



Nemours®

Center for Health Delivery Innovation

A System Wide Approach
to Telemedicine and
Innovation

Carey Officer, OVP, Nemours CareConnect,
Center for Health Delivery Innovation

Nemours®

Nemours at a Glance

Nemours.org

- Enduring legacy of Alfred I. duPont
- Patient care by the numbers:

410,000 Patients/1.3 million annual encounters

3,800 Trainees annually

1,600 Residents, fellows & students

724 Employed physicians

228 Researchers

60 Pediatric care locations in five states

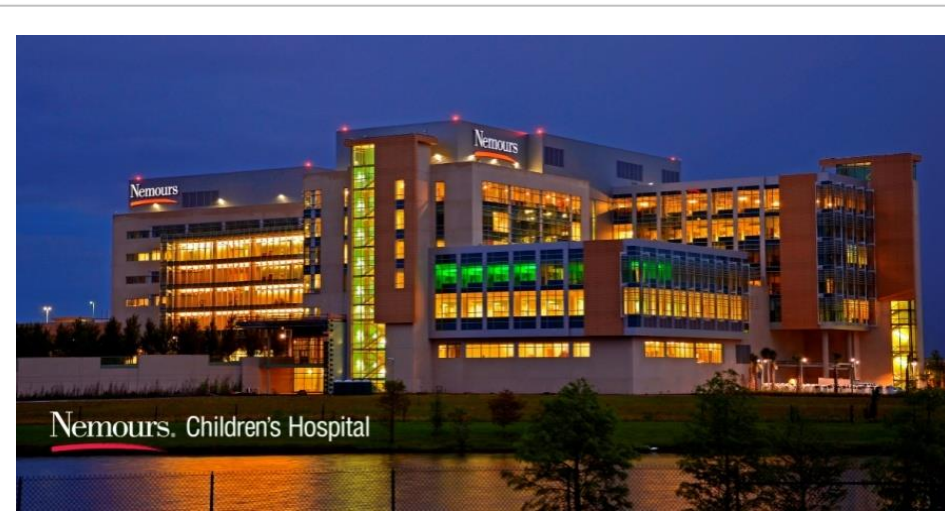
42 Specialties and subspecialties

40 Employed hospitalists

19 Collaborating hospitals



Wilmington, Delaware



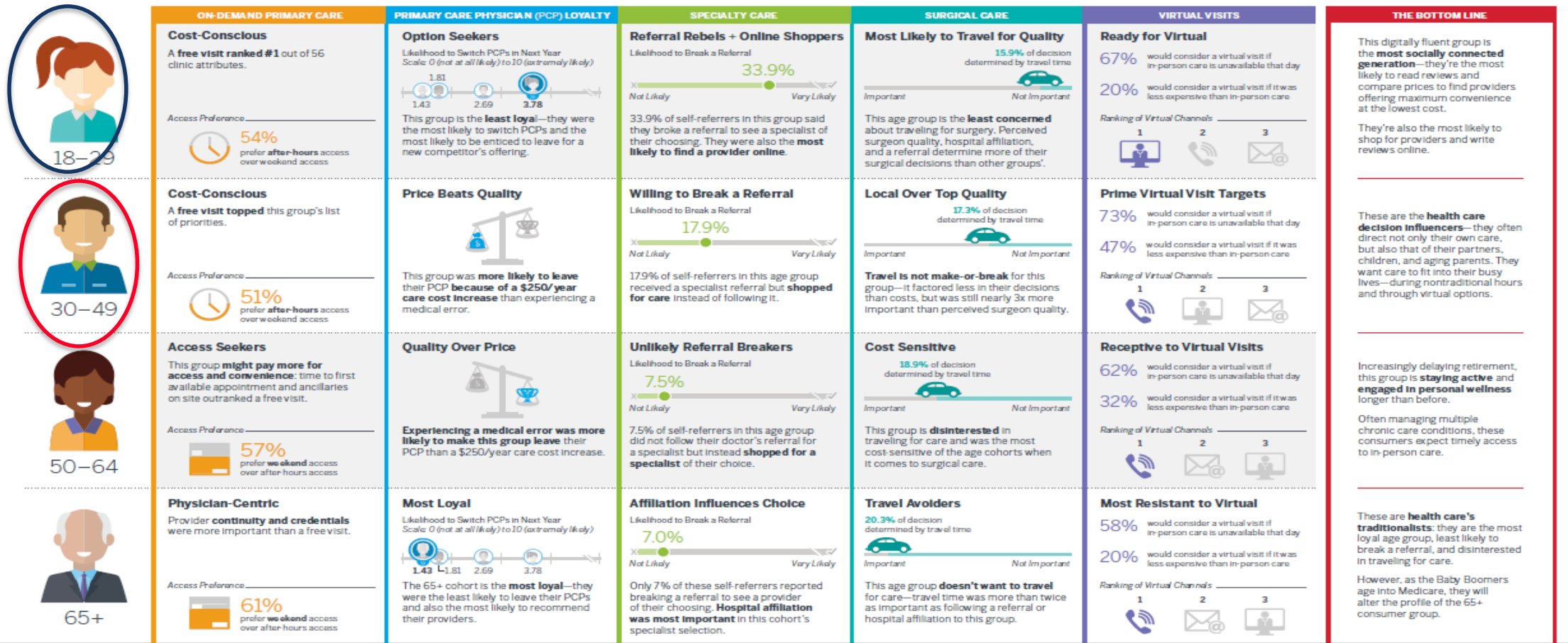
Orlando, Florida

Who Is Our Consumer?

How Consumers' Health Care Preferences Vary by Age

Millennials, Gen X, Baby Boomers, the Silent Generation—you know they all consume care differently, but what exactly do each of these groups want? And how can you become their provider of choice?

We surveyed thousands of consumers across the United States to better understand their care expectations and found that **some of the most significant variations fall across age groups**. Here, we've segmented each of our five consumer choice surveys by age to help you tailor your messages and target your investments to different generations across the care continuum.

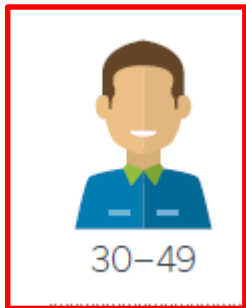


Source: Advisory Board Market Innovation Center, 2017


How Do They Consume Healthcare?



- Digitally-fluent, most socially-connected generation
- Most likely to read reviews and compare prices to find providers who offer most **convenience at lowest cost**
- **Least loyal** to PCP – easiest to entice to switch to competitor's offer
- **Referral Rebels** - 34% likely to break referral: most likely to shop for specialty providers and write online reviews
- Least concerned about traveling for surgery
- **Ready for telehealth:** 67% would consider if in-person care is unavailable
20% would consider if less expensive than in-person care



- Want **on-demand PC during non-traditional hours + virtual options**
- **Price beats quality** – most likely to leave PCP for price increase v. medical error
- **Referral Shoppers** – 18% likely to break referral, but still shopped for specialty care options
- **Local over Top Quality** – travel not a deal-breaker but travel time 3x more important than perceived surgeon quality
- **Most ready for telehealth:** 73% would consider if in-person care is unavailable
47% would consider if less expensive than in-person care

A young man with dark, wavy hair, wearing a blue denim jacket over a light blue shirt, is looking down at a smartphone in his hands. He is standing in a crowded city street with many other people in the background, some of whom are also looking at their phones. The background is blurred, showing colorful lights and buildings. A semi-transparent text box is overlaid on the right side of the image.

The way we find,
consume, and
share information
has changed.

Millennial Parent Decision Making



- >9,000 babies born to them daily
- Use online research and peer recommendations via social media to select providers
- Value quality, respect and environment of care over cost
- Choose hospitals based on internet searches first, then provider validation

Source: NRC Health Millennial Parents



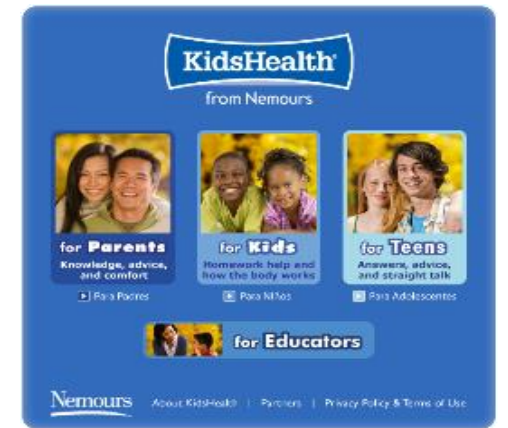
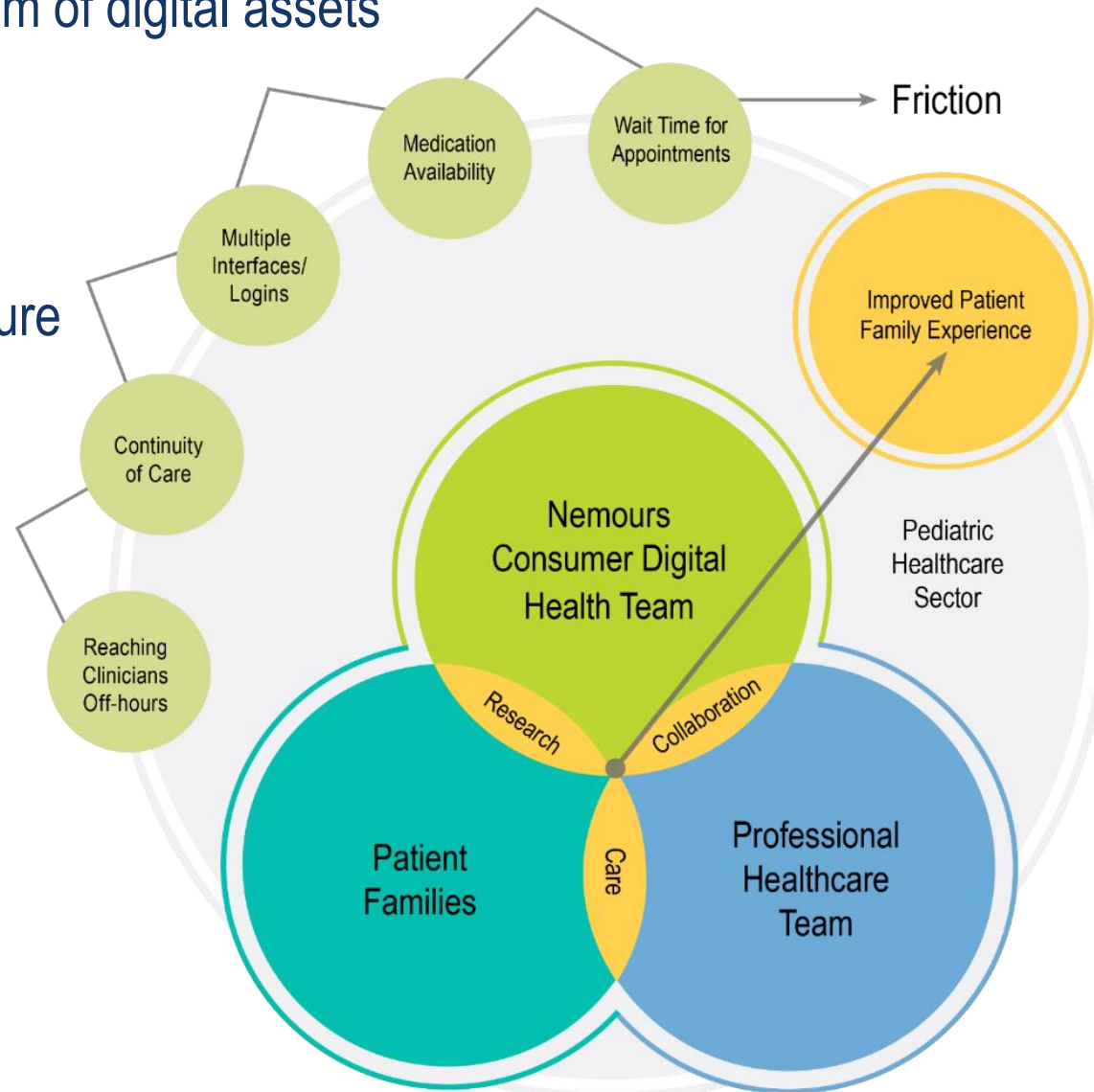
Nemours®

Anytime, Anywhere

Our aim is to expand a more **accessible** continuum of care within our **communities** in order to be a more **proactive** partner in guiding and empowering parents throughout their children's development.

Center for Health Delivery Innovation

- Unique Nemours ecosystem of digital assets
- Nemours KidsHealth
- Nemours Prevention & Population Health
- HIMSS Stage 7 infrastructure
- Telehealth



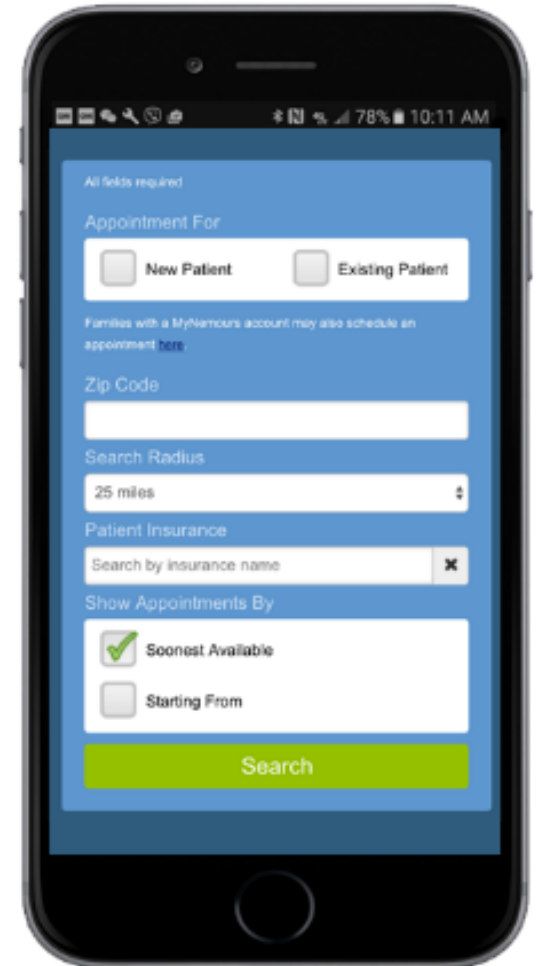
@ Nemours

- 260 million+ visits annually to KidsHealth.org
- # 1 licensor of pediatric health education – 200+ hospitals and health systems

Smart Patient Portal

Digital backbone

- Building on MyNemours
- Online scheduling
- Telehealth (Nemours CareConnect)
- Connected devices & apps
- Fully-integrated KidsHealth content



Nemours Online Appointment Scheduling

The mobile view shows the website on a smartphone screen. At the top, the status bar displays 'Verizon', '6:56 PM', and '37%' battery. The browser address bar shows 'online-scheduling.nemours.org'. The page header includes the Nemours logo and a 'HELP' link. The main heading is 'Pediatric Primary Care Appointments'. Below it is a progress bar with four steps: '1. Search' (highlighted in green), '2. Schedule', '3. Details', and '4. Confirm'. A blue 'Show Map' button is positioned below the progress bar. The 'Appointment For' section has two radio buttons: 'New Patient' (checked) and 'Existing Patient'. The 'Type of Visit' dropdown menu is set to 'Sick'. The 'Zip Code' field contains '32806'. The bottom of the screen shows standard mobile navigation icons.

Mobile View

The desktop view shows the website on a larger screen. The header includes the Nemours logo, 'Children's Health System', and links for 'Cancel Appointment', 'FAQs', and 'Visit Nemours.org'. The main heading is 'Pediatric Primary Care Appointments'. Below it is a progress bar with four steps: '1. Search' (highlighted in green), '2. Schedule', '3. Details', and '4. Confirm'. The 'Primary Care Locations' section lists 'Central Florida | Delaware | Pennsylvania'. The 'What's needed:' section lists requirements: 'Patient insurance card with plan name and member ID', 'Patient date of birth', and 'Policy holder's date of birth'. The 'Appointment For' section has two radio buttons: 'New Patient' and 'Existing Patient'. A note states: 'Families with a MyNemours account may also schedule an appointment [here](#).' The 'Zip Code' field is empty. The 'Search Radius' dropdown menu is set to '25 miles'. The 'Patient Insurance' field has a search box with 'Search by insurance name' and a clear button. The 'Show Appointments By' section has two radio buttons: 'Soonest Available' (checked) and 'Starting From'. A large green 'Search' button is at the bottom.

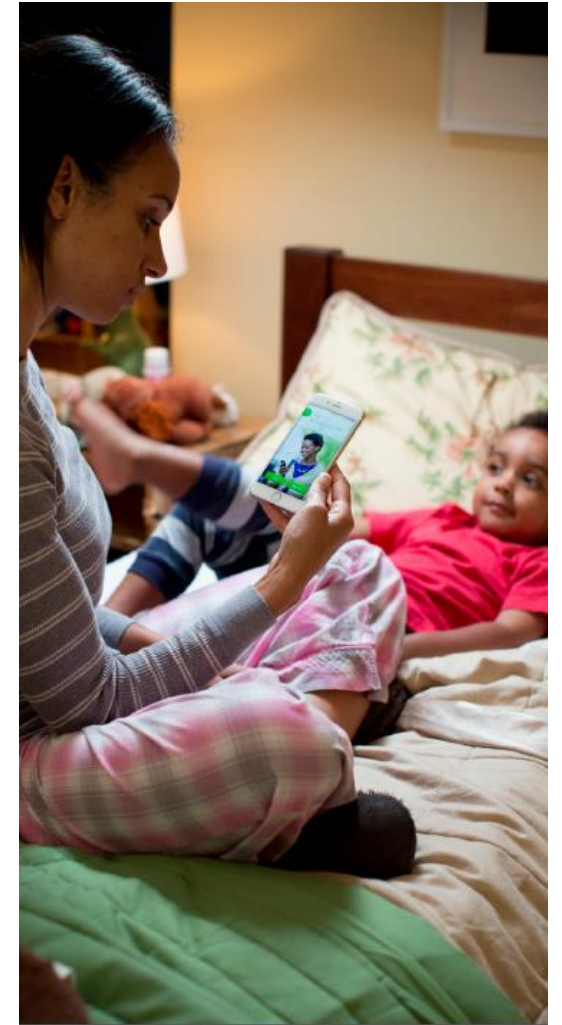
Desktop View

Nemours Telemedicine



Comprehensive Telehealth Program

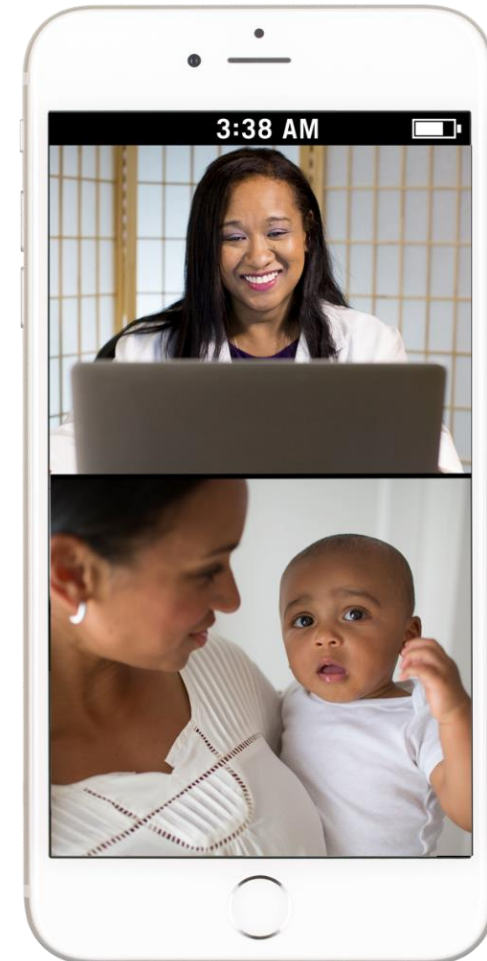
- Specialty Care – over 500 providers & 25+ specialties
- Provided to:
 - Partner Hospitals
 - Primary & Specialty Care
 - Home
 - Schools
 - Cruise Ships



24/7 On-demand Children's Care

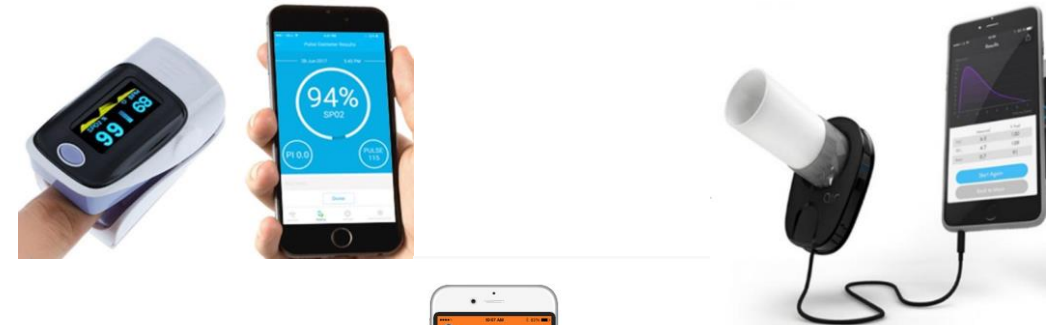
- Average wait time under 5 minutes
- Board-certified Nemours employed Pediatricians
- 6 States (FL,MD,DE,PA,GA,NJ)
- Records sent to Patient + PCP
- Participation on the AmWell Exchange
- Platform rating of 4 or 5 stars = 93%
- Provider rating of 4 or 5 stars = 97%
- Diverted 25% ER Visits and 34% UC Visits

Nemours. CareConnect



Deploying new Digital Tools in the home

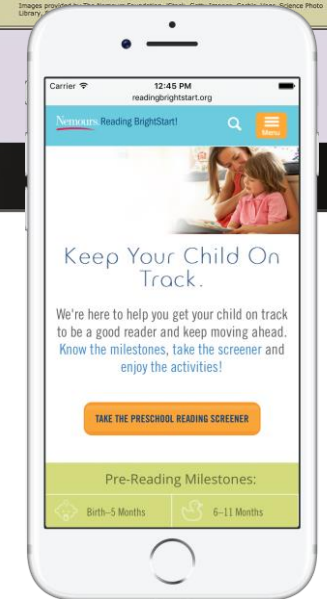
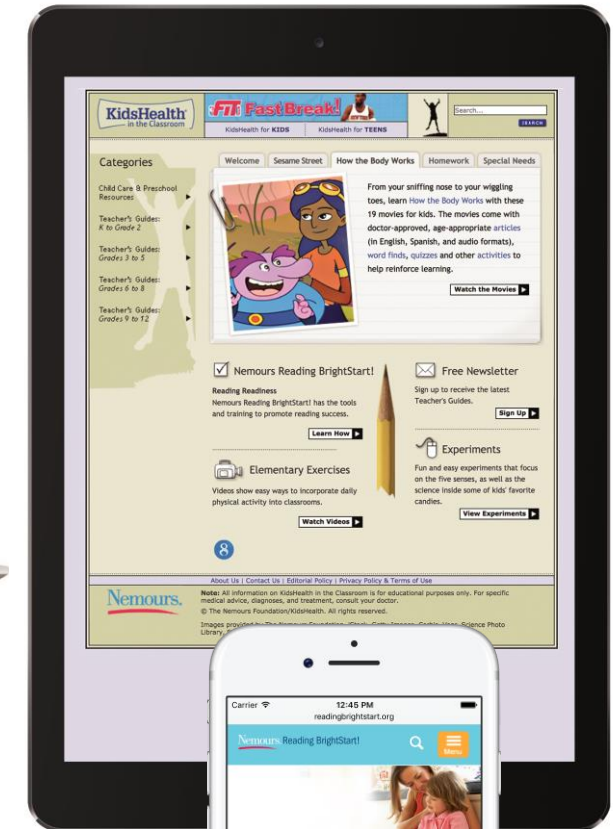
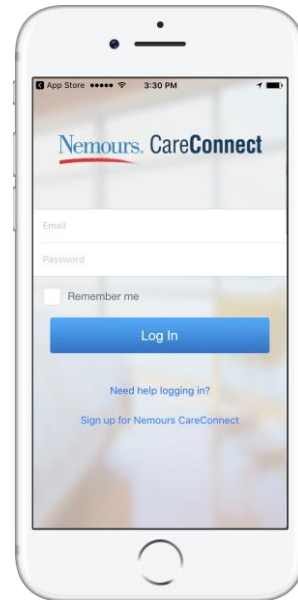
- Enhance diagnosing capabilities at the point of care via telemedicine
- Provide tools designed with families and clinicians that will lead to better management of chronic conditions
- Challenges still remain with integration to apps and EHR's



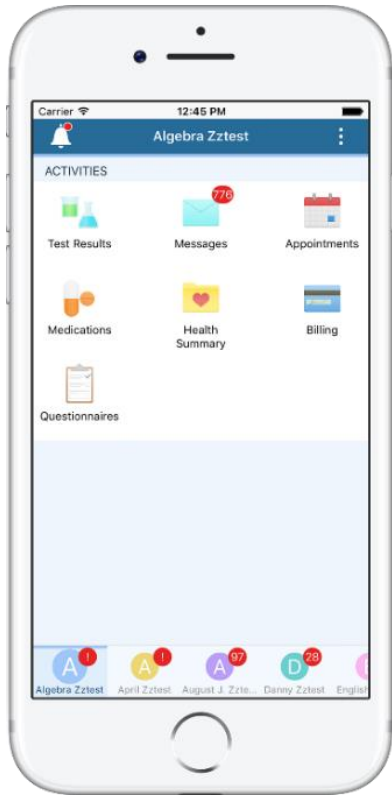
Nemours in the Community

Reaching children where they are

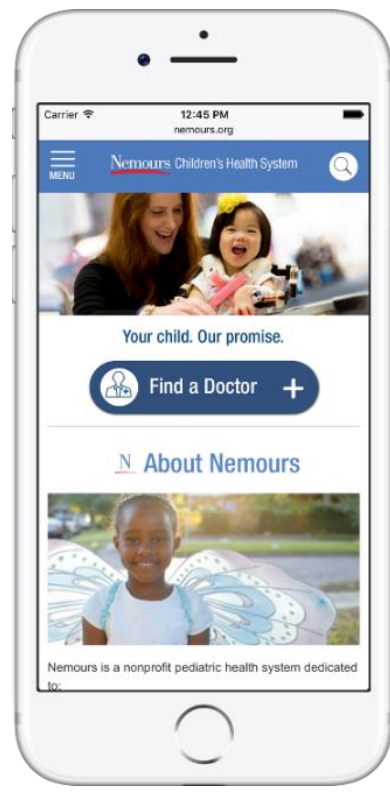
- NemoursLink (access to Nemours' EHR by school nurses and referring physicians)
- Nemours CareConnect (telehealth in schools)
- Nemours BrightStart!
- KidsHealth in the Classroom



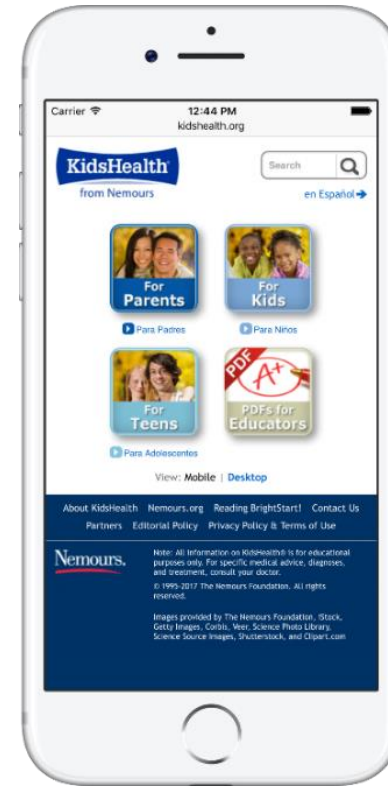
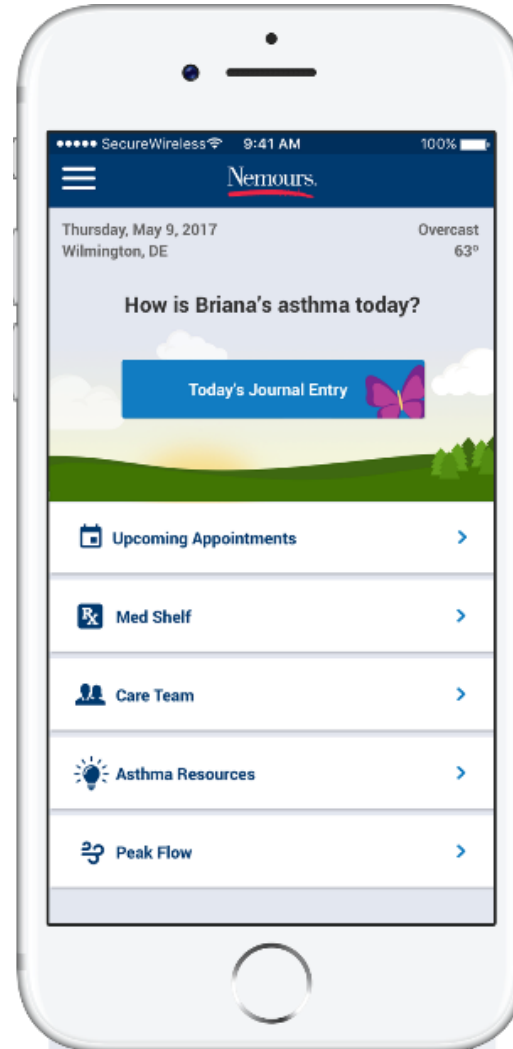
Nemours App – Tying it All Together



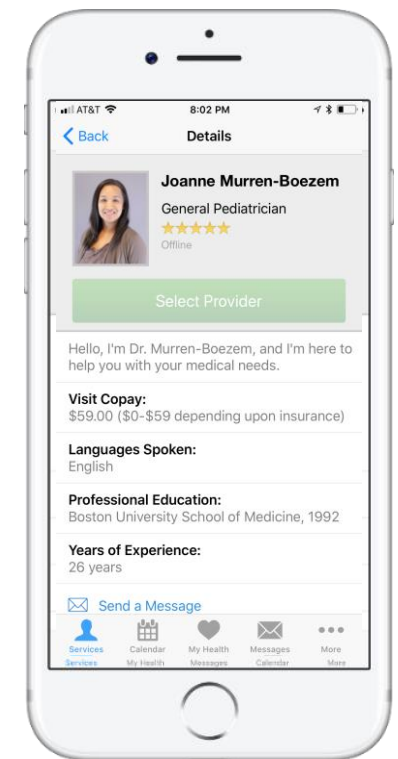
MyNemours



Nemours



KidsHealth



CareConnect

Nemours, Anytime, Anywhere.

Re-imaging how patient families experience Nemours digitally.

First Condition: Asthma

- Provide tools designed with families and clinicians that will lead to better control of childhood Asthma.
- Provide clinicians a view into how their patients experience their condition in between visits.



Example: High-Risk Cardiac

Specifically Single Ventricle Diseases

Problem:

- National interstage mortality \approx 12% - 15%*

Solution:

- Enhanced surveillance
- Early identification of deterioration

Home Monitoring

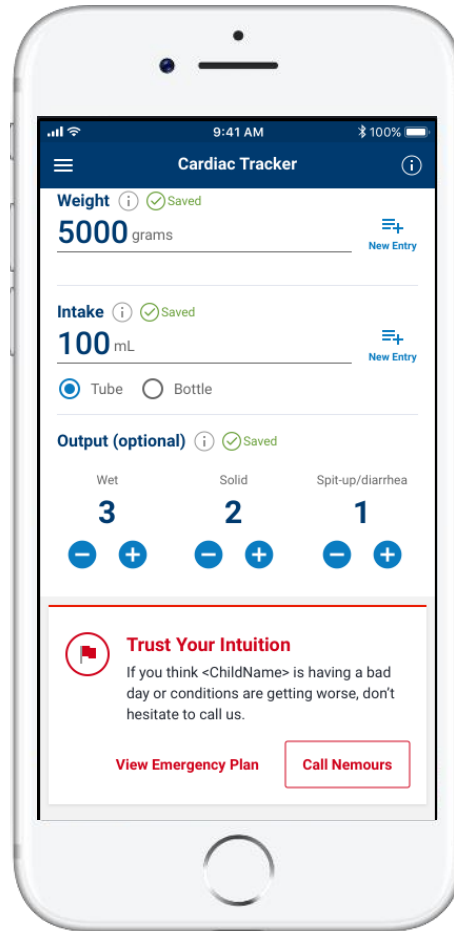
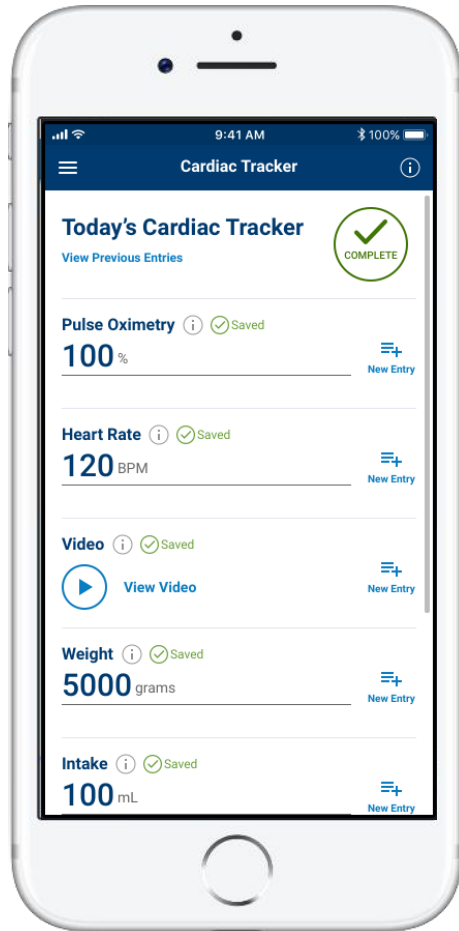
- Provide tools designed with families and clinicians that will lead to better outcomes.
- Provide clinicians a view into how their patients are doing in between visits.
- Ability to connect via Telemedicine

Source:

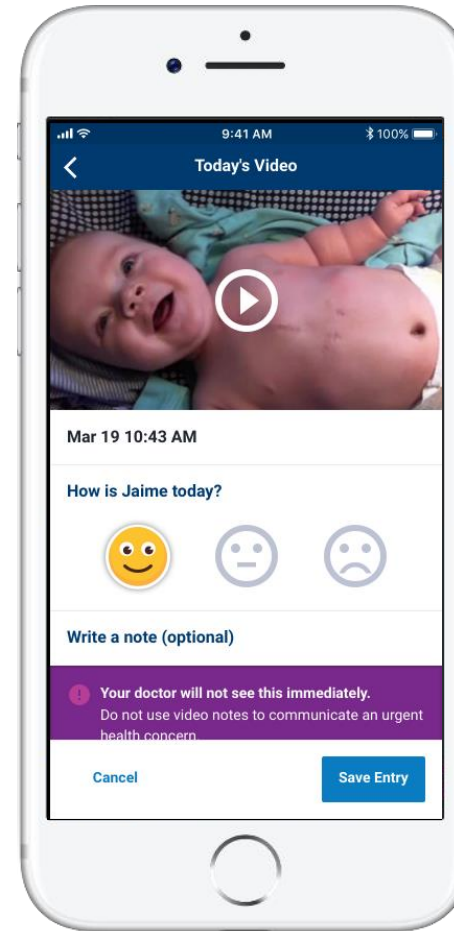
- Single-ventricle infant home monitoring programs: outcomes and impact – David A. Hehir and Nancy S. Ghanayem 2013 Wolters Kluwer Health

Nemours Cardiac Tracker

Cardiac Tracker



Video Log



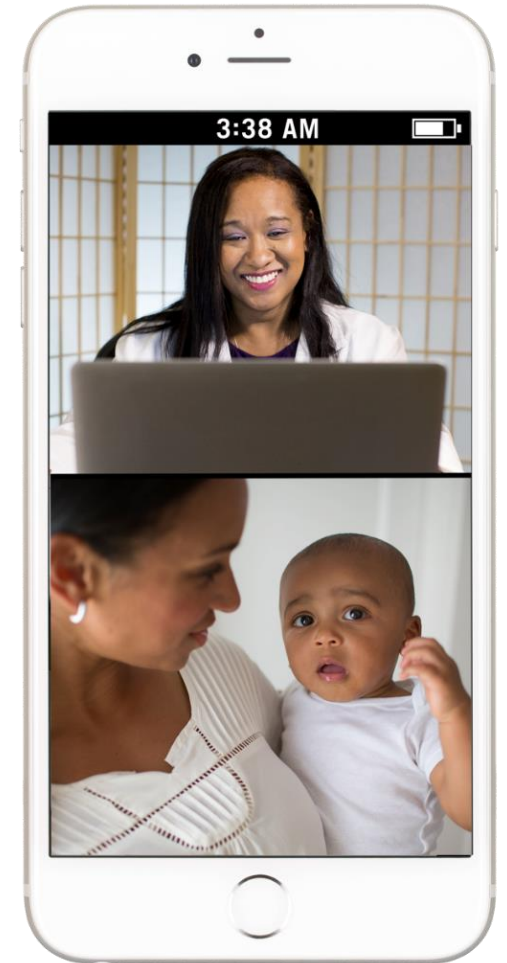
What has been critical to our journey?

- Restructured to develop a dedicated team focused on the consumer digital journey
- Created a consumer digital insights group— understanding our customer and our markets
- Utilized design thinking and agile methodologies
- Defined the problem and driver for each use case
- Measure the impact - PDCA



Integration with Front Lines Is Critical

- Find your clinical champions
- Our approach – physician led model – no mandates
- Understand their pain points – what problems are they trying to solve
- Integrate into clinical workflows and then improve the process
- Data is your friend



Educate - Adoption by Patients/Families

- If they don't know about it – they won't use it
- Do your research or lean on other research in the market
- Engage your marketing team early
- Engage your family advisory council
- Engage front-line staff – they are your best ambassadors





Thank you!
Questions?