

Tests, treatments and procedures at risk of inappropriateness in Italy
that Physicians and Patients should talk about.

**Five Recommendations from the Italian Federation of Associations of Hospital Internal
Medicine (FADOI) - 1st List**

<p>1</p>	<p>Do not prescribe “gastroprotection” for stress ulcer prophylaxis in medical patients unless there is a high risk of bleeding.</p> <p>According to international guidelines, the prophylaxis of peptic stress ulcers with antisecretive drugs, represented by H2 receptor antagonists and proton pump inhibitors, is not routinely indicated for the “medical” patient, unless it is related to patients admitted to intensive care or at high risk of bleeding. The term “gastroprotection” is indeed inappropriate, hiding the possible negative effects linked to the prolonged use of proton pump inhibitors, such as <i>Clostridioides difficile</i> colitis, pneumonia, bone fractures, chronic renal failure, interference with platelet function, vitamin B12 deficiency, alterations of the intestinal microbiota. Furthermore, it has been observed that the administration of these drugs during hospitalization tends to continue after discharge, with significant negative effects on patients’ health and leading to higher costs for National Health System.</p>
<p>2</p>	<p>In the absence of urinary symptoms, do not screen for bacteriuria and in any case do not treat with antibiotics bacteriuria in elderly subjects whether they live in the community or in residential facilities.</p> <p>In the absence of symptoms, screening for bacteriuria should be avoided in subjects with an indwelling bladder catheter. In case of asymptomatic bacteriuria (absence of systemic or local symptoms) in elderly patients with cognitive impairment, delirium or a history of falls, careful monitoring is indicated and clinical evaluation and scrupulous observation are needed rather than the immediate introduction of antibiotic therapy. Screening and treating an asymptomatic bacteriuria is allowed only in urological procedures at risk of mucosal bleeding. There are no current recommendations on patients with high-risk neutropenia (neutrophil count <100 cells/mm³, duration ≥7 days) and on high risk patients as diabetics, those living in residential facilities and those who had a bladder catheter for less than thirty days.</p>
<p>3</p>	<p>Do not recommend PEG (Percutaneous Endoscopic Gastrostomy) in advanced dementia; instead, prefer assisted oral feeding.</p> <p>PEG or Nasogastric Tube placement should be limited to probable reversible conditions or for a short time period (e.g. post stroke, acute infections). The use of PEG is not recommended in patients affected by advanced dementia since it does not increase survival, does not reduce the risk of aspiration pneumonia, does not improve the healing of pressure ulcers; on the contrary it increases stress and the probability of physical containment and pharmacological sedation. The practice of comfort feeding (oral feeding for comfort purposes) aiming at improving human contacts rather than nutritional objectives allows a better perception by the patient, relatives (where adequately informed), and healthcare personnel of his/her life ending time.</p>
<p>4</p>	<p>Do not perform repetitive laboratory tests when patients show clinical and laboratory stability.</p> <p>During hospitalization, internal medicine patients often undergo a high number of blood samples for lab tests, usually redundant and repetitive, resulting in further diagnostic procedures. Frequent blood sampling is responsible for iatrogenic anemia with consequent worsening health conditions in patients suffering from cardiovascular diseases. In order to reduce useless lab tests training, audit and feedback programs are indicated along with costs visualization, policy changes and laboratory information systems. It is up to the medical prescriber to strictly consider which lab test is useful and what is needlessly repetitive, even with close interactions with the doctor/laboratory director. There is no association between reduction in laboratory tests and increase in mortality.</p>
<p>5</p>	<p>Use a restrictive strategy for transfusions of red blood cells (RBCs) (hemoglobin threshold 7-8 g/dl) in patients with anemia in the absence of acute coronary syndrome, current major bleeding or critical conditions and in patients with chronic anemia.</p> <p>The restrictive strategy, both in patients with chronic anemia and in those with anemia in the absence of acute coronary syndrome or active major bleeding, including patients hospitalized with onco-haematological pathologies, consists in the transfusion of concentrated RBCs at hemoglobin (Hb) levels lower than 7 g/dl with a target Hb after transfusion between 7 and 9 g/dl. Higher Hb thresholds should be reserved for patients with: marked acute coronary syndrome, decrease in tissue oxygenation, such as critically ill patients, chronic heart disease or candidates to cardiac surgery or orthopedic interventions. Priority should be given to the clinical evaluation and the etiology of the anemia, considering the possibility of transfusing single units of red blood cells. Overuse of packed red blood cell transfusion is burdened by increased risk of adverse effects (such as allergic reactions, hemolysis, sepsis, anaphylaxis, acute lung injury related to transfusion, fluid overload), increased mortality and morbidity in critically ill patients and increased healthcare costs. Clinical trials have shown that the restrictive strategy does not lead to increased mortality and morbidity in hospitalized patient cases.</p>

Please note that these items are provided only for information and are not intended as a substitute for consultation with a clinician. Patients with any specific questions about the items on this list or their individual situation should consult their clinician.

How this list was created

By joining the Slow Medicine® program, FADOI was asked to contribute 10 recommendations. At the beginning of 2014, the FADOI National Board of Directors commissioned two of its members to develop a questionnaire containing a selection of recommendations already published by Choosing Wisely® (270 from 51 professional societies as of February 2014). In March 2014, a list of 32 recommendations was sent to 1,175 FADOI members from 6 different regions according to a presentation order that mirrored that of publication by Choosing Wisely®. Each member was asked to indicate the 5 recommendations considered most relevant to their medical practice. The response rate was 18.1% (213, for a total of 1,037 recommendations). This method was chosen to encourage dissemination and participation. The resulting “top ten” list reflects the qualified opinion of a large number of FADOI members: this sheet contains the first 5. All recommendations were reviewed in April 2024.

Sources

1	<ol style="list-style-type: none"> Clarke K, Adler N, Agrawal D, et al. Indications for the use of proton pump inhibitors for stress ulcer prophylaxis and peptic ulcer bleeding in hospitalized patients. <i>Am J Med</i> 2022; 135:313-7. doi:10.1016/j.amjmed.2021.09.010. Heidelbaugh JJ, Goldberg KL, Inadomi JM. Adverse risks associated with proton pump inhibitors: a systematic review. <i>Gastroenterol Hepatol</i> 2009; 5:725-34. PMID: 37967443; PMCID: PMC2886361. Herzig SJ, Howell MD, Ngo LH, et al. Acid-suppressive medication use and the risk for hospital-acquired pneumonia. <i>JAMA</i> 2009; 301:2120–8. doi: 10.1001/jama.2009.722. Imhann F, Bonder MJ, Vich Vila A, et al. Proton pump inhibitors affect the gut microbiome. <i>Gut</i> 2016; 65:740–8. doi: 10.1136/gutjnl-2015-310376. Osservatorio Nazionale sull'impiego dei Medicinali. L'uso dei farmaci in Italia. Rapporto Nazionale 2022. Roma: Agenzia Italiana del Farmaco; 2023. p. 501-8.
2	<ol style="list-style-type: none"> Nicolle LE, Gupta K, Bradley SF, et al. Clinical Practice Guideline for the Management of Asymptomatic Bacteriuria: 2019 Update by the Infectious Diseases Society of America. <i>Clin Infect Dis</i> 2019;68 :e83-e110. doi: 10.1093/cid/ciy1121. Bonkat G, Bartoletti R, Bruyère F, et al. EAU Guidelines on Urological Infections. European Association of Urology 2023. https://d56bochluxqnz.cloudfront.net/documents/full-guideline/EAU-Guidelines-on-Urological-infections-2023.pdf. (last accessed March 2024). Köves B, Cai T, Veeratterapillay R, et al. Benefits and Harms of Treatment of Asymptomatic Bacteriuria: A Systematic Review and Meta-analysis by the European Association of Urology Urological Infection Guidelines Panel. <i>Eur Urol</i> 2017;72:865-8. doi: 10.1016/j.eururo.2017.07.014
3	<ol style="list-style-type: none"> Matarasso Greenfeld S, Gil E, Agmon M. A bridge to cross: tube feeding and the barriers to implementation of palliative care for the advanced dementia patient. <i>J Clin Nurs</i> 2022;31:1826-34. doi: 10.1111/jocn.15437. Van Bruchem-Visser RL, Mattace-Raso FUS, de Beaufort ID, et al. Percutaneous endoscopic gastrostomy in older patients with and without dementia: Survival and ethical considerations. <i>J Gastroenterol Hepatol</i> 2019;34:736-41. doi: 10.1111/jgh.14573. Roche KF, Bower KL, Collier B, et al. when should the appropriateness of PEG be questioned? <i>Curr Gastroenterol Rep.</i> 2023;25:13-9. doi: 10.1007/s11894-022-00857-2. Schneider PL, Fruchtmann C, Indenbaum J et al. Ethical considerations concerning use of percutaneous endoscopic gastrostomy feeding tubes in patients with advanced dementia. <i>Perm J.</i> 2021;25:20.302. doi: 10.7812/TPP/20.302. Volkert D, Chourdakis M, Faxen-Irving G et al. ESPEN guidelines on nutrition in dementia. <i>Clin Nutr</i> 2015;34:1052-73. doi: 10.1016/j.clnu.2015.09.004.
4	<ol style="list-style-type: none"> Attali M, Barel Y, Somin M et al. A cost-effective method for reducing the volume of laboratory tests in a university-associated teaching hospital. <i>Mt Sinai J Med.</i> 2006;73:787-94. PMID: 17008940. Salisbury AC, Reid KJ, Alexander KP et al. Diagnostic blood loss from phlebotomy and hospital-acquired anemia during acute myocardial infarction. <i>Arch Intern Med.</i> 2011;171:1646-53. doi: 10.1001/archinternmed.2011.361. Yeshoua B, Bowman C, Dullea J, et al. Interventions to reduce repetitive ordering of low-value inpatient laboratory tests: a systematic review. <i>BMJ Open Quality</i> 2023;12:e002128. doi: 10.1136/bmjopen-2022-002128 Thurm M, Craggs H, Watts M, Brooks A. Reducing the number of unnecessary laboratory tests within hospital through the use of educational interventions. <i>Ann Clin Biochem</i> 2021;58:632-637. doi: 10.1177/00045632211040670. Fondazione GIMBE. Strategie per ridurre la ripetizione dei test di laboratorio nei pazienti ospedalizzati. <i>Evidence</i> 2018;10: e1000185. https://www.evidence.it/articoli/pdf/e1000185.pdf. (last accessed March 2024).
5	<ol style="list-style-type: none"> Carson JL, Stanworth SJ, Guyatt G, et al. Red Blood Cell Transfusion 2023 AABB International Guidelines. <i>JAMA</i> 2023;330:1892-902. doi:10.1001/jama.2023.12914. National Institute for Health and Care Excellence. Blood transfusion. November 2015 (updated 2020). https://www.nice.org.uk/guidance/ng24/evidence/full-guideline-pdf-2177160733. (last accessed March 2024). Istituto Superiore di Sanità, Centro Nazionale Sangue Linee guida per il programma di Patient blood Management, Revisione 2016. https://pbm.centronazionaliemesangue.it/MC-API/Risorse/Linee%20Guida%20per%20il%20programma%20di%20Patient%20Blood%20Management.pdf. (last accessed March 2024). Mehta N, Murphy MF, Kaplan L, et al. Reducing unnecessary red blood cell transfusion in hospitalised patients. <i>BMJ</i> 2021;373:n830. doi: 10.1136/bmj.n830. Choosing wisely Canada. Internal Medicine. https://choosingwiselycanada.org/recommendation/internal-medicine/. (last accessed March 2024).

Slow Medicine ETS, an Italian Third Sector organization of health professionals, patients and citizens promoting a Measured, Respectful and Equitable Medicine, launched the campaign “**Doing more does not mean doing better- Choosing Wisely Italy**” in Italy at the end of 2012, similar to Choosing Wisely in the USA. The campaign aims to help physicians, other health professionals, patients and citizens engage in conversations about tests, treatments and procedures at risk of inappropriateness in Italy, for informed and shared choices. The campaign is part of the Choosing Wisely International movement. Partners of the campaign are the National Federation of Medical Doctors' and Dentists' Orders (FNOMCeO), that of Registered Nurses' Orders (FNOPI), the Academy of Nursing Sciences (ASI), National Union of Radiologists (SNR), Tuscany regional health agency, PartecipaSalute, Altroconsumo, the Federation for Social Services and Healthcare of Aut. Prov. of Bolzano, Zadig. www.choosingwiselyitaly.org; www.slowmedicine.it

FADOI (Federazione delle Associazioni Dirigenti Ospedalieri Internisti) is a scientific society aimed at promoting Internal Medicine and its role inside the hospitals, augmenting the medical knowledge and improving its good practice among practitioners, and developing the “disease management” culture. It also promotes sharing of the different experiences in health organization among different regions of Italy, exchanging clinical experiences across the different departments within an hospital, and encourages continuity in medical assistance of the patients after discharge from the hospital. FADOI has established “ten points” for a sustainable and wise health care approach.

<http://www.fadoi.org/>