

Introduction to the Quality Indicators 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 for the care of adults and children 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. 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 QIs 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 QI Toolkit is updated.

Which QIs have best practices forms? Best practices forms have been developed for all PSIs and PDIs for which there was sufficient evidence to recommend best practices.

Best practices forms exist for the following 14 PSIs:

- PSI 03 Pressure Ulcer Rate
- PSI 05 Retained Surgical Item or Unretrieved Device Fragment Count
- PSI 06 Iatrogenic Pneumothorax Rate
- PSI 07 Central Venous Catheter-Related Blood Stream Infection Rate
- PSI 08 Postoperative Hip Fracture Rate
- PSI 09 Perioperative Hemorrhage or Hematoma Rate
- PSI 10 Postoperative Physiologic and Metabolic Derangement Rate
- PSI 11 Postoperative Respiratory Failure Rate
- PSI 12 Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate
- PSI 13 Postoperative Sepsis Rate
- PSI 14 Postoperative Wound Dehiscence Rate
- PSI 15 Accidental Puncture or Laceration Rate

- PSI 18 Obstetric Trauma Rate—Vaginal Delivery With Instrument
- PSI 19 Obstetric Trauma Rate—Vaginal Delivery Without Instrument

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

In addition, a more general best practices form addressing mortality review was developed, which hospitals can use to implement review and improvement strategies for any of the mortality-based IQIs.

Why are there only best practices for selected QIs? 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:

- *PSI 02 Death Rate in Low-Mortality Diagnosis Related Groups (DRGs):* This PSI contains roughly 119 DRGs that are considered low mortality. Given the heterogeneity of these diagnoses, it would not be feasible to develop a best practices form that addresses all of these conditions. In addition, a best practices form addressing mortality review could be used to implement review and improvement strategies for any of the conditions contained in this PSI.
- *PSI 04 Death Rate Among Surgical Inpatients With Serious Treatable Conditions:* This PSI calculates postoperative deaths with the following complications: pneumonia, pulmonary embolism/deep vein thrombosis (VTE), sepsis, shock/cardiac arrest, or gastrointestinal hemorrhage/acute ulcer. Best practices forms for VTE and sepsis already exist, and the remaining conditions are too heterogeneous to be captured by one best practices form. However, as noted above, a best practices form addressing mortality review could be used to implement review and improvement strategies for any of the conditions contained in this PSI.
- *PSI 16 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 very general 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.

- *PSI 17 Birth Trauma Rate—Injury to Neonate*: The existing literature on birth trauma and injury to the neonate suggests multiple risk factors, etiologies for, and types of birth trauma in neonates. Given this heterogeneity, creating one best practices form to address the various risk factors would not be feasible.
- *NQI 02 Neonatal Mortality Rate*: This PDI relates to the death rate for a number of ICD-9 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*: See rationale for PSI 16 above.

Who are the target audiences? The primary audiences include quality improvement leaders, clinical leaders, and multidisciplinary frontline staff members.

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).