

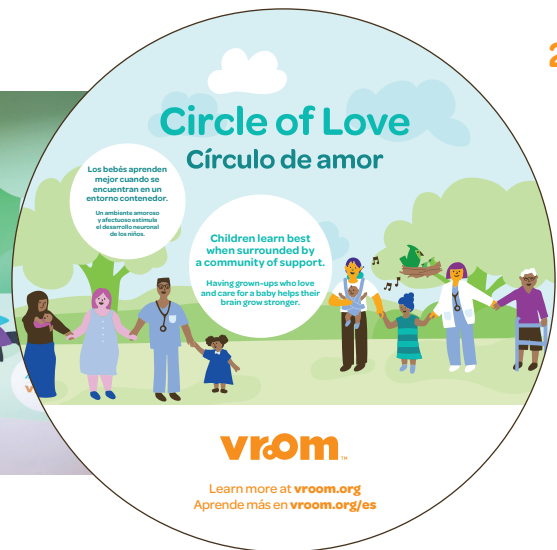
Whole Child, Whole Family, Whole Staff: Transforming Routine Healthcare Moments to Drive Early Childhood Development



Table of Contents

- 2 Introduction: A New Approach
- 3 An Overnight Transformation
- 4 Scalable and Shareable
- 5 Building on the Vroom Foundation
- 6 Staff Matters
- 7 Engaging Non-Medical Staff
- 7 Evaluating the Results
- 8 Surveys Results
- 9 Conclusion: Supporting Families, Children, and Staff





Introduction: A New Approach

Thanks to robust research in multiple disciplines, dramatic changes are at play in our understanding of the social, emotional, and cognitive needs of infants and young children. The ever-growing science of brain development reveals these early years as foundational for every process that develops the child's brain, body, and social connections. Seemingly small moments of interaction between a child and a caring adult can make a big difference in laying the groundwork for a lifetime of learning.

Though early childhood development has often been viewed through the lens of the child's relationship with parents and other primary caregivers, healthcare providers also have a crucial role in ensuring the child's best start. Healthcare is the system families interact with the most before they enter primary education – a relationship that sets the stage for the child's ongoing health and development. Pediatricians are among the most trusted sources of information on child development and parenting throughout the country¹ and the American Academy of Pediatrics urges professionals to include providing parental guidance as part of children's primary care. The question for this project was how to make such guidance a supportive and seamless part of the healthcare practice without seeming heavy-handed or pedantic—and moving this to all medical and non-medical staff.

What if new parents understood just from sitting in the waiting room that their baby's brain has been busy learning since the day they were born? What if employees that parents encountered—from housekeeping to nurses and doctors—offered them encouragement that they already had what it takes to give their child a great start in life? And what if time spent getting weighed and measured became an opportunity to promote early numeracy?

Seeking to reimagine and expand ways to better support young children and their families in healthcare, the Bezos Family Foundation and its innovative Vroom® program, which provides science-based tips to support

brain-building with children in everyday moments, partnered with New York City's renowned Mount Sinai Parenting Center (MSPC) to transform six units within the hospital—the prenatal clinic, labor and delivery and postpartum units; the neonatal intensive care unit; general pediatric practice; and the pediatric emergency department—into dynamic settings that foster the richness of relationships and reinforce caregivers' active role in nurturing their child's development.

The project had been in the making for many years as professionals in the medical, research and foundation fields planted the seeds of what would become an innovative collaboration. Bolstered by a strong commitment from Mount Sinai's leadership, the **goals aimed far beyond lively changes to the physical space, seeking instead to create a culture shift within the institution so that child development became everyone's job.**

That's exactly what happened. Staff members who previously hadn't felt that they knew enough to discuss early learning with parents and caregivers found that, with training, they could make a big difference in helping families understand that their daily interactions have a profound impact on their child's health and development. A typical clinical environment transformed into dynamic, inviting experiences where families are galvanized – and given the tools – to nurture their children with confidence, based on the best science.

As a result of the partnership's transformation, vital knowledge is now shared throughout physical spaces and reinforced by every person on staff. In the process, a practice has been transformed.

Healthcare is the system families interact with the most before they enter primary education – a relationship that sets the stage for the child's ongoing health and development.

The partnership worked to transform the healthcare experience for families and support children's health and development in three areas:



Physical Messaging

Science-based messages to spark brain-building activities and explain how these interactions help promote positive development.



Staff Training

Over 1,000 staff members were trained on the science of early childhood development and ways to integrate this into their interactions with families.



Evaluations

Staff, parents and caregivers completed pre- and post-surveys looking at knowledge, behavior change, attitudes and confidence.

An Overnight Transformation

In the autumn of 2019, a stealthy crew entered the hallways of Mount Sinai Hospital's Parenting Center in New York City under cover of darkness. As the silent squad went about its midnight tasks, they whispered directions and soundlessly plied their craft.

Bearing colorful decals and posters, the team was there to convert a perfectly ordinary-looking facility, which serves thousands of expectant families, newborns, and young children each year, into a vibrant welcome to one of the greatest journeys of all time: Parenthood.

Since undergoing its midnight makeover, the transformed units at Mount Sinai Hospital now offer simple, science-backed guidance to promote children's learning and development. The walls and bathroom mirrors of the postpartum unit offer encouragement and easy tips for building critical adult-child relationships, beginning in the first moments of a baby's life. Even the pediatric emergency room has been transformed to foster a more calming facility with easy-to-use messaging near the medical equipment to help families cope and thrive during challenging moments with their children.

Before launching this transformation project, the partnership studied the journey of parents in the hospital space, beginning with the prenatal period, through labor and delivery, the neonatal intensive care unit, postpartum, outpatient pediatrics and the pediatric emergency room to identify inflection points where every staff member could offer knowledge that would build families' skills in supporting their child's early development. Staff and patient working groups were then convened to focus on appropriate messaging in each unit, and identify key moments in the care flow where content could be integrated.

Using this feedback, the team worked with top marketing firm Johannes Leonardo to create a testable model to evaluate the impact on healthcare staff and families.

MSPC became the laboratory to examine and make real the idea of infusing the latest child-development science into routine interactions among healthcare professionals and families. More than a year after the pilot's implementation, survey data suggests that not only does that work, but that parents and healthcare providers found that doing so made time spent in the healthcare setting not just necessary but rewarding — fostering trust and greater connections to essential care. If employees don't know that their interactions matter, opportunities can be lost. **One of the greatest transformations that took place was in the awareness of staff—from pediatricians to housekeepers—of how much even their most routine interactions matter to the children and families they serve.**

Based on insights from the MSPC staff, a feasibility assessment, and evaluation data, the Bezos Family Foundation took the idea a step further by gathering feedback from others, including Seattle Children's Odessa Brown Children's Clinic, Children's Hospital Colorado, and NYU Langone Hospital—Brooklyn. Next they created a set of materials and training protocols that incorporate the most impactful and scalable parts of the model to be shared widely with other healthcare environments as a guide for their implementation. See [page nine](#) for how to access this information.



"I really do think it's changed the culture of our hospital where we're just kinder and more thoughtful about our approaches and making the most of these moments that we have, and I feel like it doesn't just stay here in the hospital."

—Dominique Weiss, RN

Tip #915
Clues
Suggested Age 3-5 Years Old

Put a twist on the classic game of "Simon Says" and ask your child to copy you only when you use a certain clue, like when your eyes are closed or when your finger is on your nose. Try going fast and slow. Then have them pick the clues and you play the game.

This game asks your child to pay close attention to your movements and remember which one is the clue for them to copy you. They must also control themselves to move only when they see the right clue. Focus, memory, and self-control are essential skills children need for learning.

vroom. Learn more at vroom.org

Scalable and Shareable

From the beginning, the partnership between Bezos Family Foundation's Vroom program and Mount Sinai intended that the science behind this project be solid and the project itself scalable. The transformation effort was designed to test and find the best of what worked to improve infant, child, and family experiences and to enhance staff satisfaction, then offer it to other healthcare practices. The idea was not to create a template to be directly mapped onto any situation, but for the

project's extensive research and development to determine what worked and offer a flexible set of resources that other institutions could implement according to their individual situations and budgets. The results speak volumes. For example, surveys revealed that parents responded to the changes in staff behavior and the hospital environment enthusiastically and reported that they now perceived the hospital as a friendly, family-focused place that was there to support them.



Messaging was tested on all mediums, including floors. We found wall applications elevated the messaging without getting distressed by foot traffic.



"Mount Sinai was a terrific partner for this work. Its Parenting Center had an established reputation for bringing knowledge of parenting and child development to its staff, and they had an excellent understanding of the critical connection between this knowledge and children's development, and our program Vroom. This project started by looking at the unique assets we each hold, and how we can weave those together to better support children and families."

—Jackie Bezos, President, Bezos Family Foundation



“We knew how Vroom messaging had been implemented in museums and libraries and were excited about the possibilities for a hospital setting. It built slowly over time to expand from messaging on the walls to the training of every staff member. We wondered how we can use our moments differently, and how can they expand on what they are saying to families to promote early brain development through engaging activities? Basically, how can we build off what the Bezos Family Foundation had done with Vroom in those public settings?”

— Carrie Quinn, MD,
Executive Director,
Mount Sinai Parenting Center

Building on the Vroom Foundation

Armed with knowledge of the science that underpins early childhood development, the Foundation and a group of leading child development researchers developed Vroom, a program that translates the science of early brain development into free, easy-to-use tips for parents and caregivers. With Vroom, caregivers turn routine moments like bath time and meals into brain-building opportunities.

The transformation of the Mount Sinai units into its present lively space created an immersive Vroom environment where the program’s messages are easily visible wherever caregivers are most likely to see them and form the basis of the training that all staff received in creating a strong foundation for future learning.

The interdisciplinary team that developed the pilot project included Bezos Family Foundation Co-Founder Jackie Bezos, pioneer in the field of children’s development Ellen Galinsky and a team of pediatricians, social workers, developmental psychologists, and training specialists from the Mount Sinai Parenting Center. They focused on opportunities to meet the families where they were and integrate messaging through interactions and physical elements such as colorful posters and decals.

After reviewing Vroom’s 1,000+ Tips, materials, and messaging, the team:

- Crafted messages to share information about children’s development, spark engagement between

parents and children, and offer the scientific explanation behind why these exchanges were so important

- Vetted these moments, messages and materials with staff and parents through interdisciplinary focus groups to make certain that the content and tone were appropriate, relevant and would not disrupt clinical flow. They paid special attention to seeing that the messages would not only resonate with families, but that staff would feel at home delivering them.
- Offered messages in both English and Spanish to prompt interactions among caregivers and children and with staff members and patients.
- Developed decals, posters, and a variety of handouts that can be displayed everywhere parents and staff might see them — on doors, floors, walls, attached to bassinets, and at the front desk.
- Created a training program to reach any staff member who might interact with parents, caregivers, and children in any of the six hospital units. Doctors, nurses, midwives and lactation consultants, and everyone from food services, reception and security to lab techs and custodial staff all were invited to participate to ensure that even brief encounters with parents and children could support early learning and brain development.

Staff Matters

As important as the changes to the physical environment, the project sought to inform and empower all clinic staff to understand the basics of early childhood development and how they personally could be instrumental in communicating that knowledge to families. The partnership created a video that introduced the foundational science of early childhood development as well as practical tips for how employees could implement these ideas in their everyday work with families.

The clinic trained 1,086 staff members in a one-hour, in-person learning lab that helped them apply these key concepts and identify specific moments in everyday patient interactions where they could promote a child's development. For example, an audiologist telling a mother about her baby's hearing test result could expand her

message to let the mother know how important it is to speak to babies long before they can speak back. The training concluded with a self-directed, interactive e-learning module staff could complete at their convenience.

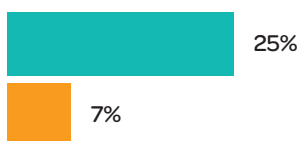
One month after completing the training, staff received reinforcing e-modules, with monthly newsletters that kept the momentum going by celebrating staff success and acknowledging individual champions.

In keeping a focus on scalability, all training modules and materials were made to be practical, useful and could be easily replicated for other healthcare facilities.



Staff Impact Post Campaign

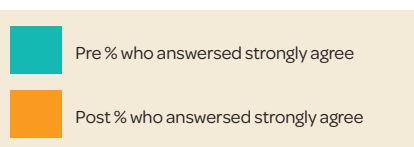
I do not have the knowledge or training necessary to discuss early learning with parents and caregivers.



I find it feasible to share specific information or messages with parents and caregivers about early learning and brain development.



The brain grows fastest during the first five years of life.



"There's a lot of downtime in the emergency department which, if anyone has ever been knows, it can prove challenging with young children and in keeping them busy and occupied while they're waiting for test results to come back, or X-rays to result, or their treatments to finish. And so, we've found Vroom to be really instrumental in helping patients and their caregivers interact and promote development, promote learning, and engage their children as they're waiting for these tests to result."

—Dr. Lauren Zinns, Emergency Department Attending Physician



Engaging Non-Medical Staff

One of the project's most exciting and significant transformations came via inclusion of non-medical staff in all aspects of the program. When a family needs pediatric health care, these employees are often the first clinic representatives they encounter and continue to meet every step along the way. Trust and rapport can be built when the caregiver makes their initial call for an appointment and can continue to be strengthened the minute they walk out the door with their baby. Families in need of health care services are often under significant stress, struggling with financial, housing, work, or other issues. Encountering thoughtful, well-informed staff can make all the difference.

After participating in the program, the **non-medical employees reported the most significant gains among all staff in knowledge of early brain development**, and as their knowledge went up, barriers to interacting with parents and children came down. The employees saw that even the most routine interactions with families could be a rich opportunity for connection and that they had the knowledge to model and praise early learning with parents, whether they were changing the sheets, picking up the breakfast tray or escorting the family to their next appointment.

Prior to the project, 14 percent of hospital staff believed it wasn't part of their job to support healthy brain development in their interactions with caregivers. That number fell to just three percent after their training and participation in the project.

Surveys revealed that the project brought about a subtle but profound shift in how staff began to see themselves and their interactions with the families in their care, viewing these moments as not only important to convey clinical information but as opportunities for social interaction that could help caregivers learn essential information for their child's future.

- Many employees reported they began to think about their work differently related to communicating about early learning, parent-child relationships, and healthy brain development during their interactions.
- Their knowledge, behaviors, attitudes, confidence, mindset, and sense that sharing information with caregivers was doable increased in statistically measurable ways.

- Many barriers that prevented staff from engaging in these important interactions with families were dramatically reduced.

Despite staff having reported that they already knew a lot about early learning and brain development, one critical knowledge point—that the brain grows fastest during the first five years of life—changed significantly following training and implementation of the program.

Hospital staff cited training as the most effective aspect of the project.

- Ninety-five percent of staff reported success making changes to their parent interactions after completing the training.
- Nearly all staff (97%) indicated the training increased their understanding of the importance of parents talking to their children, even before children are able to talk back, as a means of boosting healthy brain development.

Equally powerful was the staff recognition that everyone at Mount Sinai Hospital had a role to play in encouraging early learning and brain development, and that they could do so through typical interactions with parents, caregivers, and children.

In all units, staff reported a high level of success transforming how they interacted with parents and children.

A team member in the postpartum unit said that the training helped them realize “that newborns are learning every second.”

74 percent of postpartum parents noticed signs and materials

“Every wall has relevant information about early childhood development. The nurse and all the lactation consultants spoke to me about it.”

– MSPC Patient

Evaluating The Results

The independent Edge Research firm measured the pilot program's effectiveness, working with the MSPC to develop benchmarks and key metrics to track how the program was doing.

Surveys before the project and after the training and the clinic's physical transformation measured staff's knowledge of early brain development and how confident they were when communicating with parents.

The surveys also captured employees' feedback on how they felt the transformation affected the hospital experience.

Parent surveys looked at their child-rearing behaviors, what they knew and felt about early brain development, and whether they discussed or noticed interactions with staff and the physical materials. The surveys also asked patients and families for feedback on their experience with the hospital.



Surveys Results

Impact on Parents

Though parents reported already knowing a lot about early learning and healthy brain development at baseline, their knowledge increased in key areas.

Impact most consistently reported:

- The percentage of parents who indicated they understood why brain development during the first five years of life was important rose 13% points, from 66% to 79%.
- The percentage of parents reporting **greater confidence** in their ability to help their child's brain develop and the number of those felt equipped to do so during daily routines both jumped nearly 15 percent
- Parents reported improvements in their **mindset** about the importance of their interactions in their child's development
- More parents and caregivers believed that the way they interact with their children shapes the babies' growing brains, more understood why brain development is so important in the first five years of life
- Nearly 10 percent more said they would talk and play differently with their children because of what they learned in the healthcare setting
- Following program implementation, 21 percent more parents reported having access to the resources they needed to support their child's early learning. Prior to the project, just 69 percent of parents reported reading, singing, or telling a story to their baby five or more times per day. **Following the transformation, 81 percent reported doing so.**

Parents responded to the changes in staff behavior and the hospital environment. Surveys revealed that they were more likely to perceive the hospital as a friendly, family-focused place that was there to support them.

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Some of the most compelling clinical-care impacts could be seen in the postpartum units, where new parents often spend several days and experience hundreds of touchpoints with hospital staff. These critical first days of an infant's life are particularly ripe for supportive acts and messaging to help parents understand that their instinctive interactions with their children can be a sturdy foundation for their newborn's well-being and healthy brain development.

Parents' recall of brain-building materials was highest in the postpartum unit, with three-quarters of postpartum parents recalling seeing early learning materials compared with 55 percent overall. There was a 100% increase in the number of people in the postpartum unit who reported their intent to engage with their child differently because of what they learned.

The Hospital As A Welcoming Space

The training and physical transformation had positive impacts on both staff and families' relationship with the hospital:

- **Nearly nine out of ten staff members said the Vroom materials, training and messaging helped them become more patient- and family-centered, more confident in doing their work and made the hospital environment feel like a friendlier place for parents and families.**
- An equally high percentage of parents (nine out of ten) agreed that the signs and materials they saw during their hospital visit made them feel that the hospital was a place that cared about them and their families. And the vast majority said they were likely to share the information they learned there with others.

Conclusion: Supporting Families, Children, and Staff

The pediatric primary care clinic is a crucial environment where relationships are built, essential information is exchanged and families begin their journeys together, with the guidance and knowledge of their care team. The appearance of the physical space matters — whether it is colorful, intentional and invites lively participation or clinical, ordinary and suppresses interaction. The project the Bezos Family Foundation and Mount Sinai Hospital's Parenting Center piloted demonstrates a holistic approach that transforms the physical environment and moments between staff and families can make significant strides in promoting early learning and healthy brain development. These are not add-on programs to be adopted only when funds can be found in the budget: They should be considered essential components of effective, quality care and an investment in healthier generations to come.

Transformation of this sort creates an inclusive environment for staff, elevating the importance of everyone's role and enhancing interactions with every

staff member a patient may encounter. It ensures that all healthcare moments can promote early learning in young children and that all hospital employees relate to themselves as someone who understands the critical role they play as members of a team dedicated to delivering care that makes a profound difference for families.

When small touchpoints with families include this support and encouragement, they feel a deeper connection to the care they are receiving and the place that is providing it. They begin to perceive hospitals and other healthcare settings not just as places that will treat their health problems, but places where they will be cared for in the broadest sense of the word.

Such transformation captures the essence of potential: for the child, for the caregivers interacting with the child, for staff interacting with family, and for the healthcare community to expand upon its long-term vision of pediatric health including early learning and healthy brain development.



This Project Was Designed To Be Replicated

The Bezos Family Foundation encourages health systems anywhere seeking to enhance their efforts to promote early learning, brain development and meaningful relationships with families to connect and learn more.

The research and development have been done and the best of the learning has been brought forward to scale. A suite of materials that combines the training, environmental transformation, and other resources are available, and wherever you are, you can begin to make these changes right away.

Want to learn more? Contact:

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