National Emergency Department Inventory

This survey is funded by the R Baby Foundation (www.rbabyfoundation.org)

Please find below questions that apply to the year 2016 (either fiscal or calendar year is acceptable). If you are unable to quickly find the precise answer, we welcome your best estimate. We would like to know the following about your hospital:

1. What is the name of your hospital/ED? ________________________________

2. What is the mailing address of your hospital/ED? ________________________________

3. In 2016, was your ED open:
   a. 24 hours/day, 7 days/week?  ☐ Yes  ☐ No  
   b. 365 days per year?  ☐ Yes  ☐ No
   If NO to either question, please explain: _______________________________________

4. Please indicate the total number of patient visits at your ED and the 12-month reporting period to which they apply.
   
   # ED VISITS  
   
   From ___/___ to ___/___  
   
   # CHILD ED VISITS  
   
5. Approximate number of ED visits by children (e.g., age <18):
   
   5a. If your ED uses another age to distinguish between children and adults (e.g., age 21 years), and it's difficult to obtain data for age <18, please respond above according to your ED’s cut-off.
   
   If you have used an age other than <18 years, please specify cut-off here: Age < ____ years

6. For EDs that regularly treat adults: Does your ED have a separate "pediatric ED" (i.e., a dedicated ED area for children only)?  ☐ Yes  ☐ No  ☐ Not applicable (e.g., children’s hospital)

7. Do you have identified coordinators for pediatric emergency medicine in your ED? (check all that apply)
   
   ☐ Yes, physician coordinator(s)  ☐ Yes, nurse coordinator(s)  ☐ No  
   ☐ Yes, other coordinator(s) (e.g., PA, administrator), please specify: ________________________________

8. Does your hospital provide telemedicine services for patient evaluation?  ☐ Yes  ☐ No  ☐ Not sure

9. Does your ED receive telemedicine services for patient evaluation?  ☐ Yes  ☐ No
   
   If your ED receives telemedicine services, does your ED utilize telemedicine for: (check all that apply)
   
   ☐ Pediatrics  ☐ Psychiatry  ☐ Dermatology  ☐ Transfer coordination
   ☐ Stroke/Neuro  ☐ Trauma  ☐ Radiology  ☐ Other: ________________________________

The results from this national survey will be used to upgrade our existing app, EMNet findERnow. We hope that you can help us with this short/simple survey as we work to bring accurate, beneficial ED information directly to those in need.

Please take a moment to send your answers to us in the attached, pre-paid envelope. If you prefer, we also welcome your responses by email (emnet@partners.org) or by fax to 617-724-4050. Another option is to complete this short form online at: https://is.gd/findERnow (please note that the URL is case-sensitive).

Thank you!
Carlos Camargo
(on behalf of EMNet)

We welcome your comments and suggestions! Please feel free to write on the back of this form, or to contact us:

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Pediatric telemedicine in EDs

Follow-up Survey Instrument

Study of Telemedicine Use for Pediatrics in US Emergency Departments

The Emergency Medicine Network (EMNet), based at the Massachusetts General Hospital in Boston, coordinates multicenter studies on many topics in emergency medicine, including the delivery and quality of emergency care.

Last year, your emergency department (ED) reported receiving telemedicine services for the evaluation of children. We are hoping to learn more about these services. This research survey asks about your ED’s pediatric telemedicine use in the year 2017, and should take 2-5 minutes to complete. We will not share your ED’s data with anyone; the results will only be presented in aggregate form.

Thank you for helping us understand this understudied topic in emergency care.

1. Does your ED receive telemedicine services for the evaluation of children? Y/N
   a) **If NO to 1:** Just to confirm, does your ED use telemedicine to diagnose, treat, or transfer children visiting your ED? Y/N
   b) **If NO to 1 And 1a:** Thank you for your time. Please do not proceed with the following questions and return this completed survey to us.

**IF YOUR ED RECEIVES TELEMEDICINE:**

![Diagram of telemedicine](image)

2. a) In 2017, was telemedicine ever used to evaluate infants (<1 year) visiting your ED? Y/N
   b) In 2017, was telemedicine ever used to evaluate children (1 year – 17.9 years) in your ED? Y/N

3. In 2017, were pediatric telemedicine services available in your ED 24/7 year-round? Y/N
   a) **If NO to 3:** Are there set hours for which your ED uses pediatric telemedicine services? Y/N
   b) **If YES to 3a:** What are those hours?
     - Monday
     - Please indicate set hours on Monday:
     - Tuesday
     - Please indicate set hours on Tuesday:
     - Wednesday
     - Please indicate set hours on Wednesday:
     - Thursday
     - Please indicate set hours on Thursday:
     - Friday
Pediatric telemedicine in EDs

- Please indicate set hours on Friday:
  - Saturday
- Please indicate set hours on Saturday:
- Sunday
  - Please indicate set hours on Sunday:

4. Now focusing on staff in your ED, in 2017, was there ever a board certified or board eligible pediatric emergency physician who worked clinically in your ED? Y/N

   a) **If YES to 4**, how many hours in a typical 24-hour day was there at least one board certified or board eligible pediatric emergency physician on duty in the ED?

5. In 2017, was there ever a board certified or board eligible pediatrician who worked clinically in your ED? Y/N

   a) **If YES to 5**, how many hours in a typical 24-hour day was there at least one board certified or board eligible pediatrician on duty in the ED?

6. To your knowledge, for which of the following purposes do staff in your ED use pediatric telemedicine?
   (select all that apply):
   - Diagnosis of conditions
   - Treatment of conditions
   - Placement and transfer coordination
   - Admission or discharge of patients
   - Staff education
   - Other (please describe): __________________________________________

6.a.1. **If YES to 6a or 6b:** To your knowledge, which of the following conditions does your ED diagnose or treat with the help of pediatric telemedicine? (select all that apply)

For each option that you choose, please clarify whether your ED diagnoses or treats (or both) this condition with the help of telemedicine.
   - Behavioral/psychiatric
   - Injuries and open wounds
   - Respiratory complaints
   - Fever
   - Conditions requiring critical care
7. To your knowledge, what facility or organization provided pediatric telemedicine services to patients in your ED in 2017? (select all that apply)

a) Another hospital in your hospital system
b) A hospital in a different hospital system
c) Private organization/company (please list name if applicable)
d) Unaffiliated pediatrician/clinician
e) Other (please describe): ____________________________

8. To your knowledge, what was the biggest challenge in implementing pediatric telemedicine in your ED in 2017?

a) Clinical concerns – e.g., concern that telemedicine would interfere with patient-provider relationship
b) Legal concerns – patient health information, liability, or medico-legal issues
c) Cost concerns – e.g., costs related to the technology or of ‘subscription’ to services
d) Administrative concerns – e.g., credentialing outside telemedicine providers, billing laws
e) Fear of losing patients
f) Had tried it in the past but did not find it valuable for patient care
g) Technological concerns – e.g., discomfort with or difficulty incorporating a new technology into the department
h) Process concerns – e.g. concerns about slowing or interrupting providers’ work-flow
i) Other (please specify):

9. Now shifting the focus to include all patients, both adults and children: To your knowledge, how often did any visits to your ED involve the use of telemedicine in 2017?

a) Never
b) <1 per month
c) Every 3-4 weeks
d) Every 1-2 weeks
e) >1 per week

Thank you for your participation!
Supplemental Table 1: Pediatric Telemedicine Survey Items, n=89

<table>
<thead>
<tr>
<th>Pediatric Telemedicine Survey Items</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telemedicine ever used to evaluate infants (aged &lt; 1 year) in the ED</td>
<td>42 (48)</td>
</tr>
<tr>
<td>Telemedicine ever used to evaluate children (aged 1 year - 17.9 years) in the ED?</td>
<td>71 (81)</td>
</tr>
<tr>
<td>Pediatric telemedicine services available in ED 24/7/365</td>
<td>87 (98)</td>
</tr>
<tr>
<td>Ever a board certified or board eligible pediatric emergency physician who works clinically in the ED</td>
<td>9 (10)</td>
</tr>
<tr>
<td>Ever a board certified or board eligible pediatrician who worked clinically in the ED</td>
<td>6 (7)</td>
</tr>
</tbody>
</table>

Facility or organization providing pediatric telemedicine services to patients in ED

<table>
<thead>
<tr>
<th>Facility or organization providing pediatric telemedicine services to patients in ED</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Another hospital in same hospital system</td>
<td>33 (38)</td>
</tr>
<tr>
<td>Hospital in different hospital system</td>
<td>38 (43)</td>
</tr>
<tr>
<td>Private organization/company</td>
<td>20 (23)</td>
</tr>
<tr>
<td>Unaffiliated pediatrician/clinician</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Other</td>
<td>0 (0)</td>
</tr>
</tbody>
</table>

Single greatest reported challenge in implementing pediatric telemedicine

<table>
<thead>
<tr>
<th>Single greatest reported challenge in implementing pediatric telemedicine</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical concerns – e.g., concern that telemedicine would interfere with patient-provider relationship</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Legal concerns – patient health information, liability, or medico-legal issues</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Cost concerns – e.g., costs related to the technology or of ‘subscription’ to services</td>
<td>3 (3)</td>
</tr>
<tr>
<td>Administrative concerns – e.g., credentialing outside telemedicine providers, billing laws</td>
<td>3 (3)</td>
</tr>
<tr>
<td>Fear of losing patients</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Had tried it in the past but did not find it valuable for patient care</td>
<td>4 (5)</td>
</tr>
<tr>
<td>Technological concerns – e.g., discomfort with or difficulty incorporating a new technology into the department</td>
<td>12 (14)</td>
</tr>
<tr>
<td>Process concerns – e.g., concerns about slowing or interrupting providers’ work-flow</td>
<td>26 (30)</td>
</tr>
<tr>
<td>Other</td>
<td>6 (7)</td>
</tr>
<tr>
<td>Pediatric visit volume not high enough to observe challenges</td>
<td>5 (6)</td>
</tr>
<tr>
<td>No concerns</td>
<td>34 (39)</td>
</tr>
</tbody>
</table>

Frequency of all ED telemedicine use (adults and children)

<table>
<thead>
<tr>
<th>Frequency of all ED telemedicine use (adults and children)</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>1 (1)</td>
</tr>
<tr>
<td>&lt;1 per month</td>
<td>21 (24)</td>
</tr>
<tr>
<td>Every 3-4 weeks</td>
<td>23 (26)</td>
</tr>
<tr>
<td>Every 1-2 weeks</td>
<td>16 (18)</td>
</tr>
<tr>
<td>&gt;1 per week</td>
<td>27 (31)</td>
</tr>
</tbody>
</table>

Abbreviations: ED, emergency department; 24/7/365, 24 hours per day/7 days per week/365 days per year.