NATIONAL QUALITY FORUM

TO: NQF Members and Public

FR: NQF Staff

RE: Pre-voting review for Serious Reportable Events in Healthcare—2011 Update: A

Consensus Report

DA: December 1, 2010

This draft report is the second update of the NQF-endorsed Serious Reportable Events in Healthcare: A Consensus Report, first published in 2002 and updated in 2006. The project seeks to endorse an updated list of serious reportable events (SREs) that includes 25 SREs from the 2006 list that have been updated and 4 new SREs. All the SREs have been reviewed in terms of their applicability to four specific settings of care—hospitals; ambulatory practice settings, specifically office-based practices; long-term care, specifically skilled nursing facilities; and outpatient or office-based surgery centers.

A Steering Committee of 20 individuals representing a diverse range of stakeholder perspectives reviewed and considered the 28 NQF-endorsed SREs along with 79 proposed modifications that touched each SRE and 12 proposed new events. Three Technical Advisory Panels (TAPs) assisted the Steering Committee in its review. This report recommends that 29 SREs be considered for endorsement and 3 existing SREs be retired.

The draft report, Serious Reportable Events in Healthcare—2011 Update: A Consensus Report, is posted on the NQF website along with the following additional information:

- SRE submission forms
- Meeting and call summaries from the Steering Committee and the TAPs

Pursuant to Section II.A of the Consensus Development Process v. 1.8, this draft document, along with the accompanying material, is being provided to you at this time for purposes of review and comment only—not voting. You may post your comments and view the comments of others on the NQF website.

NQF Member comments must be submitted no later than 6:00 pm ET, December 30, 2010. Public comments must be submitted no later than 6:00 pm ET, December 23, 2010.

NQF is now using a program that facilitates electronic submission of comments on this draft report. All comments must be submitted using the online submission process.

Supporting documents related to your comments may be submitted by e-mail to patientsafety@qualityforum.org with "Comment—SRE 2011" in the subject line and your contact information in the body of the e-mail.

Thank you for your interest in NQF's work. We look forward to your review and comments.

NQF DOCUMENT—DO NOT CITE, QUOTE, REPRODUCE OR DISTRIBUTE NQF MEMBER comments due December 30, 2010, 6:00 pm ET; PUBLIC comments due December 23, 2010, 6:00 pm ET

NATIONAL QUALITY FORUM

SERIOUS REPORTABLE EVENTS IN HEALTHCARE—2011 UPDATE: A CONSENSUS REPORT

DRAFT REPORT FOR COMMENTING

DRAFT NATIONAL QUALITY FORUM

SERIOUS REPORTABLE EVENTS IN HEALTHCARE—2011 UPDATE: A CONSENSUS REPORT

TABLE OF CONTENTS

| EXECUTIVE SUMMARY | 1 |
|---|----------|
| BACKGROUND | ∠ |
| Criteria for Inclusion of Events on the List | 5 |
| Box A—Criteria for Inclusion | <i>6</i> |
| STRATEGIC DIRECTIONS FOR NQF | 6 |
| NATIONAL PRIORITIES PARTNERSHIP | 7 |
| NQF'S CONSENSUS DEVELOPMENT PROCESS | 8 |
| Evaluating Potential Consensus Standards | 8 |
| RELATIONSHIP TO OTHER NQF-ENDORSED CONSENSUS STANDARDS | 8 |
| RECOMMENDATIONS FOR ENDORSEMENT | 9 |
| Updated and New Candidate Consensus Standards Recommended for Endorsement | 9 |
| Surgical or Invasive Procedure Events | 10 |
| Product or Device Events | 11 |
| Patient Protection Events | 12 |
| Care Management Events | 13 |
| Environmental Events | 15 |
| Radiologic EventsPotential Criminal Events | |
| Consensus Standards Recommended for Retirement | 17 |
| Candidate Consensus Standards Not Recommended for Endorsement | 18 |
| ADDITIONAL RECOMMENDATIONS | |
| NOTES | 21 |

DRAFT NATIONAL QUALITY FORUM

SERIOUS REPORTABLE EVENTS IN HEALTHCARE—2011 UPDATE: A CONSENSUS REPORT

EXECUTIVE SUMMARY

The National Quality Forum (NQF)-endorsed[®] Serious Reportable Events in Healthcare were released initially in 2002. The purpose of the serious reportable events (SREs) is to facilitate uniform and comparable public reporting to enable systematic learning across healthcare organizations and systems and to drive systematic national improvements in patient safety based on what is learned both about the events and about how to prevent their recurrence. Originally envisioned as a set of events that might form the basis for a national state-based reporting system, the SREs continue to fill that purpose as organizations, independent of NQF, have put them into practice. Additionally, they have been used or adapted by national entities with the goal of illuminating such events in order to facilitate learning and improvement.

The purpose of the 2011 update is to 1) ensure the continued currency and appropriateness of each event in the list; 2) ensure that the events remain appropriate for public accountability in light of their standing as voluntary consensus standards; and 3) provide guidance gained by implementers to those just beginning the reporting of these events, across hospitals and for three newly specified settings of care—office-based practices, ambulatory surgery centers, and skilled nursing facilities.

This second update of NQF's serious reportable events presents the results of evaluation of the 28 NQF-endorsed SREs, with recommended modifications, and 12 new events considered under NQF's Consensus Development Process (CDP). After evaluation against the threshold criteria of unambiguous, largely preventable, and serious, 29 events are recommended for endorsement as voluntary consensus standards suitable for public reporting.

Serious Reportable Events in Healthcare—2011 Update

- 1. SURGICAL OR INVASIVE PROCEDURE EVENTS
 - A. Surgery or other invasive procedure performed on the wrong site
 - B. Surgery or other invasive procedure performed on the wrong patient
 - C. Wrong surgical procedure or other invasive procedure performed on a patient

- D. Unintended retention of a foreign object in a patient after surgery or other invasive procedure
- E. Intraoperative or immediately postoperative/postprocedure death in an ASA Class 1 patient

2. PRODUCT OR DEVICE EVENTS

- A. Patient death or serious injury associated with the use of contaminated drugs, devices, or biologics provided by the healthcare setting
- B. Patient death or serious injury associated with the use or function of a device in patient care, in which the device is used or functions other than as intended
- C. Patient death or serious injury associated with intravascular air embolism that occurs while being cared for in a healthcare setting

3. PATIENT PROTECTION EVENTS

- A. Discharge or release of a patient/resident of any age, who is unable to make decisions, to other than an authorized person
- B. Patient death or serious injury associated with patient elopement (disappearance)
- C. Patient suicide, or attempted suicide, while being cared for in a healthcare setting

4. CARE MANAGEMENT EVENTS

- A. Patient death or serious injury associated with a medication error (e.g., errors involving the wrong drug, wrong dose, wrong patient, wrong time, wrong rate, wrong preparation, or wrong route of administration)
- B. Patient death or serious injury associated with unsafe administration of blood products
- C. Maternal death or serious injury associated with labor or delivery in a low-risk pregnancy while being cared for in a healthcare setting
- D. Death or serious injury of a neonate associated with labor or delivery in a low-risk pregnancy while being cared for in a healthcare setting
- E. Patient death or serious injury associated with a fall during or after being cared for and prior to leaving the grounds of a healthcare setting
- F. Any Stage 3, Stage 4, and unstageable pressure ulcers acquired after admission/presentation to a healthcare setting
- G. Artificial insemination with the wrong donor sperm or wrong egg
- H. Death or serious injury resulting from the irretrievable loss of a biological specimen
- I. Death or serious injury resulting from failure to follow up or communicate clinical information

5. ENVIRONMENTAL EVENTS

- A. Patient or staff death or serious injury associated with an electric shock in the course of a patient care process in a healthcare setting
- B. Any incident in which systems designated for oxygen or other gas to be delivered to a patient contains no gas, the wrong gas, or is contaminated by toxic substances
- C. Patient or staff death or serious injury associated with a burn incurred from any source in the course of a patient care process in a healthcare setting
- D. Patient death or serious injury associated with the use of physical restraints or bedrails while being cared for in a healthcare setting

6. RADIOLOGIC EVENTS

A. Death or serious injury of a patient or staff associated with the introduction of a metallic object into the MRI area

7. POTENTIAL CRIMINAL EVENTS

- A. Any instance of care ordered by or provided by someone impersonating a physician, nurse, pharmacist, or other licensed healthcare provider
- B. Abduction of a patient/resident of any age

- C. Sexual abuse/assault on a patient or staff member within or on the grounds of a healthcare setting
- D. Death or significant injury of a patient or staff member resulting from a physical assault (i.e., battery) that occurs within or on the grounds of a healthcare setting

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

Safety Event Information: A Consensus Report. 1

BACKGROUND

The NQF-endorsed[®] Serious Reportable Events in Healthcare were released initially in 2002, one of the first products of the ongoing effort to enable healthcare quality and safety improvement through introduction of tools for assessing, measuring, and reporting organizational performance. Those efforts were aimed, as they are now, at facilitating learning within the healthcare industry that would lead to delivery of high-quality and safer healthcare. Then, as now, the focus is on what can be done on the part of all members of the healthcare enterprise to ensure that those who seek care are protected from injury while receiving "world class" healthcare. This can only occur when all parts of the healthcare industry work together to find and correct unsafe conditions in the spirit of providing an environment that is safe for patients and for those involved in the delivery of care. Each individual event (rather than frequencies of events) should be reported and investigated by healthcare institutions as they occur. The purpose of the NQF-endorsed list of Serious Reportable Events in Healthcare is to facilitate uniform and comparable public reporting to enable systematic learning across healthcare organizations and systems and to drive systematic national improvements in patient safety based on what is learned both about the events and about how to prevent their recurrence. The SREs were originally envisioned as a set of events that might form the basis for a national state-based reporting system, and they continue to serve that purpose. Additionally, they have been used or adapted by national entities with the goal of illuminating such events in order to facilitate learning and improvement. Every healthcare organization is, and should want to be, accountable for the quality of care it delivers and the safety of all it serves—staff, visitors, families, and most particularly, patients. Accountability in this context encompasses 1) diligent effort to discover vulnerabilities that could lead to adverse events; 2) focused review and analysis of events that do occur to determine causal or contributing factors; and 3) public reporting to enable other organizations to apply lessons learned and actions to prevent recurrence. All who report such events or sponsor reports should recognize and respect the fact that using reports to fix blame is counter-productive in the patient safety improvement effort. Further guidance related to publicly reporting patient safety events is available in National Voluntary Consensus Standards for Public Reporting of Patient

In keeping with the expectations set in the initial report, *Serious Reportable Events in Healthcare*—2011 *Update* has undergone significant changes. The purpose of the update is to 1) ensure the continued currency and appropriateness of each event in the list; 2) ensure that the events remain appropriate for public accountability in light of their standing as voluntary consensus standards; and 3) provide guidance gained by implementers to those just beginning the reporting of these events across hospitals. Additionally, effort has been made to clarify what events should be reported for three other settings of care—office-based practices, ambulatory surgery centers, and skilled nursing facilities. In large part the differences across the four settings are nuances that find their way into the implementation guidance rather than necessitate significantly different specifications. It should be noted that a focus on these four settings of care does not preclude use of the events in other settings of care.

In all events where "serious disability" was part of the event description, the term has been replaced by "serious injury" to broaden application of the event. In some events this has been further broadened to capture change in patient risk status when the risk change requires long-term care or monitoring.

State, legal, or other jurisdictional boundaries that take precedence in the way the events are interpreted should be respected in reporting the events. The Steering Committee (Committee) was mindful of the jurisdictional boundaries as well as the importance of comparability within settings of care over time. For these reasons, changes to existing events were made only to the extent warranted by experience gained in their use and current evidence.

Criteria for Inclusion of Events on the List

To qualify for the list of SREs, an event must be unambiguous, largely preventable, and serious, as well as adverse, indicative of a problem in a healthcare setting's safety systems, or important for public credibility or public accountability. Some SREs are universally preventable and should never occur. Others are largely preventable and may be reduced to zero as knowledge and improved prevention strategies evolve. SREs that are entirely preventable and those that are largely preventable should be publicly reported. The criteria for inclusion (see Box A) and the definitions of terms (see Appendix B, Glossary) were closely reviewed, debated, revised, and subjected to public comment prior to being finalized for use in this update. The events described in this report meet those criteria; however, they do not represent all adverse events that might be useful to report or from which the healthcare industry can learn and make improvements.

Further, presence of an event on the list is not an a priori judgment either of a systems failure or a lack of due care.

The majority of events on the list are events that, over the years since they were endorsed as voluntary consensus standards, have continued to meet the criteria by which they were selected and have been accepted by organizations and states as appropriate for reporting, but yet have continued to occur.

179

173

174

175

176

177

178

Box A—Criteria for Inclusion

To qualify for the list of *Serious Reportable Events in Healthcare— 2011 Update* an event must be unambiguous, largely preventable, serious, and any of the following:

- adverse
- indicative of a problem in a healthcare setting's safety systems
- important for public credibility or public accountability

Additionally, items included on the list are events that are:

- of concern to both the public and healthcare professionals and providers;
- clearly identifiable and measurable; and
- thus feasible to include in a reporting system; and
- of a nature such that the risk of occurrence is significantly influenced by the policies and procedures of the healthcare facility.

180 181

182

183

184

185

186

187

188

189

190

191

192

193

194

STRATEGIC DIRECTIONS FOR NQF

- NQF's mission includes three parts: 1) setting national priorities and goals for performance improvement; 2) endorsing national consensus standards for measuring and publicly reporting on performance; and 3) promoting the attainment of national goals through education and outreach programs. As greater numbers of quality [including safety] measures are developed and brought to NQF for consideration of endorsement, it is incumbent on NQF to assist stakeholders to "measure what makes a difference" and address what is important to achieve the best outcomes for patients and populations.
 - Several strategic issues have been identified to guide consideration of candidate consensus standards:
 - **Drive toward high performance.** Over time, the bar of performance expectations should be raised to encourage achievement of higher levels of system performance.
- **Emphasize composites.** Composite measures provide much-needed summary information pertaining to multiple dimensions of performance and are more comprehensible

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

- Move toward outcome measurement. Outcome measures provide information of keen interest to consumers and purchasers, and when coupled with healthcare process measures, they provide useful and actionable information to providers. Outcome measures also focus attention on much-needed system-level improvements, since achieving the best patient outcomes often requires carefully designed care processes, teamwork and coordinated action on the part of many providers.
- Consider disparities in all that we do. Some of the greatest performance gaps relate to care of minority populations. Particular attention should be focused on identifying disparities-sensitive performance measures and on identifying the most relevant race/ethnicity/language strata for reporting purposes.

These strategic directions were considered as the 2011 list of serious reportable events was under development. NQF has focused on driving toward high performance through improving safety across the healthcare enterprise since its inception. *Serious Reportable Events in Healthcare*, published in 2002, was one of the first NQF publications. It was updated in 2006, and now has been further updated and refined to attend to specific issues in four designated healthcare settings. In doing so, special needs of the very young, the elderly, and those with compromised decisionmaking capacity have been considered.

213

214

NATIONAL PRIORITIES PARTNERSHIP

- NQF seeks to endorse measures that address the National Priorities and Goals of the NQFconvened National Priorities Partnership (Partnership).² The Partnership represents those who receive, pay for, provide, and evaluate healthcare. The National Priorities and Goals focus on these areas:
- patient and family engagement,
- population health,
- 221 safety,
- care coordination,
- palliative and end-of-life care,
- overuse,
- equitable access, and

226 • infrastructure supports. 227 228 NQF'S CONSENSUS DEVELOPMENT PROCESS 229 NQF's National Voluntary Consensus Standards for Serious Reportable Events in Healthcare— 2011 Update project³ seeks to endorse 29 serious adverse events for use by healthcare 230 institutions, states. and other entities for public reporting. 231 232 **Evaluating Potential Consensus Standards** 233 This report presents the evaluation of an initial group of 28 endorsed and 12 proposed new 234 serious reportable events. Candidate consensus standards and modifications to NQF-endorsed 235 SREs were solicited through a Call for Serious Reportable Events on May 18, 2010. 236 The events were evaluated using NQF's standard evaluation criteria for serious reportable 237 events, which were refined during this project (see Box A). Three Technical Advisory Panels 238 (TAPs) (see Appendix C) evaluated the endorsed SREs and the proposed modifications thereto 239 as well as the proposed new SREs to identify the strengths, weaknesses, and applicability to their 240 respective settings of care to assist the Committee in making recommendations. The 20 member, 241 multi-stakeholder Committee provided final evaluations of the events in terms of the three main 242 criteria: unambiguous, largely preventable, and serious as well as the recommendation for 243 endorsement. 244 245 RELATIONSHIP TO OTHER NQF-ENDORSED CONSENSUS STANDARDS If endorsed, the 29 recommended SREs in this report will become part of a group of NQF-246 247 endorsed consensus standards that specifically address healthcare safety and therefore address 248 the National Priorities Partnership focus on safety. Together with the consensus standards in Safe Practices for Better Healthcare—2010 Update, ⁴ National Voluntary Consensus Standards for 249 Public Reporting of Patient Safety Event Information.⁵ and the rising number of measures related 250 251 to patient safety that have been endorsed by NQF, the SREs comprise a group of consensus 252 standards aimed at improving patient safety. This group of safety standards provides a strong 253 array of nationally accepted tools for measuring, improving, and reporting safety-related

healthcare events that enable and facilitate improvements in healthcare safety.

Although the SREs have been evaluated and defined in the context of four specific healthcare settings, they can be applied across multiple settings, professional disciplines, and healthcare conditions.

RECOMMENDATIONS FOR ENDORSEMENT

This report presents the results of the evaluation of 28 endorsed and 12 proposed new serious reportable events considered under NQF's CDP. (For more detailed specifications and implementation guidance, see Appendix A.) Twenty-nine SREs are recommended for endorsement as voluntary consensus standards suitable for public reporting.

The events are organized in seven categories—six that relate to the provision of care (surgical or invasive procedure, product or device, patient protection, care management, environmental, and radiologic) and one that includes four potential criminal events. These latter events include both illegal acts and acts of unintentional misconduct, and they are included because they could be indicative of an environment that is unsafe for patients. Although a healthcare institution cannot eliminate all risk of these types of events, it can take preventive measures to reduce that risk.

The specifications expand and offer clarification of the event to support reporting efforts, while the implementation guidance provides context and otherwise facilitates understanding of the events.

Consistent with the 2002 and 2006 lists of NQF-endorsed serious reportable events, this 2011 list is a relatively small and carefully constructed list of events defined to facilitate understanding and wide utilization. To facilitate clear understanding, a number of terms used in this report have been defined for its use (See Appendix B).

Updated and New Candidate Consensus Standards Recommended for

Endorsement

Each of these events is intended to be used for public reporting by healthcare institutions, states, and other entities as part of healthcare enterprise-wide efforts to identify, learn from, and form solutions to such events. All are largely, if not entirely, preventable, and yet all continue to occur. All are potentially indicative of a problem in the healthcare institutions' safety systems

and are of a nature such that the risk of occurrence is significantly influenced by the policies and procedures of the healthcare organization. They are of concern to the public and healthcare professionals and providers, and they are important for public credibility and public accountability. When used as a set for reporting, the events provide a multidimensional view of the safety of a healthcare organization that cannot be achieved with single event-type reporting. These characteristics make each event important for public reporting.

Of the 29 events proposed for endorsement, 25 are endorsed events that have been updated. Based on the changes to these events, including the specified care settings, all are being subjected to the CDP. The four new events are identified.

Surgical or Invasive Procedure Events

Each of the surgical or invasive procedure events was originally specified as a surgery event and each was endorsed as part of the initial set of SREs in 2002. During the past eight years, these events have continued to occur without appreciable improvement. The occurrence of the first four events requires additional, otherwise unnecessary, intervention and has the potential to cause long-term adverse consequences for the patient. The Committee agreed that the first four events should be expanded to include a broader universe of invasive procedures, many of which occur outside the traditional operating room. Inclusion of invasive procedures in these four events makes the determination of when surgery or a procedure ends challenging, thus the definition has been updated. There was some concern that including invasive procedures with surgery in these events could reduce setting-specific learning unless settings are identified in reports. With respect to the first three events, it was agreed that, although the traditional "consent form" might not be used for procedures outside an operating suite, documentation of informed consent is essential. The definition of informed consent and a caveat in the implementation guidance of each of the three clarifies the intent.

- A. <u>Surgery or other invasive procedure performed on the wrong site</u>. To be more inclusive of the range of occurrences that this event should capture, "body part" was changed to "site.."
- B. <u>Surgery or other invasive procedure performed on the wrong patient</u>. Because patients undergoing procedures in outpatient settings typically will not be identified using

- wristbands, the implementation guidance for this event includes a caveat about identification procedures.
 - C. Wrong surgical procedure or other invasive procedure performed on a patient.
 - D. <u>Unintended retention of a foreign object in a patient after surgery or other invasive</u>

 <u>procedure</u>. The definition of "end of surgery" has been modified to ensure that it does
 not create a circumstance in which carrying out standard procedures for discovery of a
 foreign object would create a reporting requirement.
 - E. <u>Intraoperative or immediately postoperative/postprocedure death in an ASA Class 1</u>
 <u>patient.</u> The Committee discussed the possibility of broadening this event or creating a new event to capture any death during or within some specified period after a procedure.
 The decision was made to be explicit about the settings to which the event as specified applies and to reconsider modifying the event specifications at a future update.

Product or Device Events

- A. Patient death or serious injury associated with the use of contaminated drugs, devices, or biologics provided by the healthcare setting. Initially endorsed in 2002, this event has been modified to clarify the issue of detectability. Often contaminants are not visible to the naked eye but can be detected through monitoring. There has been a dramatic increase in the spread of pathogens such as hepatitis and HIV due to the reuse or improper repurposing of medical equipment (e.g., endoscopy tubes, syringes) as well as misuse of medication vials, injection devices, and containers (e.g., single-use vials used for more than one patient, inappropriate access of multi-dose vials, and pooling of medications). When such uses become known, it is essential that organizations investigate and that appropriate patient monitoring, which follows national guidelines or standards for care, occur. The serious injury that occurs in such cases could be development of disease or the threat of disease that changes the patient's risk status for life, requiring monitoring not needed before the event.
- B. Patient death or serious injury associated with the use or function of a device in patient care, in which the device is used or functions other than as intended. As in the previous event, failure to properly clean and maintain a device or misuse of a device that exposes a patient to disease or injury imposes a "serious injury" when it changes his or her risk status for life, requiring previously unneeded monitoring or treatment.

C. Patient death or serious injury associated with intravascular air embolism that occurs while being cared for in a healthcare setting. Discussion of this endorsed event centered on concern that the exclusions allow the occurrence of neurosurgical procedures identified only as presenting a high risk of intravascular air embolism to remain unreported. The American Academy of Neurologic Surgeons provided information that in those cases where surgery is performed in a position that puts the head above the heart to reduce venous pressure, development of air embolism is a known risk that is not entirely preventable. Pediatric experts, while agreeing that air embolism is not entirely preventable in some neurosurgical procedures, expressed differing points of view about reporting. To be consistent, the exclusion is retained for both adults and children at this time.

Patient Protection Events

- A. <u>Discharge or release of a patient/resident of any age</u>, who is unable to make decisions, to other than an authorized person. This event had been limited to infants. The Committee determined that it should be expanded to apply to any individual of any age who lacks decision-making capacity. The two areas of concern discussed by the Committee related to the challenges associated with applying the event in an outpatient setting and the meaning of the term "authorized." The former has been addressed through the implementation guidance and the latter through definition and explanatory language in the implementation guidance.
- B. Patient death or serious injury associated with patient elopement (disappearance).

 Although the issue of accepting an individual into care who subsequently goes missing is important, the struggle with this event focused on what elopement or disappearance means. The determination was made that the exclusion of competent (with decisionmaking capacity) adults who leave against medical advice or voluntarily leave without being seen would address the concern. It was also noted that some states and other jurisdictions have defined elopement and, where applicable, those definitions are to be respected.
- C. Patient suicide, or attempted suicide, while being cared for in a healthcare setting. The determination was made that this remains an important event to be reported but that the threshold of serious injury associated with a suicide attempt should be deleted. The

rationale for this decision was that once an individual is accepted into care, a responsibility for ensuring his or her safety exists. The struggle lies in the determination of when the individual has been accepted into care because it is not reasonable to impose a duty on an institution for an individual who is on the premises of the institution but has not yet presented him- or herself for care (e.g., attempts suicide in a restroom prior to checking in for care). This was addressed through modification of the additional specifications.

Care Management Events

- A. Patient death or serious injury associated with a medication error (e.g., errors involving the wrong drug, wrong dose, wrong patient, wrong time, wrong rate, wrong preparation, or wrong route of administration). The high rate of medication errors resulting in injury and death makes this event important to endorse again. With this update, two significant additions to the additional specifications have been made. One is the administration of a medication for which there is serious contraindication. The other relates to failure to observe safe injection practices (i.e., the improper use of single dose/single use and multidose containers leading to injury or death as a result of contamination or dosages).
- B. Patient death or serious injury associated with unsafe administration of blood products. The Committee was of the opinion that this event should be entirely preventable in any setting. Changes made to this event included broadening the event beyond hemolytic reaction and changing "serious disability" to "serious injury." There was concern about operationalizing "unsafe". Implementation guidance has been added to address this concern.
- C. Maternal death or serious injury associated with labor or delivery in a low-risk pregnancy while being cared for in a healthcare setting. The single change to this event was the change from "serious disability" to "serious injury" made to all other events with this language. Although there was discussion of removing the exclusions, this is not recommended at this time. It will be revisited when the list is next reviewed.
- D. <u>Death or serious injury of a neonate associated with labor or delivery in a low-risk</u> <u>pregnancy while being cared for in a healthcare setting</u>. (NEW) This new event is a companion to, and equally important as, death or serious injury of the mother in similar circumstances.

E. Patient death or serious injury associated with a fall during or after being cared for and prior to leaving the grounds of the healthcare setting. This event was endorsed in 2002. It has been refined to improve clarity related to the boundaries within which reporting is to occur, both in terms of the physical boundary and the relationship with the patient. These changes were seen as especially significant in identifying the current gaps that offer opportunity for improvement, such as in the case of a post-operative patient who may have remaining influence of medications who is moving from the interior of a healthcare setting to a vehicle. At the same time, it was important that there be no responsibility for an individual prior to acceptance as a patient. The Committee decided to move this event from the Environmental Events group to the Care Management Events group at this time. The question of moves of other events as well as the typology used for grouping events will be further considered in future updates to the SREs.

- F. Any Stage 3, Stage 4, and unstageable pressure ulcers acquired after admission/
 presentation to a healthcare setting. Updates to this event include the addition of
 "unstageable" based on harmonization with the National Pressure Ulcer Advisory Panel's
 (NPUAP) position and definitions. Although possible inclusion of deep tissue injury was
 discussed, determination was made that this would amount to reporting an unconfirmed
 suspicion. Also, there was discussion of preventability and, while acknowledging that
 some pressure ulcers cannot be prevented, determination was made that pressure ulcers as
 defined by this event and the NPUAP should be reported.
- G. <u>Artificial insemination with the wrong donor sperm or wrong egg</u>. This event, first endorsed in 2006, is continued unchanged other than to specify three settings of care to which it applies.
- H. Death or serious injury resulting from the irretrievable loss of a biological specimen.

 (NEW) The Committee readily agreed on the importance of this newly submitted event. Discussion of this event centered on the meaning of "irretrievable," which was addressed both in the specifications and implementation guidance. As with the event related to use of contaminated drugs, etc., serious injury could be the progress of an undiagnosed disease or it could be the threat of disease that changes the patient's risk status for life, requiring monitoring not needed before the event.
- I. Death or serious injury resulting from failure to follow up or communicate clinical information. (NEW) The Committee agreed on the importance of this newly submitted

event and acknowledged that the issue of failure to follow up or communicate imposes significant increased risk of death or serious injury (e.g., change in stage of cancer).

Environmental Events

- A. Patient or staff death or serious injury associated with an electric shock in the course of a patient care process in a healthcare setting. This event, which was endorsed in 2002, has been expanded to include staff death or serious injury. Explanation of the intent of the addition has been added to the implementation guidance.
- B. Any incident in which systems designated for oxygen or other gas to be delivered to a patient contain no gas, the wrong gas, or is contaminated by toxic substances. This event, which was endorsed in 2002, has been refined to ensure that events involving both remote and bedside systems are included and that cases in which gas is not delivered when it has been prescribed are captured.
- C. Patient or staff death or serious injury associated with a burn incurred from any source in the course of a patient care process in a healthcare setting. This event was endorsed in 2002. It has been expanded to include staff death or serious injury. Implementation guidance has been added to provide examples of the array of burns that are possible.
- D. Patient death or serious injury associated with the use of physical restraints or bedrails while being cared for in a healthcare setting. The single change to this event, initially endorsed in 2002, was the addition of "physical." The Committee acknowledged concern about the issue of chemical restraints but determined that difficulty in defining such events makes their inclusion infeasible at present.

Radiologic Events

A. Death or serious injury of a patient or staff associated with the introduction of a metallic object into the MRI area. (NEW) This event is an adaptation of a newly proposed event. The occurrence of such events continues to be recognized, suggesting that there is an opportunity for discovery and learning to reduce the occurrence. After discussion and consultation with experts in MRI processes and environments, the event was clarified and expanded to include death or serious injury of staff as well as patients. Because radiologic events of various types are occurring with increasing frequency, this event is

included in a new category, "Radiologic Events," in anticipation that additional events will be added to this category in future SRE updates.

Potential Criminal Events

The category title has been changed by the addition of "potential," recognizing that at the time of occurrence, there may be no determination of intent. In fact, the occurrence may be determined to be unintentional very early on (e.g., the patient with dementia who harms another). Although the latter event results in unintentional harm, it can indicate a problem with the safety systems in the healthcare setting. The overarching discussion about this group of events was related to redundant reporting and the potential for compromising the event-related information.

Committee members experienced in medical event-related judicial proceedings noted that the legal pathway has no interest in learning, improvement, or prevention; thus the events are appropriately included in the SREs for those reasons. Further, these events are rare, and although there is a certain amount of redundancy in data collection or reporting, the burden should be relatively light. Of note, use of the term "patient" in these events is intended to convey that the individual has presented for care, is under care, or has received care and has not yet left the healthcare setting grounds.

- A. Any instance of care ordered by or provided by someone impersonating a physician, nurse, pharmacist, or other licensed healthcare provider. No changes were made to the specifications of this event, which was initially endorsed in 2002. Implementation guidance was added to provide some clarification regarding what it is intended to capture.
- B. Abduction of a patient/resident of any age. This event, endorsed in 2002, was changed to include "resident" in keeping with the nomenclature used in long-term care settings.
 Implementation guidance was added to clarify what it is intended to be captured.
- C. <u>Sexual abuse/assault on a patient or staff member within or on the grounds of a healthcare setting</u>. This event, endorsed in 2002, was changed to add staff to the reporting requirement.
- D. Death or significant injury of a patient or staff member resulting from a physical assault (i.e., battery) that occurs within or on the grounds of a healthcare setting. The change made to this event, endorsed in 2002, is limited to changing "facility" to "setting," where applicable.

Consensus Standards Recommended for Retirement

| 507 | Three Care Management events are recommended for retirement. The Committee recommends |
|-----|---|
| 508 | that when an event represents an example of a type of event, it be reported under the rubric of the |
| 509 | event type or category rather than creating a proliferation of single events representative of the |
| 510 | type or category. Two events recommended for retirement are examples. |
| 511 | Formerly Care Management Event 4.D. Patient death or serious disability associated with |
| 512 | hypoglycemia, the onset of which occurs while the patient is being cared for in a healthcare |
| 513 | facility |
| 514 | Onset of hypoglycemia in a healthcare setting is an example of a medication management event, |
| 515 | and as such, the Committee recommends that events related to insulin dosing be included as an |
| 516 | explicit example of occurrences to be reported under the Care Management event related to death |
| 517 | or serious injury associated with a medication error (4.A.). Further, the "Additional |
| 518 | Specifications" of that event have been changed to include over- or under-dosing. |
| 519 | |
| 520 | Formerly Care Management Event 4.E. Death or serious disability (kernicterus) associated |
| 521 | with failure to identify and treat hyperbilirubinemia in neonates |
| 522 | Development of kernicterus is an example of failure to follow up or communicate clinical |
| 523 | information, a new care management event proposed for this 2011 update. The committee, |
| 524 | therefore, recommends that the event be retired and that its intent be added to the "Additional |
| 525 | Specifications" of the new event. This recognizes the importance of continued diligence in the |
| 526 | effort to detect signs of hyperbilirubinemia and the potential for kernicterus, while providing a |
| 527 | category for capturing a wider range of events related to failure to follow up on important |
| 528 | clinical information. |
| 529 | |
| 530 | Formerly Care Management Event 4.G. Patient death or serious disability due to spinal |
| 531 | manipulative therapy |
| 532 | The Committee identified this event as one that targets a specific group of healthcare providers. |
| 533 | Further, the event is related to individual provider behavior rather than facility safety systems. |
| 534 | Based on these facts, it is recommended that this event be retired. |

| 333 | |
|-----|--|
| 536 | Candidate Consensus Standards Not Recommended for Endorsement |
| 537 | Of the eight proposed new SREs that are not recommended for endorsement, elements of three |
| 538 | have been incorporated into the implementation guidance of other SREs for which endorsement |
| 539 | is recommended. Additionally, some of the eight events not recommended in this update can be |
| 540 | expected to be included in future updates as experience and the evidence evolves. |
| 541 | |
| 542 | Patient death or serious injury associated with prolonged fluoroscopy with cumulative dose |
| 543 | >1500 rads to a single field or any delivery of radiotherapy to the wrong body region or 25 |
| 544 | percent above or below the planned radiotherapy dose |
| 545 | The complexity of this proposed event coupled with the input from experts in fluoroscopy and |
| 546 | radiotherapy resulted in the Committee recommending against advancing this event at this time. |
| 547 | At present, fluoroscopy equipment does not provide dose maps after a procedure, and the |
| 548 | measurement systems used for dosages are changing. Further, dosages differ based on a number |
| 549 | of factors including body location. These factors would require extensive, detailed specifications |
| 550 | that would depend on the ability to clearly articulate a number of variables, some of which are |
| 551 | transitioning to new methods. The Committee recommends this event be held for consideration |
| 552 | at the next update of SREs. |
| 553 | |
| 554 | Patient death or serious injury related to a central line associated blood stream infection |
| 555 | (CLABSI) |
| 556 | The development of blood stream infections associated with clinical care is an important |
| 557 | occurrence that can be related to failure of organizational policy and procedures or the |
| 558 | enforcement and surveillance of these policies and procedures. The Committee opined that |
| 559 | development of such an infection (versus death or serious injury) should be reported; however, |
| 560 | the event is not recommended for endorsement at this time because of issues related to |
| 561 | attributing causality as well as relative lack of measurement experience and reporting. The event |
| 562 | will be revisited in the next SRE update cycle. |
| 563 | |
| 564 | Death among surgical patients with serious treatable complications (failure to rescue) |

In the context of a SRE, ascertainment would be difficult due to the potential breadth of complications to be defined and linked to failure to rescue. At this juncture, the event can best be captured, albeit in the aggregate, using a performance measure. NQF has endorsed three such measures, and although similar each measure applies to different populations. At some future date, the feasibility of linking the SREs with performance measures should be explored; however, the complexity of individual event reporting that would result requires careful consideration. Arterial misplacement and use of a central venous catheter Diagnostic testing error resulting in unnecessary invasive procedure, serious disability or death Incorrect placement of a feeding (gastrointestinal) or ventilation tube, which results in patient harm A guiding principle applied by the Committee in its deliberations of the three foregoing proposed events was that individual examples of event types should, where possible, be captured within SREs that capture the broader type rather than as individual events. The three events above are examples of broader categories of events in the proposed list and have been included as such in the relevant event implementation guidance. Death or serious injury resulting from care provided by an impaired healthcare worker Death or significant injury of a patient as a consequence of staff impaired by recreational drugs or alcohol use The Committee acknowledged that the issue at the center of these two foregoing proposed events is important. However, the issue is complex given the range of substances that could be involved, including at least one that may be legalized in some states; the types of impairments that could be involved; the ability to determine or verify the impairment objectively; and the point at which impairment could be declared and reported. Due to these challenges, these events are not recommended at this time.

565

566

567

568

569

570

571

572

573

574

575

576

577

578

579

580

581

582

583

584

585

586

587

588

589

590

591

592

ADDITIONAL RECOMMENDATIONS

- Although the list of serious reportable events has been in use to varying degrees across states and
- 596 healthcare organizations, significant opportunity for improving the list through research remains.
- 597 The NQF report, National Voluntary Consensus Standards for Public Reporting of Patient Safety
- 598 Event Information, 6 outlined a number of recommendations, of which four are repeated here
- either verbatim or modified to be specific to SREs.

- Research and evaluation should be conducted to determine which events convey a valid, reliable perspective of healthcare organization safety.
- Research should be conducted to evaluate the impact of public reporting of patient safety information on patients, consumers, and healthcare institutions.
- Organizations that collect patient safety reports from healthcare providers, those that
 design collection systems for such reports, those that design classification systems for
 event reporting, and other stakeholders should come together and begin to harmonize
 standardized systems for defining, measuring, reporting, analyzing, and classifying
 patient safety information in a way that produces greater data integrity, completeness, and
 reliability and, therefore, greater understanding of events, and reduces opportunity costs
 associated with these activities.
- Health information technology systems and any funds that become available to improve them should include provision for facilitating patient-safety related data capture in ways that can be used for public reporting.

Additionally, *Serious Reportable Events in Healthcare*, 2002 and the 2006 Update included recommendations that remain relevant and should be addressed. These include:

- exploring effective mechanisms to collect data and communicate serious reportable events to the public;
- examining how data derived from using the NQF list can be disclosed in a way that meets the public's needs, yet is balanced with the need for providers to learn from mistakes;
- testing the operational value and utility of the events on the list, including research on the necessity to support such a list and the public's perceptions of the impact of the list;

| • | identifying ICD, CPT, or other codes that correlate with each serious reportable event on |
|---|---|
| | the list; and |

- identifying effective mechanisms, including standardization of reporting systems, to permit institutions to report an event that occurs in their organization only once to a single entity from which needed information can be extracted and to avoid double reporting when a patient receives care in more than one healthcare organization;
- evaluating comparability of data reported across healthcare systems to determine the degree to which comparability exists and to define next steps toward improving comparability;
- evaluating outcomes of public reporting in terms of both reduction in occurrences of these events and identification and use of practices to prevent such occurrences; and
- evaluating population- or geographic-based differences in rates of occurrence of these
 events for purposes of determining reporting and/or occurrence variations and designing
 appropriate population-specific interventions.

639

640

625

626

627

628

629

630

631

632

633

634

635

636

637

638

NOTES

1 National Quality Forum (NQF), *National Voluntary Consensus Standards for Public Reporting of Patient Safety Event Information: A Consensus Report*, NQF: Washington, DC; publication pending. 2 NQF, *National Priorities Partnership*, Washington, DC: NQF. Available at www.nationalprioritiespartnership.org. Last accessed October 1, 2010.

³ Available at http://qualityforum.org/projects/hacs and sres.aspx. Last accessed October 1, 2010.

A NOTE of the project of th

⁴ NQF. Safe Practices for Better Healthcare—2010 Update: A Consensus Report, NQF: Washington, DC; 2010.

⁵ NQF. National Voluntary Consensus Standards for Public Reporting of Patient Safety Event Information: A Consensus Report, NQF: Washington, DC; publication pending. 6 Ibid.

APPENDIX A EVENT SPECIFICATIONS AND IMPLEMENTATION GUIDANCE

The following table presents the specifications for the proposed consensus standards. The information presented represents an update of the 2006 report with revision and additions made by the Serious Reportable Events Steering Committee utilizing NQF Member and public submissions and consultation with experts in the various fields. These proposed voluntary consensus standards are the intellectual property of the National Quality Forum and as such they are open source, fully accessible, and disclosed.

Definitions of key terms are included in the Glossary (Appendix B) and, where the terms are used in the event description or additional specifications, are considered part of the specifications of the events.

Implementation Guidance is not proposed for endorsement. It amplifies statements in the Event and Additional Specifications, which are proposed for endorsement, with examples and explanations based on experience of those organizations/entities that have implemented event reporting as well as recommendations of the NQF Serious Reportable Events Steering Committee. It does not purport to be either comprehensive or even across the events and is *not* a requirement of either.

| 1. SURGICAL OR INVASIVE PROCEDURE EVENTS | | |
|--|---|--|
| EVENT | ADDITIONAL SPECIFICATIONS | IMPLEMENTATION GUIDANCE |
| A. Surgery or other invasive procedure performed on the wrong site | Defined as any surgery or other invasive procedure performed on a body part or site that is not consistent with the correctly documented informed consent for that patient. | It should be noted that a correctly documented informed consent for patients whose procedures will not be carried out in an operating room may not involve a "surgical consent form"; however, it does require informed consent be documented in the patient record. |
| Applicable settings: Hospitals Outpatient/Office-based Surgery Centers Ambulatory Practice Settings/Office-based Practices Long-term Care/Skilled Nursing Facilities | Surgery or other invasive procedure includes, but is not limited to, endoscopies, lens implants, lesion removal, injection into joints. Excludes emergent situations that occur in the course of surgery or other invasive procedure and/or whose exigency precludes obtaining informed consent. | Although an incorrectly placed surgical mark could result in surgery being performed on the wrong body part, surgery does not begin at time the surgical mark is made on the patient. Placing a mark on the wrong body part or site does not in itself constitute wrong site surgery. Wrong site surgery or invasive procedure, corrected during the procedure, is still a wrong site procedure if the surgery/ |

| 1. SURGICAL OR INVASIVE PROCEDURE EVENTS | | |
|---|---|--|
| EVENT | ADDITIONAL SPECIFICATIONS | IMPLEMENTATION GUIDANCE |
| | | procedure had begun, based on the definition in glossary. |
| | | This event is intended to capture instances of: |
| | | surgery or other invasive procedure on the right body part but on the wrong location/site on the body; e.g. left/right (appendages/organs), wrong digit, level (spine), stent placed in wrong iliac artery, steroid injection into wrong knee, biopsy of wrong mole, burr hole on wrong side of skull; delivery of fluoroscopy or radiotherapy to the wrong region of the body; |
| | | use of incorrectly placed vascular catheters; |
| | | use of incorrectly placed tubes (for example, feeding tubes placed in the lung or ventilation tubes passed into the esophagus). |
| | | This event is not intended to capture: |
| | | changes in plan upon entry into the patient with discovery of pathology in close proximity to the intended place where risk of a second surgery or procedure outweighs benefit of patient consultation, or unusual physical configuration (for example adhesions, spine level/extra vertebrae). |
| B. Surgery or other invasive procedure performed on the wrong patient | Defined as any surgery or invasive procedure on a patient that is not consistent with the correctly documented informed consent for that patient. | It should be noted that a correctly documented informed consent for patients whose procedures will not be carried out in an operating room may not involve a "surgical consent form"; however, it does require informed consent be documented in the patient record. |
| Applicable settings: | Surgery or other invasive procedure includes, | · |
| Hospitals | but is not limited to, endoscopies, lens | This event is intended to capture: |
| Outpatient/Office-based Surgery Centers | implants, lesion removal, injection into joints. | surgical procedures (whether or not completed) initiated on one patient intended for a different patient. |

| 1. SURGICAL OR INVASIVE PROCEDURE EVENTS | | |
|---|--|---|
| EVENT | ADDITIONAL SPECIFICATIONS | IMPLEMENTATION GUIDANCE |
| Ambulatory Practice Settings/ Office-based Practices Long-term Care/Skilled Nursing Facilities | | Use of accepted patient identification procedures is key to avoiding such events. |
| C. Wrong surgical or other invasive procedure performed on a patient | Defined as any surgical or other invasive procedure performed on a patient that is not consistent with the correctly documented informed consent for that patient. | It should be noted that a correctly documented informed consent for patients whose procedures will not be carried out in an operating room may not involve a "surgical consent form"; however, it does require informed consent be documented in the patient record. |
| Applicable settings: Hospitals Outpatient/Office-based Surgery Centers Ambulatory Practice Settings/ Office-based Practices Long-term Care/Skilled Nursing Facilities | Surgery or other invasive procedure includes, but is not limited to, endoscopies, lens implants, lesion removal, injection into joints. Excludes emergent situations that occur in the course of surgery or other invasive procedures and/or whose exigency precludes obtaining informed consent. | This event is intended to capture: insertion of the wrong medical implant into the correct surgical site. This event is not intended to capture: changes in plan upon entry into the patient with discovery of pathology in close proximity to the intended place where risk of a second surgery/ procedure outweighs benefit of patient consultation, or unusual physical configuration (for example adhesions, spine level/extra vertebrae). |
| D. Unintended retention of a foreign object in a patient after surgery or other invasive procedure Applicable settings: Hospitals Outpatient/Office-based Surgery Centers | Includes medical or surgical items intentionally placed by provider(s) that are unintentionally left in place. Excludes a) objects present prior to surgery or other invasive procedure that are intentionally left in place; b) objects intentionally implanted as part of a planned intervention; and c) objects not present prior to surgery/procedure that are intentionally left | This event is intended to capture: occurrences of unintended retention of objects at any point after the surgery/procedure ends regardless of setting (post anesthesia recovery unit, surgical suite, emergency department, patient bedside) and regardless of whether the object is to be removed after discovery; unintentionally retained objects (including such things as wound packing material, sponges, catheter tips, trocars, guide wires) in all applicable settings. |

| 1. SURGICAL OR INVASIVE PROCEDURE EVENTS | | |
|--|--|---|
| EVENT | ADDITIONAL SPECIFICATIONS | IMPLEMENTATION GUIDANCE |
| Ambulatory Practice Settings/ Office-based Practices Long-term Care/Skilled Nursing Facilities | in when the risk of removal exceeds the risk of retention (such as microneedles, broken screws). | |
| E. Intraoperative or immediately postoperative/ postprocedure death in an ASA Class I patient | Includes all ASA Class I patient deaths in situations where anesthesia was administered; the planned surgical procedure may or may not have been carried out. | This event is intended to capture: ASA Class I patient death associated with the administration of anesthesia whether or not the planned surgical procedure was carried out. |
| Applicable settings: • Hospitals • Outpatient/Office-based Surgery Centers • Ambulatory Practice Settings/ Office-based Practices | Immediately post-operative means within 24 hours after surgery or other invasive procedure was completed or after administration of anesthesia (if surgery/procedure not completed). | |

| 2. PRODUCT OR DEVICE EVENT | S | |
|----------------------------|---------------------------|-------------------------|
| EVENT | ADDITIONAL SPECIFICATIONS | IMPLEMENTATION GUIDANCE |

| 2. PRODUCT OR DEVICE EVENTS | | |
|--|--|---|
| EVENT | ADDITIONAL SPECIFICATIONS | IMPLEMENTATION GUIDANCE |
| A. Patient death or serious injury associated with the use of contaminated drugs, devices, or biologics provided by the healthcare setting Applicable settings: | Includes contaminants in drugs, devices, or biologics regardless of the source of contamination and/or product. Includes threat of disease that changes patient's risk status for life requiring monitoring not needed before the event | This event is intended to capture: contaminations that can be seen with the naked eye or with use of detection mechanisms in general use. Often, contaminants, including such things as hepatitis and HIV, are not visible to the naked eye. These contaminations are to be reported at such time as they become known to the provider or healthcare organization. (Detection mechanisms may include such |
| Hospitals Outpatient/Office-based Surgery Centers Ambulatory Practice Settings/ | | things as cultures and tests, including sterilization monitoring devices that signal changes in pH or glucose levels.) |
| Office-based Practices • Long-term Care/Skilled Nursing Facilities | | This event is intended to capture: administration of contaminated vaccine or medication (e.g., intramuscular antibiotic); serious infection from contaminated device used in surgery or an invasive procedure (e.g., a scalpel). |

| 2. PRODUCT OR DEVICE EVENTS | | |
|---|---|---|
| EVENT | ADDITIONAL SPECIFICATIONS | IMPLEMENTATION GUIDANCE |
| B. Patient death or serious injury associated with the use or function of a device in patient care, in which the device is used or functions other than as intended | Includes, but is not limited to, catheters, drains and other specialized tubes, infusion pumps, and ventilators. | This event is intended to capture: occurrences whether or not the use is intended or described by the device manufacturers' literature; occurrences related to improper cleaning or maintenance of the device. |
| Applicable settings: Hospitals Outpatient/Office-based Surgery Centers Ambulatory Practice Settings/ Office-based Practices Long-term Care/Skilled Nursing Facilities | | |
| C. Patient death or serious injury associated with intravascular air embolism that occurs while being cared for in a healthcare setting | Excludes death or serious injury associated with neurosurgical procedures known to present a high risk of intravascular air embolism. | This event is intended to capture: high-risk procedures, other than neurosurgical procedures, that include, but are not limited to, procedures involving the head and neck, vaginal delivery and caesarean section, spinal instrumentation procedures and liver transplantation; low-risk procedures including those related to lines |
| Applicable settings: Hospitals Outpatient/Office-based Surgery Centers, Long-term Care/Skilled Nursing Facilities | | placed for infusion of fluids in vascular space. |

| EVENT | ADDITIONAL SPECIFICATIONS | IMPLEMENTATION GUIDANCE |
|---|---|---|
| A. Discharge or release of a patient/resident of any age, who is unable to make decisions, to other than an authorized person. | | Authorized as used here includes the definition in the glossary. Other than authorized includes removing the patient/resident without specific notification and approval by staff even when the person is otherwise authorized. Examples of individuals who do not have decisionmaking |
| Applicable settings: Hospitals Outpatient/Office-based Surgery Centers Ambulatory Practice Settings/ Office-based Practices Long-term Care/Skilled Nursing Facilities | | capacity include: newborns, minors, adults with Alzheimer's. |
| B. Patient death or serious injury associated with patient elopement (disappearance). | Includes events that occur after the individual presents him/herself for care in a healthcare setting. | The term "elopement" and "competent" adult should be interpreted in accordance with prevailing legal standards in applicable jurisdictions. |
| Applicable settings: Hospitals Outpatient/Office-based Surgery Centers Ambulatory Practice Settings/ Office-based Practices Long-term Care/Skilled Nursing Facilities | Excludes events involving competent adults with decisionmaking capacity who leave against medical advice or voluntarily leave without being seen. | This is not intended to capture: death or serious injury that occurs (after the patient is located) due to circumstances unrelated to the elopement. |
| C. Patient suicide, or attempted suicide, while being cared for in a healthcare setting | Includes events that result from patient actions after they present themselves for care in a healthcare setting. | This event is not intended to capture patient suicide or attempted suicide when the patient is not physically present |

| 3. PATIENT PROTECTION EVENTS | | | |
|---|--|---|--|
| EVENT | ADDITIONAL SPECIFICATIONS | IMPLEMENTATION GUIDANCE | |
| Applicable settings: • Hospitals • Outpatient/Office-based Surgery Centers • Ambulatory Practice Settings/ Office-based Practices • Long-term Care/Skilled Nursing Facilities | Excludes deaths resulting from self-inflicted injuries that were the reason for admission/presentation to the healthcare facility. | in the "healthcare setting "as defined in the glossary. | |

| 4. CARE MANAGEMENT EVENTS | | |
|---------------------------|---------------------------|-------------------------|
| EVENT | ADDITIONAL SPECIFICATIONS | IMPLEMENTATION GUIDANCE |

| 4. CARE MANAGEMENT EVENTS | | |
|--|---|--|
| EVENT | ADDITIONAL SPECIFICATIONS | IMPLEMENTATION GUIDANCE |
| A. Patient death or serious injury associated with a medication error (e.g., errors involving the wrong drug, wrong dose, wrong patient, wrong time, wrong rate, wrong preparation, or wrong route of administration) Applicable settings: Hospitals Outpatient/Office-based Surgery Centers Ambulatory Practice Settings/ Office-based Practices Long-term Care/Skilled Nursing Facilities | Excludes reasonable differences in clinical judgment on drug selection and dose. Includes, but is not limited to, death or serious injury associated with a) over- or underdosing; b) administration of a medication to which a patient has a known allergy or serious contraindication, c) drug-drug interactions for which there is known potential for death or serious injury, d) improper use of single-dose/single-use and multi-dose medication vials and containers leading to death or serious injury as a result of contamination or dose adjustment problems. | This event is intended to capture: the most serious medication errors including occurrences in which a patient receives a medication for which there is a contraindication or a patient, known to have serious allergies to specific medications/ agents, receives those medications/ agents, resulting in serious injury or death. These events may occur as a result of failure to collect information about contraindications or allergies, failure to review such information available in information systems, failure of the organization to assure availability of such information and prominently display such information within information systems, or other system failures that are determined through investigation to be cause of the adverse event. occurrences in which a patient dies or suffers serious injury as a result of failure to administer a prescribed medication; occurrences in which a patient is administered an overor under-dose of a medication including insulin, heparin, and any other high alert medication including but not limited to medications listed on the Institute for Safe Medication Practices "High Alert Medication List"; occurrences in which a patient dies or suffers serious injury as a result of wrong administration technique. This event is not intended to capture: |
| | | patient death or serious injury associated with allergies |

| 4. CARE MANAGEMENT EVENTS | | |
|--|---|---|
| EVENT | ADDITIONAL SPECIFICATIONS | IMPLEMENTATION GUIDANCE |
| B. Patient death or serious injury associated with unsafe administration of blood products | | Unsafe administration includes, but is not limited to, hemolytic reactions and administering a) blood or blood products to the wrong patient; b) the wrong type; or c) blood or blood products that have been improperly stored or handled. |
| Applicable settings: Hospitals Outpatient/Office-based Surgery Centers Ambulatory Practice Settings/ Office-based Practices Long-term Care/Skilled Nursing | | This event is not intended to capture: patient death or serious injury associated with organ rejection other than those attributable to a hyperacute hemolytic reaction patient death or injury when cause is not detectable by ABO/HLA matching. |
| C. Maternal death or serious injury associated with labor or delivery in a low-risk pregnancy while being cared for in a healthcare setting | Includes events that occur within 42 days post-delivery. Excludes deaths from pulmonary or amniotic fluid embolism, acute fatty liver of pregnancy, or cardiomyopathy. | This event is not intended to create a new obligation. The organization's obligation is to report the event when made aware of the maternal death or serious injury either by readmittance or by the patient's family. |
| Applicable settings:HospitalsOutpatient/Office-based Surgery Centers | | |
| D. Death or serious injury of a neonate associated with labor or delivery in a low-risk pregnancy while being cared for in a healthcare setting | Includes, for the office-based surgery or birthing center setting, unplanned admission to an inpatient setting within 24 hours of delivery | |

| 4. CARE MANAGEMENT EVENTS | | |
|---|---|---|
| EVENT | ADDITIONAL SPECIFICATIONS | IMPLEMENTATION GUIDANCE |
| Applicable settings:HospitalsOutpatient/Office-based Surgery Centers | | |
| E. Patient death or serious injury associated with a fall during or after being cared for and prior to leaving the grounds of a healthcare setting | Includes but is not limited to fractures, head injuries, and intracranial hemorrhage | |
| Applicable settings: • Hospitals • Outpatient/Office-based Surgery Centers • Ambulatory Practice Settings/ Office-based Practices • Long-term Care/Skilled Nursing Facilities | | |
| F. Any Stage 3, Stage 4, and unstageable pressure ulcers acquired after admission/ presentation to a healthcare setting | Excludes progression from Stage 2 to Stage 3 if Stage 2 was recognized upon admission and excludes pressure ulcers that develop in areas where deep tissue injury is documented as present on admission/presentation. | Although this event could occur in the ambulatory surgery environment based on patient condition and surgery time, it will be difficult to discern. Pre- and post- skin assessment will be key. |
| Applicable settings:HospitalsOutpatient/Office-based Surgery Centers | | |

| 4. CARE MANAGEMENT EVENTS | | |
|---|---|---|
| EVENT Long-term Care/ Skilled Nursing Facilities | ADDITIONAL SPECIFICATIONS | IMPLEMENTATION GUIDANCE |
| G. Artificial insemination with the wrong donor sperm or wrong egg Applicable settings: Hospitals Outpatient/Office-based Surgery Centers Ambulatory Practice Settings/Office-based Practices H. Death or serious injury resulting from the irretrievable loss of a biological specimen. Applicable settings: Hospitals Outpatient/Office-based Surgery Centers Ambulatory Practice Settings/Office-based Practices Long-term Care/Skilled Nursing Facilities | Includes events where specimens are misidentified, where another procedure cannot be done to produce a specimen Includes progression of an undiagnosed disease or threat of disease that changes the patient's risk status for life, requiring monitoring not needed before the event | This event is not intended to capture: This event is not intended to capture: procedures where the specimen was properly handled, but the specimen proved to be nondiagnostic. Inability to secure a replacement for a lost specimen can occur with excisional biopsy as well as in organ removal. |
| I. Death or serious injury resulting from failure to follow up or communicate clinical information. | Includes events where failure to report increased neonatal bilirubin levels result in kernicterus. | Examples of serious injury are a new diagnosis, or an advancing stage of an existing diagnosis (e.g., cancer). Examples of clinical information for which failure to follow up could occur include imaging or laboratory reports, biopsy results, or other test results. |

| 4. CARE MANAGEMENT EVENTS | | |
|---|---------------------------|-------------------------|
| EVENT | ADDITIONAL SPECIFICATIONS | IMPLEMENTATION GUIDANCE |
| Applicable settings: Hospitals Outpatient/Office-based Surgery Centers Ambulatory Practice Settings/ Office-based Practices Long-term Care/Skilled Nursing Facilities | | |

| 5. ENVIRONMENTAL EVENTS | | |
|---|---|---|
| EVENT | ADDITIONAL SPECIFICATIONS | IMPLEMENTATION GUIDANCE |
| A. Patient or staff death or serious injury associated with an electric shock in the course of a patient care process in a healthcare setting Applicable settings: | Excludes events involving patients during planned treatments such as electric countershock /elective cardioversion. | This event is intended to capture: patient death or injury associated with unintended electric shock during the course of care or treatment; staff death or injury associated with unintended electric shock while carrying out duties associated with a patient care process, including preparing for care delivery. This event is not intended to capture: patient death or injury associated with emergency defibrillation in ventricular fibrillation or with electroconvulsive therapies; injury to staff who are not involved in patient care. |
| B. Any incident in which systems designated for oxygen or other gas to be delivered to a patient contains no gas, the | | This event is intended to capture: events in which the line is attached to a reservoir distant from the patient care unit or in a tank near the patient such as E-cylinders, anesthesia machines. |

| 5. ENVIRONMENTAL EVENTS | | |
|---|---------------------------|---|
| EVENT | ADDITIONAL SPECIFICATIONS | IMPLEMENTATION GUIDANCE |
| wrong gas, or is contaminated by toxic substances | | |
| Applicable settings: Hospitals Outpatient/Office-based Surgery Centers Ambulatory Practice Settings/ Office-based Practices Long-term Care/Skilled Nursing Facilities | | |
| C. Patient or staff death or serious injury associated with a burn incurred from any source in the course of a patient care process in a healthcare setting | | This event is intended to capture burns that result from: operating room flash fires, including second degree burn in these cases; hot water; sunburn in the patient with decreased ability to sense pain; smoking in the patient care environment. |
| Applicable settings: Hospitals Outpatient/Office-based Surgery Centers Ambulatory Practice Settings/ Office-based Practices Long-term Care/Skilled Nursing Facilities | | |

| 5. ENVIRONMENTAL EVENTS | | | |
|---|---------------------------|---|--|
| EVENT | ADDITIONAL SPECIFICATIONS | IMPLEMENTATION GUIDANCE | |
| D. Patient death or serious injury associated with the use of physical restraints or bedrails while being cared for in a healthcare setting | | The event is intended to capture: • instances where physical restraints are implicated in the death; e.g., lead to strangulation/entrapment, etc. Death/injury resulting from falls caused by lack of restraints would be captured under "falls." | |
| Applicable settings: Hospitals Outpatient/Office-based Surgery Centers Ambulatory Practice Settings/ Office-based Practices Long-term Care/Skilled Nursing Facilities | | | |

| 6. RADIOLOGIC EVENTS | | |
|----------------------|---------------------------|-------------------------|
| EVENT | ADDITIONAL SPECIFICATIONS | IMPLEMENTATION GUIDANCE |

| A. Death or serious injury of a patient or staff associated with the introduction of a metallic object into the MRI area | Includes events related to material inside the patient's body or projectiles outside the patient's body. | This event is intended to capture injury or death as a result of projectiles including: retained foreign object external projectiles pacemakers |
|--|--|--|
| Applicable settings: Hospitals Outpatient/Office-based Surgery Centers Ambulatory Practice Settings/ Office-based Practices | | |

| EVENT | ADDITIONAL SPECIFICATIONS | IMPLEMENTATION GUIDANCE |
|---|---------------------------|--|
| A. Any instance of care ordered by or provided by someone impersonating a physician, nurse, pharmacist, or other licensed healthcare provider | | This event is intended to capture: those without licensure to provide the care given; those with licensure who represent themselves and act beyond the scope of their licensure. |
| Applicable settings: • Hospitals • Outpatient/Office-based Surgery Centers • Ambulatory Practice Settings/ Office-based Practices • Long-term Care/Skilled Nursing Facilities | | It is not intended to capture individuals who are practicing within the scope of their license whom patients or others mistakenly bestow titles beyond that scope when such is not encouraged by the provider. |

| 7. POTENTIAL CRIMINAL EVENTS | | |
|---|---------------------------|---|
| EVENT | ADDITIONAL SPECIFICATIONS | IMPLEMENTATION GUIDANCE |
| B. Abduction of a patient/resident of any age Applicable settings: | | This event is intended to capture: removal of a patient/resident, who does not have decision-making capacity, without specific notification and approval by staff even when the person is otherwise authorized to be away from the setting. |
| Hospitals Outpatient/Office-based Surgery Centers Ambulatory Practice Settings/ Office-based Practices Long-term Care/Skilled Nursing Facilities | | Examples of individuals who do not have decision-nmaking capacity include: newborns, minors, adults with Alzheimer's. |
| C. Sexual abuse/assault on a patient or staff member within or on the grounds of a healthcare setting | | Language and definitions may vary based on state statute; however, the principle and intent remain regardless of language required based on jurisdiction. |
| Applicable settings: Hospitals Outpatient/Office-based Surgery Centers Ambulatory Practice Settings/ Office-based Practices Long-term Care/Skilled Nursing Facilities | | |
| D. Death or significant injury of a patient or staff member resulting from a physical assault (i.e., battery) that occurs within or on the | | Language and definitions may vary based on state statute (e.g., many states have existing statutes that use the terms "first degree assault" or "second degree assault" or "battery"). |

A-17

| 7. POTENTIAL CRIMINAL EVENTS | | |
|---|---------------------------|-------------------------|
| EVENT | ADDITIONAL SPECIFICATIONS | IMPLEMENTATION GUIDANCE |
| grounds of a healthcare setting. | | |
| Applicable settings: Hospitals Outpatient/Office-based Surgery Centers Ambulatory Practice Settings/ Office-based Practices Long-term Care/Skilled Nursing Facilities | | |

APPENDIX B GLOSSARY

The following terms are defined as they apply to the NQF list of serious reportable events. To the extent practicable, they have been harmonized with definitions used in other NQF safety-related products, the Agency for Healthcare Research and Quality's Common Formats, and the World Health Organization's evolving International Classification for Patient Safety. The Common Formats are a product of the requirements of the Patient Safety and Quality Improvement Act of 2005 that provides a structure for reporting adverse events, while the latter provides structure for classifying such events.

- **Abduction** means the taking away of a person by persuasion, by fraud, or by open force or violence. It includes convincing someone, particularly a minor or a woman he/she is better off leaving with the persuader, telling the person he/she is needed, or that the mother or father wants him/her to come with the abductor.
- Adverse describes a consequence of care that results in an undesired outcome. It does not
 address preventability.
- Associated with means that it is reasonable to initially assume that the adverse event was
 due to the referenced course of care; further investigation and/or root cause analysis of
 the unplanned event may be needed to confirm or refute the presumed relationship.
- Authorized means the guardian or other individual(s) having the legally recognized ability to consent on behalf of a minor or incapacitated individual (surrogate), or person designated by the surrogate to release or consent for the patient.
- Deep tissue injury presents as a purple or maroon localized area of discolored intact skin or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear.

The area may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissue.

- Elopement refers to a situation where a patient or resident who is cognitively, physically, mentally, emotionally, and/or chemically impaired wanders/walks/runs away, escapes, or otherwise leaves a caregiving institution or setting unsupervised, unnoticed, and/or prior to their scheduled discharge.
- **Event** means a discrete, auditable, and clearly defined occurrence.
- Healthcare setting means any facility or office, including a discrete unit of care within such facility, that is organized, maintained, and operated for the diagnosis, prevention, treatment, rehabilitation, convalescence or other care of human illness or injury, physical or mental, including care during and after pregnancy. Healthcare settings include, but are not limited to, hospitals, nursing homes, rehabilitation centers, medical centers, office-based practices, outpatient dialysis centers, reproductive health centers, independent clinical laboratories, hospices, ambulatory surgical centers, and pharmacies. The boundary of a healthcare setting (the "grounds") is the physical area immediately adjacent to the setting's main buildings. It does not include nonmedical businesses such as shops and restaurants located close to the setting.
- **High alert medications** are those medications that have a high risk of causing serious injury or death to a patient if they are misused. Examples of high-alert medications include anticoagulants and IV antithrombotics, insulin, cytotoxic chemotherapy, concentrated electrolytes, IV digoxin, opiate narcotics, neuromuscular blocking agents, and adrenergic agonists. A "High Alert Medication List" is available at the Institute for Safe Medication Practices' website, http://www.ismp.org.
- Infant is a child under the age of one year. (SRE 2006; Stedman's online dictionary)
- Informed consent involves a process of shared decisionmaking in which discussion between a person who would receive a treatment, including surgery or invasive

procedure, and the caregiver/professional person who explains the treatment, provides information about possible benefits and risks, and answers questions that result in the person's authorization or agreement to undergo a specific medical intervention.

Documentation of this discussion should result in an accurate and meaningful entry in the patient record, which could include a signed "consent form." Signing a consent form does not constitute informed consent; it provides a record of the discussion.

- Injury, as used in this report has a broad meaning. It includes physical or mental damage that substantially limits one or more of the major life activities of an individual in the short term, which may become a disability if extended long term. Further, injury includes a substantial change in the patient's long-term risk status such that care or monitoring, based on accepted national standards, is required that was not required before the event. (Of note, states and other entities may use alternate definitions for the term "disability.")
- Largely preventable recognizes that some of the events on the SRE list are not universally avoidable, given the complexity of healthcare and current knowledge.
- Low-risk pregnancy refers to a woman aged 18-39, with no previous diagnosis of essential hypertension, renal disease, collagen-vascular disease, liver disease, cardiovascular disease, placenta previa, multiple gestation, intrauterine growth retardation, smoking, pregnancy-induced hypertension, premature rupture of membranes, or other previously documented condition that poses a high risk of poor pregnancy outcome.
- Medical device is an instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent, or other similar or related article, including a component part, or accessory, which is recognized in the official National Formulary, or the United States

 Pharmacopoeia, or any supplement to them; intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease, in man or other animals; or intended to affect the structure or any function of the body of man or

other animals, and which does not achieve any of its primary intended purposes through chemical action within or on the body of man or other animals and which is not dependent upon being metabolized for the achievement of any of its primary intended purposes.

- Medication error means any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the healthcare professional, patient, or consumer. Such events may be related to professional practice, healthcare products, procedures, and systems, including prescribing; order communication; product labeling, packaging, and nomenclature; compounding; dispensing; distribution; administration; education; monitoring; and use.
- Neonate is a newborn less than 28 days of age.
- **Patient** means a person who is a recipient of healthcare.
- Pressure Ulcer, Stage 3 is defined as full thickness tissue loss. Subcutaneous fat may be visible, but bone, tendon, or muscle is not exposed. Some slough may be present. May include undermining and tunneling. The depth of a Stage 3 pressure ulcer varies by anatomical location. The bridge of the nose, ear, occiput, and malleolus do not have subcutaneous tissue and Stage 3 ulcers can be shallow. In contrast, areas of significant adiposity can develop extremely deep Stage 3 pressure ulcers. Bone/tendon is not visible or directly palpable.
- Pressure Ulcer, Stage 4 is defined as full thickness tissue loss with exposed bone, tendon, or muscle. Slough or eschar may be present. Often includes undermining and tunneling. The depth of a Stage 4 pressure ulcer varies by anatomical location. The bridge of the nose, ear, occiput, and malleolus do not have subcutaneous tissue, and these ulcers can be shallow. Stage 4 ulcers can extend into muscle and/or supporting structures (e.g., fascia, tendon, or joint capsule) making osteomyelitis or osteitis likely to occur. Exposed bone/tendon is visible or directly palpable.

- **Pressure Ulcer, Unstageable** is defined as full thickness tissue loss in which the base of the ulcer is completely covered by slough or eschar. Unstageable pressure ulcers will, by definition, be either Stage 3 or Stage 4.
- Preventable describes an event that could have been anticipated and prepared for, but that occurs because of an error or other system failure.
- Restraints is defined by The Joint Commission, the Centers for Medicare & Medicaid Services, and by some states. The appropriate source(s) should be consulted for the definition required by the setting and/or jurisdiction in which a presumptive event occurs. In the event none of those definitions apply to an institution, the following definition, which is intended to capture definitions from the named organizations, is offered:

 Restraints means any method of restricting a patient's freedom of movement that is not a usual and customary part of a medical diagnostic or treatment procedure to which the patient or his or her legal representative has consented; is not indicated to treat the patient's medical condition or symptoms; or does not promote the patient's independent functioning.
- **Serious** describes an event that can result in death, loss of a body part, disability, loss of bodily function, or require major intervention for correction (e.g., higher level of care, surgery).
- Sexual abuse is defined as the forcing of unwanted sexual activity by one person on another, as by the use of threats or coercion or sexual activity that is deemed improper or harmful, as between an adult and a minor or with a person of diminished mental capacity.
- Surgery is an invasive operative procedure in which skin or mucous membranes and connective tissue is incised or the procedure is carried out using an instrument that is introduced through a natural body orifice. It includes minimally invasive procedures involving biopsies or placement of probes or catheters requiring the entry into a body cavity through a needle or trocar. Surgeries include a range of procedures from minimally

invasive dermatological procedures (biopsy, excision, and deep cryotherapy for malignant lesions) to vaginal birth or Caesarian delivery to extensive multiorgan transplantation. It does not include use of such things as otoscopes and drawing blood. Organizations may choose to adopt a list of surgical procedures to supplement the definition above; one example of such a list in common use is that of the Institute of Clinical Systems Improvement.

- Surgery begins, regardless of setting, at point of surgical incision, tissue puncture, or insertion of instrument into tissues, cavities, or organs.
- Surgery ends after all incisions or procedural access routes have been closed in their entirety, device(s) such as probes or instruments have been removed, and, if relevant, final surgical counts confirming accuracy of counts and resolving any discrepancies have concluded and the patient has been taken from the operating/procedure room.
- Unambiguous refers to an event that is clearly defined and easily identified.
- Unintended retention of a foreign object refers to a foreign object introduced into the body during a surgical or other invasive procedure, without removal prior to the end of the surgery or procedure, which the surgeon or other practitioner did not intend to leave in the body.

APPENDIX C STEERING COMMITTEE, TECHNICAL ADVISORY PANELS, AND NQF STAFF

STEERING COMMITTEE

Gregg S. Meyer, MD, MSc (Co-chair)

Massachusetts General Hospital Boston, MA

Sally Tyler, MPA (Co-chair)

American Federation of State, County and Municipal Employees Washington, DC

Leah Binder

The Leapfrog Group Washington, DC

Patrick Brennan, MD

University of Pennsylvania Health System Philadelphia, PA

Tejal Gandhi, MD, MPH

Brigham and Women's Hospital Boston, MA

Susan Gentilli, MBA, RHIA, CPHQ

HealthPartners Minneapolis, MN

Christine A. Goeschel, RN, MPA

Johns Hopkins University School of Medicine Baltimore, MD

Kevin P. High, MD, MS

Wake Forest University School of Medicine Winston-Salem, NC

Cynthia N. Hoen, Esq, MPH, FACHE

Atlantic Health Morristown, NJ

Helen Lau, RN, MHROD, BSN, BMus

Kaiser Permanente Oakland, CA

Kathryn J. McDonagh, PhD

Hospira

Lake Forest, IL

John Morley, MD, FACP

State of New York Department of Health Office of Health Systems Management Albany, NY

Deborah Nadzam, PhD, RN, FAAN

Joint Commission Resources, Inc. Westlake, OH

Martha J. Radford, MD, FACC, FAHA

New York University School of Medicine New York, NY

Stancel M. Riley, Jr., MD, MPA, MPH

Massachusetts Board of Registration in Medicine Wakefield, MA

Diane Rydrych, MA

Minnesota Department of Health St. Paul, MN

Doron Schneider, MD, FACP

Abington Memorial Hospital Abington, PA

Philip J. Schneider, MS, FASHP

University of Arizona College of Pharmacy Phoenix, AZ

Eric Tangalos, MD, FACP, AGSF, CMD

Mayo Clinic Rochester, MN

Michael Victoroff, MD

Lynxcare Centennial, CO

AMBULATORY AND OFFICE-BASED SURGERY TECHNICAL ADVISORY PANEL

Stancel M. Riley, Jr., MD, MPA, MPH (Chair)

Massachusetts Board of Registration in Medicine Wakefield, MA

James P. Bagian, MD

Veterans Health Administration Department of Veterans Affairs Ann Arbor, MI

Leigh Hamby, MD, MHA

Piedmont Healthcare Atlanta, GA

William B. Rosenblatt, MD

Medical Society of the State of New York New York, NY

Gina Throneberry, RN, MBA, CASC, CNOR

Symbion Healthcare Nashville, TN

Richard Urman, MD, MBA

Harvard Medical School Boston, MA

Deborah Wheeler

United HealthCare Las Vegas, NV

PHYSICIAN OFFICE TECHNICAL ADVISORY PANEL

Tejal Gandhi, MD, MPH (Chair)

Partners Healthcare Boston, MA

Steven Kaplan, MD, FACEP

New York Presbyterian Hospital New York, NY

Catherine C. Roberts, MD

Mayo Clinic Phoenix, AZ

Michael A. Steinman, MD

University of California, San Francisco San Francisco, CA

Diana Swanson, MSN, NP-C

American Academy of Nurse Practitioners Bloomington, IN

James S. Taylor, MD

Cleveland Clinic Cleveland, OH

Saul N. Weingart, MD, PhD

Dana-Farber Cancer Institute Boston, MA

Elizabeth Wertz Evans, RN

Corazon

Cranberry Township, PA

SKILLED NURSING FACILITY TECHNICAL ADVISORY PANEL

Eric Tangalos, MD, FACP, AGSF, CMD (Chair)

Mayo Clinic Rochester, MN

Debra P. Bakerjian, PhD, MSN, FNP

Betty Irene Moore School of Nursing Sacramento, CA

Stefan Gravenstein, MD, MPH, CMD

Quality Partners at Rhode Island Providence, RI

Randall D. Huss, MD

St. John's Clinic Rolla, MO

Gloria J. Jelinek, RN, MSN, JD

Kindred Healthcare Louisville, KY

James E. Lett, II, MD, CMD

American Medical Directors Association Carmichael, CA

Laura M. Wagner, PhD, RN

New York University College of Nursing New York, NY

NQF STAFF

Helen Burstin, MD, MPH

Senior Vice President Performance Measures

Peter Angood, MD

Senior Advisor Patient Safety

Melinda L. Murphy, RN, MS

Clinical Consultant

Lindsey Tighe, MS

Research Analyst