# Editorial

# Adventures in Neverland: Challenges and Alternatives

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Several of the articles in this month's *American Journal of Critical Care* (*AJCC*) confront clinical problems that are considered "never events," including medication errors and pressure ulcers. Ventilator-associated pneumonia and delirium have also been proposed as never events, although they are not yet officially classified as such.

Excellence in critical care practice encompasses a continued quest for improvements in patient safety and quality of care, with a goal of better outcomes for patients. AACN has a strong commitment to excellence as reflected in its mission statement: "AACN drives excellence because nothing less is acceptable."[1] Excellence in patient safety and quality of care requires attention to both process and outcomes.

Process and outcomes have been the focus of national safety and quality initiatives over the past decade. In 1999, the Institute of Medicine published *To Err Is Human: Building a Safer Health System*.[2] This report highlighted the morbidity, mortality, and cost associated with preventable health care errors.

This report also advocated for organizational attention to improving the delivery of care, and emphasized that many preventable errors could be directly linked to systemic process failures. Despite the increased attention, preventable errors continue to cost the United States an estimated 99,000 lives annually plus $17 billion to $29 billion per year in health care expenses, lost worker productivity, lost income, and disability.[3]

Never events were introduced into the clinical lexicon in 2002 by the National Quality Forum (NQF) report, *Serious Reportable Events in Healthcare*, and gained traction when they were linked to hospital reimbursement in 2008. NQF currently identifies 28 clinical problems as "serious, largely preventable, and of concern to patients and health care providers."[4]

In 2007, the Centers for Medicare and Medicaid Services (CMS) identified a set of 8 "reasonably preventable" never events, and in 2008 began a policy of nonpayment to hospitals and providers for treatment of these events unless it could be documented that the condition was present on admission.[5] The current CMS list has expanded to 10 hospital-acquired conditions (see Table). Other payers have followed the lead of CMS in denying payment for certain hospital-acquired conditions. Although NQF has recently removed references to the term "never events" and now refers to "serious reportable events," the idea of never events is well established.

Never events focus on important undesirable clinical outcomes. In an ideal world, never events would never happen. However, the real world of critical care is a more nuanced environment than Neverland, and several considerations are important in any discussion of never events.


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## The Challenge of Never Events

First, are all never events truly entirely preventable? Some errors are largely under the control of the provider and institution (for example, wrong site surgeries), and it may be reasonable to expect that these can be prevented. When a wrong site surgery occurs, it clearly represents a failure of our duty to provide safe, high-quality care. However, for other conditions there are many variables in patient outcomes that are neither fully understood nor controllable by clinicians.

Bad outcomes can result for individual patients even when best practice guidelines are followed and excellent care is provided. For example, Duska and colleagues[6] conducted a retrospective case-control study of venous thromboembolism (VTE, a CMS never event) in women with ovarian cancer. They found that even though all of the women had received appropriate VTE prophylaxis, women with clear cell carcinoma of the ovary had a 2.5-times greater risk of VTE than women with other types of ovarian cancer. The reasons for increased risk of VTE in cancer patients and variability in risk related to cancer type, have not been elucidated.

Brown and colleagues[7] argue that nosocomial infection guidelines will never achieve an infection rate of zero, because guidelines cannot address host response or pathogen virulence. Understanding of the pathophysiology underlying risk of never events, and how risk can be reduced in critically ill patients, continues to evolve. Particularly in the case of complex processes such as delirium or ventilator-associated pneumonia, understanding is incomplete and clinical guidelines mitigate but do not eliminate risk. Furthermore, in many cases best practices have not been developed or validated.

## A Chilling Effect

Because CMS and other payers evaluate reimbursement based upon whether conditions were present prior to admission, there is incentive to hunt for evidence that patients already had subclinical problems before hospital admission. Such preadmission

**Table**
**Categories of "never events"[a]**

| NQF serious reportable events | CMS hospital-acquired conditions |
|---|---|
| • Stage III, IV pressure ulcers<br>• Foreign object retained after surgery<br>• Air embolism<br>• Blood incompatibility<br>• Hypoglycemia resulting in death or serious disability<br>• Falls resulting in death or serious disability<br>• Wrong site surgery<br>• Wrong patient surgery<br>• Wrong surgical procedure performed<br>• Intraoperative or immediately postoperative death in an ASA Class I patient<br>• Contaminated drugs, devices, or biologics causing patient death or serious disability<br>• Device malfunction causing patient death or serious disability<br>• Infant discharged to the wrong person<br>• Patient elopement resulting in death or serious disability<br>• Patient suicide or attempted suicide<br>• Medication error resulting in death or serious disability<br>• Maternal labor/delivery death in low-risk pregnancy<br>• Kernicterus from failure to identify and treat hyperbilirubinemia in neonates<br>• Death or serious disability due to spinal manipulative therapy<br>• Artificial insemination with the wrong donor sperm or wrong egg<br>• Accidental electric shock<br>• Oxygen or other gas delivery errors or contamination<br>• Burns resulting in death or serious disability<br>• Death or serious disability associated with the use of restraints or bedrails<br>• Care ordered by or provided by someone impersonating a licensed health care provider<br>• Abduction of a patient of any age<br>• Sexual assault on a patient<br>• Physical assault of a patient or staff member resulting in death or significant injury | • Stage III, IV pressure ulcers<br>• Foreign object retained after surgery<br>• Air embolism<br>• Blood incompatibility<br>• Certain manifestations of poor blood sugar control<br>• Fall or trauma resulting in serious injury<br>• Vascular catheter-associated infection<br>• Catheter-associated urinary tract infection<br>• Certain surgical site infections<br>• Certain deep vein thromboses or pulmonary embolisms |

Abbreviations: ASA, American Society of Anesthesiologists; CMS, Centers for Medicare and Medicaid Services; NQF, National Quality Forum

[a] Items in each list have been reordered to align where both agencies have similar items. For full information about categories, see references 4 and 5.


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testing can result in more diagnostic testing and higher cost without evidence of patient benefit.

For example, because hospital-acquired urinary tract infection is classified as a never event, there is pressure to screen the urine of all patients despite a recommendation against routine screening in asymptomatic nonpregnant adults[8] and to treat colonization as if infection already exists. Many products designed to reduce infection risk are currently available, but data evaluating effectiveness and cost are lacking.[9]

Safety and quality improvement depend on accurate and complete reporting of events, but reporting systems remain underdeveloped and do not communicate well with any central system. Once a patient is admitted, institutional incentives are lacking for aggressive identification of never events. High rates of clinical suspicion and low thresholds for diagnostic testing increase the number of events identified, and thus may negatively impact an institution's reported rate of adverse events.[10] Undercoding and underreporting are potential dangers of the current system and complicate efforts to conduct health systems research.

Critical care clinicians depend on research that evaluates clinical interventions to define best practices. The evidence base for critical care is not complete, and will evolve as new interventions become available. Labeling specific outcomes as never events is likely to have a chilling effect on research that is vital for improving patient outcomes in important areas such as pressure ulcer prevention and medication errors.

## Alternatives to Neverland

There are alternatives to the Neverland perspective. NQF's Safe Practices for Better Health Care[11] focuses on institutional and provider processes rather than individual patient outcomes. Many of the standards are directly applicable to critical care, including those establishing and maintaining a culture of safety (Safe Practice 2); effective nurse staffing that specifies number, competency, and skill mix (Safe Practice 9); critical care certification of physicians (Safe Practice 11); care of the ventilated patient (Safe Practice 23), and prevention of central line–associated bloodstream infections (Safe Practice 21) and pressure ulcers (Safe Practice 27).

We must continue to push for increased safety, quality, and positive patient outcomes. Improvements depend on the development and maintenance of interdisciplinary teams that are supported by an institutional culture of safety and quality. More research is needed on issues that are serious problems for critically ill patients. Let our resolve be to pursue excellence—because nothing less is acceptable.

The statements and opinions contained in this editorial are solely those of the coeditors.

FINANCIAL DISCLOSURES
None reported.

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