Telemedicine in Rural Communities
An Innovative Approach to Delivering Healthcare

Learn About School-Based Telemedicine
What's Involved, How to Get Started and the Secrets to Success

August 19, 2014. Start time is 12:00 PM (central time)
Questions During Webinar

- Type into “Question” box in control panel
- 15 minute Q&A session after presentations
- Webinar technical support call 800-263-6317
School-Based Telemedicine in Rural Communities Webinar, August 2014

Featured Presenters


Lessons Learned from Experience How To Get Started & Succeed:

Jenny Kattlove
Director, Strategic Health Initiatives
The Children's Partnership

Amanda Martin
Executive Director
Center for Rural Health Innovation, My Health-e-Schools
School-Based Telemedicine: An Innovative Approach to Meet the Health Care Needs of Children

Jenny Kattlove
The Children’s Partnership
What is Telemedicine?

Telemedicine is the use of technology to provide health care at a distance.
What is Telemedicine?

- Video conferencing
- Store and forward software
- Remote monitoring
School-Based Telemedicine: Applications and Impact

- Brings care to children who may otherwise go without
- Adds value to existing school-based health services
- Allows community health systems (e.g., clinics, hospitals) to bring care to where children are – at school
- Helps keep children in school and parents at work
- Parent satisfaction
- Efficient use of resources
- Can be cost effective
School-Based Telemedicine: Applications and Impact

- Increased access to acute care
- Chronic disease management
- Behavioral and mental health care
- Dental care
- Health education for children and families
- Education, training, and support for school staff
Financing and Sustaining School-Based Telemedicine

- Grants for start-up
- Leverage current technology
- Education funds
- Medicaid and CHIP
  - Advocating for policy changes
  - Creating volume
  - Outreach and enrollment
- Medicaid Administrative Assistance
Lessons from Across the Country

- Engaging parents is critical
- Role of school nurse is crucial
- Conduct a needs assessment
- Obtain community buy-in
- Work with local health care providers; promote medical home
Lessons from Across the Country

- Take a multidisciplinary approach
- Schools need resources
- Technology must be reliable
- Invest in evaluation
School-Based Telehealth: An Innovative Approach to Meet the Health Care Needs of California’s Children

- Schools’ roles in meeting the health care needs of children
- The role of telemedicine in meeting the health care needs of children
- Profiles of selected school-based telemedicine programs
- Benefits of school-based telemedicine
- Lessons learned

http://www.childrenspartnership.org/schoolbasedtelehealth
Contact Information

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www.childrenspartnership.org
Lessons Learned from Experience

How to Develop & Implement an Effective & Sustainable School-Based Telemedicine Program

Amanda Martin
MY Health-e-Schools Telemedicine Program
How to Develop & Implement an Effective & Sustainable School-Based Telemedicine Program

- Why?
- Existing Models for Program Structure and Method
- Who Are We? Where Are We?
- Hub & Spoke Model
- Planning Phase, Listening to our Community & Applying for Grants
- Pilot Year... and the Next Two Years
- Billing
- Challenges/Surprises/What to Measure
- Resources
School-Based Health Centers

No matter how good schools are, students won't be able to learn if they're not healthy.
- Secretary of Education Arne Duncan
Examined Existing Models

- University of Rochester
  - Link 33 daycare centers to 10 physician practices

- Akron Children’s Hospital
  - Links 2 schools to a children’s hospital

- Kansas University Medical Center
  - 10 schools in 7 counties in Kansas
Store and Forward

- Dermatology
- Pathology
- Radiology
- Some acute care
Real-Time Telemedicine

- Consultations
- Direct Patient Interaction
- Medical Education
- Group discussions
Mitchell and Yancey Counties
Hub and Spoke Model
Spoke Sites

- Clinical Station
  - Camera
  - Monitor
  - Stethoscope
  - Otoscope
  - Exam camera

- Locate in an office or tutoring room
Hub Sites

- Receiving Station
  - Camera
  - Monitor
  - Computer
  - Connections to peripherals
Medical Peripherals

General Exam Camera

ENT Otoscope

Electronic Stethoscope
Initial Planning

- Building local relationships
- Research
- UC-Davis Telemedicine Course
- American Telemedicine Association
- Launching the plan
Organizational Development

- 501c3 partnership
- Advisory board
- Hiring a STAFF PERSON
- Developing image
- Social media
Needs Assessment

Listening Sessions

- School Nurses
- Teachers
- Parents
- At-risk students
- Local healthcare providers
Needs Assessment

Family Survey

- Sent home with students
- 30%+ response rate
- Complemented with a teacher survey
## Desired Health Services at School

<table>
<thead>
<tr>
<th>Service</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute injury or illness care</td>
<td>85.5%</td>
<td>954</td>
</tr>
<tr>
<td>Physical exams, including sports physicals</td>
<td>61.3%</td>
<td>684</td>
</tr>
<tr>
<td>Learn about healthy living</td>
<td>53.7%</td>
<td>599</td>
</tr>
<tr>
<td>Health Education</td>
<td>44.4%</td>
<td>496</td>
</tr>
<tr>
<td>Dermatology</td>
<td>38.8%</td>
<td>433</td>
</tr>
<tr>
<td>Counseling for depression, drug abuse, family problems</td>
<td>36.7%</td>
<td>410</td>
</tr>
<tr>
<td>Disease management</td>
<td>36.5%</td>
<td>407</td>
</tr>
<tr>
<td>Help to quit smoking</td>
<td>16.1%</td>
<td>180</td>
</tr>
<tr>
<td>N=</td>
<td></td>
<td>1116</td>
</tr>
</tbody>
</table>
Would you consider letting your child use school-based telemedicine services?

<table>
<thead>
<tr>
<th>Response</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>32.3%</td>
<td>408</td>
</tr>
<tr>
<td>Probably</td>
<td>25.8%</td>
<td>326</td>
</tr>
<tr>
<td>I don’t know</td>
<td>32.4%</td>
<td>410</td>
</tr>
<tr>
<td>Probably not</td>
<td>3.8%</td>
<td>48</td>
</tr>
<tr>
<td>No</td>
<td>5.8%</td>
<td>73</td>
</tr>
<tr>
<td>N=</td>
<td></td>
<td>1265</td>
</tr>
</tbody>
</table>
I would consider letting my child use telemedicine if…. (n=376)

<table>
<thead>
<tr>
<th>Response</th>
<th>Percent</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Received more information</td>
<td>34%</td>
<td>128</td>
</tr>
<tr>
<td>Parents were informed and involved</td>
<td>14.7%</td>
<td>54</td>
</tr>
<tr>
<td>The provider was qualified</td>
<td>11.4%</td>
<td>43</td>
</tr>
<tr>
<td>There was a true need or an emergency</td>
<td>5.6%</td>
<td>21</td>
</tr>
<tr>
<td>Confidence in the care and the providers</td>
<td>5.3%</td>
<td>20</td>
</tr>
<tr>
<td>If it was provided</td>
<td>5.1%</td>
<td>19</td>
</tr>
<tr>
<td>Affordable and/or free if no insurance</td>
<td>4%</td>
<td>15</td>
</tr>
</tbody>
</table>
# Equipment Grants

<table>
<thead>
<tr>
<th>Year</th>
<th>Source</th>
<th>Match</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>Local Foundation</td>
<td>0</td>
<td>$40,000</td>
</tr>
<tr>
<td>2010</td>
<td>App. Regional Comm.</td>
<td>70:30</td>
<td>$90,000</td>
</tr>
<tr>
<td>2011</td>
<td>USDA-RUS</td>
<td>2:1</td>
<td>$260,000</td>
</tr>
<tr>
<td>2011</td>
<td>HRSA SBHC</td>
<td>0</td>
<td>$54,000</td>
</tr>
<tr>
<td>2011</td>
<td>HRSA SBHC</td>
<td>0</td>
<td>$145,000</td>
</tr>
</tbody>
</table>

School-Based Telemedicine in Rural Communities Webinar, August 2014
Staffing Needs

- Nurse Practitioner
- Program Manager
- Mental Health Provider
- IT Support
Operational Funds

- Essential to cover start-up costs
- Feasibility study was very beneficial in helping get these grants
- Be honest with your funders if you are not hitting your targets
Pilot Network Components

- 700 students with access
- ~225 enrolled
- One elementary and two middle schools
2011-2012 Pilot Network

- Small steps to work out the bugs
- Segment the funding
- Grow based on demands and finances
- Multiple challenges, limited number of patients
# Implementation Plan

<table>
<thead>
<tr>
<th>School Year</th>
<th>Sites</th>
<th>Potential Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-2012</td>
<td>3</td>
<td>700</td>
</tr>
<tr>
<td>2012-2013</td>
<td>10</td>
<td>2,600</td>
</tr>
<tr>
<td>2013-2014</td>
<td>14</td>
<td>4,000</td>
</tr>
<tr>
<td>2014-2015</td>
<td>21</td>
<td>8,000</td>
</tr>
<tr>
<td>2015-2016</td>
<td>27</td>
<td>12,000</td>
</tr>
</tbody>
</table>
Challenges

- Enrollment
- School nurses
- Legal issues
- HIPPA-FERPA
- Electronic Health Record
- Staffing
Surprises

- Evaluation is useless without a way to make the treatment happen
- Eavesdropping pays off
- Flexibility matters
- Growth curve? What growth curve?
Outcome Measures

- Attendance
- Coordination of Care
- Satisfaction Measures
- Cost-savings to Medicaid
- Health outcomes
- Annual preventive care
- Financial viability
Resources

- learntelehealth.org
- Mid-Atlantic Telehealth Resource Center
- American Telemedicine Association
- School-Based Health Alliance
- Global Telemedicine: The Future of Medicine...Now!
- Center for Rural Health Innovation
- my health:ESchools
- The Children’s Partnership
Contact Information

my health eSchools

Find us on Facebook

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Choosing Telemedicine Equipment & Technology

Consider:

- Medical specialties servicing
- Environment of equipment
- Training required of users
- Integration with existing IT infrastructure
Types of Telemedicine Equipment & Technology

- Clinical Telemedicine Systems
- Medical Devices
- Encounter Management Software
Contact Information

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Q&A Session

- Type your questions for the presenters in the control panel box

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Amanda Martin
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- You can also email the presenters directly with questions after the webinar

- Webinar technical support call 800-263-6317
Thank You for Attending

- Archived presentation will be available in next few days.
- List of telemedicine resource centers will be provided