Measures Associated with Facility Recognition

The Illinois EMSC Facility Recognition Program

Since 1998, over 100 hospitals in Illinois have received recognition by the Illinois Department of Public Health and Illinois Emergency Medical Services for Children (EMSC) for having the essential resources and capabilities in place to meet the emergency needs of seriously ill and injured children. Illinois Administrative Code 77, Subpart J, Sections 515.4000, 515.4010, and 515.4020 define specifically the criteria associated with facility recognition.

Hospitals can apply for one of three levels of voluntary recognition.

- Hospitals with a dedicated pediatric intensive care unit and pediatric inpatient specialties and capabilities can apply for the Pediatric Critical Care Center (PCCC) level.
- Facilities that provide comprehensive emergency services can seek recognition as an Emergency Department Approved for Pediatrics (EDAP).
- The Standby Emergency Department for Pediatrics (SEDP) recognition is available for hospitals that provide stabilization measures and that have transfer guidelines in place when more definitive care is needed.

Note that facilities applying for the PCCC level must also meet EDAP standards.

Hospitals seeking this voluntary designation receive a site visit by the EMSC program staff to verify that their Emergency Department (and Pediatric Intensive Care Unit and Pediatric Inpatient capabilities for PCCC hospitals) is capable of meeting the following key pediatric emergency and critical care standards:

- Professionals specially trained in pediatric emergency and critical care;
- Adequate staffing and provisions for pediatric consultation and backup to support provision of pediatric emergency care services;
- Availability of essential pediatric equipment, supplies and medication;
- Implementation of protocols addressing the high volume and high risk pediatric population; and
- Inclusion of pediatrics into emergency services quality improvement activities, and monitoring of high risk cases such as pediatric deaths, interfacility transfers, child abuse/neglect cases and critically ill and injured children requiring stabilization.
Measures of Effectiveness

In an effort to evaluate effectiveness associated with the facility recognition program, inpatient discharge data obtained from the Illinois Hospital Association were evaluated. Specifically, mortality rates per 1,000 inpatients were calculated for 0-15 year olds who were admitted with a principal diagnosis of injury.

To conduct a pre- and post-recognition comparison, records were restricted to facilities that obtained recognition between the years of 1994 and 2015. This included all recognition levels (PCCC, EDAP or SEDP).

As shown in Figure 1, using this approach, the post-recognition mortality rate was 9.9 per 1,000 inpatients, significantly lower than the pre-recognition rate of 12.2 deaths per 1,000 inpatients ($p < 0.05$, Pearson Chi-Square). Decreases in mortality can likely be attributed to multiple factors, one of which may be the increased awareness and attention to pediatric emergency care needs emphasized through the facility recognition process.

Figure 1. Mortality Rates per 1,000 Inpatient Injury-Related Admissions 0-15 Year Olds, 1994-2015
(Note: Records were restricted to hospitals participating in facility recognition)

<table>
<thead>
<tr>
<th></th>
<th>Pre-Recognition</th>
<th>Post-Recognition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients</td>
<td>31,954</td>
<td>60,483</td>
</tr>
<tr>
<td>Deaths</td>
<td>391</td>
<td>601</td>
</tr>
<tr>
<td>Rate</td>
<td>12.2</td>
<td>9.9</td>
</tr>
</tbody>
</table>

Notes: Records for all available years (1994-2015) were used, restricted to hospitals participating in facility recognition. Error bars represent 95% confidence intervals.

Data Source: Illinois Hospital Association