

# **Engagement Solutions for Families in Neonatal and Pediatric Settings**

In this feature, Neonatal Intensive Care interviews clinicians and healthcare providers about the actual application of specific products and therapies. This interview is with Robert White, MD, Director and Christopher Rand, CEO of AngelEye Health.

Could you give us an overview of AngelEye, its services, and the key features of the recent platform upgrade?

Christopher Rand: AngelEye Health, the leading technology provider for neonatal and pediatric family engagement solutions, deeply understands the value that family engagement and family-centered care bring to the neonatal and pediatric intensive care environment. We provide HIPAA-compliant family engagement solutions to integrate parents or caregivers simply and seamlessly into the child's care team. From admission to discharge, AngelEye Health's bedside cameras with messaging capabilities and feeding management solution deliver a proven, positive impact on care delivery workflows for the dedicated bedside team, the quality of the family experience, and a successful transition home.

Our platform is used by more than 200 NICUs nationwide, and data reveals that when installed, AngelEye's solutions result in remarkable daily parent usage, with 95% of NICU families actively engaged with more than 10 million virtual visits to date.

During 2024, the company will unveil considerable enhancements to its existing suite of technology, which will then

Robert White, MD, Director, Regional Newborn Program, Mednax, Robert\_ White@mednax.com: Robert White, MD is a graduate of the Johns Hopkins School of Medicine and has been Director of the Regional Newborn Program at Beacon Children's Hospital since 1981. His primary interest has been in advancing structural and operational strategies to provide the optimal NICU environment of care for babies, families, and caregivers. To this end, he has written many papers and co-founded the Consensus Committee to Establish Recommended Standards for Newborn ICU Design, the Gravens Conference on the Physical and Developmental Environment of the Newborn, and the International Newborn Brain Conference. Christopher Rand, CEO, AngelEye Health, crand@angeleyehealth.com: Christopher Rand is the Chief Executive Officer of AngelEye Health. Since assuming the leadership role in 2019, Rand has built a team, created a culture based on collaboration and innovation, and focused on empowering neonatal and pediatric intensive care units with the most advanced family engagement technologies available today. Rand is committed to delivering engagement solutions designed to bridge the gap between families and hospital care teams to ease workflows and offer a more positive hospital stay while elevating patient outcomes. In addition to his role at AngelEye Health, Rand has advised over 50 healthcare companies. He also serves as a partner for a venture investment firm, Tristar Health Partners. Rand received his MBA from Vanderbilt University's Owen Graduate School of Management and his Bachelor's degree from The University of Notre Dame.

enable the introduction of new patient coordination solutions. AngelEye understands the obstacles families and care teams face. AngelEye's platform can be uniquely leveraged to support the patient, their family, and the care team to improve outcomes, efficiency, and satisfaction.

"Today, NICUs nationwide are embracing transformation to forge deeper connections with families. They require innovative technology that empowers families throughout their NICU journey," said Christopher Rand, CEO of AngelEye Health. "By providing round-the-clock virtual access and facilitating crucial information sharing, caregivers can deliver transformative care that leaves a lasting impact on outcomes. Our next step is to turn our active family engagement and empowerment into meaningful workflow improvements for caregivers and ultimately into even greater financial returns with enhanced quality of care for our hospital partners."

New software advancements that are slated for the existing AngelEye portfolio include an extensive refresh to the Iris Camera System, a secure, live video stream enabling families to connect with their infant at any time from their devices, and significantly improved functionality to MilkTracker, a feeding management solution for families and clinicians. In addition to these major enhancements to existing products, AngelEye will introduce new services that redefine NICU navigation and discharge coordination, equipping care teams with integrated technologies that cultivate confident families.

## Can you share some insights into the user feedback that influenced the latest upgrades? How does this feedback guide the development of new solutions?

Christopher Rand: AngelEye Health's platform advancements are deeply influenced by feedback from NICU clinicians and families, underscoring its customer-focused product development. The company employs diverse feedback mechanisms, including technology-enabled surveys, data analytics, personal interactions, and a Clinical Advisory Board, to understand and address the unique challenges of NICU environments.

This approach has led to the creation of targeted solutions and enhancements, such as the development of our newest NICU navigation/discharge coordination solution, a novel NICU groundbreaking tool (assistant) that seamlessly integrates assessments (robust surveys), education, scheduling, and transparent communication, demonstrating how user feedback drives innovation. AngelEye Health's commitment to continuous

education and improvement, evidenced by its extensive support resources and monthly updates, ensures its solutions remain relevant and effective for healthcare providers and families.

In summary, AngelEye Health's dedication to listening to its users has cemented its position as a neonatal and pediatric care technology leader, continually adapting its offerings to meet the evolving needs of its hospital partners and their patients.

#### In what ways does integrating technology like AngelEye's platform transform the NICU experience and workflows compared to environments that have yet to adopt digital solutions?

Robert White, MD: In the pre-tech era, family interaction with their baby in the NICU consisted of their personal presence or brief phone conversations with their baby's providers. AngelEye has changed that paradigm, especially for those families who are not able to be with their babies most of the time—which, in the US, is the vast majority of parents. The original AngelEye feature, the camera, allowed a parent to observe their baby anytime from anywhere—the mother's hospital bed in the same or an outlying hospital, the father at home or work, the grandparents who might be living on the other side of the country. The camera quickly became a valuable tool to promote family bonding and to alleviate parental anxiety about the status of their baby.

Over the ensuing years, many features have been added to the capability of the AngelEye system, allowing it to become a portal of parent-care team communication, pre-discharge education of families, and support for optimizing breast milk nutrition in high-risk newborns.

AngelEye now facilitates nearly continuous family engagement with their NICU baby and care team even when they are separated so that at discharge, families are more familiar with and bonded to their babies than has been possible in the past when transportation or time limitations only permitted brief, intermittent interactions.

AngelEye has revolutionized NICU family engagement, transforming intermittent, in-person visits and phone calls into a nearly continuous, intimate connection between families, their babies, and healthcare teams, ensuring that distance and time no longer hinder the crucial bonding and communication essential for the early stages of life.

### What are some of the primary challenges staff experience in the NICU, and how does AngelEye's platform address these issues?

Christopher Rand: Caring for young patients, especially vulnerable infants and neonates, presents unique challenges for healthcare teams. The high dependency of these young patients places an immense strain on nursing and clinical teams, who are already navigating the pressures of a demanding healthcare landscape. In addition to caring for the patient, clinical teams must keep guardians up to speed on their infant's health. To support their care teams effectively, clinical leaders must equip nurses with the tools needed to endure shortages and the high demands of the job. Innovative solutions can alleviate the workload of the current staff, enhance engagement with patients and families, streamline workflows, and contribute to better patient outcomes.

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Advanced technology platforms can provide invaluable support to their NICU teams in several key areas:

Enhance Family Engagement and Reassurance: Bedside cameras and messaging systems offer real-time visual access to NICU infants, enabling parents to stay connected with their babies even when they cannot be physically present. Beyond just providing life support, NICUs play a crucial role in fostering healthy parent-infant relationships. Real-time visual access and continuous communication enhance engagement between parents and healthcare teams, promoting transparency and trust while creating a collaborative care environment and alleviating parental anxiety.

Advanced Feeding Management: One of the most significant burdens on NICU nurses is meticulously managing feedings. Modern tracking systems streamline nutrition management in the NICU, offering real-time updates on breastmilk availability and aiding in inventory control within the hospital and at home. These platforms optimize feeding schedules and ensure timely delivery of nutrients while empowering healthcare teams to make data-driven decisions to support the nutritional needs of each infant. By automating these processes, nurses can focus their time and attention on other critical aspects of care, thus improving efficiency and patient outcomes.

Educational Support: NICU care extends beyond the hospital walls. Educating families about post-discharge care is crucial for a smooth transition and optimal recovery—technology offers a treasure trove of educational resources conveniently accessible at parents' fingertips. Technology solutions provide families access to abundant educational resources, empowering them with the knowledge and skills to participate actively in their baby's care journey. These resources, from online modules to interactive tools, facilitate learning and enable families to track their progress seamlessly. Also, these platforms eliminate the need for time-consuming manual distribution of printed materials, allowing nurses to allocate their time more effectively and focus on direct patient care.

Support Discharge Coordination: The journey does not end at discharge. Digital tools for discharge planning play a crucial role in empowering families to manage care post-discharge confidently. These platforms provide comprehensive guidance on medication schedules, feeding routines, and follow-up appointments, ensuring a smooth transition from hospital to home. By equipping families with the necessary resources and support, health systems can reduce the burden on nurses during busy shifts and streamline discharge workflows, improving continuity of care and patient outcomes.

### In what ways does AngelEye Health's platform facilitate a more holistic approach to neonatal care?

Christopher Rand: AngelEye Health facilitates a more holistic approach to neonatal care through a multifaceted strategy emphasizing comprehensive family involvement and enhanced communication between families and healthcare providers. Here are several key ways AngelEye contributes to a more holistic neonatal care experience:

**Continuous Remote Access:** The core feature of the AngelEye system, a live-streaming camera system, allows families to visually connect with their infant in the NICU anytime, from anywhere. This constant visual connection supports emotional

bonding between parents, extended family, and their newborns, even when physical presence in the NICU is not possible.

**Enhanced Communication:** AngelEye offers secure, direct communication between the care team and the family. This allows for timely updates, educational content sharing, and the ability to ask questions and receive answers, facilitating a transparent and inclusive care process.

*Pre-Discharge Education:* Through the AngelEye platform, families can access educational resources and content specifically designed to prepare them for the care needs of their infant upon discharge. This education is crucial for ensuring a smooth transition home and empowering parents with the knowledge and confidence to care for their high-risk newborns.

Breast Milk Nutrition Support: Recognizing the importance of breast milk in the development of high-risk newborns, AngelEye provides tools and resources to support and optimize breast milk nutrition. This includes educational materials and communication channels that encourage and facilitate breastfeeding and the use of breast milk.

Integrated Care Team Collaboration: AngelEye's newest offerings will enhance the collaboration between different members of the care team, including doctors, nurses, lactation consultants, and other specialists involved in the infant's care, along with the caregivers. This integrated approach ensures that all aspects of the infant's health and well-being are addressed in a coordinated manner to prepare families and the infant for a successful transition from NICU to home.

**Family-Centered Care:** By placing the family at the heart of the neonatal care process, AngelEye supports a family-centered care model. This approach recognizes the family's integral role in the healing and development of the infant, promoting practices that involve and support the family in care decisions and activities.

In summary, AngelEye Health's technology and services foster a holistic approach to neonatal care by ensuring continuous family engagement, enhancing communication between families and healthcare providers, providing comprehensive predischarge education, supporting optimal nutrition, encouraging collaborative care team efforts, and prioritizing family-centered care practices. These elements are essential for improving patient outcomes, reducing parental anxiety, and ensuring the infant's and their family's well-being.

How does AngelEye measure the impact of its platform on NICU outcomes, and what improvements have you observed or anticipated with the recent upgrades?

Christopher Rand: AngelEye actively works with its hospital partners on Quality Improvement Initiatives to validate the impact of virtual engagement solutions on staff productivity, family and staff satisfaction, and reduction in feeding errors that can occur in the inpatient setting. The platform also includes robust reporting features to keep NICU leaders informed with rapid insights on consolidated engagement metrics.

Why should health system leaders consider NICU technology a critical investment for their NICU operations, particularly in terms of patient care and outcomes?

Robert White, MD: System leaders have a keen interest in

becoming the "go-to" hospital for maternal care because of the trickle-down effect of care opportunities for the extended family. To that end, NICUs that are perceived in the hospital's service area as "high-tech, high-touch" help foster an impression of that facility as a caring, highly competent provider, attracting maternity patients and, ultimately, their extended families at all stages of life. This patient-capture strategy ultimately benefits the bottom line of the hospital organization.

From an outcomes perspective, as everyone is aware, family involvement in the care of a NICU baby has been shown to reduce hospital length of stay and drive better patient outcomes. Today, technology, such as bedside cameras, enables more frequent and deeper family connection during the care process, which ultimately leads to better outcomes. Additional technologies, including automated journey-based education and patient communication, help empower parents and provide them with a greater sense of confidence. When parents are more confident and competent in caring for their babies after discharge from the NICU, those children are more likely to do well both medically and developmentally, which benefits not only the baby and family but also the entire community in the form of reduced societal costs.

- Preventing Stillbirth...continued from page 37 guidelines for good practice in psychosocial care of mothers after stillbirth: a cohort study. Lancet: 2002; 360 (9327):44
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# Impact OUTCOMES

with evidence-based NICU navigation and discharge coordination software



AngelEye Health's NICU2Home Solution redefines NICU navigation, equipping care teams with integrated technologies that cultivate confident families. Experience a new era of seamless support for families and clinicians throughout the NICU stay and help them safely transition from the NICU to home.

### The Power to Empower

### **IMPACT STAFF**

- Proactively identify and support at-risk families
- Improve staff efficiency & save staff time
- Reduce readmission rates
- Decrease cost by reducing length of stay

#### **IMPACT FAMILIES**

- Improve health outcomes
- Enhance continuity in communication and care
- Increase parental confidence & competence
- Improve Engagement

### **Effectively Reaching Families:** (data from three NICUs)

2,000+

**FAMILIES** 

83 +

**NET PROMOTER SCORE** 

25 +

**DAILY USAGE (TAPS/DAY)** 

### **Current Challenge:**

- Parents forget or misremember 80% of care instructions<sup>1</sup>
- 15%-37% of NICU infants require readmission within one year<sup>2</sup>
- Parental education is concentrated in the 48-72 hours prior to discharge<sup>3</sup>



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