Telehealth: School-Based Program Outcomes and Expansion

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Regional Director, Rehab Services and Telehealth Operations
About Nicklaus Children’s Hospital

- A not-for-profit freestanding pediatric teaching hospital
- Over 220 pediatric sub-specialists in 40+ pediatric subspecialties
- 79% of physicians are board-certified
- Ranked nationally in 8 pediatric specialties in US News and World Report
- 61 physicians on medical staff were listed in the Best Doctors in America List for 2015-2016
- Magnet™ recognized by the American Nurses Credentialing Center
- Gold-level Beacon Awards for Excellence from the American Association of Critical-Care Nurses in three specialized ICUs
- Renowned for excellence in all aspects of pediatric medical care from birth through adolescence
- Employed and private practice providers across a multitude of disciplines and specialties work together to provide, comprehensive, multidisciplinary care the patients

- Licensed beds…………………………..289
- Inpatient admissions………………….10,544
- Total surgeries……………………….16,223
- Emergency department visits……..86,893
- Hospital outpatient visits………….218,945
- Off Campus Visits…………………..290,914
- Employees…………………………..4,000+
- Medical staff ………………………….931
New Advanced Pediatric Care Pavilion

The 212,000 square-foot pavilion will house:

- The neonatal, cardiac and pediatric intensive care units
- The hematology/oncology inpatient units
- An expanded bone marrow transplant unit
- A 10-bed obstetrical unit for babies requiring immediate intervention after birth
- Family-centered amenities

Network of Outpatient Centers
Telehealth Center

- Re-imagining the healthcare experience and innovating how we support families and children at the point of illness and throughout the continuum of care
- Expanding telehealth into the retail market, partnering with insurance providers and offering wellness services for adults and children
- Support sophisticated video-conferencing, diagnostics and testing, allowing clinicians, parents and patients to consult with a team of specialists
- Our Telehealth Center brings expert care and peace of mind to families and children – wherever they are, whenever they need us

Programs:
- Primary Care/Convenient Care – Employer Groups
- Primary Care/ Convenient Care and Basic Nursing – Schools
- Subspecialist Services
- NICU Nursing – BabyCare and Lactation Services
- Dental Mobile Unit
- Rehabilitation Services
- Nutrition Services
- Mental/ Behavioral Health
- Social Services
- Child Life
- Support Groups
- Care/ Case Management
Primary Care – School Health

**Settings:**
- Schools

**Technology:**
- Mobile Solution (suitcase)

**Commonly seen minor illnesses in children:**
- Cold, flu, fever, sore throat, earache
- Sinus or upper respiratory infection
- Rash or skin conditions
- Eye conditions
- Allergies
- Laryngitis
- Head Lice
- Insect Bites
- Mouth and Cold sores

**Financial Model:**
- Partnership with the Miami-Dade County Public Schools, The Children’s Trust, private donor

**Healthcare Team:**
- Family ARNPs and physicians
- On site Telehealth Presenter
School Telehealth Volumes

Number of patients seen per location

<table>
<thead>
<tr>
<th>Location</th>
<th>Patients Seen</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-8 Airbase for International Education</td>
<td>35</td>
</tr>
<tr>
<td>Richmond Heights Middle School*</td>
<td>10</td>
</tr>
<tr>
<td>Southwest High School</td>
<td>72</td>
</tr>
<tr>
<td>W.R. Thomas Middle School</td>
<td>80</td>
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</tbody>
</table>

* Only participated during 2015-2016 pilot
School Telehealth - Chief Complaints

Chief Complaints

<table>
<thead>
<tr>
<th>Condition</th>
<th>Totals year to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cough</td>
<td>18</td>
</tr>
<tr>
<td>Fever</td>
<td>22</td>
</tr>
<tr>
<td>Eye Irritation</td>
<td>57</td>
</tr>
<tr>
<td>Congested</td>
<td>2</td>
</tr>
<tr>
<td>Derm</td>
<td>14</td>
</tr>
<tr>
<td>Ear Pain</td>
<td>26</td>
</tr>
<tr>
<td>Sore Throat</td>
<td>57</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
</tr>
</tbody>
</table>

Totals year to date
School Telehealth
Medications Ordered

Total number of medications ordered

- Prescription: 76
- Over the Counter (OTC): 65
- Prescription & OTC: 40
- No Medication: 14
School Telehealth
Assumptions on Missed School Days

Child likely to have gone home due to parent preference

Parent/Child likely to miss school or work for 2+ days

Likely to have gone home if not for Telehealth Services
School Attendance Rates
Quarterly Attendance for 2015/2016 – 2016/2017 School Years

Airbase Elementary
Richmond Heights Middle
W.R. Thomas Middle
Southwest Miami Sr High
School Telehealth
Parent and Student Satisfaction Survey Results

Your Overall treatment experience with telehealth

- Very Satisfied: 113
- Satisfied: 8
- Neutral: 1
- Dissatisfied: 0
- Very Dissatisfied: 0
Evidence – Clinical Effectiveness, Satisfaction & Cost

- Student health and educational performance are interdependent.
- A school-based telehealth clinic can bring resources and collaboration to schools located in rural, poor, and medically underserved areas (Burke et al., 2008).
- Telehealth is “increasing access to acute and specialty care for children; helping children and families manage chronic conditions; facilitating health education for children, families and school personnel; and increasing the capacity of school nurses and school-based health centers to meet the healthcare needs of students” (The Children’s Partnership, 2009).
- A study showed a 63% reduction in absence resulting from illness in urban children (McConnochie, Wood, Herendeen & Roghmann, 2005).
- “Health-e-Access was well accepted by a substantial, diverse group of patients….Convenience and convenience-related experience dominated perceptions” (McConnochie et al., 2010).
- Families evaluated an acute-care pediatric telemedicine service in urban neighborhoods and indicated 97.6% satisfaction (satisfied or highly satisfied rating) (McIntosh et al., 2014)
- “The Health-e-Access telemedicine model holds potential to reduce health care costs, mostly through replacement of ED visits for non-emergency problems” (McConnochie et al., 2009).


Questions?

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