



JoAnn Grif Alspach

Editorial

Please Stop Doing That. . . and That, and That, and That, and That

Critical care nurses are accustomed to working in compliance with numerous types of directives that specify the who, what, when, where, and why of some dimension of their responsibilities. Our practice is frequently directed by documents such as unit, department, or hospital policies and procedures; local, regional, or national protocols; standards; guidelines; algorithms, and the like, which, under optimal circumstances, are derived from exhaustive review and analysis of current research and relevant health care literature that enables construction of a valid and reliable foundation of evidence upon which to base those directives. The continual evolution of new, refined, and updated versions of documents such as these promulgates what can feel like a never-ending profusion of sets of expectations from various stewards of our professional practice that, at times, can seem overwhelming. It is not very often that those same professional societies that develop and disseminate these codified sets of behaviors issue a directive to *stop* doing something that we have been practicing for quite some time. When such an infrequent stop order is issued, it is noteworthy to pause and consider what has now been relegated to the cease-and-desist category of practice for critical care providers.

Five Things to Stop Doing in the Intensive Care Unit to Limit Waste

In January 2014, at the Society of Critical Care Medicine's Critical Care Congress, a list of 5 critical care practices were identified as practices

clinicians should question. Characterized as the "Five Don'ts in Critical Care,"¹ these 5 practices were selected by the Critical Care Societies Collaborative (CCSC), a partnership of the 4 major US health care professional organizations whose 150 000 collective members provide health care services for the critically ill and injured: the American Association of Critical-Care Nurses, the American College of Chest Physicians, the American Thoracic Society, and the Society of Critical Care Medicine.²

The critical care list is just one of many comparable lists generated by professional health care societies in conjunction with the American Board of Internal Medicine's Choosing Wisely initiative, which promotes dialogue between patients and physicians aimed at assisting patients to use care that is truly necessary, substantiated by valid research evidence, free from harm, and not repetitive of diagnostic or therapeutic procedures previously completed.³ Some 60 different national medical specialty organizations, including the CCSC, have now issued their respective lists of tests, procedures, or treatments that need to be considered more thoughtfully by providers and their patients in order to "choose wisely"⁴ and contribute to eliminating unnecessary costs, procedures, and wasteful expenditure of health care resources.

The CCSC's list of 5 Don'ts appears in the Table together with a summary of the rationale surrounding its inclusion and the research evidence upon which it is based.⁵

The list was generated by a 10-member taskforce of representatives from all 4 societies, who initially contributed 58 items for consideration, critiqued those against 5 criteria (evidence,

Table 5 Don'ts For Critical Care Providers⁵

Don'ts For Critical Care Providers

Rationale

Evidence

<p>1. Don't order diagnostic tests at regular intervals (such as daily), but rather in response to specific clinical questions.</p>	<p>Compared with ordering diagnostic tests only to answer specific clinical questions or to modify management, routine ordering of such tests does not benefit, and could harm patients and unduly increases the cost of care.</p>	<p>Flabouris A, Bishop G, Williams L, Cunningham M. Routine blood test ordering for patients in intensive care. <i>Anaesth Intensive Care</i>. 2000;28:562-565. Ganapathy A, Adhikari NKJ, Spiegelman J, Scales DC. Routine chest x-rays in intensive care units: a systematic review and meta-analysis. <i>Crit Care</i>. 2012;16:R68. May TA, Clancy M, Critchfield J, et al. Reducing unnecessary inpatient laboratory testing in a teaching hospital. <i>Am J Clin Pathol</i>. 2006;126:200-206.</p>
<p>2. Don't transfuse red blood cells (RBCs) in hemodynamically stable, nonbleeding intensive care unit (ICU) patients with a hemoglobin concentration greater than 7 g/dL.</p>	<p>RBC transfusions in the ICU are primarily for benign anemia rather than acute hemorrhage that leads to hemodynamic compromise. In all patient populations studied, when RBCs are transfused at a hemoglobin trigger of 7 g/dL, survival is comparable or improved, complications are fewer, and costs are lower than when transfusion thresholds are higher. More aggressive transfusion may cause harm and diminish availability of a scarce resource.</p>	<p>Corwin HL, Gettinger A, Pearl RG, et al. The CRIT Study: anemia and blood transfusion in the critically ill—current clinical practice in the United States. <i>Crit Care Med</i>. 2004;32:39-52. Carson JL, Terrin ML, Noveck H, et al. FOCUS Investigators. Liberal or restrictive transfusion in high-risk patients after hip surgery. <i>N Engl J Med</i>. 2011;365:2453-2462. Hajjar LA, Vincent JL, Galas F, et al. Transfusion requirements after cardiac surgery: the TRACS randomized controlled trial. <i>JAMA</i>. 2010;304:1559-1567. Hebert PC, Wells G, Blajchman MA, et al. A multicenter, randomized, controlled clinical trial of transfusion requirements in critical care. <i>N Engl J Med</i>. 1999;340:409-417. Villanueva C, Colomo A, Bosch A, et al. Transfusion strategies for acute upper gastrointestinal bleeding. <i>N Engl J Med</i>. 2013;368:11-21. Chatterjee S, Wetterslev J, Sharma A, Lichstein E, Mukherjee D. Association of blood transfusion with increased mortality in myocardial infarction. <i>JAMA</i>. 2013;313:132-139.</p>
<p>3. Don't use parenteral nutrition in adequately nourished critically ill patients within the first 7 days of an ICU stay.</p>	<p>In terms of survival and length of stay (LOS) in the ICU, patients who were adequately nourished before admission receive, at best, no benefit from parenteral nutrition initiated within the first week of their stay and others are harmed. Those with hospital-associated infections demonstrate mixed results, whereas patients who are severely malnourished before their admission may benefit from early parenteral nutrition. The higher costs of this therapy are borne by all who receive it.</p>	<p>Casaer MP, Mesotten D, Hermans G, et al. Early versus late parenteral nutrition in critically ill adults. <i>N Engl J Med</i>. 2011;365:506-517. Heidegger CP, Berger MM, Graf S, et al. Optimisation of energy provision with supplemental parenteral nutrition in critically ill patients: a randomised controlled clinical trial. <i>Lancet</i>. 2013;381:385-393. Martindale RG, McClave SA, Vanek VW, et al. American College of Critical Care Medicine; A.S.P.E.N. Board of Directors. Guidelines for the provision and assessment of nutrition support therapy in the adult critically ill patient: Society of Critical Care Medicine and American Society for Parenteral and Enteral Nutrition: Executive Summary. <i>Crit Care Med</i>. 2009;37:1757-1761. Singer P, Berger MM, Van den Berghe G, et al. ESPEN guidelines on parenteral nutrition: intensive care. <i>Clin Nutr</i>. 2009;28:387-400. Buzby GP. Overview of randomized clinical trials of total parenteral nutrition for malnourished surgical patients. <i>World J Surg</i>. 1993; 17:173-177.</p>
<p>4. Don't deeply sedate patients receiving mechanical ventilation without a specific indication and without daily attempts to lighten sedation.</p>	<p>Patients receiving mechanical ventilation do not routinely need deep sedation. Evidence demonstrates that lighter sedation reduces the duration of mechanical ventilation and ICU and hospital LOS. Several protocol-based approaches are effective and available for this purpose.</p>	<p>Brook AD, Ahrens TS, Schaiff R, et al. Effect of a nursing-implemented sedation protocol on the duration of mechanical ventilation. <i>Crit Care Med</i>. 1999;27:2609-2615. Girard TD, Kress JP, Fuchs BD, et al. Efficacy and safety of a paired sedation and ventilator weaning protocol for mechanically ventilated patients in intensive care (awakening and breathing controlled trial): a randomized controlled trial. <i>Lancet</i>. 2008;371:126-134. Jacobi J, Fraser GL, Coursin DB, et al. Task Force of the American College of Critical Care Medicine, Society of Critical Care Medicine, American Society of Health-System Pharmacists, American College of Chest Physicians. Clinical practice guidelines for the sustained use of sedatives and analgesics in the critically ill adult. <i>Crit Care Med</i>. 2002;30:119-141. Kress JP, Pohlman AS, O'Connor MF, Hall JB. Daily interruption of sedative infusions in critically ill patients undergoing mechanical ventilation. <i>N Engl J Med</i>. 2000;342:1471-1477. Mehta S, Burry L, Cook D, et al. SLEAP Investigators; Canadian Critical Care Trials Group. Daily sedation interruption in mechanically ventilated critically ill patients cared for with a sedation protocol: a randomized controlled trial. <i>JAMA</i>. 2012;308:1985-1992.</p>

Continued

Table *Continued*

Don'ts For Critical Care Providers

Rationale

Evidence

<p>5. Don't continue life support for patients at high risk for death or severely impaired functional recovery without offering patients and their families the alternative of care focused entirely on comfort.</p>	<p>Although many patients and families prefer avoidance of extended life support measures, aggressive life-sustaining therapies are often used at least in part to elicit patient/family preferences and to provide patient-centered care. Routinely discussing these preferences and the alternative of palliative care could improve the quality of dying and reduce family distress and bereavement.</p>	<p>Fields MJ, Cassel CK. <i>Approaching Death, Improving Care at the End of Life</i>. Washington, DC: National Academy Press; 1997:437. Angus DC, Barnato AE, Linde-Zwirble WT, et al. Robert Wood Johnson Foundation ICU End-Of-Life Peer Group. Use of intensive care at the end of life in the United States: an epidemiologic study. <i>Crit Care Med</i>. 2004;32:638-643. Curtis JR, Engelberg RA, Wenrich MD, et al. Missed opportunities during family conferences about end-of-life care in the intensive care unit. <i>Am J Respir Crit Care Med</i>. 2005;171:844-849. Gries CJ, Engelberg RA, Kross EK, et al. Predictors of symptoms of posttraumatic stress and depression in family members after patient death in the ICU. <i>Chest</i>. 2010;137:280-287.</p>
--	---	---

prevalence, cost, relevance, innovation), whittled the list to 16, then to 9 and—following numerous iterative reviews—down to the final list of 5 items that was endorsed by all 4 societies. (For a more detailed description of how this list was created, visit www.choosingwisely.org/doctor-patient-lists/critical-care-societies-collaborative-critical-care.) The list covers a broad range of practices recommended for restraint, including orders for daily bloodwork, electrocardiograms, or chest radiographs; use of blood transfusions in hemodynamically stable patients; early use of parental nutrition; deep sedation of patients receiving mechanical ventilation; and extended use of aggressive life support measures without offering the alternative of palliative care.

What Other Practices Would You Add to This List?

My purpose for bringing this information to your attention is 3-fold:

1. To reinforce its mention and relevance to you as critical care staff nurses, clinical nurse specialists, and nurse managers, who interact and collaborate daily with our colleagues in medicine and other health care professions to plan and manage patient care that may include these measures.
2. To reinforce its mention and relevance to acute care nurse practitioners who both collaborate with members of the health care team and may order these procedures.
3. To solicit your suggestions for other critical care practices that have little or no evidence for their efficacy or where greater clinical scrutiny needs to be exercised or specific clinical criteria or indications need to be met

before those measures are implemented. If the CCSC began their work from nearly 60 areas recommended for consideration, there must be other practice areas that warrant our attention. Please let us know what your observations, analysis, and/or literature review may expose as another practice area that deserves a discriminating investigation. Be our *Critical Care Nurse* reporter and e-mail your proposed new Critical Care Practice Don't, your rationale for adding that practice to this list, and full citations to literature that supports your rationale to ccn@aacn.org. Let us hear from you so we can continue this dialogue, provide more tailored patient care, and cut waste of critical care resources. **CCN**



JoAnn Grif Alspach, RN, MSN, EdD
 Editor, *Critical Care Nurse*

References

1. Harrison L. Five things to stop doing in the ICU to limit waste. *Medscape Medical News*, Jan 13, 2014. <http://www.medscape.com/viewarticle/819057>. Accessed January 27, 2014.
2. Critical Care Societies Collaborative (CCSC). <http://ccsonline.org>. Accessed January 27, 2014.
3. American Board of Internal Medicine. Choosing Wisely—An initiative of the American Board of Internal Medicine Foundation. <http://www.choosingwisely.org/about-us>. Accessed January 27, 2014.
4. American Board of Internal Medicine. Choosing Wisely—An initiative of the American Board of Internal Medicine Foundation. Lists. <http://www.choosingwisely.org/doctor-patient-lists>. Accessed January 27, 2014.
5. American Board of Internal Medicine. Choosing Wisely—An initiative of the American Board of Internal Medicine Foundation. Critical Care Societies Collaborative-Critical Care. Five Things Physicians and Patients Should Question. <http://www.choosingwisely.org/doctor-patient-lists/critical-care-societies-collaborative-critical-care>. Accessed January 27, 2014.