

Pediatric Virtual Care Platform Boosts Pediatric Engagement and Elevates Clinical Outcomes

Cierra Gromoff, MD, Christie Sander

Kismet Health, a HIPAA-compliant pediatric collaborative care platform, was created to enable families everywhere to have access to quality care by building the pediatric telehealth solution of the future.

According to the American Academy of Pediatrics (1), 17+ million children live more than a 1-hour drive from a regional children's hospital. Kismet Health is redefining what access looks like for future generations by offering a video technology solution created for providers by providers, specifically with the unique needs of families and children in mind. This paper will further highlight the challenges in the fields of pediatrics and telehealth, the early successes of the platform, and the future of pediatric healthcare.

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The Digital Landscape:

The digital healthcare landscape has evolved significantly due to the global COVID-19 pandemic. As a society, we were catapulted into the virtual world when everything was shut down in 2020. Suddenly, classrooms, boardroom meetings, doctor appointments, piano lessons, and family visits were moved online. While telehealth existed before the pandemic, there was a rapid shift as it became the primary option for receiving care.

The Challenge:

Telehealth has remained a standard part of hybrid care post-pandemic. However, the problem of lack of access and engagement in the pediatric population is still an issue, particularly in rural and underserved communities.

Current video communication platforms, like Skype, FaceTime, and Zoom, were built for adults. No one could have predicted that there would be an immediate need for a telecommunications solution for pediatrics. Providers faced the challenge of rapid adjustment without access to optimal technology solutions. Unfortunately, even after a few years, there remains a gap in technology tailored to the unique needs of children. While telehealth continues to gain recognition for enhancing healthcare accessibility and breaking down physical barriers, pediatric telehealth platforms lag behind their adult counterparts in evolution. This discrepancy forces many

providers to rely on adult-centric solutions for pediatric patients.

Traditionally, telehealth has predominantly targeted adults and workplaces. However, we must acknowledge that children are not simply miniature adults; they have dedicated hospitals, specialized providers, and medical instruments. This prompts the question: Should technology for children not be purpose-built for their unique requirements?

Researchers at Nationwide Children's Hospital have shown that one of the top reasons for cancellations and rescheduling of telehealth appointments is the lack of engagement in the health field. Specifically, engagement constituted 25% of cancellations and rescheduling due to the inability to engage a child to complete the telehealth session (2). Given that the average cost of a pediatric visit is \$169 (3) over the past year, and 12.6M children aged 0–17 used telehealth over the past year (4) with an average of two visits per year, this results in an estimated \$630M lost annually due to cancellations or rescheduling from poor engagement, not to mention poorer outcomes.

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In response to this challenge, Kismet Health has recognized the urgent need for innovative solutions to enhance pediatric telehealth engagement. After surveying 200+ providers, the Kismet Health team found that most providers were also experiencing the same pain points in their practice. These providers reported needing a solution that boosts patient engagement, streamlines their workflows, and improves clinical outcomes while also being HIPAA-compliant, easy to use, and cost-effective.

The Solution:

Kismet Health aims to bridge this gap by offering a specialized purpose-built telehealth platform focusing on children aged

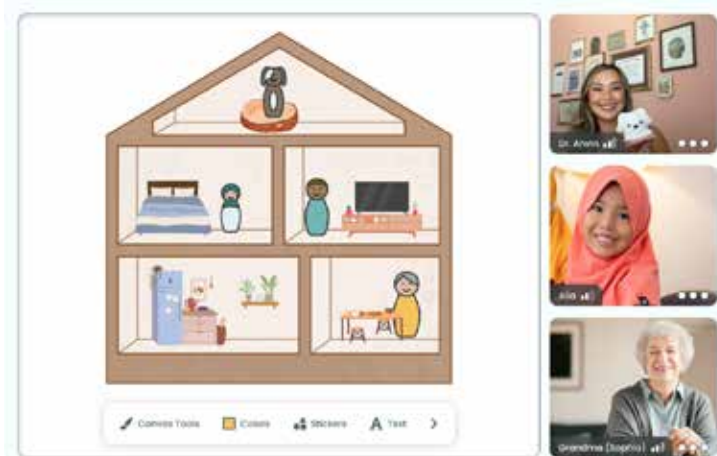
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0–18 and addressing providers' needs. The platform is uniquely designed by providers for providers, understanding the nuanced needs of pediatric patients and the professionals who care for them. This platform goes beyond basic video conferencing by integrating features like a built-in canvas and clinician-controlled focus tools, crucial for maintaining children's engagement during sessions. By addressing the unique needs of children during telehealth sessions, Kismet Health aims to significantly reduce the 25% engagement-related cancellations and rescheduling reported earlier by researchers at Nationwide Children's Hospital while driving improved outcomes.

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Figure 1. Example of Kismet Health Platform



“We know children are not tiny adults. They have their own hospitals, specialty providers, and medical instruments. They also need their own technology. I realized that the only option was to create a telehealth platform built for children with all the providers’ needs in mind to help bridge this gap. Telehealth can be effective for children, but only with the right tools in hand.”

- Dr. Cierra Gromoff, CEO/Co-Founder Kismet Health

Built by Providers for Providers

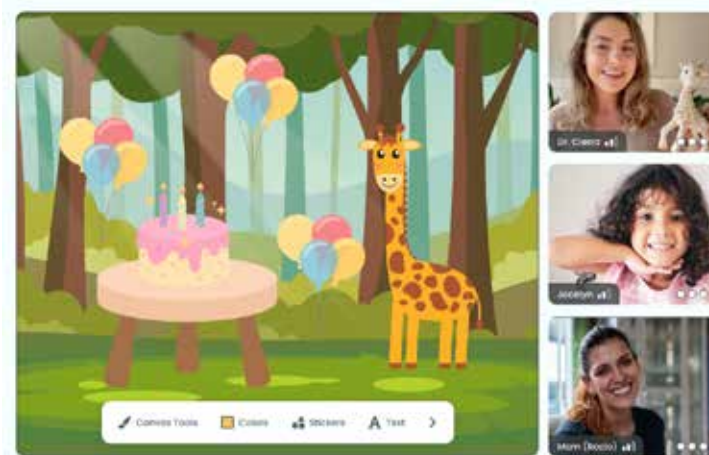
In 2022, Dr. Gromoff connected with Christie Sander, a seasoned Silicon Valley leader, and brought this idea to life. In collaboration with leading pediatricians from top children's hospitals, Kismet

Health combined clinical expertise with cutting-edge technology to launch the company's initial product in the fall of 2023. The innovative product marks a significant leap forward in pediatric healthcare by providing accessible and high-quality care specifically designed for children and their families while simultaneously supporting the clinical needs of providers.

With its proprietary technology and engaging digital playroom, Kismet provides a cost-efficient and accessible solution while enhancing the standard of care. Kismet is easy to use; with a few clicks, one can access this HIPAA-compliant, browser-based platform from anywhere.

Enhanced Patient Engagement with Kismet

Figure 2. Example of Kismet Health Platform



One of the primary objectives of Kismet Health is to boost patient engagement, a critical factor in delivering effective healthcare. Increased engagement through play leads to better clinical outcomes.

“At Kismet, we know that children don’t yet have the language to express themselves and often act out their thoughts metaphorically through play, which is why Kismet is the first platform that meets children where they are. Play is our children’s natural language that they use to explore, express, and experience our world.”

- Kismet Health Co-Founders.

As noted in the pilot study data below, children demonstrated remarkable levels of engagement when using Kismet compared to other platforms.

Streamlined Workflows and Improved Clinical Outcomes with Kismet:

The ultimate goal of Kismet Health is to drive equitable health outcomes across families everywhere, starting with access and engagement. During Kismet's 2023 pilot study, children exceeded their expected participation time, indicating that children are engaged and responsive to the treatment provided via Kismet.

In addition, Kismet's efficiency and ease of use are vital for healthcare providers. They streamline workflows by offering user-friendly interfaces to provide secure communication tools. These elements significantly contribute to providers' productivity and enhance the overall quality of care. As a platform built by providers, Kismet went out of its way to ensure the platform was easy to use and access and that providers could focus their time on the patient.

Improved Parental Attitudes with Kismet:

Providers were not the only group the Kismet team had in mind when creating the platform, and Kismet Health recognized the importance of involving parents in pediatric care. The platform allows parents to participate in sessions and offers valuable resources and information to empower them to help support their children. The 2023 pilot study noted below showed a significant shift in parental attitudes. Negative attitudes decreased, while positive attitudes increased in this user group.

Access with Kismet:

Access with Kismet Health extends beyond convenience; it addresses a critical disparity in healthcare access for children in rural and underserved communities—especially for the over 17 million children who reside more than an hour away from a regional children's hospital, significantly limiting their access to specialized pediatric care. Traveling long distances for routine check-ups or consultations can be burdensome and financially prohibitive for these families. Kismet Health's HIPAA-compliant telehealth platform is specifically engineered to bridge this gap. By offering a browser-based solution accessible from any device with internet connectivity, Kismet Health ensures that geographical barriers do not hinder a child's ability to receive timely and high-quality healthcare services. This accessibility empowers families to schedule appointments without the logistical challenges of travel, thereby reducing missed appointments and improving overall health outcomes.

Moreover, Kismet Health's commitment to accessibility extends to its user-friendly interface, which requires minimal technical expertise to navigate. This simplicity enhances usability for providers and families, allowing them to focus on the healthcare experience rather than dealing with complex technology. By democratizing access to pediatric healthcare, Kismet Health enhances convenience and promotes equity in healthcare delivery. Families in remote or underserved areas can now access specialized care that matches the quality available in metropolitan areas, thereby narrowing the healthcare divide and fostering healthier communities nationwide.

“...it addresses a critical disparity in healthcare access for children in rural and underserved communities—especially for the over 17 million children who reside more than an hour away from a regional children’s hospital, significantly limiting their access to specialized pediatric care. Traveling long distances for routine check-ups or consultations can be burdensome and financially prohibitive for these families.”

Enhanced Mental Health with Kismet:

Lastly, it was crucial for the Founders of Kismet to consider the whole person. The impact of pediatric healthcare extends beyond physical health. Dr. Cierra Gromoff is a Clinical Child

Psychologist, who dedicated her career to building high-quality telehealth programs long before the pandemic, specializing in early childhood mental health. The emotional well-being of Kismet's users was a top priority for the team. Mental health can be a primary or underlying factor and contribute significantly to the success of patient outcomes. In the 2023 Kismet pilot study, all parents either maintained their own anxiety and depression symptoms or showed significant reductions in these symptoms.

“We believe fostering a positive and engaging healthcare experience for children is integral to achieving optimal clinical outcomes. Kismet is not only bridging a technological gap but actively contributing to whole-child wellness for the next generation by providing quality access through our seamless collaborative care technology.”

- Christie Sander, COO/ Co-Founder of Kismet Health.

Kismet Health Pilot Study:

Background and Objective:

Kismet launched a pilot program in June 2023 before launching it to the general public. This included tracking the results of multiple families using the platform in their telehealth appointments, explicitly focusing on the clinician-controlled focus controls and a built-in canvas. The Kismet team hypothesized that children could engage for more extended periods than expected for their developmental age due to these features.

Methods:

Seven families were tracked for 12 weeks, and in-session comments and post-user feedback were documented in real-time for 53 sessions.

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The Results:

While most child pediatric symptoms remained the same after 12 sessions, there have been significant changes in parental attitudes toward their children. Across all parents, negative attitudes have decreased, and positive attitudes have increased. 83% of parents have reported a reduction in their levels of caregiver strain, and the remaining parents reported no change (Figure 3). All parents have either maintained their own anxiety and depression symptoms or have shown significant reductions in these symptoms.

The cancellations and reschedules for Kismet sessions were primarily due to vacation and school schedule conflicts. No families have canceled sessions due to a lack of child engagement, compared to the 25% industry standard of cancellations and rescheduling due to engagement or inability to complete a

session. When asked, 83% of families would recommend Kismet to a friend.

The pilot's results also show that children have been able to stay in session for their expected amount of time per age group for 98% of total sessions (Figure 4), almost three times the industry baseline, according to large payers.

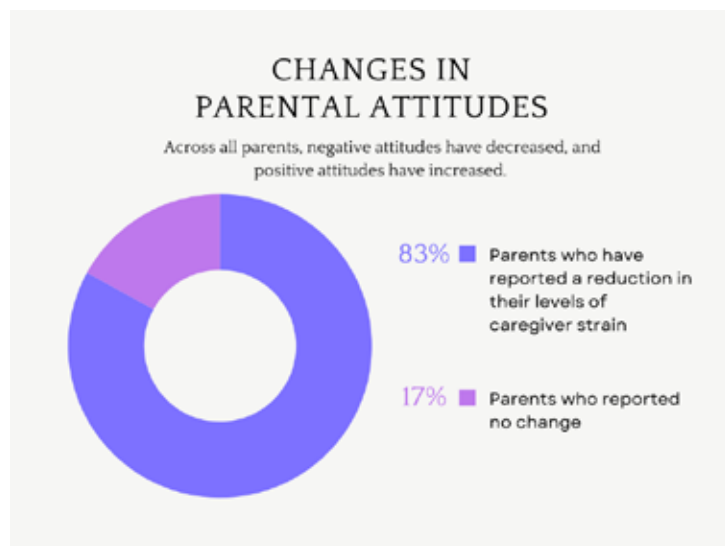
Notably, children have exceeded their expected participation time in sessions (20–30 minutes) at 70% of all sessions by as much as 2.5 times. 86% of children surveyed also reported a smiley face for their experience with Kismet.

"It was truly an exciting experience to witness our hypothesis come to life. I was amazed to see children as young as five staying in sessions for 45 minutes or more! It's a true testament to how having technology built specifically for children can make sessions more productive, fun, and engaging. It was heartwarming to hear parents say that children were looking forward to their sessions and to hear the children asking to draw on our canvas."

- Dr. Arwin Cotas-Girard, Head of Clinical at Kismet Health and Pilot Study Lead.

Preliminary results indicate promising outcomes for telehealth platforms explicitly designed for children. Children can engage better and enjoy technology that is built for them. In return, parents are experiencing less stress and more joy in their relationships with their children. As we know, parental stress significantly impacts their children's mental health, and reducing caregiver strain and symptoms will have a positive impact on the whole family. Of the 53 sessions held during the pilot with children present, only once could a child not complete a session. Children stayed in sessions longer than developmentally expected.

Figure 3. Changes in Parental Attitudes



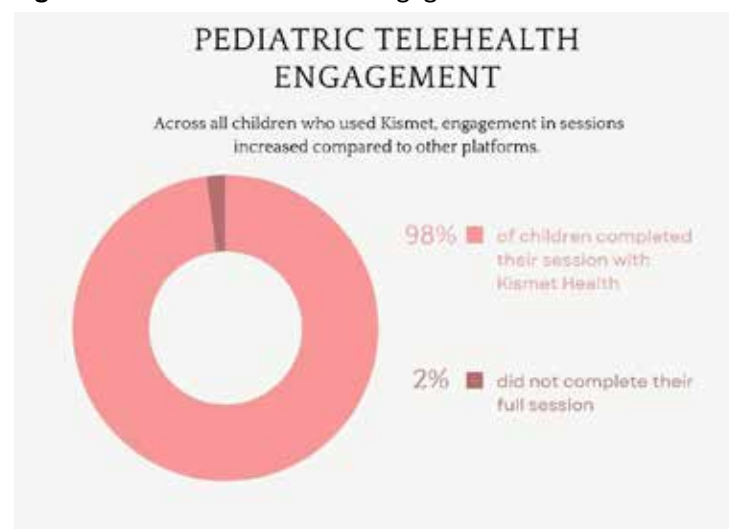
Clinical Provider Survey:

Background and Objective: In 2023, Kismet Health conducted a virtual survey to discover how providers use telehealth and the challenges they face with their current platforms.

Method: A survey was disseminated to therapy provider networks across the United States through various channels, including university listservs, social media posts, word-of-mouth, and professional associations. The target population for the survey included master's and doctoral-level therapists and therapy students. The survey was conducted via SurveyMonkey over one month in March 2023. A total of 215 responses were received.

30% of providers see telehealth patients that are pediatrics only, 20% of providers see telehealth patients that are adults only, and 46% of providers see patients of all ages.

Figure 4. Pediatric Telehealth Engagement



Results:

The Kismet Health team found that most providers were experiencing the same pain points in their practice. These providers reported needing a solution that boosts patient engagement, streamlines their workflows, improves clinical outcomes, and is HIPAA-compliant, easy to use, and cost-effective.

46% of providers used Zoom as their primary telehealth platform, a virtual meeting room platform created for the adult community (Figure 5).

When asked what the most important telehealth feature they would like to see, most providers said they wanted embedded games and interactive whiteboard capabilities, key features of Kismet Health's platform (Figure 6).

When looking at pain points, the engagement of patients is a top pain point within the provider population (Figure 7).

INTERNATIONAL CHILDREN'S ADVISORY NETWORK (ICAN) FOCUS:

Group Study with Kismet Health:

Background and Objective:

Kismet Health partnered with the International Children's Advisory Network (iCAN) to conduct four focus groups on the effectiveness of the Kismet Health platform with the pediatric population. Three focus groups and one post-focus group survey were conducted.

Methods:

An initial survey was sent to the iCAN network to garner interest for the focus groups. This survey polled iCAN's chapters over a range of a month. The population asked to participate in the survey was the 8–10 age range and the 12–18 age range. There were three focus groups conducted: Group One: 3 participants (12–18), Group Two: 3 participants (12–18), and Group Three: 17 participants (8–10). There was a focus on participant populations that were neurodiverse and/or had physical, speech, and/or learning disabilities. However, the focus group and survey were open to all participants that fit the age range—30% of participants identified as Neurodiverse, and 63% identified as having no

Figure 5. Other Telehealth Platforms



disabilities. The purpose of the focus group and post-focus group survey was to evaluate aspects of the Kismet telehealth platform. For the post-focus group survey, respondents were asked to give their input on Kismet's platform mechanics, ease of use, and interactive features.

The Results:

Most participants either agreed or somewhat agreed that Kismet was better than other platforms they had used. Most participants also found the platform easy to use and enjoyed using it. 49% of participants indicated that they would "rather use Kismet than meet in person" when asked how they would feel if their doctor, nurse, or therapist used Kismet. The most mentioned feature that participants did not like was the locking feature; they felt it was constricting and did not like that they were not in control. Following

the locking feature was the blur feature. Multiple participants in the 8–10 age range found the blur distracting or wished they could turn it off. Kismet has already been continuously taking strides to improve the product and experience based on the iCAN study results.

For notable results, 87% of the post-focus group survey participants agreed that Kismet is better than other platforms they have used for telehealth appointments (Figure 8).

In addition, 83% of participants found Kismet neutral to extremely easy to use, as seen in (Figure 9):

78% of participants said they preferred using Kismet over in-person meetings or felt neutral about the preference (Figure 10).

The Future of Pediatric Telehealth:

Figure 6. Most important telehealth feature providers would like

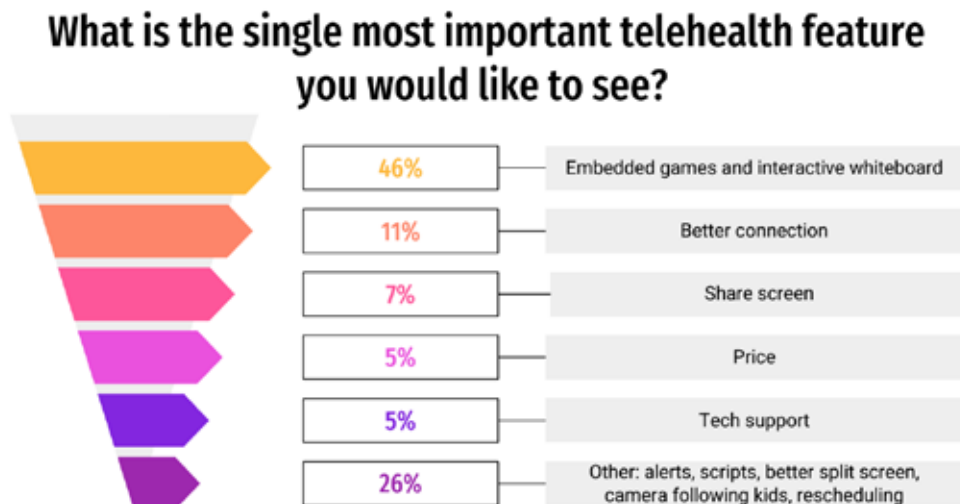


Figure 7. Top pain points when administering telehealth

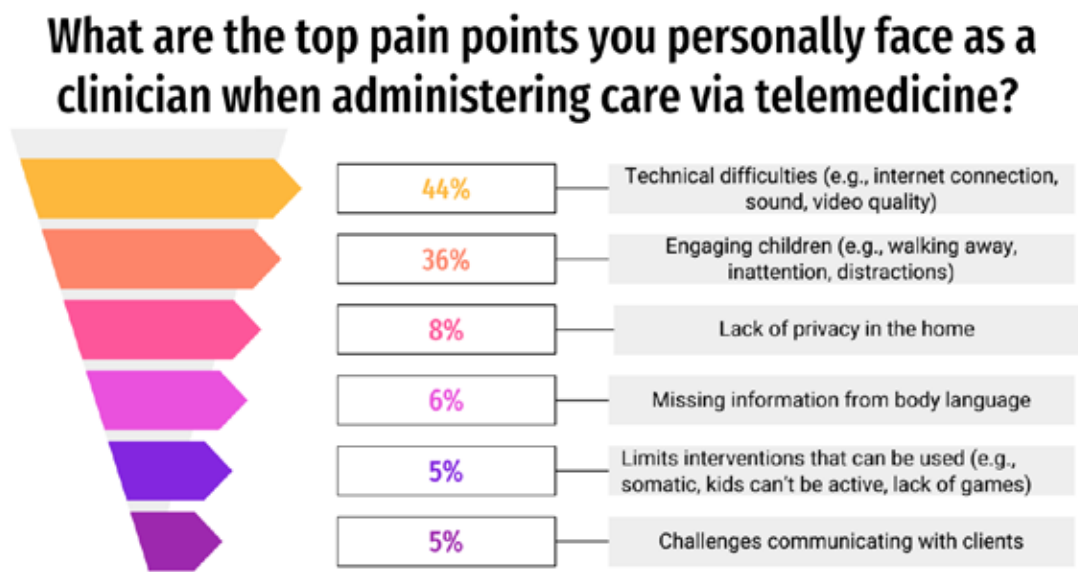


Figure 8. Kismet platform comparison

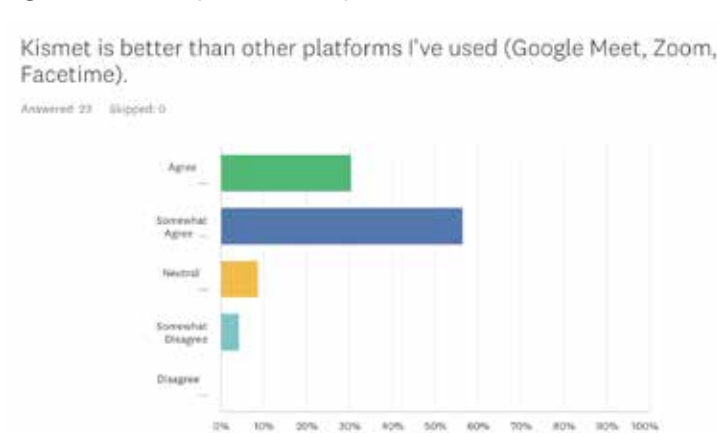


Figure 9. Ease of use of Kismet

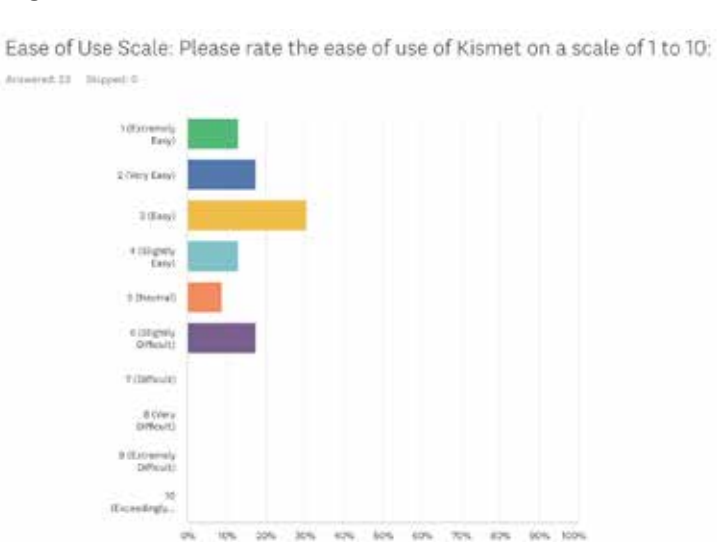


Figure 10. Using Kismet preference



The future of pediatric telehealth holds tremendous promise, propelled by innovative platforms like Kismet Health. Historically, pediatric telehealth has lagged behind adult-focused counterparts, primarily due to the unique needs of children and adolescents that are often not adequately addressed by existing telecommunication tools designed for adults. The COVID-19 pandemic accelerated the adoption of telehealth across all demographics, exposing gaps in pediatric care delivery and underscoring the need for tailored solutions. By meeting children at their developmental level, tailored telehealth solutions like Kismet Health improve session outcomes and address broader systemic issues by increasing accessibility to quality pediatric care, particularly for families in rural or underserved communities. Kismet Health ensures that geographical distance does not hinder access to specialized pediatric care, thus leveling the healthcare playing field for all children.

Looking forward, Kismet is integrating advanced technologies with input from its advisory board (including renowned pediatricians and healthcare informaticists), ensuring the platform meets the highest standards of care and usability. As telehealth evolves, Kismet Health remains committed to refining its platform to meet the evolving needs of providers, parents, and, most importantly, the children they serve.

Kismet Health exemplifies the transformative potential of pediatric telehealth, setting a new standard for collaborative care technology that prioritizes accessibility, engagement, and clinical outcomes.

“By meeting children at their developmental level, tailored telehealth solutions like Kismet Health improve session outcomes and address broader systemic issues by increasing accessibility to quality pediatric care, particularly for families in rural or underserved communities. Kismet Health ensures that geographical distance does not hinder access to specialized pediatric care, thus leveling the healthcare playing field for all children.”

Conclusion:

Kismet Health is poised to redefine pediatric healthcare delivery with its innovative platform, driven by real-time feedback from users and providers who understand the specific needs of pediatric patients. With an average NPS score of 8.5 and strong responses from pilot studies, provider surveys, and joint iCAN studies, Kismet Health is confident in the future of pediatric telehealth. By addressing critical accessibility issues, Kismet Health ensures that families in rural and underserved areas can access quality care through its HIPAA-compliant telehealth solution designed for children. Kismet Health reduces appointment cancellations and enhances engagement, a challenge often seen with adult-centric platforms.

Furthermore, Kismet Health streamlines provider workflows with its intuitive interface and secure communication tools, improving efficiency and care quality. Kismet Health enhances treatment effectiveness by keeping children engaged for longer during sessions, contributing to positive patient and parental experiences. These outcomes underscore their commitment to supporting physical and emotional well-being, positioning it as a transformative leader in pediatric telehealth.

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Disclosure: Kismet Health (www.kismethealth.com) is a pediatric technology company with a vested interest in improving quality healthcare access and care for all families. This whitepaper discusses the shifts in pediatric healthcare delivery following the COVID-19 pandemic, and how tailored solutions such as Kismet improve pediatric engagement and clinical outcomes for the entire family.

The research and development of the technologies mentioned in this white paper may be partially funded by Kismet Health. The authors also hold financial interests in Kismet Health, including employment and stock ownership.

Kismet Health also partnered with the International Children’s Advisory Network (iCAN) through a paid and collaborative user research study. This partnership ensures the platform’s development aligns with the specific needs and perspectives of children, fostering an objective and user-centric approach.

Despite the above disclosures, the authors have strived to present an objective and evidence-based discussion of the topic. For further information or to learn more about Kismet Health, please visit our website at www.kismethealth.com.

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Still a Premie?

Some preemies are born months early, at extremely low birthweights. They fight for each breath and face nearly insurmountable health obstacles.

But that's not every preemie's story.

Born between 34 and 36 weeks' gestation?

STILL A PREMIE

Just like preemies born much earlier, these "late preterm" infants can face:

- Jaundice
- Feeding issues
- Respiratory problems

And their parents, like all parents of preemies, are at risk for postpartum depression and PTSD.

Born preterm at a "normal" weight?

STILL A PREMIE

Though these babies look healthy, they can still have complications and require NICU care.

But because some health plans determine coverage based on a preemie's weight, families of babies that weigh more may face access barriers and unmanageable medical bills.

Born preterm but not admitted to the NICU?

STILL A PREMIE

Even if preterm babies don't require NICU care, they can still face health challenges.

Those challenges can extend through childhood, adolescence and even into adulthood.

Some Premies	All Premies
Will spend weeks in the hospital	Face health risks
Will have lifelong health problems	Deserve appropriate health coverage
Are disadvantaged from birth	Need access to proper health care

NCJH National Coalition for Infant Health
www.infanthealth.org