## ARTICLE IN PRESS

European Journal of Internal Medicine xxx (xxxx) xxx

Contents lists available at ScienceDirect

# European Journal of Internal Medicine

journal homepage: www.elsevier.com/locate/ejim



Letter to Editor

# General practitioner agreement and adherence to the Swiss Choosing wisely top 5 list: A cross-sectional survey

Dear Editor,

Choosing Wisely (CW) campaigns have spread around the world to stimulate conversations between physicians and patients about unnecessary tests, treatments, and procedures that account for up to 20% of all medical costs [1]. The Swiss Society of General Internal medicine (SSGIM) played a pioneering role by launching the "Smarter Medicine Choosing Wisely Switzerland" campaign with the first top-five list in 2016 and five additional items 2021 (Table 1) [2]. The present study examined how general practitioners (GP) working in a Health Maintenance Organization (HMO) agree with and report adhering to the Swiss Choosing wisely top-five lists of unnecessary interventions.

The Delta Network is an HMO established in Western Switzerland that limits member coverage to medical care provided through a network of 815 GP who are under contract with the HMO. The Delta network provides for >250'000 insured adults (>18 years old) contracting with all Swiss health insurance companies [3]. Acting like an accountable care organization (ACO) without a real capitation, Delta network physicians are accountable for the quality, cost, and overall care of HMO beneficiaries.

For this survey, we mailed a self-administered questionnaire to 815 GPs with 29 questions. Survey questions focused on four domains: a) knowledge of the top five lists, b) GP agreement with the items of these top five lists and their adherence in clinical practice c) the external factors that may influence their ability to implement the recommendations d) sociodemographic characteristics of the GP. Answers were categorized in four levels, for example: never / sometimes / most of the time / always.

After two mailing from 19 July 2021 to 26 August 2021, 95 of the 815 GP responded (response rate 12%). 53% of GP were males, with an average of 17 years of experience. 83% of respondents were aware of the contents of the 2016 top five list, but this rate dropped to 56% for the top five list released in 2021. Overall, 70% of physicians fully agreed with the recommendations, but only 32% reported always adhering to the recommendations in practice. The proportion of respondents saying they follow individual recommendations (always/most of the time) ranged from 97% for the recommendation to not perform preoperative chest x-rays, to 76%, 77% and 78% for the recommendation to not performing Vitamin D measurement, lipid management in patients >75 years old, and annual check-ups respectively (Table 2). The most frequent reasons for which physicians might not follow each given recommendation are pressure from patients (97%), fear of losing patients (57%), fear of litigation (62%), and lack of time (58%).

Notwithstanding the low response rate of our self-reported survey, knowledge of the top five lists seems high among GPs working in the Delta network, mirroring a previous study assessing awareness of the Swiss CW campaign among members of a Swiss primary care network,

after the release of the first top five list [4]. GPs working in the Delta network likely hear more often and earlier about CW than their peers, as they meet during quality circles (QC) at regular intervals to discuss and review their clinical practice and solve quality-oriented medical problems. QC represent a great platform to disseminate best practice guidelines, such as the top-five lists published by the CW campaign. Of note, the level awareness of the extended top five list released in 2021 was lower (56%), confirming that dissemination of information takes times and different communication channels are needed to have an impact.

Screening or new management of dyslipidemia in people over 75 years of age for primary prevention and Vitamin D measurement had the lowest adherence rate. A first explanation is certainly the degree of confidence in these recommendations. Indeed, these interventions fall into a gray zone for which the balance of benefits and harms varies substantially among patients and are backed by little evidence to help decide which patients may benefit.

GPs agree at least most of the time to all of the recommendations but report relatively low adherence in clinical practice (32% always follow the recommendations). Important reasons for not following the recommendations include perceived pressure to yield to the patient requests for fear of losing patients or of litigation. Patient expectations have often been identified as a barrier to implement CW campaign across developed countries, where overuse is rooted in the culture and demanded by a society that requests certainty at almost any cost [5]. By integrating quality-measurement efforts including patients' perspective, the CW campaign can help educate patients and explain them why an unnecessary test may be harmful so that doctors and patients can have more constructive conversations about the tests during a shared decision process.

After the release of the initial CW top five lists, some experts raised concerns that the recommendations largely target services that are not revenue-generating for members of the recommending societies [6]. Based on the most robust evidence in the literature suggesting that general health checks are unlikely to be beneficial [7], the SSGIM has courageously discouraged the annual checkup in their extended top five list, even though it is an activity that generates income for most of the GP. However, there is still a discordance between the agreement and adherence rates to this recommendation, suggesting that financial incentives may play a role in a fee-for service system, like the Swiss health system.

The relative discrepancy between the agreement and adherence rates suggests that the dissemination of guidelines alone will not change physician behavior. The top five lists highlight low-value services, but must be translated into measurable quality indicators if we want to assess their effect on provider behavior. In a recent study, we showed

https://doi.org/10.1016/j.ejim.2022.04.016

Received 25 February 2022; Accepted 16 April 2022

 $0953-6205/ \hbox{@ } 2022 \ \hbox{European Federation of Internal Medicine. Published by Elsevier B.V. All rights reserved.}$ 

#### Table 1

The extended top 10 list of Swiss CW recommendations.

- A radiology workup in a patient with nonspecific low back pain for less than 6

  weeks
- PSA testing to screen for prostate cancer without discussing the risks and benefits with the patient.
- 3. Prescribing antibiotics for upper airway infections without signs of severity.
- 4. A chest x-ray in the preoperative workup in the absence of suspected thoracic pathology.
- Long-term continuation of proton pump inhibitor therapy for gastrointestinal symptoms without using the lowest effective dose.
- No screening or new management of dyslipidemias for people over 75 years of age for primary prevention.
- No MRI of the knee joint for pain in the front part of the knee in the absence of limitation of motion or joint effusion without adequate prior conservative treatment
- No iron replacement in asymptomatic, non-anemic patients and no iron infusion without a prior therapeutic oral trial (unless poor absorption).
- Do not measure 25(OH) vitamin D as a matter of habit for people without risk factors for vitamin D deficiency.
- 10. No regular thorough health checkups in asymptomatic individuals.

PSA: prostate specific antigen, MRI: magnetic resonance imaging.

Table 2
Proportion of physicians who agree with (totally/partially) and adhere to Swiss Choosing wisely smarter medicine recommendations in practice (most of the time /always).

Clinical scenario	Agreement rate (%)	Adherence in practice(%)
Imaging for patients with non- specific low-back pain	96	93
2. PSA for prostate cancer	91	86
<ol><li>Antibiotic for URTI</li></ol>	97	94
4. Preoperative chest X-ray	98	97
5. Long term PPI	100	92
<ol><li>Lipid treatment for patients &gt;75 years old</li></ol>	96	77
<ol><li>MRI for knee joint pain</li></ol>	99	92
8. IV iron substitution	91	87
<ol><li>Vitamin D measurement</li></ol>	86	76
10. Regular check up	91	78

PSA: prostate specific antigen, URTI: upper respiratory tract infection, PPI: proton pump inhibitor, MRI: magnetic resonance imaging, IV: intravenous.

that behavioral interventions during QC, such as provider assessment

and data feedback, may change the prescription of low-value services among primary care practices [8]. However, additional long-term interventions are necessary for wider implementation of CW.

## **Declaration of Competing Interest**

The authors declare they have no conflict of interest.

### References

- Born KB, Levinson W. Choosing wisely campaigns globally: a shared approach to tackling the problem of overuse in healthcare. J Gen Fam Med 2019;20(1):9–12. https://doi.org/10.1002/jgf2.225.
- [2] smartermedicine.ch. (Access date 18 April 2022).
- [3] https://www.reseau-delta.ch/ (Access date 18 April 2022).
- [4] Selby K, Cornuz J, Cohidon C, Gaspoz JM, Senn N. How do Swiss general practitioners agree with and report adhering to a top-five list of unnecessary tests and treatments? Results of a cross-sectional survey. Eur J Gen Pract 2018;24(1):32–8. https://doi.org/10.1080/13814788.2017.1395018.
- [5] Kherad O, Peiffer-Smadja N, Karlafti L, et al. The challenge of implementing less is more medicine: a European perspective. Eur J Intern Med 2020;76:1–7. https://doi. org/10.1016/j.ejim.2020.04.014.
- [6] Zadro JR, Farey J, Harris IA, Maher CG. Do choosing wisely recommendations about low-value care target income-generating treatments provided by members? A content analysis of 1293 recommendations. BMC Health Serv Res 2019;19(1):707. https://doi.org/10.1186/s12913-019-4576-1.
- [7] Krogsbøll LT, Jørgensen KJ, Gøtzsche PC. General health checks in adults for reducing morbidity and mortality from disease. Cochrane Database of Syst Rev 2019;(1). https://doi.org/10.1002/14651858.CD009009.pub3.
- [8] Kherad O, Selby K, Martel M, et al. Physician assessment and feedback during quality circle to reduce low-value services in outpatients: a pre-post quality improvement study. J Gen Intern Med 2021;36(9):2672–7. https://doi.org/ 10.1007/s11606-021-06624-9.

Mae Cuérel<sup>a</sup>, Marc-André Raetzo<sup>b</sup>, Kevin Selby<sup>c</sup>, Omar Kherad<sup>b,d,\*</sup>

<sup>a</sup> Haute Ecole Spécialisée de Suisse Occidentale (HES-SO – HEIG-VD),

Switzerland

<sup>b</sup> Delta network, Health Maintenance Organization, Geneva, Switzerland
<sup>c</sup> Unisanté and University of Lausanne, Switzerland

<sup>d</sup> Internal medicine division, Hospital de la Tour and University of Geneva, Switzerland

\* Corresponding author.

E-mail address: omar.kherad@latour.ch (O. Kherad).