Colombian Journal of Anesthesiology

OPEN

Received: 7 September, 2022 ▸ Accepted: 4 February, 2023 ▸ Online first: 16 May, 2023

DOI: https://doi.org/10.5554/22562087.e1075

S.C.A.R.E. aims at "Choosing Wisely – Caring from knowledge"

La S.C.A.R.E. le apunta a las "Decisiones acertadas. Cuidando desde el conocimiento"

Luz María Gómez Buitrago[a], Nubia Fernanda Sánchez Bello[b], Jorge Rubio Elorza[c,d]

[a] Scientific directorship, Colombian Society of Anesthesiology and Resuscitation (S.C.A.R.E.). Bogotá, Colombia.
[b] Anesthesia and Perioperative Research Group, Research and Scientific Publications Area, Colombian Society of Anesthesiology and Resuscitation, (S.C.A.R.E.). Bogotá, Colombia.
[c] National Board of Directors. Colombian Society of Anesthesiology and Resuscitation (S.C.A.R.E.). Bogotá, Colombia.
[d] Salud SURA Industriales. Medellín, Colombia.

Correspondence: Cra. 15A No. 120-74, Sociedad Colombiana de Anestesiología y Reanimación (S.C.A.R.E.). Bogotá, Colombia.

How to cite this article: Gómez Buitrago LM, Sánchez Bello NF, Rubio Elorza J. S.C.A.R.E. aims at "Choosing Wisely – Caring from knowledge". Colombian Journal of Anesthesiology. 2023;51:e1075. **Email:** lm.gomez@scare.org.co

Abstract

The Choosing Wisely initiative has become a significant benchmark as a strategy to reduce low value tests and therapies. An original initiative of the American Board of Internal Medicine (ABIM) which has been growing gradually and is now present in over 18 countries, with the support of more than 80 scientific societies around the world.

In Colombia, the strategy is being accepted by the Colombian Association of Scientific Societies (ACSC), which with the support of six pioneer Colombian scientific societies, have encouraged the development and implementation of "do not do recommendations", with a view to fulfil the right to self-regulation of human resources in healthcare, reducing those medical behaviors that could be ineffective or harmful to the patient.

This article is an overview of the most significant items of the initiative which has been conducted by the ACSC, with the support of the Colombian Society of Anesthesiology and Resuscitation (S.C.A.R.E.) as a pioneer.

Key words

Decision making; Patient care; Low-value care; Medical overuse; Colombia; Anesthesiology.

Resumen

La iniciativa Choosing Wisely se ha convertido en un significativo referente como estrategia para reducir pruebas y tratamientos de bajo valor. Planteada originalmente por la American Board of Internal Medicine (ABIM), ha ido creciendo gradualmente y ya se encuentra en más de 18 países, y cuenta con el apoyo de más de 80 sociedades científicas del mundo.

En Colombia, la estrategia está siendo adaptada por la Asociación Colombiana de Sociedades Científicas (ACSC), quienes, con el apoyo de seis sociedades científicas colombianas como pioneras, han motivado la elaboración e implementación de "recomendaciones de no hacer", con el objetivo de materializar el derecho a la autorregulación del talento humano en salud, reduciendo aquellas conductas médicas que pueden ser inefectivas u ocasionar daño al paciente.

En este artículo hacemos un recuento de los puntos más importantes de la iniciativa, cuál ha sido la labor de la ACSC, y el papel que la Sociedad Colombiana de Anestesiología y Reanimación (S.C.A.R.E.) ha tenido como sociedad pionera.

Palabras clave

Toma de decisiones; Atención al paciente; Atención de bajo valor; Uso excesivo de los servicios de salud; Colombia; Anestesiología.

Lea la versión en español de este artículo en www.revcolanest.com.co

INTRODUCTION

Technological developments and breakthroughs in the various health domains, in addition to the growing relevance of patient-centered care over the past few years, have led healthcare stakeholders and scientific societies to search assertive strategies that initiate and maintain an open dialogue between doctors and patients, on the adequate use of diagnostic tests, treatments, or health technologies.

Bases on such need, the American Board of Internal Medicine [ABIM]), launched in 2012 a program called Choosing Wisely. The original program focused on identifying low value tests and therapies; i.e., which fail to contribute with any additional benefit to the patient and hence may result in waste of resources and harm. Afterwards, they looked for partnerships with other medical societies so that each developed five recommendations that were based on scientific literature. Since the Choosing Wisely initiative was launched, over 80 scientific societies have developed recommendations and 18 additional countries have become involved. (1,2) Later, Canada adopted Choosing Wisely International (CWI) in order to strengthen a network for cooperation among national initiatives to be implemented based on lessons learned and technical support to the countries that are just beginning this journey.

The Colombian Association of Scientific Societies (ACSC) identified this international initiative as a sound approach to highlight the urgent need of adopting self-regulatory powers previously enacted under the Health Statutory Law and according to other government regulations. Thus, the initiative enables the development of concrete strategies by suggesting the rational use of health technologies which could be ineffective or even harmful to patients.

In Colombia, the work team decided to call this initiative "Choosing Wisely – Caring from knowledge". As a result, each scientific society is required to prepare a list with five "Do not do recommendations"; in other words, avoid any activities/actions that may impact patient safety and quality of care. Hence, the general objective of the initiative in Colombia is:

> To implement in the largest possible number of scientific societies members of ACSC, the initiative of lists with five "Do not do" recommendations to reduce the use of ineffective or unsafe health technologies, and hence to contribute to healthcare quality improvement and patient safety.

Moving forward, the five principles of the initiative at the international level were adopted, in addition to the following statements in the light of the historical circumstances experienced in the country as a result of the implementation of the Healthcare sector Statutory Law. (3)

Principles of the Choosing Wisely initiative adopted in Colombia under the Choosing Wisely project (3,4):

1. That it is consistent with the protection of the fundamental right to health and patient safety.
2. That it is led by physicians pursuant to their obligation to self-regulation.
3. That it is patient-centered and its implementation should be agreed with the patient.
4. That it is multi-professional since compliance requires the involvement of various health professions, besides medicine.
5. That it is evidence-based.
6. That it is transparent; i.e., should be carried out avoiding the participation of individuals with conflicts of interest.

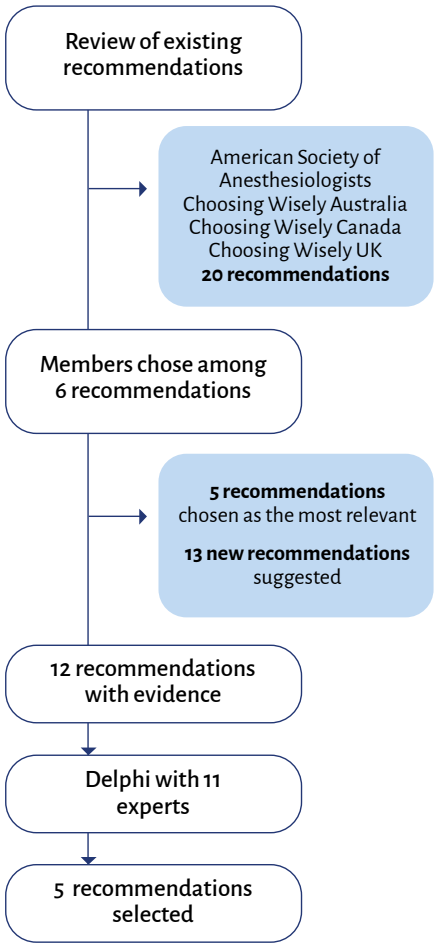
Following is the paper prepared by the Colombian Society of Anesthesiology and Resuscitation (S.C.A.R.E.), which brings together the anesthesiologists in the country and allowed for the consolidation of the five recommendations considered to be relevant for the practice of anesthesia in the country. The expectation is to be able to implement this project throughout the healthcare institutions. The final paragraph of this article discusses the roadmap for its implementation and dissemination.

METHODOLOGY

Once the work to be done was clear, each scientific society internally defined its own strategy for making their recommendations. Figure 1 presents the strategy used by our society.

S.C.A.R.E. compiled the recommendations of the American Society of Anesthesiologists, Choosing Wisely Australia, Choosing Wisely Canada, and Choosing Wisely UK Anaesthesia. Naturally, the recommendations were specifically

Figure 1. Construction strategy for Choosing Wisely.



Source: Authors.

related to the management of anesthesia. This initial selection was consolidated in a QuestionPro survey form (5); the form was forwarded to the anesthesiologists members of S.C.A.R.E. to select the most important recommendations, or to suggest new recommendations with their respective evidence.

The results of the survey were used to identify some additional recommendations and a short list of twelve recommendations was developed. Then, using the Delphi methodology, a validation process took place with a selected group of experts. Two fundamental criteria were the basis to decide the composition of the group of experts: first, clinical experience; and second, the absence of any relationships that could result in a conflict of interests. The ACSC suggested some criteria to identify potential conflicts of interest and these were the criteria used. The following were considered conflicts of interest (6):

- Full time employee in non-clinical activities of the Ministry of Health, or State, District, or Municipal health secretariats.
- Full time employee in non-clinical activities of a healthcare provider institution (EPS) or agency responsible for payment.
- Full time employee of a manufacturer or distributor of medical technologies (medicines, devices, medical equipment, medical supplies).
- Owner or Board Member of any the above-mentioned companies.

A team of eleven experts was organized in accordance with the above criteria; prior to the meeting, each expert received a document with a summary of the results accomplished so far and the preliminary proposals for do-not-do recommendations. The experts had the opportunity to make comments to these preliminary proposals from April 8 through 18, 2022. A QuestionPro questionnaire was used to indicate the experts' agreement with the inclusion of these recommendations. This initial review and ballot was called the preliminary round.

The meeting of experts was held online on April 22, 2022. On the day of the meeting, the information collected by the developer team was presented again, together with the results of the preliminary round. First, a ten-minute discussion was opened for each recommendation - maximum one minute per participant – for a total of thirty minutes, to analyze the recommendations over which there was no agreement for its inclusion or exclusion. The items over which there was disagreement in the preliminary round were subject to vote with two rounds. Before the start of the second round, a discussion took place on the recommendations over which there was no agreement; this discussion lasted again for ten minutes, with a maximum of one minute per intervention.

After the decision was made regarding the recommendations to be included, these recommendations were prioritized to identify the five recommendations to be submitted as Wise Decisions in Anesthesiology. The prioritization was done using QuestionPro, via a list to classify the five most important recommendations according to each expert. This information was analyzed in terms of percentages to establish the five best rated recommendations in the group. This methodology was the basis to select the recommendations listed in Table 1.

Disclosure of the results and next steps moving forward

After collecting all of the recommendations from the pioneer societies that replied to the first call of the ACSC, and submitting them in a specially designed form, a kickoff webinar was held on May 5, 2022, which was widely broadcasted to ensure participation of the different stakeholders in healthcare. The session began with a conference on the international experience by Dr. Wendy Livingston, followed by a short presentation of a summary of the recommendations of each society by the developer group. On July 12, S.C.A.R.E held an online meeting to introduce the recommendations in anesthesiology and to answer questions from the audience.

However, this is not the end of the journey. The next step is the implementation of the recommendations in the healthcare institutions, measuring the results before and after their implementation, to evidence the benefits achieved; simultaneously, the dissemination of the recommendations to patient organizations and education institutions, in order to promote the initiative among the organizations responsible for the development of human resources. The ACSC shall continue to lead this activity, inviting and advising other scientific societies to encourage their participation. S.C.A.R.E is particularly interested in moving forward in the areas of our specialty where recommendations may be issued on specific topics such as: pediatric anesthesia, obstetric anesthesia and regional anesthesia, inter alia.

ACKNOWLEDGMENTS

Contributions by the authors

LMGB and JRE: Conception of the strategy, planning of the study, preparation of the draft, drafting and revision and approval of the manuscript.
NFSB: Planning of the study, development of the research protocol, statistical analysis of the results, drafting, revision and approval of the final manuscript.

Assistance for the study

Use of the QuestionPro platform under license property of S.C.A.R.E.

Financial support and sponsorship

None declared.

Table 1. Recommendations of Wise Decisions in Anesthesiology.

Recommendation	Commentary
Do not allow prolonged fasting in patients undergoing elective surgery; unless there is a contraindication, consider the intake of clear fluids up to two hours before surgery.	Randomized, controlled trials have shown that clear fluid intake up to two hours and light solids up to six hours before the induction of anesthesia is safe and improves the patient's wellbeing. (7)
Do not require "routine" laboratory tests (electrocardiogram, chest X-rays, spirometry, CBC, coagulation tests), in ASA I or II patients undergoing a low risk procedure and when no blood loss is anticipated.	By reducing the number of unnecessary tests, there is a reduction in the number of adjournments and delays; it is also considered a cost-effective measure that reduces healthcare costs. (8,9) A pilot study on the elimination of routine preop tests in ambulatory surgery, showed that the number of adverse events did not increase. (10)
Do not administer supplemental oxygen in regional anesthesia in healthy patients, unless sedatives are used or when the oxygen saturation is below 90 %.	In ASA I-III patients under spinal anesthesia, the routine use of oxygen supplementation is nor necessary, due to the low incidence of intraoperative hypoxemia (oxygen saturation 90 %). (11) The use of oxygen supplementation to healthy term pregnant mothers during elective cesarean section under regional anesthesia failed to show any benefit or to be detrimental to the mother or the fetus. (12) However, in some geographies with an altitude over 2600 meters above sea level, this figure could be higher and a 92% oxygen saturation should be considered as the baseline. (13,14)
Do not administer packed red blood cells to a young patient with no comorbidities, no blood loss, with a hemoglobin (Hb) ≥ 7 g/dL, except if the patient is symptomatic or hemodynamically unstable.	The updated guidelines of the American Society of Anesthesiology recommend red blood cells transfusion if the Hb is < 7 g/dL in most of the asymptomatic patients with no cardiovascular disease. Red blood cells transfusion should not be exclusively determined based on the level of hemoglobin. (15) In a study in an intensive care setting a restrictive group with transfusion if the Hb was below 7 g/dL to maintain it at 7-9 g/dL was compared against a liberal group, with a level for transfusion of Hb < 10 g/dL to be maintained between 10-12 g/dL, there was no statistical difference in the 30-day mortality between the two groups. (16) Most allogeneic red blood cells transfusions may be avoided in patients with a level of hemoglobin around 7-8 g/dL. (17)
Do not administer fresh frozen plasma (FFP) prophylactically during the perioperative period of patients without active bleeding.	EThe prophylactic use of FFP prior to an invasive procedure with altered coagulation tests, but without active bleeding, is not supported by good quality evidence; the conclusion is that altered coagulation tests are not a predictor for bleeding (18); there is no evidence supporting the prophylactic use of plasma. (19) Any personal or family history of bleeding, the use of medications, and the risk of bleeding during the procedure, are more important indicators than routine coagulation tests. (20)

Source: Authors.

Conflicts of interest

The article describes a number of activities conducted by the Colombian Society of Anesthesia and Resuscitation (S.C.A.R.E.) and all the authors are associated with this organization.

Acknowledgements

We recognize Yenny Marcela Muñoz Laverde, research professional of S.C.A.R.E., for her support in collecting information through the QuestionPro platform.

REFERENCES

1. Levinson W, Kallewaard M, Bhatia RS, Wolfson D, Shortt S, Kerr EA. 'Choosing Wisely': a growing international campaign. BMJ Qual Saf. 2015;24(2):167-74. doi: www.doi.org/10.1136/bmjqs-2014-003821
2. Santhirapala R, Fleisher LA, Grocott MPW. Choosing Wisely: just because we can, does it mean we should? Br J Anaesth. 2019;122(3):306-10. doi: 10.1016/j.bja.2018.11.025
3. Congreso de la República de Colombia. Ley Estatutaria de Salud 1751 de 2015 [Internet]. 2015. Available at: https://www.minsalud.gov.co/Normatividad_Nuevo/Ley 1751 de 2015.pdf
4. Choosing Wisely International Learning Network. Starter Kit for your Choosing Wisely Campaign [Internet]. 2017. Available at: https://choosingwiselycanada.org/wp-content/uploads/2017/03/English-CWILN-starter-kit-.pdf
5. QuestionPro Inc. Software para encuestas QuestionPro [Internet]. 2022. Available at: https://www.questionpro.com/es/
6. Asociación Colombiana de Sociedades Científicas. Documento de referencia para la implementación de la iniciativa en las Sociedades científicas [Internet]. Decisiones Acertadas. Cuidando desde el conocimiento. 2022. Available at: http://decisionesacertadas.sociedadescientificas.com/wp-content/uploads/2022/05/Decisiones-Acertadas-Documento_Referencia_Mayo-17-2022.pdf

7. Brady MC, Kinn S, Stuart P, Ness V. Preoperative fasting for adults to prevent perioperative complications. Cochrane database Syst Rev. 2003;(4). doi: https://doi.org/10.1002/14651858.CD004423

8. Beliveau L, Buddenhagen D, Moore B, Davenport D, Burton M, Duane T. Decreasing resource utilization without compromising care through minimizing preoperative laboratories. Am Surg. 2018;84(7):1185-8. doi: https://doi.org/10.1177/000313481808400735

9. Nelson SE, Li G, Shi H, Terekhov M, Ehrenfeld JM, Wanderer JP. The impact of reduction of testing at a Preoperative Evaluation Clinic for elective cases: Value added without adverse outcomes. J Clin Anesth. 2019;55:92-9. doi: www.doi.org/10.1016/j.jclinane.2018.12.027

10. Chung F, Yuan H, Yin L, Vairavanathan S, Wong DT. Elimination of preoperative testing in ambulatory surgery. Anesth Analg. 2009;108(2):467-75. doi: www.doi.org/10.1213/ane.0b013e318176bc19

11. Mutukwa T, Gonah L, Ndhlala AR, Saurombe DT. Is oxygen supplementation necessary for patients under spinal anaesthesia?-A prospective hospital-based study. Med J Zambia. 2017;44(1):45-51. Available at: https://www.ajol.info/index.php/mjz/article/view/157404

12. Chatmongkolchart S, Prathep S. Supplemental oxygen for caesarean section during regional anaesthesia. Cochrane Database Syst Rev. 2016;(3). doi: www.doi.org/10.1002/14651858.CD006161.pub3

13. Ministerio de Salud y Protección Social. Uso e interpretación de la oximetría de pulso [Internet]. 2016. Available at: https://www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/VS/PP/ENT/uso-interprtn-oximetria-pulso.pdf

14. Trompetero González AC, Cristancho Mejía E, Benavides Pinzón WF, Serrato M, Landinéz MP, Rojas J. Behavior of hemoglobin concentration, hematocrit and oxygen saturation in Colombian university population at different altitudes. Nutr Hosp. 2015;32(5):2309-18. doi: www.doi.org/10.3305/nh.2015.32.5.9711

15. American Society of Anesthesiologists Task Force on Perioperative Blood Transfusion and Adjuvant Therapies. Practice guidelines for perioperative blood transfusion and adjuvant therapies: An updated report by the American Society of Anesthesiologists Task Force on Perioperative Blood Transfusion and Adjuvant Therapies. Anesthesiology. 2006;105(1):198-208. doi: https://doi.org/10.1097/00000542-200607000-00030

16. Hébert PC, Wells G, Blajchman MA, Marshall J, Martin C, Pagliarello G, et al. A multicenter, randomized, controlled clinical trial of transfusion requirements in critical care. N Engl J Med. 1999;340(6):409-17. doi: https://doi.org/10.1056/NEJM199902113400601

17. Carson JL, Stanworth SJ, Dennis JA, Trivella M, Roubinian N, Fergusson DA, et al. Transfusion thresholds for guiding red blood cell transfusion. Cochrane Database Syst Rev. 2021;(12). doi: https://doi.org//10.1002/14651858.CD002042.pub5

18. Segal JB, Dzik WH, Network TMCT. Paucity of studies to support that abnormal coagulation test results predict bleeding in the setting of invasive procedures: an evidence-based review. Transfusion. 2005;45(9):1413-25. doi: www.doi.org/10.1111/j.1537-2995.2005.00546.x

19. Green L, Bolton-Maggs P, Beattie C, Cardigan R, Kallis Y, Stanworth SJ, et al. British Society of Haematology Guidelines on the spectrum of fresh frozen plasma and cryoprecipitate products: their handling and use in various patient groups in the absence of major bleeding. Br J Haematol. 2018;181(1):54-67. doi: www.doi.org/10.1111/bjh.15167

20. Patel IJ, Davidson JC, Nikolic B, Salazar GM, Schwartzberg MS, Walker TG, et al. Consensus guidelines for periprocedural management of coagulation status and hemostasis risk in percutaneous image-guided interventions. J Vasc Interv Radiol JVIR. 2012;23(6):727-36. doi: www.doi.org/10.1016/j.jvir.2012.02.012

COMPLEMENTARY MATERIAL

Choosing Wisely. Caring from knowledge

Following is a list of "Do not do" recommendations with regards to some of the most frequent practices in anesthesiology in Colombia. Please select those you feel should be included in the list of Wise Decisions for Colombian Anesthesiologists , (maximum 5).

· Do not hospitalize a patient one day prior to his/her scheduled, low-to-moderate risk ambulatory surgery, if the patient has been properly assessed and prepared before surgery.

· Do not request routine laboratory tests (electrocardiogram, chest X-rays, spirometry, CBC, coagulation tests) in ASA I or II patients undergoing a low risk procedure, when minimal blood loss of use of fluids is anticipated.

· Do not request cardiac diagnostic tests or stress tests to cardiac asymptomatic, stable patients undergoing a low to moderate risk, non-cardiac procedure.

· Do not administer packed red blood cells to a young patient with no comorbidities, no blood loss, with a hemoglobin (Hb) ≥ ___, except if the patient is symptomatic or hemodynamically unstable.

· Do not administer colloids routinely (dextran, hydroxyethyl - starch, albumin) for fluid volume rescue without proper indications.

· Do not initiate anesthesia in patients with a limited life expectancy, high risk of dying, or severely compromised functional recovery, without discussing the expected outcomes and the care goals.

If you have a recommendation proposal which is not included in those listed above, you may include your proposal under the heading: "Other not recommended", bearing in mind that:

· The proposal should begin with the words "Do not".

· Maximum number of words: 30.

· Only submit recommendations associated with Anesthesiology.

Reference: Indicate the source that supports the proposal; you may provide a statement or link for consultation.

Please let us know if you have any comments or remarks to the proposed recommendations.