in a semi-structured interview to gain information on the feasibility of Prescription for Play implementation during well-child care visits and its perceived efficacy. Interviews were conducted between January 21, 2022-February 8, 2022 at a time of convenience. Providers were offered a \$15 gift card to Panera Bread for their time and participation. The interview guide consisted of questions to understand providers' experience with the program, how the program was implemented, providers' motivations related to the program, the effect of the program on patient visits, and ease of implementation. All 8 providers ( $n=8$ ) completed the interview for a response rate of 100%.

#### Caregiver Semi-Structured Interviews

To understand the implementation process and feasibility of incorporating the Prescription for Play program in well-child care visits, caregivers of patients that had a well-child care visit during the implementation period were invited to participate in a semi-structured interview. Interviews were conducted between December 21, 2022-February 14, 2022. The interview guide consisted of a series of questions to understand caregivers' experiences with participating in Prescription for Play, their preferences for the process of promoting play during the well-child care visit, and their perspectives on potential improvements to the program. Caregivers were offered a \$40 Amazon gift card for completing the interview. A total of 30 caregivers ( $n=30$ ) completed the interview.

#### Participant Observations

An observation protocol was employed to observe the patient waiting area, check-out processes, and the newly established clinical workflow for 'Prescription for Play' from September 24, 2021-December 22, 2021. At least one day before each observation, providers and other appropriate care team members (e.g., Medical Assistants) were contacted via email to notify them that a member of the research team would be present to observe a patient's well-child care visit on the subsequent day. Once at the clinic, the research team member sought permission from care team members and caregivers to observe the visit. Upon receiving verbal permission, the research team member conducted a passive observation, noting key factors, such as the kit distribution process as well as participants' interactions. A total of 11 observations ( $n=11$ ) were completed.

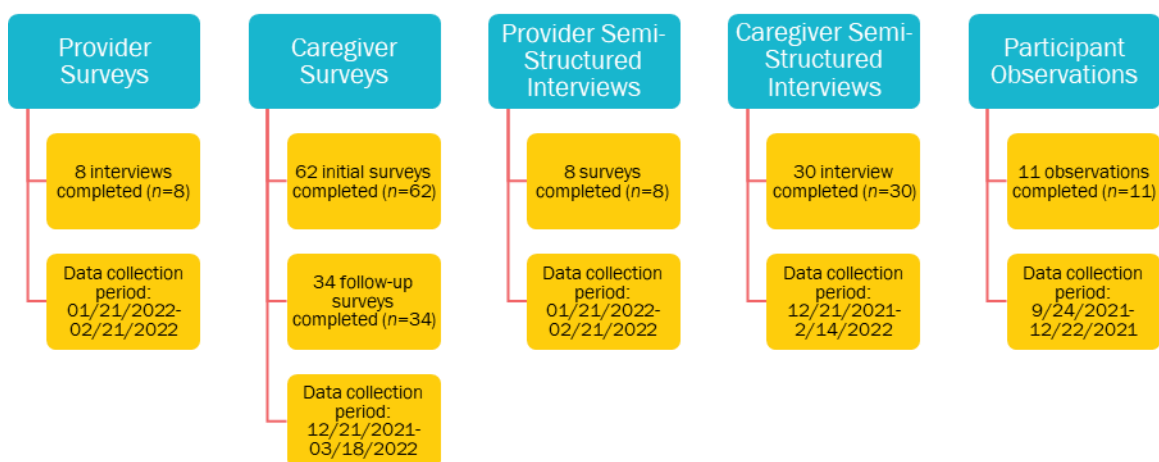


Figure 1. Data collection tool summary



## Results

In the following sections, we describe our findings from the Prescription for Play pilot study. Findings are broken down by quantitative data, which assessed changes experienced by each participant group, followed by qualitative data that served as an assessment of the implementation process.

### Quantitative Data

#### Providers Demographics

Primary care providers that implemented the Prescription for Play program represented an even split between Pediatricians (50%) and Nurse Practitioners (50%), see Figure 2. As shown in Figure 3, half of the providers fell into the 25-34 years age range; the remaining providers were between the ages of 35 and 54. Finally, the majority of providers were relatively new to the field, with 62.5% holding their role for 1-5 years, and the remaining (37.5%) in their role for 6+ years (see Figure 4).

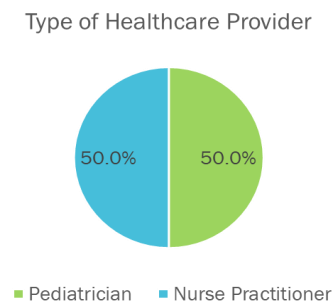


Figure 2. Type of Healthcare Providers that Implemented Prescription for Play

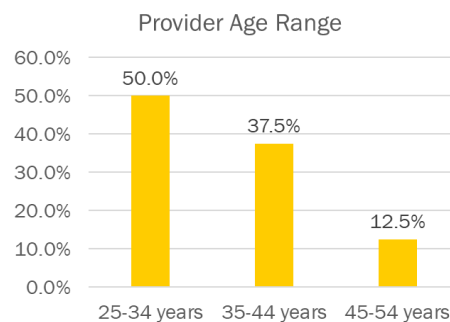


Figure 3. Age Range for Providers that Implemented Prescription for Play

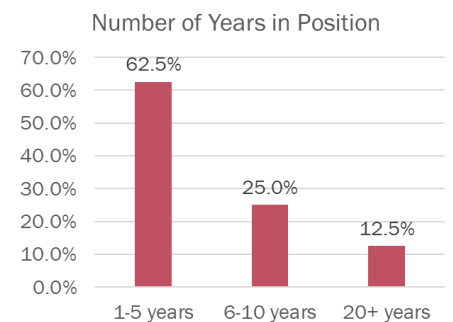


Figure 4. Number of Years in Position for Providers that Implemented Prescription for Play

#### Provider Behavior Changes

Providers were asked how their behaviors changed in terms of discussing 'learning through play' with their pediatric families. The results from this section of the survey are displayed in Figure 5. All providers (100%) experienced a change to some extent in how regularly they introduce 'learning through play' to pediatric families, with half (50%) experiencing some change and the other half (50%) experiencing much change. Most providers (87.5%) experienced a change in how regularly they document their play conversations in the patient's electronic health record, and the same proportion of providers (87.5%) experienced a change to some extent in how regularly they reinforce learning through play in subsequent visits.

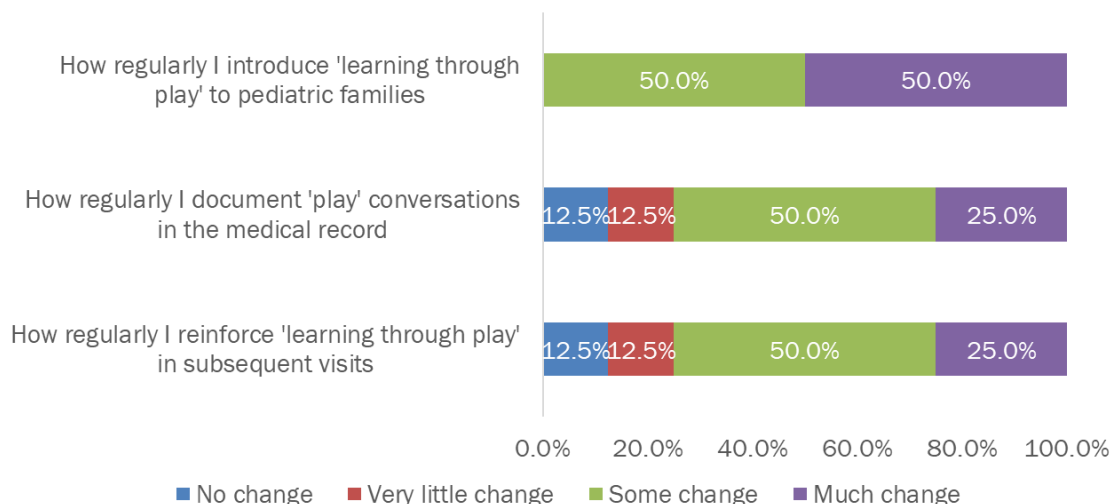


Figure 5. Provider Behavior Changes Related to Discussing Learning Through Play with Pediatric Families

## Results

### Provider Knowledge Changes

To assess the extent to which providers' knowledge changed after being a part of the Prescription for Play program, providers were asked a series of questions related to their change in play knowledge (see Figure 6). All providers (100%) experienced a change in their knowledge about why play is important. The majority (62.5%) experienced some change, and the remaining (37.5%) experienced much change. Furthermore, all providers (100%) experienced a change in knowledge about how to introduce play with families, with the majority (50%) experiencing much change, followed by 37.5% experiencing some change, and the rest (12.5%) experiencing very little change. Providers' knowledge of what counts as play was more evenly split, with the majority experiencing some change (37.5%), followed by much change (25%) and very little change (25%), and the rest experiencing no change (12.5%).

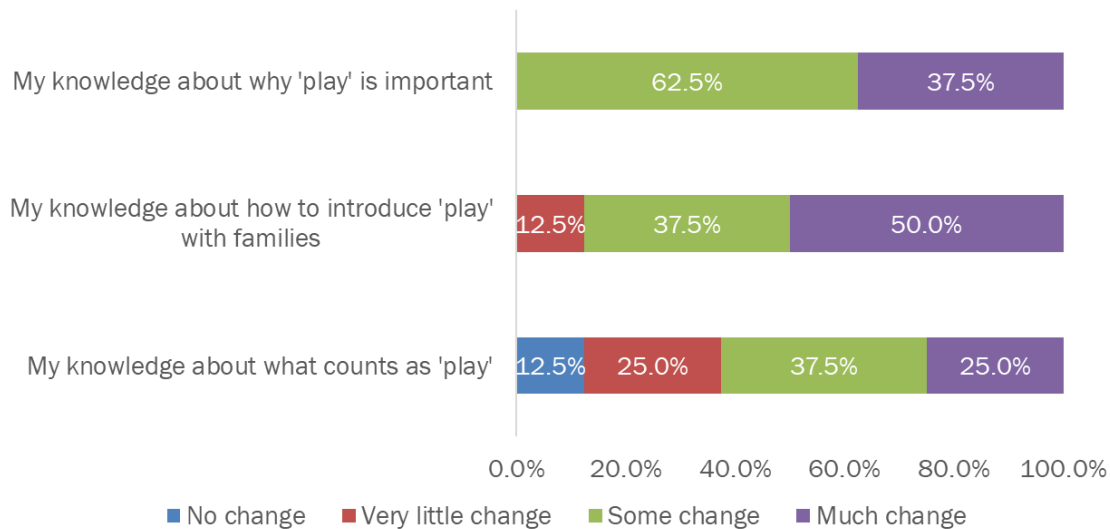


Figure 6. Provider Knowledge Changes Related to Play

### Provider Changes in Interest

Providers were also asked how their interests changed in relation to demonstrating play habits with families, giving information about how to play, and engaging in play conversations with families. Results are displayed in Figure 7. Providers experienced the same extent of changes across all questions, with half of providers (50%) experiencing some changes, 37.5% experiencing much change, and the remaining (12.5%) experiencing no change.

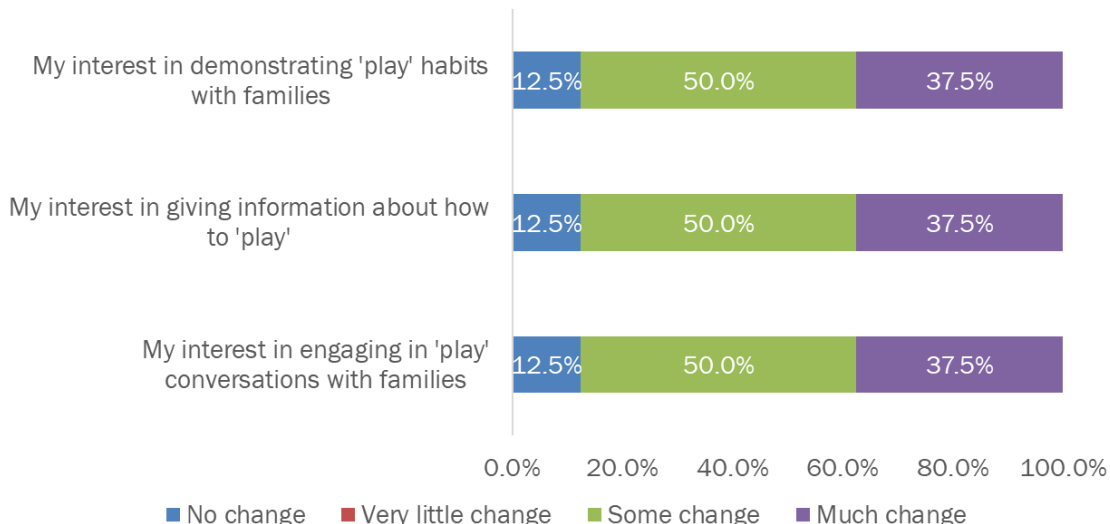


Figure 7. Provider Changes in Interest Related to Encouraging Play with Pediatric Families

## Results

### Provider Changes to Intentions

Providers were asked how their intentions changed in terms of introducing and reinforcing 'learning through play' with pediatric families. The results from this section of the survey are displayed in Figure 8. The majority (87.5%) experienced a change in their intentions to regularly introduce learning through play to families, with 50% experiencing some change and 37.5% experiencing much change. Similarly, 87.5% experienced a change in their intentions to regularly document play encounters in the medical record, with 37.5% experiencing much change and some change and 12.5% experiencing very little change. Lastly, the majority of providers experienced a change in their intention to regularly reinforce learning through play in subsequent visits, with three-fourths (75%) experiencing much change and some change (37.5% each).

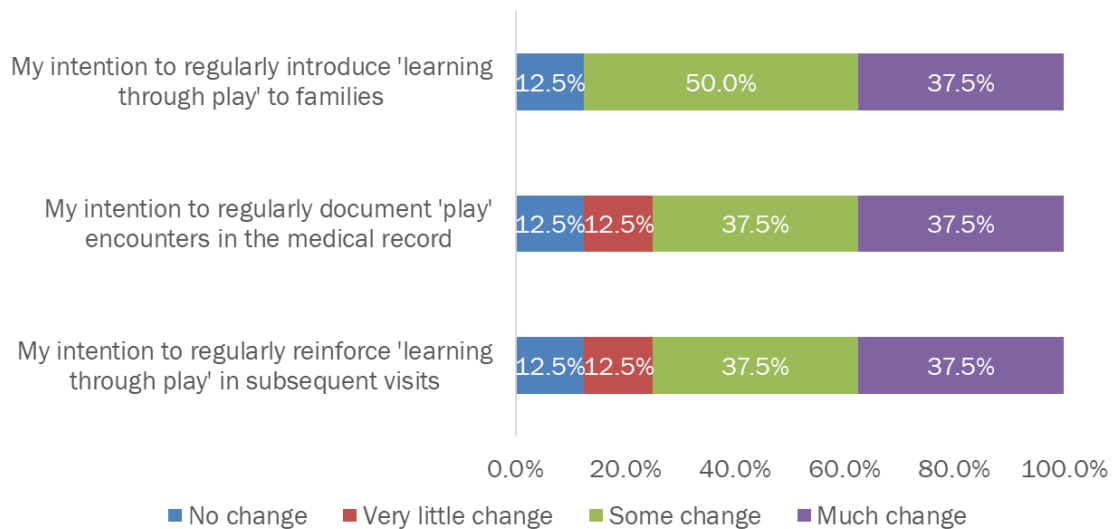


Figure 8. Provider Changes to Intentions Related to Introducing and Reinforcing Play with Pediatric Families

### Provider Changes in Confidence

Providers were asked how their confidence changed in terms of introducing and reinforcing 'learning through play' with pediatric families after being a part of the Prescription for Play program. The results from this section of the survey are displayed in Figure 9. All providers (100%) experienced a change in confidence in how regularly they introduce learning through play to pediatric families. Half of providers (50%) experienced much change, a little over one-third (37.5%) experienced some change, and the remaining (12.5%) experienced very little change. Three-fourths of providers (75%) experienced changes in their confidence in how regularly they document play encounters in the patient's medical record. The majority of providers (87.5%) experienced a change in confidence in how regularly they reinforce learning through play in subsequent patient visits, with 75% experiencing much and some change in confidence (37.5% each) and 12.5% experiencing very little change in confidence.

## Results

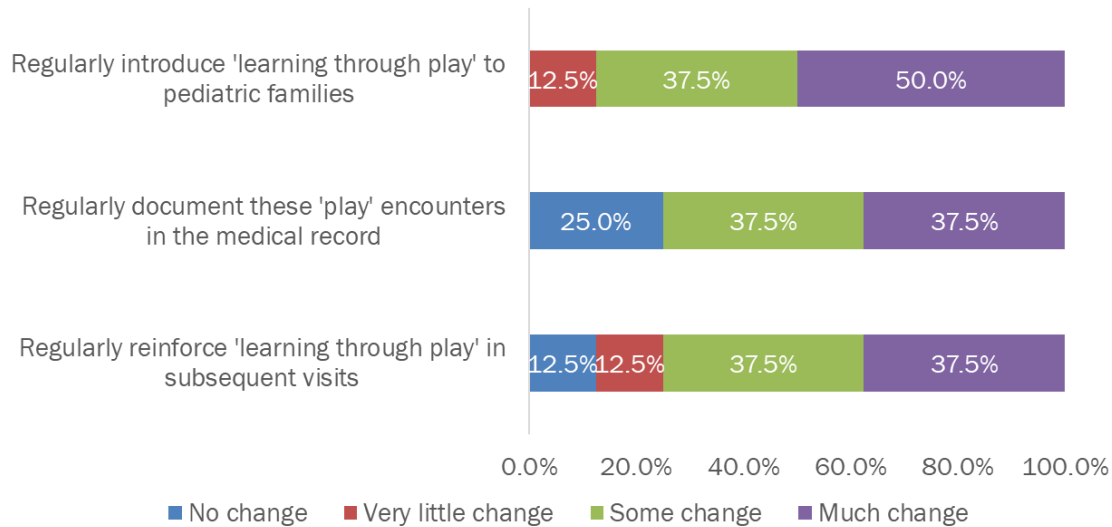


Figure 9. Provider Changes to Confidence Related to Introducing and Reinforcing Play with Pediatric Families

## Caregiver Demographics

For the initial caregiver survey, the majority of respondents represented parents (95.2%), followed by grandparents (3.2%) and extended family members (1.6%); results are displayed in Figure 10. A little less than half of respondents (41.4%) were part of a single parent household (see Figure 11). There was nearly an even split between type of visit that the child had, with the greatest proportion (29%) having an 18-month old visit (see Figure 12). The majority of caregivers (54.8%) were predominantly Spanish speakers.

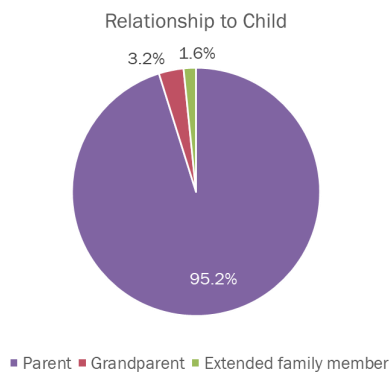


Figure 10. Caregiver Relationship to Child (Initial Survey)

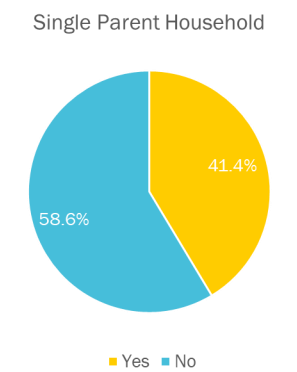


Figure 11. Type of Household (Initial Survey)

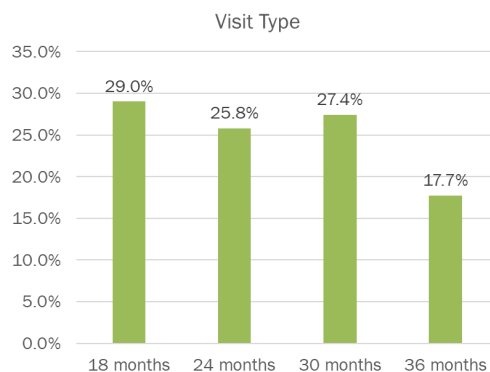


Figure 12. Patient Visit Type (Initial Survey)

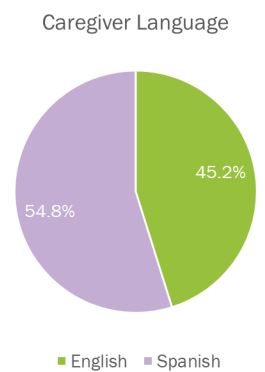


Figure 13. Caregiver Language (Initial Survey)

Of the subset of caregivers that were invited to participate in the follow-up survey, the majority (94.1%) were parents, and a small percentage represented grandparents (2.9%) and extended family members (2.9%). These results are shown in Figure 14. In comparison to the initial survey, the follow-up survey respondents encompassed fewer (27.3%) families of single-parent households (see Figure 15). The type of patient visit for the subset of caregivers that completed the follow-up survey was almost evenly distributed, with 18-month, 24-month, and 30-month visits comprising 26.5% of caregiver respondents each and 36-month visits including 20.6% of respondents (see Figure 16). Lastly, the majority of caregivers (58.8%) that participated in the three-month follow-up survey were Spanish speakers.

## Results

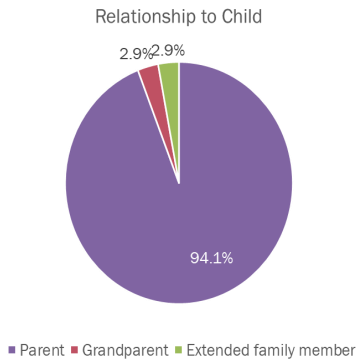


Figure 14. Caregiver Relationship to Child (Follow-Up Survey)

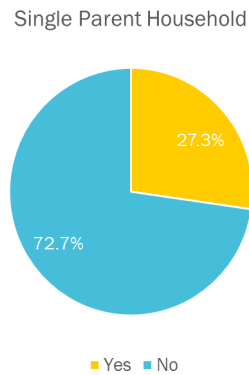


Figure 15. Type of Household (Follow-Up Survey)

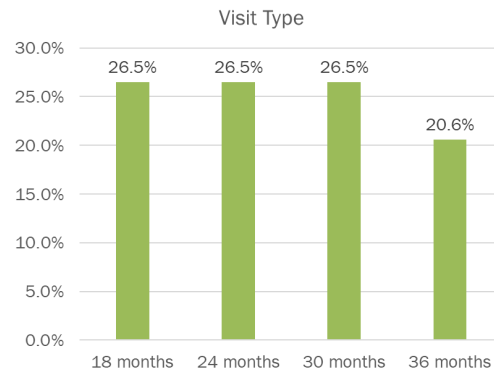


Figure 16. Patient Visit Type (Follow-Up Survey)

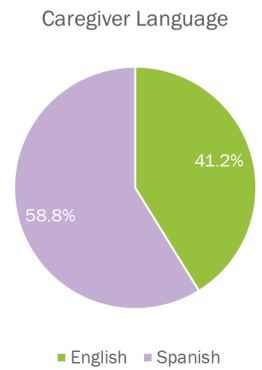


Figure 17. Caregiver Language (Follow-Up Survey)

## Caregiver Behavior Changes

Caregivers were asked how their behaviors changed in terms of playing with their child after exposure to the Prescription for Play program. The results from this section of the surveys are displayed in Figures 18 and 19. The majority of caregivers (81.4%) experienced a change in the number of days they play with their child each week; however, at the three-month follow-up, the number of caregivers that experienced a change slightly decreased (79.4%), but a greater proportion experienced much change (41.2% versus 37.3%). A greater percentage of caregivers (88.1%) experienced a change in the number of minutes they play with their child each time. Again, a lower percentage of caregivers (76.5%) that experienced a change in the number of minutes they play with their child each time was observed at the three-month follow-up, but a greater proportion experienced much change in comparison to the initial survey (44.1% versus 52.9%). Similar results were observed when caregivers were asked how often play with their child involves learning games. A greater proportion of caregivers (91.5%) expressed a change in this area at least one month after exposure to the Prescription for Play program in comparison to the three-month follow-up (85.3%). However, a greater proportion of caregivers (58.8%) experienced much change at the three-month follow-up in comparison to the initial survey (47.5%).

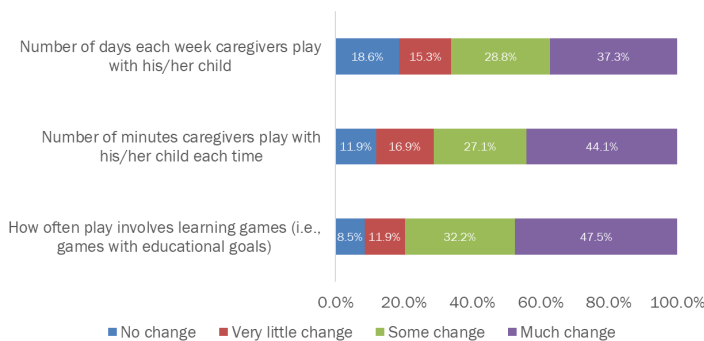


Figure 18. Caregiver Behavior Changes Related to Playing with Their Child (Initial Survey)

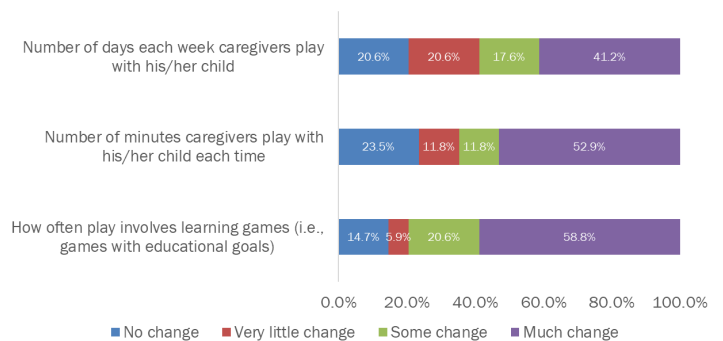


Figure 19. Caregiver Behavior Changes Related to Playing with Their Child (Follow-Up Survey)

## Results

### Caregiver Knowledge Changes

Caregivers were asked a series of questions related to their play knowledge to understand how it changed after being exposed to the program. Results from the initial and follow-up surveys are shown in Figures 20 and 21, respectively. Almost all caregivers experienced a change in knowledge about what counts as play at least one month after their child's well-child care visit (88.2%) and three months after their child's well-child care visit (85.3%). Similarly, caregivers experienced a change in knowledge about why play is important, with 86.4% of caregivers experiencing a change at the initial follow-up and 88.2% experiencing a change at the subsequent follow-up. Caregivers experienced the least extent of knowledge changes in terms of how to play with their child. At the time of the initial survey, 76.3% experienced a change, while at the time of the follow-up survey, 82.4% experienced a change.

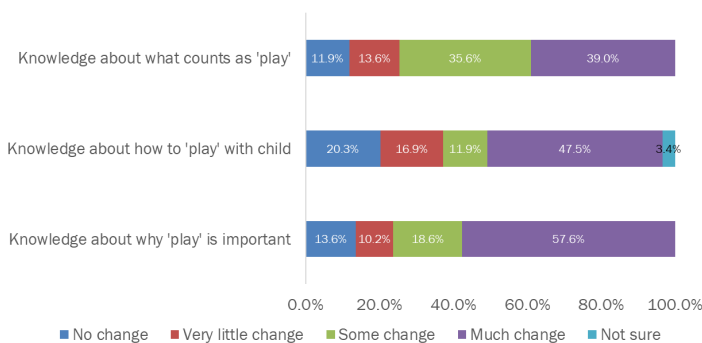


Figure 20. Caregiver Knowledge Changes Related to Play (Initial Survey)

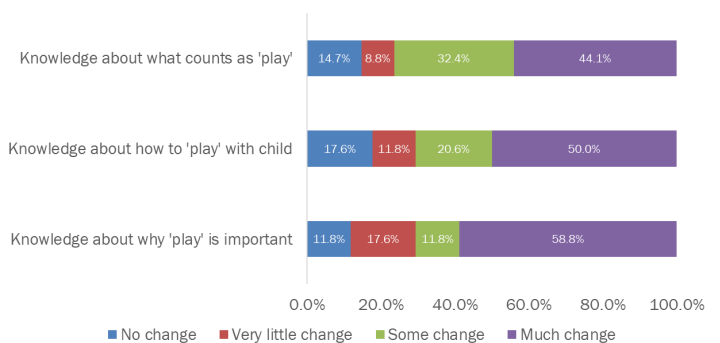


Figure 21. Caregiver Knowledge Changes Related to Play (Follow-Up Survey)

### Caregiver Changes in Interest

At both the first time point (at least one month post-visit) and the second time point (three months post-visit), caregivers were asked a series of questions to assess the extent to which their interests changed after being exposed to the Prescription for Play program (see Figures 22 and 23). At the time of the initial survey, caregivers experienced the greatest change (89.8%) in their interest in new information about how to play. At the three-month follow-up, caregivers experienced the greatest change (94.1%) in their interest in engaging in play with their child.

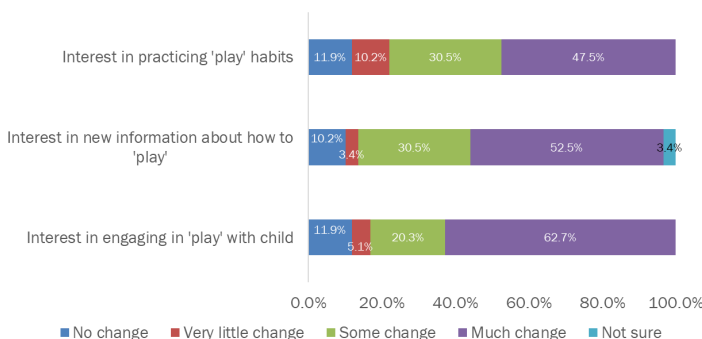


Figure 22. Caregiver Changes in Interest Related to Playing with Their Child (Initial Survey)

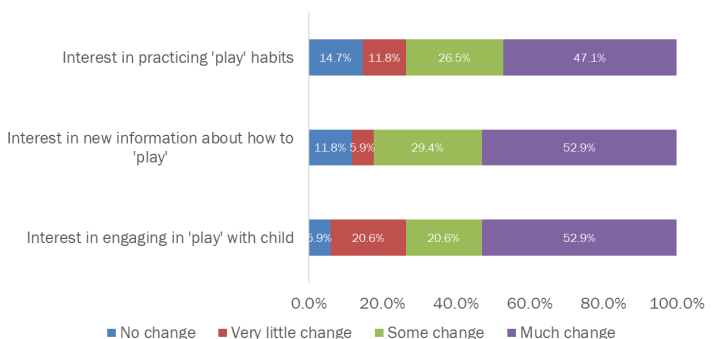


Figure 23. Caregiver Changes in Interest Related to Playing with Their Child (Follow-Up Survey)

## Results

### Caregiver Changes to Intentions

Caregivers were asked how their intentions changed in terms of playing with their child. The results from this section of the surveys are displayed in Figures 24 and 25. The majority (84.7%) experienced a change in their intentions to help their child learn through play, with 59.3% experiencing much change at least one month after being exposed to the Prescription for Play program. A slightly lower proportion of caregivers (79.4%) experienced this change at the three-month follow-up; however, a greater proportion (61.8%) experienced much change in comparison to the initial one-month follow-up. At both the initial time point and the three-month follow-up, the least proportion of caregivers (79.6% and 73.5%, respectively) experienced a change in their intention to play with their child for 15 minutes each time in comparison to their intention to help their child learn through play and play with their child each day. Finally, 86.5% of caregivers experienced a change in their intention to play with their child each day at the one-month follow-up, with 42.4% experiencing much change. At the three-month follow-up, 79.4% experienced a change in their intention to play with their child each day, with 44.1% experiencing much change.

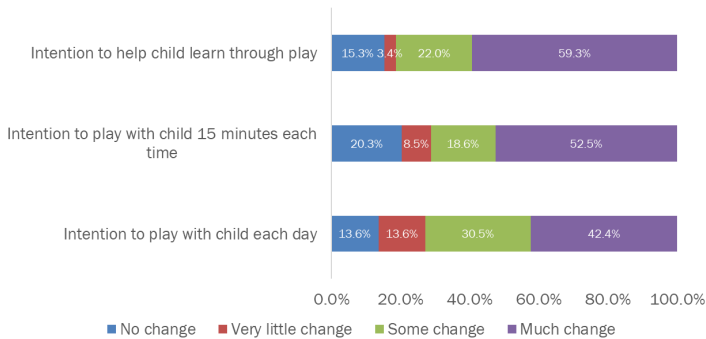


Figure 24. Caregiver Changes to Intentions to Play with Their Child (Initial Survey)

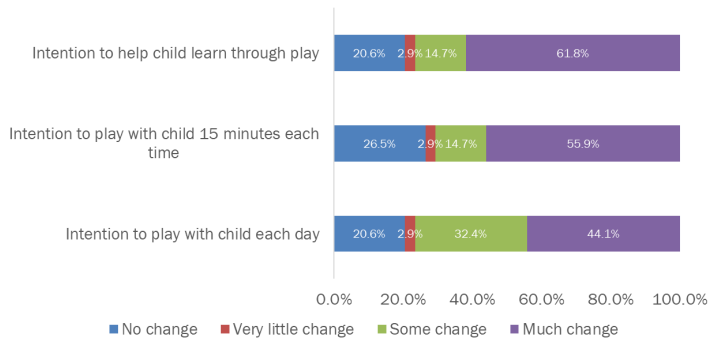


Figure 25. Caregiver Changes to Intentions to Play with Their Child (Follow-Up Survey)

### Caregiver Changes in Confidence

Caregivers were asked how their confidence changed in terms of playing with their child after being exposed to the Prescription for Play program. The results from this section of the initial and follow-up surveys are displayed in Figures 26 and 27. In response to the initial survey, approximately three-fourths (76.3%) of caregivers experienced a change in confidence that they can provide different opportunities for their child to play. This proportion slightly increased (81.9%) at the three-month follow-up. A smaller proportion of caregivers (74.6%) felt a change in confidence that they can play with their child for 15 minutes each time. Approximately 10% more caregivers experienced a change in confidence for this question at the three-month follow-up. The smallest proportion of caregivers (71.2%) felt a change in confidence to some extent that they can play with their child all or most days. Again, we saw an approximate 10% increase in the change in confidence experienced at the three-month follow up.



## Results

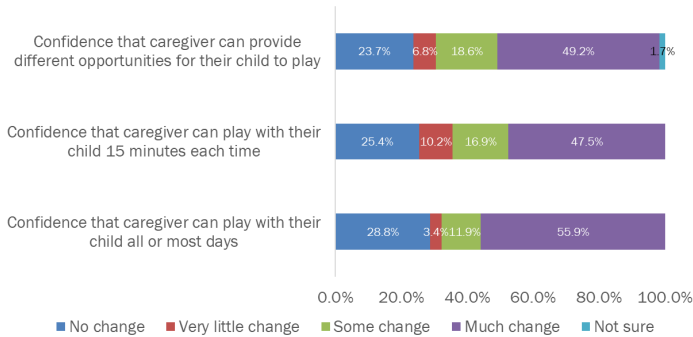


Figure 26. Caregiver Changes to Intentions to Play with Their Child (Initial Survey)

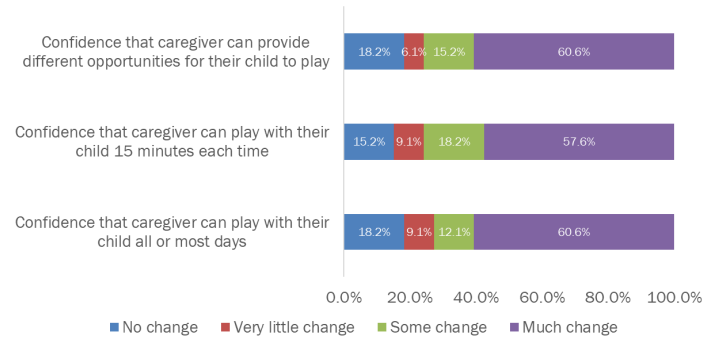


Figure 27. Caregiver Changes to Intentions to Play with Their Child (Follow-Up Survey)

## Qualitative Data

### Effect on Patient Visit

Providers reported that the Prescription for Play program assisted in integrating a discussion on play promotion in almost every patient visit. Initially, providers experienced challenges or stress related to implementing a new program, especially due to their overloaded schedules. However, over time, they saw how beneficial the program is and were able to develop a workflow to integrate it into their discussions with caregivers. They also found that the program complemented other existing programs, such as Reach Out and Read, to provide a more comprehensive patient visit. These findings are indicated by the quotes in Figure 28.

Additionally, both providers and caregivers expressed that the Prescription for Play kit created a positive clinical experience for the whole family. Providers felt that the kit helped build trust between the provider and family. Additionally, caregivers saw the kit as a way to help appease their child during the visit. They also felt that it made the visit more fun. If a child was not having a good day or was feeling anxious about going to the doctor, the kit made the visit much more exciting. These findings are exemplified in Figure 29.

*"Initially, I was just asked to do it. [...] And I quickly learned how much kids really enjoy it. And parents also really appreciate getting something and having that talking point just about day to day play."*

*"At first I was just like, 'this is something else that we have to do.' But now I'm like, Alright, now I know why we're doing it. I can see now the benefits of it."*

*"And I've also used to support my fact of saying like, hey, you know, parent has XYZ concerns. I've seen in the room that the child is, you know, developmentally appropriate playing with the duck properly. We do also the reach out to read so I've used it in my documentation to either support my stance and say this kid is developing appropriately or support my stance to say, hey, he needs like further evaluation."*

Figure 28. Provider Initial Experiences with the Prescription for Play Program

#### Provider Feedback:

*"It 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. I think parents that may have initially been hostile or frustrated...it's a nice way to kind of to mend that relationship and continue to build that trust between the provider and the family."*

#### Caregiver Feedback:

*"Yes, it was fun because when you go to the doctor, kids are usually scared to go because they are expecting vaccinations and stuff. So I feel like that removed the negative perspective that my son had about going to the doctor, and the toy just made it fun."*

*"My son was not happy that day, so when they gave him that, he calmed down a little bit. I just liked that he liked it, and watching him play made me happy."*

Figure 29. Provider and Caregiver Perceptions of the Positive Clinical Environment Cultivated Through the Prescription for Play Program

## Results

*"The Prescription for Play program has added yet another dimension to our ability as providers to make a more comprehensive and in-room live based assessment of the child's development and developmental milestones in addition to that direction... but the silver lining is that it does it in a fun way."*

*"I think seeing it from the parents eyes, having their child do something that they have never seen before. A lot of them maybe go to daycare, you know, cared for by another caregiver. But more times than not, the kid opens it up and like starts building and they go, Gosh, I didn't, I didn't know you could do that... it certainly creates for special moments."*

Figure 30. Provider Recognition of the Benefit of the Prescription for Play Kit

### Provider Feedback:

*"It also empowers families with a lot of information regarding the different domains of a child's development. And to me, I think that that's a huge win. Because we're starting from 18 months to three years, so very early on in development before they even go to school. And so that's why I think it's such a great program to start talking about it now, not when they're in school."*

### Caregiver Feedback:

*"The fact that I now know that "play" is just as important as everything else they have to do in their lives. I know there is a learning initiative behind it, so it makes play a bit more important in our household now."*

*"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."*

Figure 31. Provider and Caregiver Perceptions of the Positive Clinical Environment Cultivated Through the Prescription for Play Program

*"I shared it with my mom since my mom watches her while I'm at work. I told her that it's good for her to play for 20-30 minutes. I sit on the floor with her and a pile of stuff and just play."*

*"Yes, I did share with both friends and family. At first, I asked if they knew about the program, and they said no. So I let them know that it helps you interact with your child and understand their learning development. I even shared it with my coworkers."*

Figure 32. Caregiver Communication with Social Circles about the Prescription for Play Program

The Prescription for Play brick kit also enhanced the patient visit by providing a first-hand insight into the child's developmental stage. Developmental assessment tools typically rely on parent report to measure a child's developmental stage. However, by providing the kit during the visit, providers were able to observe how the child manipulated the kit and recognized different colors. It also created special moments for caregivers to observe their child do something that they may not have observed before. In these ways, the Prescription for Play kit provided benefits beyond the program's goals. Quotes supporting these findings are shown in Figure 30.

## Impact on Caregiver Knowledge

Both providers and caregivers felt that the Prescription for Play program equipped caregivers with additional support and knowledge they need to help their child grow emotionally and developmentally. Providers were enthusiastic about the potential for the program to empower caregivers with information on different developmental stages even before they begin school. Caregivers that were able to recall a discussion about play during the patient visit retained the information that was shared and were able to put the recommendations into practice. Examples of these findings are shown in Figure 31.

In addition to applying the knowledge gained to play with their child, caregivers also communicated the program message to their social circles. In some cases, they shared the importance of play with other family members who care for their child, such as spouses, parents, or siblings. In other cases, caregivers discussed the importance of play with friends and family who have young children. These findings are supported by quotes shown in Figure 32.

## Results

### Overall Stakeholder Experiences with the Program

Both providers and caregivers conveyed a positive experience with the program. In particular, providers felt that the Prescription for Play program allowed them to have more in-depth conversations with caregivers about their child's development. Providers found it rewarding in that they were able to share information about development that caregivers did not have knowledge of previously. Caregivers were most enthusiastic about their child's reaction to the kit as it brought out positive emotions for them. Additionally, caregivers described that they regularly use the kit at home, and the kit is enjoyed by their child. Quotes exemplifying these findings are shown in Figure 33.

#### Provider Feedback

*"It's so special and important to talk about the importance of all those domains, right? Fine motor, physical, emotional, cognitive. And a lot of them it's so refreshing to hear that. A lot of them just didn't know that, you know, play itself can also help cultivate speech and language. So, all of [this] has been very rewarding for both us and I think for the families."*

#### Caregiver Feedback:

*"The best part was that my son got very happy when they gave him the toy."*

*"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."*

*"We play with [the kit] often because my granddaughter loves those types of toys. I play with her two times a week when I get out of work early."*

*"[...] every time my son sees [the kit], he already knows it's time to play."*

Figure 33. Provider and Caregiver Experiences with the Prescription for Play Program

### Challenges and Suggestions for Improvement

Overall, while the Prescription for Play program was viewed positively, both providers and caregivers experienced challenges with the program. Within the clinic, some providers were either not participating in the program or had not yet been trained, so it was difficult for participating providers to look to other colleagues within their unit for support with the program. For providers that were able to discuss the program with others, they found it reassuring to share their experiences related to the program. Additionally, over 60% of caregivers, particularly Spanish-speaking caregivers, did not recall a discussion about play or related topics, indicating possible inconsistencies in how the Prescription for Play messages are conveyed. Caregivers that did not recall having a conversation about play wanted more information about the importance of play and ways they can play with their child. Quotes to support findings related to challenges and areas of improvement are shown in Figure 34.

#### Provider Feedback:

*"My challenge was not everybody was trained and up to date on, on this pilot, and so I had a lot of missed opportunities."*

*"Talking about things just kind of reassures that it is a beneficial program that it really doesn't take as much time as maybe some people had initially been nervous that would take."*

#### Caregiver Feedback:

*"They could talk to the parents about playing with the children more often and talk to them about different games."*

*"They can explain more about the importance of play and how children can learn so that the parents can be motivated to play more with their kids."*

Figure 34. Provider and Caregiver Challenges and Suggestions for Improving the Prescription for Play Program

## Summary, Conclusions, and Recommendations

The Prescription for Play program sought to embed conversations on learning through play in routine, pediatric well-child care visits for infants ages 18 to 36 months. The program involves the delivery of a LEGO® DUPLO® Brick Kit and educational brochure to help prompt the conversation on the importance of play for a child's social, emotional, and cognitive development. The program also emphasizes the positive influence caregivers can have by actively playing with their child on a regular basis. This program is one of many programs that capitalizes on the ability of healthcare providers to disseminate valuable health information to pediatric families early in development.

The findings from this pilot study suggest the Prescription for Play program provides useful tools for providers and caregivers to have conversations related to play promotion and meet the social, emotional, and developmental needs of children. The implementation of the program helped make the patient visit more holistic, allowing providers to use the kit as a way to measure a child's developmental stage. It complemented other programs focused on enhancing child development, such as Reach Out and Read. The program helped build trust between providers and families, soothing patients during their well-child care visit.

Through the knowledge caregivers gained by being introduced to the program, they understood the importance of play and how it can benefit their child. This prompted them to spend extra time playing with their child and to focus on more active forms of play. Furthermore, caregivers saw the program's message as valuable and shared it with their social circles. In this way, the program's message went beyond the clinic and was being disseminated to the community.

While the overall findings about the program were positive, there are areas where the program can be improved. In the following section, we provide our recommendations for future program roll outs, gleaned through feedback from stakeholders as well as the observations from implementing the program in practice.

### Additional Training for Providers

Providers could benefit from additional training opportunities and content to share with pediatric families. Although all providers experienced a change to some extent in their knowledge about why play is important, the majority of providers said they only experienced some change, as opposed to much change. Additional training opportunities for providers could help enrich the conversations they have with caregivers and may also assist with buy-in and sustainability of the program. Furthermore, more specific training related to children with developmental disabilities could be beneficial for providers to make more tailored recommendations to caregivers. Lastly, training content on children's developmental milestones and possible deviations from this standard could also prove beneficial to meet the diverse needs of their patients.

## Summary, Conclusions, and Recommendations

### Additional Resources for Caregivers

Through the semi-structured interviews, caregivers shared that they wanted additional content on the importance of play as well as different ways to play with their child. This was especially evident with caregivers that did not recall having a conversation about play, indicating that this aspect of the program was not emphasized during the patient visit. In addition to additional educational content, caregivers could also benefit from more frequent conversations about play during subsequent visits. This would help reinforce concepts learned at the initial visit and could provide supplemental information as the child progresses developmentally. Additional content could also be shared through videos or interactive books to provide further learning opportunities for caregivers. Caregivers also suggested additional tangible resources that would encourage play with their children and learn more about the role of play in development. Support groups could be one resource for caregivers to share ideas on how they play with their child and discuss any challenges that they might be facing. Lastly, additional play tools or suggestions for additional play tools could also be useful to encourage differentiation to meet children's varying methods of learning and increase children's engagement.

### Develop Structured Recommendations for Workflow at the Clinic-Level

While the Prescription for Play program does not require a set workflow for implementation, it currently offers recommendations on how to incorporate the kit and conversation on learning through play into the patient visit. However, we found that there were inconsistencies in the ways in which the program was implemented. In some cases, the kit was just given to caregivers without a conversation, and in other cases, the kit was given and the provider discussed play with caregivers, but did not open the kit and model play. Since clinics vary in terms of their resources and workflow, it is important for each clinic to determine a standard for implementing the program to ensure consistency and that each patient receives the kit and educational materials.

### Improved Communication

Communication proved to be a challenge during this pilot study among providers as well as between providers and caregivers. At the start of the implementation period, not all providers were trained in the program, making it difficult to consistently implement the program. Providers that were able to discuss the program with their colleagues found reassurance that the program was beneficial and did not take as much time out of the patient visit as was anticipated. They were also able to share ideas on how to introduce the program. More opportunities to discuss the program among providers during team meetings could help support the implementation process.

## Summary, Conclusions, and Recommendations

Communication between caregivers and providers was also a barrier identified through this study. From observations and interviews with providers, it was evident that communication is one way in that providers were sharing information related to learning through play, but caregivers did not engage in conversation or ask follow-up questions. Prompting providers to follow-up with caregivers at subsequent visits could help spark conversation, especially after caregivers have had the opportunity to apply some of the recommendations given. Another key communication barrier was between providers and Spanish-speaking families. The majority of families that did not recall the conversation on play during the patient visit were Spanish speaking; a possible reason for this challenge could be due to the use of translators that may not be able to convey the message accurately to caregivers. Additional support materials translated into Spanish that reinforces the information that was shared could help mitigate this challenge.



## References

1. Ginsburg KR; American Academy of Pediatrics, Committee on Communications; American Academy of Pediatrics, Committee on Psychosocial Aspects of Child and Family Health. The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *Pediatrics*. 2007;119(1):182–191.
2. Shonkoff JP, Phillips DA, eds. *From Neurons to Neighborhoods: The Science of Early Childhood Development*. Washington, DC: National Academy Press; 2000.
3. Frost JL. Neuroscience, play and brain development. Paper presented at: IPA/USA Triennial National Conference; Longmont, CO; June 18 –21, 1998. Available at: [www.eric.ed.gov/ERICDocs/data/ericdocs2/contentstorage01/0000000b/80/11/56/d6.pdf](http://www.eric.ed.gov/ERICDocs/data/ericdocs2/contentstorage01/0000000b/80/11/56/d6.pdf). Accessed March 26, 2022.
4. Tamis-LeMonda CS, Shannon JD, Cabrera NJ, Lamb ME. Fathers and mothers at play with their 2- and 3-year-olds: contributions to language and cognitive development. *Child Dev*. 2004;75:1806 –1820.
5. Hurwitz SC. To be successful: let them play! *Child Educ*. 2002/2003;79:101–102.
6. Erickson RJ. Play contributes to the full emotional development of the child. *Education*. 1985;105:261–263.
7. Band EB, Weisz JR. How to feel better when it feels bad: children’s perspectives on coping with everyday stress. *Dev Psychol*. 1988;24:247–253.
8. Pellegrini AD, Smith PK. The development of play during childhood: forms and possible functions. *Child Psychol Psychiatry Rev*. 1998;3:51–57.
9. Smith D. How play influences children’s development at home and school. *J Phys Educ Recreation Dance*. 1995;66:19 –23.
10. Yogman M, Garner A, Hutchinson J, et al; American Academy of Pediatrics Committee on Psychosocial Aspects of Child and Family Health; American Academy of Pediatrics, Council on Communications and Media. The Power of Play: A Pediatric Role in Enhancing Development in Young Children. *Pediatrics*. 2018;142(3):e20182058.
11. Milteer RM, Ginsburg KR; Council on Communications and Media; Committee on Psychosocial Aspects of Child and Family Health. The importance of play in promoting healthy child development and maintaining strong parent-child bond: focus on children in poverty. *Pediatrics*. 2012;129(1):e204-e213.
12. Mendelsohn AL, Cates CB, Weisleder A, et al. Reading aloud, play, and socialemotional development. *Pediatrics*. 2018;141(5):e20173393.
13. Rhoades BL, Warren HK, Domitrovich CE, Greenberg MT. Examining the link between preschool social – emotional competence and first grade academic achievement: the role of attention skills. *Early Child Res Q*. 2011;26(2):182–191.



# Appendices

# Appendix A. Provider Feasibility Survey

# **P4P 3-Month Provider Survey - 10.21.2021**

## **Survey Flow**

**Standard: Identifiers (6 Questions)**  
**Standard: Recall - WCC Visit (7 Questions)**  
**Standard: Behaviors - P4P (2 Questions)**  
**Block: Knowledge and Skills to Perform the Behavior (1 Question)**  
**Standard: Salience of the Behavior (1 Question)**  
**Standard: Environmental Constraints (1 Question)**  
**Standard: Habits (1 Question)**  
**Standard: Behavior Intentions (1 Question)**  
**Standard: Experiential Attitude (1 Question)**  
**Standard: Instrumental Attitude (1 Question)**  
**Standard: Injunctive Norms (1 Question)**  
**Standard: Descriptive Norms (1 Question)**  
**Standard: Perceived Behavioral Control (1 Question)**  
**Standard: Self-Efficacy (1 Question)**  
**Standard: Demographics (5 Questions)**

Page Break

---

---

### Start of Block: Identifiers

Q40 We'd love to hear from you about your "Prescription for Play" experience as a healthcare provider at Connecticut Pediatrics @ CHC. This will help us make improvements to the program.

The survey should only take 10 minutes, and your responses are confidential. You can only take the survey once, but you can change your answers before you submit the survey.

If you have any questions about the survey, please email us: P4P@chc1.com

We really appreciate your input!

---

Q20 In the past 3 months, have you conducted any well-child care visits with pediatric patients ages 18-36 months and incorporated 'Prescription for Play'?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Other (please specify) (4) \_\_\_\_\_
- ☐ Do Not Recall (3)

*Skip To: End of Survey If Q20 != Yes*

---

Page Break

---

*Display This Question:*

*If Q20 = Yes*

Q18 For how long have you participated in the 'Prescription for Play' program?

- ☐ Less than 1 month (1)
- ☐ 1-3 months (2)
- ☐ More than 3 months (3)
- ☐ Other, please specify (5) \_\_\_\_\_
- ☐ Do not recall (4)

---

Page Break

Q37 Where do you primarily incorporate 'Prescription for Play' into practice?

- ☐ Community health center (1)
- ☐ Pediatrics practice (2)
- ☐ Family practice (3)
- ☐ Inpatient facility (e.g., hospital) (4)
- ☐ Urgent care (5)
- ☐ Other (please specify) (7) \_\_\_\_\_
- ☐ N/A (I am not a healthcare worker) (6)

*Skip To: End of Survey If Q37 = N/A (I am not a healthcare worker)*

---

Page Break

---

*Display This Question:*

*If Q37 != N/A (I am not a healthcare worker)*

Q23 What type of healthcare worker do you identify as?

- ☐ Pediatrician (1)
- ☐ Family Practitioner (2)
- ☐ Nurse Practitioner (5)
- ☐ Physician's Assistant (3)
- ☐ Nurse (4)
- ☐ Resident/Fellow (6)
- ☐ Other (please specify) (8) \_\_\_\_\_
- ☐ N/A (I am not a healthcare worker) (7)

---

Page Break



*Display This Question:*

*If Q37 != N/A (I am not a healthcare worker)*

*And Q23 != N/A (I am not a healthcare worker)*

Q21 Please indicate how many years you have been in the healthcare worker role specified above.

☐ Less than 1 year (please specify) (1)

\_\_\_\_\_

☐ 1-5 years (2)

☐ 6-10 years (3)

☐ 11-20 years (4)

☐ 20+ years (5)

☐ Other, please specify (6) \_\_\_\_\_

**End of Block: Identifiers**

**Start of Block: Recall - WCC Visit**

Q24 Please respond to this next set of questions based on your most recent 'Prescription for Play' (P4P) patient encounter:

-----

Q38 When did this 'Prescription for Play' (P4P) encounter take place?

☐ Less than 1 month ago (1)

☐ 1-3 months ago (3)

☐ More than 3 months ago (2)

☐ Other (please specify) (4) \_\_\_\_\_

☐ Do Not Recall (5)

-----

Q31 Did you or someone else give the family the 'Prescription for Play' (P4P) kit?

- ☐ I gave the P4P kit (1)
- ☐ Someone else gave it (2)
- ☐ Other (please specify) (4) \_\_\_\_\_
- ☐ Do Not Recall (3)

---

*Display This Question:*

*If Q31 = I gave the P4P kit*

Q32 For how many minutes per day was the family's 'play prescription'?

- ☐ 5 Minutes (1)
- ☐ 10 Minutes (2)
- ☐ 15 Minutes (3)
- ☐ Other (please specify) (5) \_\_\_\_\_
- ☐ Do Not Recall (4)

---

Q17 Did the family receive a bag of toy bricks (or toy blocks)?

- ☐ Yes (1)
  - ☐ No (2)
  - ☐ Other (please specify) (4) \_\_\_\_\_
  - ☐ Do Not Recall (3)
-

Q25 Did the family receive an educational brochure with information about how to play with their child?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Other (please specify) (4) \_\_\_\_\_
- ☐ Do Not Recall (3)
- 

Q26 Did the family receive any other play- or learning materials?

- ☐ Yes (please specify) (1) \_\_\_\_\_
- ☐ No (2)
- ☐ Other (please specify) (4) \_\_\_\_\_
- ☐ Do Not Recall (3)

End of Block: Recall - WCC Visit

---

Start of Block: Behaviors - P4P

Q39 The next set of questions have to do with your overall involvement with "Prescription for Play" (P4P).

---

Q16 In general how much change has taken place since you became involved with "Prescription for Play" (P4P)?

**My behaviors regarding the following topics:**

	Much Change (1)	Some Change (2)	Very Little Change (3)	No Change (4)
How regularly I <u>introduce</u> 'learning through play' to pediatric families (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How regularly I <u>document</u> 'play' conversations in the medical record (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How regularly I <u>reinforce</u> 'learning through play' in subsequent visits (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Behaviors - P4P

Start of Block: Knowledge and Skills to Perform the Behavior

JS

Q1

In general how much change has taken place since you became involved with "Prescription for Play" (P4P)?

**My knowledge about the following topics:**

	Much Change (1)	Some Change (2)	Very Little Change (3)	No Change (4)
My knowledge about <u>what</u> <u>counts as 'play'</u> (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My knowledge about <u>how to</u> <u>introduce 'play'</u> with families (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My knowledge about <u>why 'play'</u> <u>is important</u> (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Knowledge and Skills to Perform the Behavior

Start of Block: Salience of the Behavior

JS

Q2

In general how much change has taken place since you became involved with "Prescription for Play" (P4P)?

**My interest about the following topics:**

	Much Change (1)	Some Change (2)	Very Little Change (3)	No Change (4)
My interest in <u>engaging in</u> <u>'play'</u> <u>conversations</u> with families (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My interest in <u>giving</u> <u>information about</u> <u>how to 'play'</u> (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My interest in <u>demonstrating</u> <u>'play' habits</u> with families (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Salience of the Behavior

Start of Block: Environmental Constraints

JS

Q3

In general how much change has taken place since you became involved with "Prescription for Play" (P4P)?

**Barriers I face regarding the following topics:**

	Much Change (1)	Some Change (2)	Very Little Change (3)	No Change (4)
Sufficient <u>time</u> to engage my families on 'play' (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sufficient access to ' <u>play</u> ' <u>materials (or</u> <u>toys)</u> to engage families (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Sufficient exam</u> <u>room space</u> for engaging families on 'play' (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Environmental Constraints

---

Start of Block: Habits

Q7

In general how much change has taken place since you became involved with "Prescription for Play" (P4P)?

**My own habits regarding the following topics:**

	Much Change (1)	Some Change (2)	Very Little Change (3)	No Change (4)
Working on <u>puzzles</u> such as crosswords and jigsaws (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Playing <u>board games</u> such as chess and checkers (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using <u>memory apps</u> that help improve my memory & attention (e.g., Lumosity) (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Habits

---

Start of Block: Behavior Intentions



Q8 In general how much change has taken place since you became involved with "Prescription for Play" (P4P)?

**My intentions about the following topics:**

	Much Change (1)	Some Change (2)	Very Little Change (3)	No Change (4)
My intention to <u>regularly introduce 'learning through play'</u> to families (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My intention to <u>regularly document 'play' encounters</u> in the medical record (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My intention to <u>regularly reinforce 'learning through play'</u> in subsequent visits (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Behavior Intentions

Start of Block: Experiential Attitude

Q9 In general how much change has taken place since you became involved with "Prescription for Play" (P4P)?

**When I think about helping families learn through play, me feeling:**

	Much Change (1)	Some Change (2)	Very Little Change (3)	No Change (4)	N/A (5)
Happy (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Irritated (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Proud (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Annoyed (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Experiential Attitude

---

Start of Block: Instrumental Attitude

Q10

In general how much change has taken place since you became involved with "Prescription for Play" (P4P)?

**My belief that helping families learn through play is:**

	Much Change (1)	Some Change (2)	Very Little Change (3)	No Change (4)	N/A (5)
Beneficial (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Useless (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Valuable (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worthless (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Instrumental Attitude

---

Start of Block: Injunctive Norms

Q11 In general how much change has taken place since you became involved with "Prescription for Play" (P4P)?

**My perception that coworkers:**

	Much Change (1)	Some Change (2)	Very Little Change (3)	No Change (4)
<u>Think I should</u> help families learn through play (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Support me</u> in helping families learn through play (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Approve of me</u> helping families learn through play (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Injunctive Norms

---

Start of Block: Descriptive Norms

Q12 In general how much change has taken place since you became involved with "Prescription for Play" (P4P)?

**My perception that coworkers:**

	Much Change (1)	Some Change (2)	Very Little Change (3)	No Change (4)
Regularly <u>introduce</u> 'learning through play' to pediatric families (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regularly <u>document</u> these 'play' encounters in the medical record (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regularly <u>reinforce</u> 'learning through play' in subsequent visits (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Descriptive Norms

Start of Block: Perceived Behavioral Control

Q13 In general how much change has taken place since you became involved with "Prescription for Play" (P4P)?

**My belief that helping families learn through play:**

	Much Change (1)	Some Change (2)	Very Little Change (3)	No Change (4)
Is within my control (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is up to my decision (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is <u>not</u> prevented by others (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

**End of Block: Perceived Behavioral Control**

---

**Start of Block: Self-Efficacy**

Q14 In general how much change has taken place since you became involved with "Prescription for Play" (P4P)?

**My confidence that I can:**

	Much Change (1)	Some Change (2)	Very Little Change (3)	No Change (4)
Regularly <u>introduce</u> 'learning through play' to pediatric families (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regularly <u>document</u> these 'play' encounters in the medical record (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regularly <u>reinforce</u> 'learning through play' in subsequent visits (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

**End of Block: Self-Efficacy**

---

**Start of Block: Demographics**

Q34

As a healthcare provider, do you participate in any other child development programs?

*For example: 'Reach Out and Read' provides free books and education to families on the importance of reading.*

- ☐ Yes (please specify) (1) \_\_\_\_\_
- ☐ No (2)
- ☐ Other (please specify) (4) \_\_\_\_\_
- ☐ Prefer not to say (3)
- 

Q22 What is your age group?

- ☐ 18-24 Years (1)
- ☐ 25-34 Years (2)
- ☐ 35-44 Years (3)
- ☐ 45-54 Years (4)
- ☐ 55 Years Plus (5)
- ☐ Prefer not to say (6)
- 

Q33 What is your gender?

- ☐ Male (1)
- ☐ Female (2)
- ☐ Non-binary / third gender (3)
- ☐ Prefer not to say (4)
-

Q35 With what racial group do you identify (select all that apply)?

- ☐ White (1)
- ☐ Black or African American (2)
- ☐ American Indian or Alaska Native (3)
- ☐ Asian (4)
- ☐ Native Hawaiian or Pacific Islander (5)
- ☐ Other (please specify) (6) \_\_\_\_\_
- ☐ Prefer not to say (7)
- 

Q36 Are you of Hispanic, Latino, or Spanish origin?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Prefer not to say (3)

**End of Block: Demographics**

---

## **Appendix B. Caregiver One-Month and Three-Month Survey**



# **P4P 1-Week Guardian Survey - 10.21.2021 - Abridged**

## **Survey Flow**

Standard: Identifiers (4 Questions)  
Standard: Recall - WCC Visit (10 Questions)  
Standard: Behaviors - P4P (1 Question)  
Block: Knowledge and Skills to Perform the Behavior (1 Question)  
Standard: Salience of the Behavior (1 Question)  
Standard: Environmental Constraints (1 Question)  
Standard: Habits (1 Question)  
Standard: Behavior Intentions (1 Question)  
Standard: Experiential Attitude (1 Question)  
Standard: Instrumental Attitude (1 Question)  
Standard: Injunctive Norms (1 Question)  
Standard: Descriptive Norms (1 Question)  
Standard: Perceived Behavioral Control (1 Question)  
Standard: Self-Efficacy (1 Question)  
Standard: Demographics (5 Questions)

Page Break

---

Start of Block: Identifiers

Q20 Please confirm that you attended this recent Hartford well-child visit: [Unaided Scale]

- ☐ Yes (1)
- ☐ No (2)
- ☐ Do Not Recall (3)
- 

Q18 What is your relationship to the child? [Unaided Scale]

- ☐ Parent (1)
- ☐ Grandparent (2)
- ☐ Extended family member (e.g., aunt, uncle, cousin) (3)
- ☐ Non-related caregiver (4)
- ☐ Other, please specify (5) \_\_\_\_\_
- 

Q23 Are you the child's primary caregiver? [Unaided Scale]

- ☐ Yes (1)
- ☐ No (2)
- 

Display This Question:

If Q23 = No

Q21 Who is the child's primary caregiver? [Unaided Scale]

- ☐ Both parents (1)
- ☐ One parent (2)
- ☐ Grandparent(s) (3)
- ☐ Extended family member (4)
- ☐ Non-family member (5)
- ☐ Other, please specify (6) \_\_\_\_\_

End of Block: Identifiers

---

Start of Block: Recall - WCC Visit

Q24 Please respond to the following questions based on your most recent Hartford well-child visit:

-----

Q31 Did a Hartford provider give you a 'prescription' for playing with your child? [Clarification: "Did they give you verbal or written instructions about playing with your child?"]

- ☐ Yes (1)
  - ☐ No (2)
  - ☐ Do Not Recall (3)
  - ☐ Other (please specify) (4) \_\_\_\_\_
- 

Display This Question:

If Q31 = Yes

Q32 For how many minutes per day is your 'play prescription'? [Unaided Scale]

- ☐ 5 Minutes (1)
- ☐ 10 Minutes (2)
- ☐ 15 Minutes (3)
- ☐ Do Not Recall (4)
- ☐ Other (please specify) (5) \_\_\_\_\_
- 

Q17 Did your child receive a bag of toy bricks (or toy blocks)? [Unaided Scale]

- ☐ Yes (1)
- ☐ No (2)
- ☐ Do Not Recall (3)
- ☐ Other (please specify) (4) \_\_\_\_\_
- 

*Display This Question:*

*If Q17 = Yes*

Q27 How often have you used the toy bricks (or blocks) to play with your child? [Aided Scale]

- ☐ Never (1)
- ☐ Rarely (2)
- ☐ Sometimes (3)
- ☐ Often (4)
- ☐ Other (please specify) (5) \_\_\_\_\_
-

Q25 Did you receive an educational brochure with information about how to play with your child? [Clarification: "Did they give you a folded piece of paper with information about playing with your child?"]

- ☐ Yes (1)
- ☐ No (2)
- ☐ Do Not Recall (3)
- ☐ Other (please specify) (4)

Display This Question:

If Q25 = Yes

Q28 How often have you referred to the brochure? [Aided Scale]

- ☐ Never (1)
- ☐ Rarely (2)
- ☐ Sometimes (3)
- ☐ Often (4)
- ☐ Other (please specify) (5)

Commented [BB1]: used

Q26 Did the child receive a 'play card' to help play with their toy duck? [Clarification: "Did they give you a glossy piece of paper (like a postcard) that your child could use to play with their toy duck?"]

- ☐ Yes (1)
- ☐ No (2)
- ☐ Do Not Recall (3)
- ☐ Other (please specify) (4)

---

Display This Question:

If Q26 = Yes

Q30 How often does the child use the card when playing? [Aided]

- ☐ Never (1)
- ☐ Rarely (2)
- ☐ Sometimes (3)
- ☐ Often (4)
- ☐ Other (please specify) (5)

---

Q37 Did your child receive a book?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Do Not Recall (3)
- ☐ Other (please specify) (4)

End of Block: Recall - WCC Visit

---

Start of Block: Behaviors - P4P

Q16

The next set of questions have to do with the toy bricks (or blocks) you received, along with any other play-related information and materials.

In general, what degree of change has taken place since your Hartford provider talked to you about the importance of play? Please respond with *Much Change*, *Some Change*, *Very Little Change*, or *No Change*. [Interviewer: Skip question if respondent "Not Sure".]

Commented [BB2]: how much change

**My behaviors regarding the following topics:**

	Much Change (1)	Some Change (2)	Very Little Change (3)	No Change (4)
<u>Number of days each week I play with my child</u> (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Number of minutes I play with my child each time</u> (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How often our play involves <u>learning games</u> (i.e., games with educational goals) (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Behaviors - P4P

Start of Block: Knowledge and Skills to Perform the Behavior



Q1

In general what degree of change has taken place since your Hartford provider talked to you about the importance of play? Please respond with *Much Change*, *Some Change*, *Very Little Change*, or *No Change*.

My knowledge about the following topics:

	Much Change (1)	Some Change (2)	Very Little Change (3)	No Change (4)
My knowledge about <u>what counts as 'play'</u> (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My knowledge about <u>how to 'play'</u> with my child (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My knowledge about <u>why 'play' is important</u> (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Knowledge and Skills to Perform the Behavior

Start of Block: Saliency of the Behavior



Q2

In general what degree of change has taken place since your Hartford provider talked to you about the importance of play? Please respond with *Much Change*, *Some Change*, *Very Little Change*, or *No Change*.



My interest about the following topics:

	Much Change (1)	Some Change (2)	Very Little Change (3)	No Change (4)
My interest in <u>engaging in 'play'</u> with my child (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My interest in <u>new information about how to 'play'</u> (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My interest in <u>practicing 'play' habits</u> (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Salience of the Behavior

Start of Block: Environmental Constraints



Q3

In general what degree of change has taken place since your Hartford provider talked to you about the importance of play? Please respond with *Much Change*, *Some Change*, *Very Little Change*, or *No Change*.

**Barriers I face regarding the following topics:**

	Much Change (1)	Some Change (2)	Very Little Change (3)	No Change (4)
Having <u>time</u> to play with my child as a barrier (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to <u>play things (or toys)</u> as a barrier to playing with my child (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Lack of safe space</u> as a barrier to playing with my child (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Environmental Constraints

Start of Block: Habits

Q7

In general what degree of change has taken place since your Hartford provider talked to you about the importance of play? Please respond with *Much Change*, *Some Change*, *Very Little Change*, or *No Change*.

My own habits regarding the following topics:

	Much Change (1)	Some Change (2)	Very Little Change (3)	No Change (4)
Working on <u>puzzles</u> such as crosswords and jigsaws (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Playing <u>games</u> such as chess and checkers (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using <u>phone apps</u> that help improve my memory & attention (e.g., Lumosity) (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Habits

Start of Block: Behavior Intentions

Q8  
In general what degree of change has taken place since your Hartford provider talked to you about the importance of play? Please respond with *Much Change*, *Some Change*, *Very Little Change*, or *No Change*.

**My intentions about the following topics:**

	Much Change (1)	Some Change (2)	Very Little Change (3)	No Change (4)
My intention to <u>play with my</u> <u>child each day</u> (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My intention to <u>play with my</u> <u>child 15 minutes</u> <u>each time</u> (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My intention to <u>help my child</u> <u>learn through</u> <u>play</u> (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**End of Block: Behavior Intentions**

**Start of Block: Experiential Attitude**

Q9 In general what degree of change has taken place since your Hartford provider talked to you about the importance of play? Please respond with *Much Change*, *Some Change*, *Very Little Change*, or *No Change*.

**When I think about helping my child learn through play, me feeling:**

	Much Change (1)	Some Change (2)	Very Little Change (3)	No Change (4)
Happy (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Irritated (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Proud (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Annoyed (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Experiential Attitude

---

Start of Block: Instrumental Attitude

Q10

In general what degree of change has taken place since your Hartford provider talked to you about the importance of play? Please respond with *Much Change*, *Some Change*, *Very Little Change*, or *No Change*.

**My belief that helping my child learn through play is:**

	Much Change (1)	Some Change (2)	Very Little Change (3)	No Change (4)
Beneficial (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Useless (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Valuable (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worthless (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Instrumental Attitude

---

Start of Block: Injunctive Norms

Q11 In general what degree of change has taken place since your Hartford provider talked to you about the importance of play? Please respond with *Much Change*, *Some Change*, *Very Little Change*, or *No Change*.

**My perception that the most important people in my life:**

	Much Change (1)	Some Change (2)	Very Little Change (3)	No Change (4)
<u>Think I should</u> help my child learn through play (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Support me</u> in helping my child learn through play (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Approve of me</u> helping my child learn through play (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Injunctive Norms

Start of Block: Descriptive Norms

Q12 In general what degree of change has taken place since your Hartford provider talked to you about the importance of play? Please respond with *Much Change*, *Some Change*, *Very Little Change*, or *No Change*.

**My perception that the most important people in my life:**

	Much Change (1)	Some Change (2)	Very Little Change (3)	No Change (4)
Play with their children <u>all or</u> <u>most days</u> (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Enjoy</u> playing with their children (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Play with their children <u>15</u> <u>minutes</u> each time (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Descriptive Norms

Start of Block: Perceived Behavioral Control

Q13 In general what degree of change has taken place since your Hartford provider talked to you about the importance of play? Please respond with *Much Change*, *Some Change*, *Very Little Change*, or *No Change*.

**My belief that helping my child learn through play:**

	Much Change (1)	Some Change (2)	Very Little Change (3)	No Change (4)
Is within my control (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is up to me (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is <u>not</u> prevented by others (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Perceived Behavioral Control

Start of Block: Self-Efficacy

Q14 In general what degree of change has taken place since your Hartford provider talked to you about the importance of play? Please respond with *Much Change*, *Some Change*, *Very Little Change*, or *No Change*.

**My confidence that I can:**

	Much Change (1)	Some Change (2)	Very Little Change (3)	No Change (4)
Play with my child <u>all or most</u> <u>days</u> (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Play with my child <u>15 minutes</u> each time (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Provide different</u> <u>opportunities</u> for my child to play (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

#### End of Block: Self-Efficacy

---

#### Start of Block: Demographics

[Include a script that indicates that responses to the following questions are voluntary and used only for analytics.]

Q34

Does this child live in a single-parent household?

*"One parent with one or more minor children (under the age of 18), regardless of whether adult children also live in the home, and no other relatives or non-relatives."*

- ☐ Yes (1)
  - ☐ No (2)
  - ☐ Prefer not to say (3)
- 

Q22 What is your age group? [Unaided]

- ☐ 18-24 Years (1)
  - ☐ 25-34 Years (2)
  - ☐ 35-44 Years (3)
  - ☐ 45-54 Years (4)
  - ☐ 55 Years Plus (5)
  - ☐ Prefer not to say (6)
-



Q33 What is your sex? [Unaided]

- ☐ Male (1)
  - ☐ Female (2)
  - ☐ Non-binary / third gender (3)
  - ☐ Prefer not to say (4)
- 

Q35 What is your race? [Unaided]

- ☐ White (1)
  - ☐ Black or African American (2)
  - ☐ American Indian or Alaska Native (3)
  - ☐ Asian (4)
  - ☐ Native Hawaiian or Pacific Islander (5)
  - ☐ Other (6) \_\_\_\_\_
  - ☐ Prefer not to say (7)
- 

Q36 Are you of Hispanic, Latino, or Spanish origin? [Unaided]

- ☐ Yes (1)
- ☐ No (2)
- ☐ Prefer not to say (3)

End of Block: Demographics

---

## **Appendix C. Provider Semi-Structured Interview Guide**

## **CARE TEAM MEMBER FEASIBILITY INTERVIEW GUIDE**

**[Physicians and other identified primary care providers (NPs, PAs), registered nurses, licensed practical nurses, medical assistants]**

Thank you for taking the time to meet with me today. As you know, CHC is working on conducting a research study to explore how the promotion of ‘play’ can be incorporated into well-child care visits for patients 18- to 36 months of age.

Research has shown positive outcomes regarding the importance of ‘play’ for supporting the healthy cognitive, physical, social, and emotional development of young children. We are specifically interested in your views about the value of the ‘Prescription for Play’ project you have been involved with, and your experience with the logistics of using the play kits and associated handouts.

*Note: Please provide interviewee a copy of the questionnaire. Also ask them to fill out the short questionnaire before concluding the interview (last page of this document).*

### **Initial Steps, -Motivation, and Benefits/Costs**

1. What is (are) your role(s) at this healthcare practice?
2. For how many years have you been in that role(s)?
3. For how long have you participated in the ‘Prescription for Play’ (P4P) program?

PROMPT 3.1: At the beginning, why did you agree to join the program?

PROMPT 3.2: Has your motivation to continue with the program changed over time? (If so, how?)

4. At your site, is there a typical process for how patients and caregivers receive the P4P program?

PROMPT 4.1: If so, can you tell me how that process works?

PROMPT 4.2: Can you tell me how you typically use the toy bricks (blocks)? Brochure?

5. Does it take extra time to incorporate the P4P workflow into the well-child care visit?

PROMPT 5.1: Does the time required differ based on the age of the child or anything else?

PROMPT 5.2: Did the amount of time required change as the program went on?

6. Is the P4P template in eCW always available for you when you start your discussion about ‘play’ with the family?

PROMPT 6.1: Where in the record is this information?

PROMPT 6.2: If not available, are you able to locate it for the visit?

7. Are there benefits to your practice as a result of this program?

PROMPT 7.1: If so, what? Have those benefits changed over time?

8. Are there costs to your practice as a result of the program?

PROMPT 8.1: If so, what? Have those costs changed over time?

### **Fun of P4P Implementation**

9. Is it fun to incorporate the P4P workflow into the well-child care visit?

PROMPT 9.1: What has been most fun about your experience?

PROMPT 9.2: If not, is there anything that could be changed to make it more fun?

10. Have you shared your P4P experiences with any of your colleagues?

PROMPT 10.1: If so, what have you shared and with whom? What have been their reactions to your experiences?

PROMPT 10.2: If not, is there anything that could be done to make it easier for you to share?

### **Ease of P4P Implementation**

11. What is it like to talk about the different topics related to ‘play’ with your patients and their parents/guardians?

12. How comfortable are you talking about these different topics with families?

PROMPT 12.1: Is there anything you do to make families feel more comfortable talking about these topics?

13. How comfortable do you think families are talking with you about these topics?

PROMPT 13.1: Is there anything that could be done to make it more comfortable for them?

14. How, if at all, has the P4P program influenced the discussions you have with families?

15. How, if at all, has the P4P program changed patient care?

16. We would like to find ways to address disparities in the opportunities for caregivers to engage in play with their child. Did you notice any differences in families’ willingness to play with the P4P kit or the kinds of conversations you had with families of different backgrounds?

### **Wrap Up Questions**

17. Are there any changes you would recommend to the P4P materials (e.g., brochure) for you to use in developing anticipatory guidance for your families?

18. Are there any changes you would recommend to other parts of the P4P workflow?

**We also have a few demographic questions. (*Allow interviewee to answer on own.*)**

19. What is your age group?

- ☐ 18-24 years
- ☐ 25-34 years
- ☐ 35-44 years
- ☐ 45-54 years
- ☐ 55 years plus
- ☐ Prefer not to answer

20. Which is your sex?

- ☐ Male
- ☐ Female
- ☐ Non-binary / third gender
- ☐ Prefer not to say

21. What is your race?

- ☐ White
- ☐ Black or African-American
- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Native Hawaiian or other Pacific Islander
- ☐ Other (please specify):

☐ \_\_\_\_\_  
Prefer not to say

22. Are you of Hispanic, Latino, or Spanish origin?

- ☐ Yes
- ☐ No
- ☐ Prefer not to say

**Thank you so much for your time today.**

## Appendix D. Caregiver Semi-Structured Interview Guide

## CAREGIVER (PARENT) FEASIBILITY INTERVIEW GUIDE

**[Parents, legal guardians, etc.]**

Thank you for taking the time to speak with me today. As you may know, your child's healthcare provider, CHC (Community Health Center, Inc.), is working on conducting a research project to explore how the importance of 'play' can be incorporated into well-child care visits for patients 18- to 36 months of age.

Research has shown positive outcomes regarding the importance of 'play' for supporting the healthy development of young children. We are specifically interested in your views and your experience with the play kit and educational handout you received, during your child's most recent well-care child visit.

Your responses will help us make any changes in this process so that we can make life better for future young patients and their families. Please know that your responses will be kept confidential and will not be shared with any of the doctors or staff at your CHC location or anyone else not on the research team.

*Note: Please provide interviewee a copy of the questionnaire. Also ask them to fill out the short questionnaire before concluding the interview (last page of this document).*

### **Family's 'Play' Experience**

1. How long have you & your child been patients at this CHC practice?
2. How long has it been since your well-child care visit where you and your child received the play items?
3. In that visit, how did the process for you and your child receiving the play items work?

PROMPT 1: Do you recall what member of the care team first handed you the play items?

PROMPT 2: Did you receive a bag of toy bricks (or toy blocks)? How often have you used the toy bricks (or blocks) to play with your child?

PROMPT 3: Did you receive an educational brochure? *(If clarification needed: Did they give you a folded piece of paper with information about playing with your child?)* How often do you refer to the brochure?

PROMPT 4: Did the child receive a play card? *(If clarification needed: Did they give you a glossy piece of paper (like a postcard) that your child could use to play with their toy duck?)* How often does the child use the card when playing?

4. Did it add extra time to your visit that day to incorporate the play items into your well-child care visit?

PROMPT 1: Did it feel like it took too long or was it just about right?

5. Did your care team only hand the play items to you, or did it start a discussion about ‘play’ with your CHC care team?

PROMPT 1: Did you enjoy having this conversation?

PROMPT 2: If not, was there anything that could have made the conversation more enjoyable?

6. Was it fun to receive the play items during your well-child care visit?

PROMPT 1: What was the most fun part about your experience?

PROMPT 2: If not, is there anything that could be changed to make it more fun?

7. Have you shared your CHC play experience with any of your friends or other family members?

PROMPT 1: What did you share and with whom?

PROMPT 2: What have been their reactions to your experiences?

PROMPT 3: If not, is there anything that could be done to make it easier for you to share?

### **Ease of ‘Play’ Discussion**

8. What was it like to talk about the different topics related to ‘play’ with your provider and/or other CHC care team members?

PROMPT 1: What was it like to talk about ‘learning through play’?

PROMPT 2: Did you ask any follow-up questions? If so, what did you ask about?

9. How comfortable were you talking about the different topics with your care team?
10. How comfortable do you think families like yours would be talking with their care team about these topics?
11. Could CHC do anything to make families feel more comfortable talking about these topics?
12. Has your recent CHC well-child care experience influenced the way you think about play, or engage in play with your child? If yes, how has it been an influence?
13. We would like to find ways to address disparities in the opportunities for caregivers to engage in play with their child. Do you have any advice for how we can increase families’ willingness to play together, or the kinds of conversations medical providers should have with families of different backgrounds?

### **Wrap Up Questions**

14. What changes would you recommend to the play kit, handout, and the process you experienced, to make it easier for others or more valuable for other families?

**We also have a few demographic questions. (Allow interviewee to answer on own.)**

15. What is your age group?



- ☐ 18-24 years
- ☐ 25-34 years
- ☐ 35-44 years
- ☐ 45-54 years
- ☐ 55 years plus
- ☐ Prefer not to answer

16. Which is your sex?

- ☐ Male
- ☐ Female
- ☐ Non-binary / third gender
- ☐ Prefer not to say

17. What is your race?

- ☐ White
- ☐ Black or African-American
- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Native Hawaiian or other Pacific Islander
- ☐ Other (please specify):  
\_\_\_\_\_
- ☐ Prefer not to say

18. Are you of Hispanic, Latino, or Spanish origin?

- ☐ Yes
- ☐ No
- ☐ Prefer not to say

19. What type of educational degree(s) do you have? \_\_\_\_\_




**Thank you so much for your time today.**

# Appendix E. Participant Observation Tool

**Family Permission:** ☐ Received (MA Asked) ☐ Received (Researcher Asked) ☐ Not Received (MA Asked) ☐ Not Received (Researcher Asked)

*Hi. My name is <researcher>. I work for CHC and am doing a pediatric project to observe well-child visits. Is it okay if I observe today's visit?*

*Hola, mi nombre es <name>. Yo trabajo para CHC y estoy trabajando en un Proyecto pediatrico para observar visitas de cuidado infantil. Esta bien con usted si observo la visita de hoy?*

Observation Grid: Prescription for Play			
Site Location:	Date:	Start Time:	Stop Time:
Observation Stages			
Observation Areas	I. Medical Assistant Workup	II. Provider Encounter	III. Checkout Process
<b>Behavior</b> (what, by whom, where)			
<b>Conversation</b> (what, by whom, where)			
<b>Context</b> (What else is going on? COVID situation? Is it a weekend?)			
<b>Family type</b> (one adult, two adults, multiple children)			
<b>General mood</b> (what, how conveyed, by whom)			
<b>Other areas of observation:</b>			
<b>Reflexive comments:</b>			

Adapted from Roller & Lavrakas, 2015. *Applied Qualitative Research Design: A Total Quality Framework Approach*. New York: Guilford Press.