

## Eleven Things Physicians and Patients Should Question

1

**Don't place, or leave in place, urinary catheters for incontinence or convenience or monitoring of output for non-critically ill patients (acceptable indications: critical illness, obstruction, hospice, perioperatively (if required) for <2 days or for urologic/pelvic procedures; use weights instead to monitor diuresis).**

Catheter Associated Urinary Tract Infections (CAUTIs) are the most frequently occurring health care acquired infection (HAI). Use of urinary catheters for incontinence or convenience without proper indication or specified optimal duration of use increases the likelihood of infection and is commonly associated with greater morbidity, mortality and health care costs. Published guidelines suggest that hospitals and long-term care facilities should develop, maintain and promulgate policies and procedures for recommended catheter insertion indications, insertion and maintenance techniques, discontinuation strategies and replacement indications.

2

**Don't prescribe medications for stress ulcer prophylaxis to medical inpatients.**

According to published guidelines, medications for stress ulcer prophylaxis are not recommended for adult patients in non-ICU settings. Histamine-2 receptor antagonists (H2RAs) and proton-pump inhibitors (PPIs), commonly used to treat stress ulcers, are associated with adverse drug events and increased medication costs, and commonly enhance susceptibility to community-acquired nosocomial pneumonia and Clostridium difficile. Adherence to therapeutic guidelines will aid health care providers in reducing treatment of patients without clinically important risk factors for gastrointestinal bleeding.

3

**Avoid transfusions of red blood cells for arbitrary hemoglobin or hematocrit thresholds and in the absence of symptoms caused by anemia.**

The AABB recommends adhering to a restrictive transfusion strategy (7 to 8 g/dL) in hospitalized, stable patients. The AABB suggests that transfusion decisions be influenced by symptoms as well as hemoglobin concentration. According to a National Institutes of Health Consensus Conference, no single criterion should be used as an indication for red cell component therapy. Instead, multiple factors related to the patient's clinical status and oxygen delivery should be considered.

4

**Don't order continuous telemetry monitoring outside of the ICU without using a protocol that governs continuation.**

Telemetric monitoring is of limited utility or measurable benefit in low risk cardiac chest pain patients with normal electrocardiogram. Published guidelines provide clear indications for the use of telemetric monitoring in patients which are contingent upon frequency, severity, duration and conditions under which the symptoms occur. Inappropriate use of telemetric monitoring is likely to increase cost of care and produce false positives potentially resulting in errors in patient management.

5

**Don't perform repetitive CBC and chemistry testing in the face of clinical and lab stability.**

Hospitalized patients frequently have considerable volumes of blood drawn (phlebotomy) for diagnostic testing during short periods of time. Phlebotomy is highly associated with changes in hemoglobin and hematocrit levels for patients and can contribute to anemia. This anemia, in turn, may have significant consequences, especially for patients with cardiorespiratory diseases. Additionally, reducing the frequency of daily unnecessary phlebotomy can result in significant cost savings for hospitals.

6

## **Avoid using opioids for treatment of mild, acute pain. For moderate to severe acute pain, if opioids are used, it should be in conjunction with non-opioid methods with the lowest effective dose for the shortest required duration.**

Opioids have serious risks including opioid use disorder and overdose. If opioid therapy is required, pain management with short acting opioids should be the lowest effective dose for the shortest required duration, often no more than 1 week. A trial of non-opioid and non-pharmacological alternatives is recommended for opioid naïve patients. If opioids are used, they may be used in conjunction with non-opioid methods, when clinically appropriate.

For patients already on opioids for chronic pain, it is not recommended to abruptly stop or taper opioid therapy to avoid withdrawal, mental health crisis, and overdose. Individualized treatment plans should be made with the patient and outpatient clinicians, whenever possible. It is important for the clinician to assess potential biases that may affect treatment of pain.

7

## **Don't maintain a peripheral capillary oxygen saturation (SpO<sub>2</sub>) of higher than 96% when using supplemental oxygen, unless for carbon monoxide poisoning, cluster headaches, sickle cell crisis, or pneumothorax.**

Ideal oxygen saturation levels for patients getting supplemental oxygen therapy is at or below 96%. The overuse of supplemental oxygen has been shown to increase mortality in numerous studies of patients with a variety of critical illnesses, including cardiac arrest, stroke, and trauma, as well as following emergency surgery. Higher oxygen levels may be needed for those with certain medical conditions such as carbon monoxide poisoning, special types of headaches like cluster headaches, sickle cell crisis, or pneumothorax. An important caveat to this recommendation is the higher incidence of occult hypoxemia, defined as an arterial oxygen saturation of less than 88% with a pulse oximetry measurement of 92 to 96%, in black patients compared to white patients.

8

## **Don't wake patients at night for routine care; redesign workflow to promote sleep at night.**

Inadequate sleep in hospitalized patients has been associated with poor outcomes including high blood pressure, hyperglycemia, immune dysfunction, and delirium. Environmental factors (noise, light disruptions), care-related factors (blood draws, vital signs), and patient factors (illness, pain) all contribute to sleep disruption. It is generally recommended that non-pharmacologic interventions be the first line of prevention. Although data are limited, multifaceted interventions targeting modifiable factors including nighttime interventions to decrease noise and light, group care activities and minimize unnecessary patient contact (i.e. decreasing vital sign frequency, blood draws) may improve sleep quality and duration. Non-pharmacologic sleep aids including earplugs, eye masks and relaxation techniques can be easily adopted and may provide some benefit.

9

## **Don't order creatine kinase (CK) or Creatine Kinase-Myocardial Band (CK-MB) in suspected Acute Coronary Syndrome or Acute Myocardial Infarction.**

According to published guidelines, cardiac troponin is the lab test of choice to diagnose acute coronary syndrome or acute myocardial infarction. Troponin is highly sensitive for AMI and more specific than CK-MB; CK-MB yields no incremental diagnostic value even in patients with chronic kidney disease. Guidelines also support the use of cardiac troponin over CK-MB for diagnosing reinfarction.

10

## **Don't order daily chest radiographs in hospitalized patients unless there are specific clinical indications.**

Patients in intensive care units have historically had daily chest x-rays as part of routine management. Evidence suggests that this does not lead to change in management, unless there are specific clinical indications to obtain a chest x-ray. The use of routine daily chest x-rays leads to unnecessary test utilization, unwarranted exposure to radiation, and downstream testing.

11

## **Do not routinely prescribe VTE prophylaxis to all hospitalized patients; use an evidence-based risk stratification system to determine whether a patient needs VTE prophylaxis. If they do warrant prophylaxis, use a bleeding risk assessment to determine if mechanical rather than pharmacologic prophylaxis is more appropriate.**

Venous thromboembolism (VTE) is a major cause of morbidity and mortality in hospitals. Pharmacologic prophylaxis has been shown to reduce the risk of clinically significant VTE. While VTE prevention should be considered for every hospitalized patient, excess VTE prophylaxis – either prophylaxis inappropriately administered to patients at low risk of VTE or to high risk patients with contraindications – can be harmful. National guidelines recommend objective risk stratification for venous thromboembolism (VTE) prevention in hospitalized medical patients.

## How This List Was Created (1–5)

The Society of Hospital Medicine (SHM) created a *Choosing Wisely*<sup>®</sup> subcommittee comprised of representatives of the Hospital Quality and Patient Safety committee and included diverse representation of academic, community and adult hospitalists. SHM committee members submitted 150 recommendations for consideration, which were discussed for frequency of occurrence, the uniqueness of the tests and treatments and whether the cost burden for a specific test or treatment proved to be significant, narrowing the list to 65 items. The *Choosing Wisely* subcommittee ranked these items and a survey was sent to all SHM members to arrive at 11 recommendations, of which the final five were determined utilizing the Delphi method. SHM's Board approved the final recommendations.

## How This List Was Created (6–11)

These recommendations were created by the SHM Hospital Quality and Patient Safety Committee's High Value Care Sub-Committee (HVCC).

**Phase 1: Crowdsourcing and Brainstorming** – An online questionnaire requesting examples of low-value care in adult hospital medicine was sent to the SHM listserv, along with ABIM Foundation and affiliated social media outlets.

All examples of low-value care from the questionnaire were compiled, edited, counted, and categorized into 5 domains: laboratory, imaging, medication, diagnostics and other. Duplicate or similar recommendations were also taken into account. Recommendations in the previous SHM CW Top 5 list were removed. All items with 10 or more mentions were taken into the next phase in an effort to capture the most prominent themes.

**Phase 2: Literature Search and Developing Recommendations** – All items brought into this phase were individually reviewed and discussed through an iterative process. Items were divided among HVCC members, and a literature search was performed in the PubMed database. Focused recommendations were developed and presented to the committee for review. Items that were duplicative or had insufficient evidence to support the recommendation were removed, leaving 22 items.

**Phase 3: Modified Delphi Voting** – For the remaining recommendations, a Delphi scoring process was utilized to reach consensus among clinicians and patient advocates. A total of 7 HVCC members and 7 patient advocates voted on the recommendations.

For each recommendation on the voting survey, clinician respondents were asked to rate on a 1-5 Likert scale on three criteria: (1) strength of evidence, (2) potential for avoiding patient harm, and (3) relevance to hospital medicine. Patient advocates were asked to rate each recommendation based on the same Likert scale on a slightly different criteria: (1) strength of evidence, (2) potential for avoiding patient harm, and (3) relevance to patients.

SHM's disclosure and conflict of interest policy can be found at [www.hospitalmedicine.org/industry](http://www.hospitalmedicine.org/industry).

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### About the ABIM Foundation

The mission of the ABIM Foundation is to advance medical professionalism to improve the health care system. We achieve this by collaborating with physicians and physician leaders, medical trainees, health care delivery systems, payers, policymakers, consumer organizations and patients to foster a shared understanding of professionalism and how they can adopt the tenets of professionalism in practice.

To learn more about the ABIM Foundation, visit [www.abimfoundation.org](http://www.abimfoundation.org).



### About the Society of Hospital Medicine

Representing the fastest growing specialty in modern healthcare, the Society of Hospital Medicine (SHM) is the leading medical society for more than 34,000 hospitalists and their patients. SHM is dedicated

to promoting the highest quality care for all hospitalized patients and overall excellence in the practice of hospital medicine through quality improvement, education, advocacy and research. Over the past decade, studies have shown that hospitalists can contribute to decreased patient lengths of stay, reductions in hospital costs and readmission rates, and increased patient satisfaction.

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