

Training the Next Generation of Physicians to Support Caregivers as Brain Builders



Rapid brain development occurs in early childhood – at least **1 million new neural connections every second**. It's a time when parents and caregivers lay the foundation for a child's lifelong health, behavior, and learning by engaging in stimulating, nurturing care.



Pediatric clinics are among new parents' most trusted resources for information, and **over 95% take their kids to well-child visits**.



Though these healthcare settings are timely touchpoints for families, **76% of graduating pediatric residents feel unprepared** to advise parents on how to promote early childhood development and unlock their child's full potential.



In response, the **Mount Sinai Parenting Center** created Keystones of Development to train residents to guide parents and caregivers and provide them with tips and tools to promote their child's optimal social, emotional, and cognitive development.



Introduced to all **9 pediatric and 12 family medicine residency programs** in New Jersey from 2020 to 2022, the curriculum is yielding promising results and lessons learned.

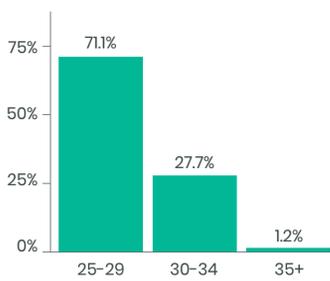


Resident Demographics

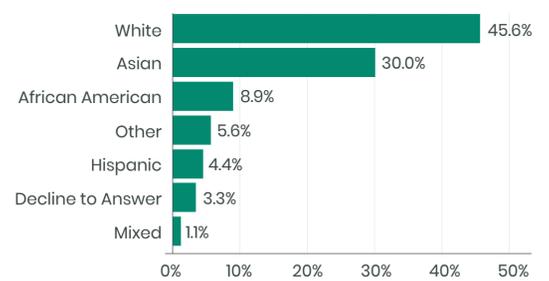
RESIDENT SURVEYS

- **371 residents** completed the curriculum from all 9 pediatric programs and 12 family medicine programs.
- **90 (24%)** completed both pre- and post-surveys.

RESIDENT AGE



RESIDENT RACE/ETHNICITY



Resident Survey Results

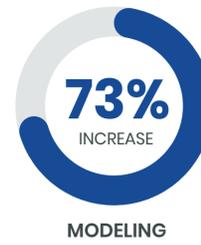
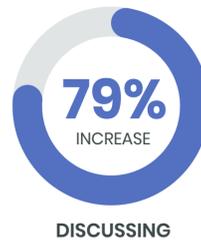
Change in resident behaviors, increased knowledge

WELL-CHILD VISITS

Between pre- and post-surveys of participating residents:

- **79%** increase in **discussing** early child development topics with caregivers
- **73%** increase in **modeling** positive interactions with children
- **52%** increase in **praising** caregiver behaviors

These changes were found to be statistically significant.



GENERAL KNOWLEDGE

Residents answered **10 general knowledge questions** about early childhood development, pre- and post-survey.

The average number of correct responses to 10 questions **increased significantly** after completing the curriculum (4.9 to 6.5).



RESIDENT ATTITUDES

Residents rated **how much they agreed** with statements related to their comfort in discussing parenting behaviors and giving advice to caregivers.

A perceptions scale based on participants' mean response to all statements (1-Strongly Disagree to 5-Strongly Agree) showed a statistically significant **increase in positive perceptions** from pre- to post-survey (3.4 to 3.7).

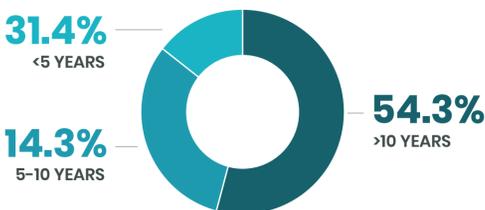


Preceptor Survey Results

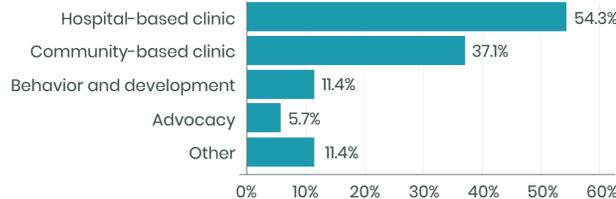
PRECEPTOR SURVEY

Faculty completed a Keystones of Development training module presenting strategies to help residents incorporate Keystone concepts into resident education and clinical practice. **32 preceptors completed a survey** after the faculty training module.

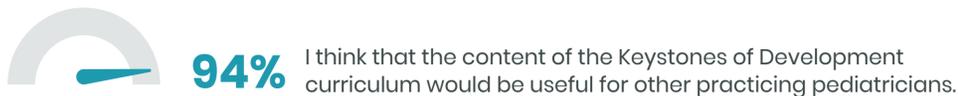
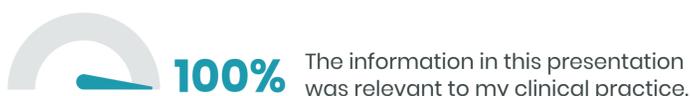
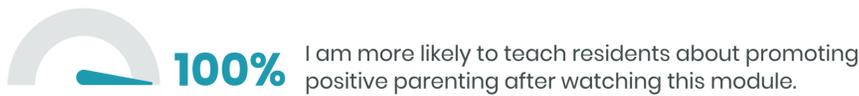
PRECEPTOR'S YEARS IN PRACTICE



PRECEPTOR'S ROLE IN TEACHING RESIDENTS



PERCENT OF PRECEPTORS WHO AGREED OR STRONGLY AGREED WITH THE FOLLOWING STATEMENTS:



Preceptor Focus Groups



5 focus groups were conducted with resident faculty preceptors, November 2020–January 2022.



16 physicians from 10 New Jersey healthcare facilities participated:

- 9 pediatric residency programs
- 1 family medicine residency program

5 THEMES

FROM PRECEPTOR FOCUS GROUPS

1

Residents generally lacked comfort and confidence promoting and modeling positive parenting behaviors with caregivers during well-child visits prior to implementing Keystones of Development.

2

Training in medical schools should be enhanced to include how to effectively support nurturing parent-child relationships and model behaviors for families.

3

Establishing good rapport, communication, and trust between caregivers and residents is critical to effectively convey messaging on how important positive parent-child interactions are for healthy child development.

4

Curriculum should be enhanced and reinforced by incorporating role play and introducing it to community partners who interact with young children, such as early childhood educators.

5

Update workflows in healthcare practices to better incorporate the use of Keystones of Development.



Caregiver Interviews



11 caregivers were interviewed at their child's most recent well-child visit about conversations with the residents related to healthy child development, perceptions of how residents established rapport with families, and educational materials.



Children that were patients at the Eric B. Chandler Health Clinic, a Federally Qualified Health Center, were seen by residents participating in Keystones of Development.



Caregivers were recruited by faculty preceptors overseeing residents at the clinic.



4 THEMES

FROM CAREGIVER FOCUS GROUPS

1

Parents understood the importance of reading, singing, and other forms of communication after discussions with residents during well-child visits.

2

Caregivers reported increased health literacy, provided positive feedback on the educational materials residents gave them, and suggested ways to make the materials more visually appealing.

3

Developing rapport between caregivers and physicians to enhance learning and conversation is important.

4

Update educational materials for families to better represent diverse communities.