

Engaging Technology: Increasing access and Improving Outcomes in the Pediatric Population

About Children's Health

- Two full-service hospitals (Dallas and Plano) dedicated exclusively to pediatric care
- More than 50 specialties and subspecialties
- Multiple Children's Health Specialty Centers
- Outpatient pediatric imaging and surgery centers
- Pediatric Group primary care locations
- Clinically integrated network of more than 300 private pediatricians
- Full range of community health offerings including school-based TeleHealth and faith-based programs
- Children's Health Home Care
- Children's Health Telemedicine
- Children's Research Institute at UT Southwestern
- Population Health offerings including an HMO, ACO, MSO and the Health and Wellness Alliance for Children











Extending Care into Our Community

Large, Growing Market

1 of 9 children in U.S. live in Texas

Significant Community Needs

- 29% of Dallas County children live in poverty
- 2 of 3 children need financial assistance
- 7 out of every 10 public school children in Dallas County eligible for free and reduced-price meals
- 18% of Dallas County children are uninsured
- Only 31% of TX physicians accept new Medicaid patients (down from 42% in 2010)

We offer programs in:

- ✓ Asthma Management
- ✓ Weight Management
- ✓ Injury Prevention
- ✓ Behavioral Health
- ✓ The Health and Wellness Alliance
- √ \$65 million in direct charity care

Significant Pediatric Medical Needs

- 50,000 children in N. Texas with asthma
- 36% of Dallas County kids are overweight or obese
- 28% of Dallas County children are malnourished
- 30% of toddlers not fully immunized



Virtual Health Today @ Children's Health

TeleER/TeleNICU

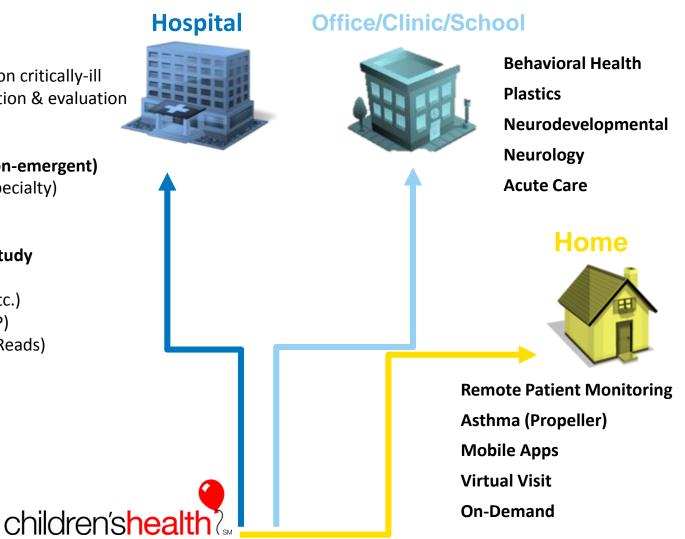
 Interactive consults on critically-ill children for stabilization & evaluation for transport

Hospital TeleConsultations (non-emergent)

- Neonatology (Sub-specialty)
- Neuro-Immunology

Technology Enabled Remote Study Interpretations

- Cardiology (Echos, etc.)
- Ophthalmology (ROP)
- Radiology (1st & 2nd Reads)



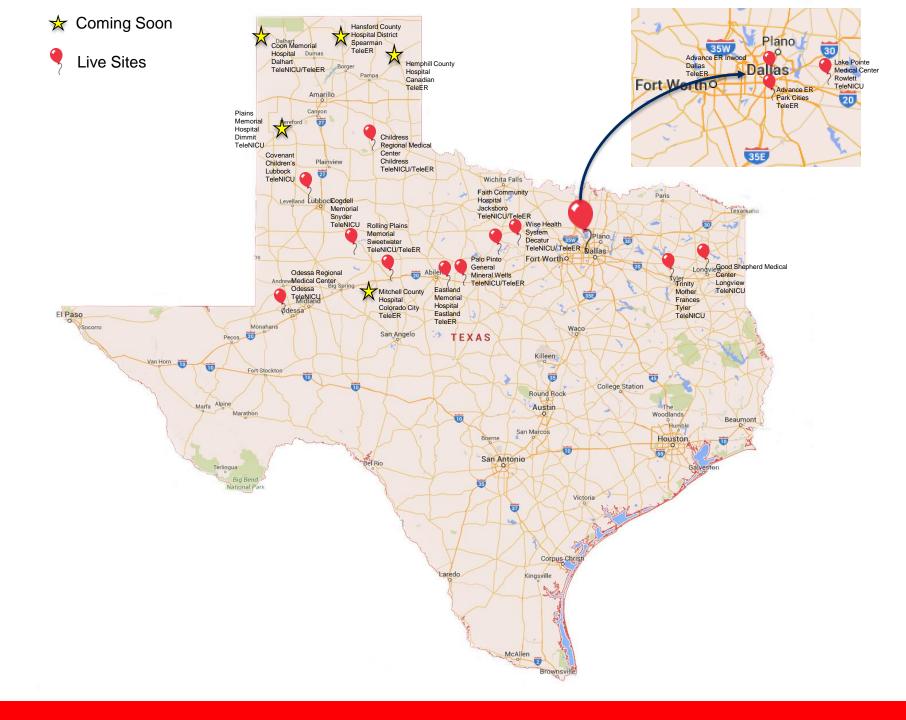
TeleNICU

- In 2012, Children's Health designed the neonatal-specific telemedicine program – TeleNICU
- Implementation with the first partner began in September 2013. TeleNICU was designed to benefit key stakeholders
 - Families
 - Affiliates
 - Payers
 - Children's Health and UT Southwestern
- Expansion to ER in 2015.



Twenty-four hour access to Level IV NICU, expert UT Southwestern board-certified neonatologists and pediatric subspecialists to interpret medical data, confirm diagnoses and confer on treatment plans.





Why School Telehealth?

- Trusted Partner
- Link between health and learning
- Access





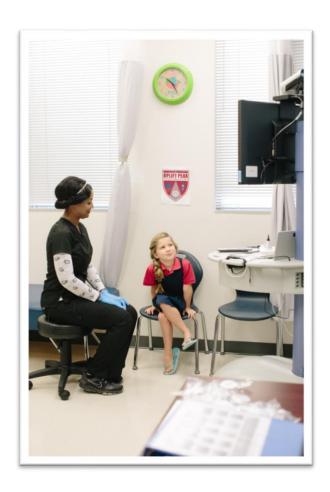
Where we started...

- Pilot
 - ESL pre-school
 - 2 sites
 - Lessons Learned



Where we are...

- Launched Fall 2014
 - 26 K-12 schools
 - Training/Education
 - Mocks
 - Technical Support
 - 1-844-Telemed
- 2015
 - 57 schools
 - Grades K-12
 - Rural, Urban, Charter and ISD's
- 2016
 - 97 schools



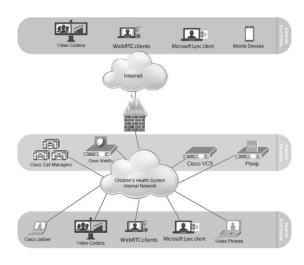


Where we are going...

- NAIP Opportunity Expansion of network, infrastructure and training to 100 additional schools across Texas.
- Behavioral Health pilot this Fall.
- Model for health systems nationally.

Technology





- Telemedicine carts are located at each school
- Each unit is networked to CHST and all data is encrypted
- Carts include stethoscope, general exam camera and otoscope





Operations

- Training and Compliance of Telehealth Presenters
 - Telemedicine
 - Workflow
 - Labs
 - Follow-up
- Consents from families
- One number for scheduling visits/technical issues
- All students enrolled in school telehealth are registered in the EMR



How to make school telemedicine visits successful!

- School Engagement / Buy In
- Nurse Readiness
- Access/Outcomes





Highlights

- Over 4000 visits have been completed through telemedicine.
- Over 200 nurses have been trained and completed telemedicine competencies.
- Live Dashboard for technology and visits.
- Expansion to complete strep/flu testing at point of care.
- Chronic Disease Management
 - Asthma
 - Obesity
- Communication with PCP or connect with a PCP.



Legislation and Expansion

- Texas 84th Legislature
- House Bill 1878



Inpatient-Consults

Neuro-Immunology

- Limited specialists
- Service-line specific
- Non-dependent on a nurse or other personnel to accompany
- Operated from a mobile device (tablet/iPad)
- Mapped by floor physician can select any pre-mapped room or drive the robot to the destination

Injury Prevention

Medical car seats



The RP-VITA has enabled us to evaluate and consult with families and patients as needed – regardless of where I am. While away at research meetings or for any other reason, I can stay connected with our patients and assist in their complex care. It gives me the capability of doing thorough evaluations while not relying on other staff members to "bring" me to rooms. It is the next best thing to being there in person.

- Benjamin Greenberg, MD



Remote Patient Monitoring

The Remote Patient Monitoring (RPM) program enables Children's Health to monitor and connect with patients with chronic diseases, post-surgery or who may need monitoring after discharge.









Silicon: 0.9mg - Bananas have 5mg per 100 grams Copper: 0.02mg - Cashews have 2.2mg per 100 grams Magnesium: 0.01mg - Halibut has 107mg per 100 grams

THE FIRST COMPUTER POWERED BY YOU

Cleared by U.S. FDA, CE Marked in Europe Designed to be combined with drugs Supported by technology and data platform



proteus

Consumerism

What does it mean for Children's Health?

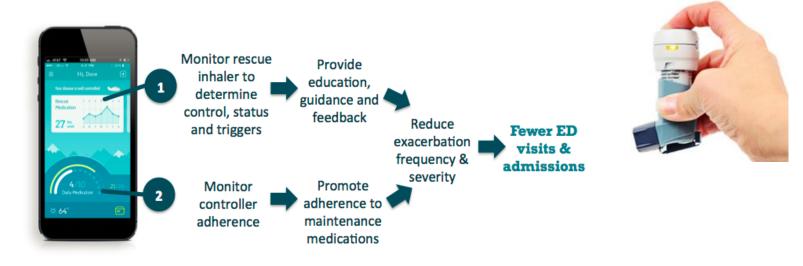
Children's Health takes care of more children and more families in more places than ever before. By taking care of children, we are naturally interacting with families and why the FamilyHealthSM brand is a natural evolution of our health system.

- National exchanges, employer mandated exchanges and high deductible health plans are forcing consumers to be more involved in healthcare spending, causing those affected to be price-sensitive shoppers
- As millennials increasingly become healthcare decision makers, nontraditional and relational access points become critical
- To succeed in a value-based world, pediatric institutions must find ways to differentiate itself and stay relevant to today's consumer by responding to unmet needs through comprehensive service offerings



Propeller

The Propeller solution pairs sensor-enabled asthma device with clinical outreach in order to potentially improve asthma management. The pilot program was launched in October 2014 to high risk asthma patients meeting the study criteria.



iPhone Apps



My Asthma Pal

My Asthma Pal is a mobile app designed to enhance asthma self-management and education, with the long-term goal of reducing preventable events, such as Asthmarelated ED admissions.

children'shealth?



Family Health On Call delivers "Health Care. On your doorstep."

Family Health™ On Call (formerly Mend) delivers high-quality care right on your doorstep. And best of all, you can book your appointment right on your smartphone, tablet or computer. We'll diagnose and treat you right in the comfort of your home, office or just about anywhere.

It's the same great care Mend brought you, just with a new name. It's On Call. It's care on your schedule. On your doorstep.

On Call treats:

- Ear, Nose & Throat
- Respiratory
- Gastro Intestinal
- Illnesses
- Eye
- Skin
- Injuries
- Flu Shots Physicals









FamilyHealth Virtual Visit provides consumers access to a trusted, quality care provider via a virtual platform.

Getting sick is never convenient. But now seeing a health care provider can be with Family Health™ Virtual Visit. Using video technology, we're delivering high-quality care right to you, right at your local pharmacy – or for that matter, virtually anywhere.

After you're seen in our <u>Virtual Visit Kiosk at Dougherty's Pharmacy</u>, you can download our app or use our web portal to videoconference with a highly experienced health care provider. Get treated right in the comfort of your home, office or virtually anywhere you go for a number of illnesses and injuries, like:

- Flu
- Allergies
- Sinusitis
- Common Cold
- Ear, Nose, and Throat Infections
- Urinary Tract Infections
- Cuts
- Skin Infections, Burns and Rashes









Children's LIVE

- Utilizing a platform that allows for on-line registration and the archival of recorded "live" sessions
- Creating relationships with providers that simply cannot be maintained through traditional once a year activities
- Leverage any and all systems to create a collaborative arena versus Ivory Tower models



www.childrenslearn.com







Research

- Ability to increase patient participation in clinical trials
- Allows rural and more distant participants to enroll
- Provides a unique opportunity for primary care providers to engage patients into research









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