

## **Introduction to the Pediatric Best Practices Tool**

**What is the purpose of this tool?** The purpose of this tool is to provide:

- Detailed description of best practices, including suggestions for improvement, prescribed process steps, and additional resources.
- Sufficient information to complete a Gap Analysis (Tool D.5), make a decision to implement (or not to implement) a process, and develop an Implementation Plan (Tool D.6).

This tool provides information on evidence-based best practices when available, as well as information gathered from real-world experience in working with hospitals. The references cited were not derived from a full systematic evidence-based review, and the best practices forms are not meant to replace validated guidelines. Guidelines developed specifically for pediatric populations were frequently not available. We used general guidelines whenever the best practices could be reasonably applied to pediatric populations and included specific pediatric best practices whenever available.

The information contained in these documents should be used to review and compare against your organization's current processes to determine where gaps may exist. As always, the final decision regarding whether to implement the practices provided in this document should be made by a multidisciplinary quality improvement team in your hospital and should be based on circumstances specific to your organization.

Of note, these best practices were created in 2014 based on v4.5 of the AHRQ PDIs and updated based on feedback from our evaluation. Thus, you may identify updated guidelines and/or changes to indicator specifications that may differ from the best practices in this Toolkit. Best practices will be updated periodically as the Pediatric QI Toolkit is updated.

**Which PDIs have best practices forms?** Best practices forms have been developed for all PDIs for which there was sufficient evidence to recommend best practices. Best practices forms exist for the following 12 PDIs:

- NQI 01 Neonatal Iatrogenic Pneumothorax Rate (bundled with the best practices for PDI 05)
- NQI 03 Neonatal Blood Stream Infection Rate
- PDI 01 Accidental Puncture or Laceration Rate
- PDI 02 Pressure Ulcer Rate
- PDI 03 Retained Surgical Item or Unretrieved Device Fragment Count
- PDI 05 Iatrogenic Pneumothorax Rate
- PDI 06 RACHS-1 Pediatric Heart Surgery Mortality Rate
- PDI 08 Perioperative Hemorrhage or Hematoma Rate
- PDI 09 Postoperative Respiratory Failure Rate
- PDI 10 Postoperative Sepsis Rate
- PDI 11 Postoperative Wound Dehiscence Rate
- PDI 12 Central Venous Catheter-Related Blood Stream Infection Rate

**Why are there only best practices for selected PDIs?** There are some indicators for which it would be impractical or infeasible to develop best practices forms based on the available evidence. In addition, some PDIs related to preventable hospitalizations reflect the quality of ambulatory care, not the quality of in-hospital care (PDIs 14, 15, 16, 17, 18, and 19). The other indicators for which we do not have best practices forms are listed below, along with a rationale for why best practices were not developed:

- *NQI 02 Neonatal Mortality Rate*: This PDI relates to the death rate for a number of ICD-9<sup>i</sup> codes. Given the heterogeneity of these diagnoses, it would not be feasible to develop a best practices form that addresses all of these conditions.
- *PDI 07 RACHS-1 Pediatric Heart Surgery Volume*: Increasing heart surgery volume is not a practice that is amenable to a best practices form.
- *PDI 13 Transfusion Reaction Count*: There are extensive existing guidelines on blood product transfusions. Some guidelines are product specific, so the best practices form can become very complex. However, the creation of a best practices form about general practices related to preventing transfusion reactions would not help readers, as most, if not all, hospitals have transfusion guidelines in place.

**Who are the target audiences?** The primary audiences include quality improvement leaders, clinical leaders, and multidisciplinary frontline staff members involved in the care of children.

**What does the tool include?** The Best Practices and Suggestions for Improvement Tool details each of the following components of a best practice and its implementation:

- Background information on the problem
- Brief summary table of best practices
- Best processes/systems of care
- Additional resources

**How does this tool relate to others?** The Best Practices and Suggestions for Improvement Tool is used to prepare the Gap Analysis (Tool D.5) and the Implementation Plan (Tool D.6).

**What are the steps for using the tool?**

1. See instructions for Gap Analysis (Tool D.5).
2. Use the appropriate Selected Best Practices and Suggestions for Improvement Tool to populate the Gap Analysis (Tool D.5).

---

<sup>i</sup> ICD-9 = International Classification of Diseases, 9<sup>th</sup> Revision.