Choosing wisely in Switzerland: Smarter medicine

Wise Medicine – Let’s talk about smart choices!
Lugano 25.09.2015

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What about Switzerland?

The Swiss Academy of Medical Sciences appointed in 2011 a task force to elaborate a roadmap on the theme «sustainable medicine» and called for medical practices which meet current needs but do no jeopardize those of future generations. It called for optimal practices and not for maximal ones.
Can the Swiss Society of General Internal Medicine take the lead?
Yes, we can!
the Swiss Less Is More project

Selby K, Le Boudec J, Cornuz J

Goals of our project

• **Generate a list** of low-value interventions commonly performed in Swiss general internal medicine ambulatory care settings which, according to the available evidence, do not provide benefit to patients.

• **Publish this list** and distribute it to Swiss physicians and patients so as to discourage use of these activities.

• Incorporate this list into the **teaching** of medical students and residents.
Challenge:

- For an initial ‘do not do’ list, we wanted to maximize impact by focusing on fewer items (ie 5 to 10).
- How do we focus on items that will have the greatest impact? Impact could be based on:
  - Frequency performed.
  - Cost savings by avoiding that activity.
  - Potential harm to patients from activity.
  - Level of evidence.
Timeline

January-May 2013:
- Literature review
- Pre-selection
- Testing survey instrument
- Letters to expert participants

May-September 2013:
- Delphi process
- Phone Meeting with leadership committee
- Analysis of results

September 2013-April 2014:
- Finalizing list
- Diffusion among SGIM/SGAM
- Press release
- Materials for patients

Secondary goals:
- Reach out to other societies to make lists.
- Study costs associated with items
- Creation of an internet site
Pre-selection

Review of the literature, exclusion of health technology assessments (HTA) and guidelines.

3 lists identified with 1090 activities:
- 799 ‘Do Not Do’ activities from National Institute for Health and Clinical Excellence (UK).
- 169 ‘Low-value health care practices’ identified by Elshaug et al (Australia).

58 items included from the 3 sources, with 20 items being repeated between the sources. Final list of 38 low value pre-selected interventions.

932 activities excluded as not part of ambulatory general internal medicine:
- 113 excluded for other reasons.
1. Do not obtain imaging studies in patients with non-specific low back pain.
2. Long-term acid suppression therapy should be titrated to the lowest effective dose.
3. Do not obtain blood chemistry panels (eg, basic metabolic panel) or urinalyses in asymptomatic, healthy adults.
4. Do not do workup for clotting disorder in first DVT or PE.
5. Do not perform stress cardiac imaging or advanced non-invasive imaging in the evaluation of asymptomatic patients.
6. Do not obtain screening electrocardiogram testing.
7. Do not perform stress cardiac imaging or advanced non-invasive imaging as a pre-operative assessment.
8. Do not perform echocardiography as routine follow-up for mild, asymptomatic native valve disease.
9. Do not routinely prescribe antibiotics for acute mild-to-moderate sinusitis.
10. Do not routinely obtain radiographic imaging for patients uncomplicated acute rhinosinusitis.
11. Do not do imaging for uncomplicated headache.
12. In simple syncope with a normal neurological examination, do not obtain brain imaging studies (CT or MRI).
13. Do not obtain preoperative chest radiography.
14. Do not use dual-energy x-ray absorptiometry (DEXA) screening for osteoporosis in women younger than 65.
15. Do not perform surveillance testing (biomarkers) or imaging (PET, CT, radionuclide bone scans) after breast cancer treatment.
16. Avoid nonsteroidal anti-inflammatory drugs (NSAIDs) in individuals with hypertension or heart failure or CKD.
17. Use only generic statins when initiating lipid-lowering drug therapy.
18. Do not screen for carotid artery stenosis (CAS) in asymptomatic adult patients.
19. Do not prescribe oral antibiotics for uncomplicated acute external otitis.
20. Do not use antimicrobials to treat bacteruria in older adults unless specific urinary tract symptoms are present.
21. Do not perform Pap smears on women younger than 21 or who have a hysterectomy.
22. Do not screen for 25-OH-Vitamin D deficiency.
23. Avoid routine preoperative blood testing for low risk surgeries.
24. Do not use PET/CT for cancer screening in healthy individuals.
25. Do not screen for renal artery stenosis.
26. Do not monitor liver function tests or creatinine kinase (CK) levels unless clinically indicated during statin therapy.
27. Do not use CRP in the diagnosis of pneumonia.
28. Do not provide antibiotic prophylaxis solely to prevent infective endocarditis.
29. Do not start long-term use of opioids without assessment by a pain service.
30. Do not offer complementary therapies such as homeopathy, massage therapy and osteopathy for chronic fatigue syndrome.
31. Do not measure folic, folate or vit B12 in chronic fatigue syndrome.
32. Do not offer acupuncture for the management of irritable bowel syndrome.
33. Do not offer acupuncture for the treatment of depression.
34. Do not monitor hemoglobin A1c more often than every six months.
35. Do not monitor bone mineral density within three years of starting treatment.
36. Do not use spirometry for (large population) screening for COPD.
37. Do not routinely use mucolytic drugs or anti-tussive therapy in people with stable chronic obstructive pulmonary-disease (COPD).
Summary Round 1-3

Round 1
- 38 items from international literature
- 35 experts of general internal medicine and family medicine
- Degree of agreement, and proposing new recommendations

Round 2
- 29 items, with 17 from round 1, 12 new
- 35 experts
- Clarify first round scores with comments from others, as well as rank newly proposed items.

Round 3
- Re-rank top items
- 35 experts
- Narrow to a shorter list of 5 to 15 recommendations
Participants - Experts

- **59 ‘experts’** asked to participate, chosen from leadership of professional societies for generalists and professors of general internal medicine.

- **35 of 59** agreed to participate (**59%**):
  - 18/37 from German cantons,
  - 17/19 from French cantons
  - 0/3 from Tessin.
Of the 35 participants who accepted:

- 32 completed round 1, who were:
  - 75% male.
  - 81% internal medicine and 19% family medicine.
  - Most work >20 hours a week in clinical practice.
  - 55% based in private practice, 38% in a university hospital.
Participants
### Top recommendations based on perceived frequency score from Round 3

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<thead>
<tr>
<th>Recommendation</th>
<th>Frequency Score (32-96)</th>
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<tbody>
<tr>
<td>1. Do not obtain imaging studies in patients with non-specific low back pain</td>
<td>94</td>
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<tr>
<td>2. Do not prescribe antibiotics for uncomplicated upper respiratory tract infections (URIs)</td>
<td>92</td>
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<tr>
<td>3. Do not perform the Prostate Specific Antigen (PSA) test to screen for prostate cancer without a discussion of the risks and benefits</td>
<td>90</td>
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<tr>
<td>4. Do not perform lab testing in patients with a clinical diagnosis of an uncomplicated upper respiratory tract infection (URI)</td>
<td>87</td>
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<td>5. Do not continue pharmacological treatment of gastroesophageal reflux disease (GERD) with long-term acid suppression therapy without titrating to the lowest effective dose</td>
<td>82</td>
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<tr>
<td>6. Do not routinely prescribe antibiotics for acute mild-to-moderate sinusitis</td>
<td>81</td>
</tr>
<tr>
<td>7. Do not use antimicrobials to treat bacteriuria in immunocompetent older adults</td>
<td>80</td>
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<td>8. Do not routinely obtain radiographic imaging for patients who meet diagnostic criteria for uncomplicated acute rhinosinusitis.</td>
<td>78</td>
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<tr>
<td>9. Do not obtain preoperative chest radiography in the absence of a clinical suspicion</td>
<td>77</td>
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<tr>
<td>10. Do not use dual-energy x-ray absorptiometry (DEXA) screening for osteoporosis in women younger than 65 or men younger than 70</td>
<td>72</td>
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Emphasis on no added value to patients, potential harms, and on risks that outweigh unproven benefits
### Top 5 interventions to be avoided in ambulatory care

The Swiss Society of General Internal Medicine **recommends against:**

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| **1.** Obtaining imaging studies during the first six weeks in patients with non-specific low back pain. | Non-specific low back pain excludes red flags such as severe or progressive neurological deficits, or when conditions such as malignancy or osteomyelitis are suspected. Imaging studies in non-specific low back pain do not improve outcomes, but do increase irradiation and costs.  
Sources: Agency for Health Care Research and Policy (AHCPR), National Institute for Health and Care Excellence (NICE)  
Evidence level: Meta-analysis of randomized controlled trials |
| **2.** Performing the Prostate Specific Antigen (PSA) test to screen for prostate cancer without a discussion of the risks and benefits. | The benefits of PSA screening are unclear as there are conflicting results from randomized trials. Men should understand the risks of overdiagnosis and overtreatment before being tested. Screening should not be offered over age 75.  
Sources: American College of Physicians, National Health Service, Swiss Society of Urology  
Evidence level: Randomized controlled trials |
| **3.** Prescribing antibiotics for uncomplicated upper respiratory tract infections. | The majority of uncomplicated upper respiratory tract infection are viral infections, for which antibiotics have no impact.  
Sources: Centers for Disease Control, American Academy of Family Physicians, National Institute for Health and Clinical Excellence  
Evidence level: Multiple randomized controlled trials |
| **4.** Obtaining preoperative chest radiography in the absence of a clinical suspicion for intrathoracic pathology. | Provides no meaningful change in management or improvement in patient outcomes in asymptomatic patients.  
Sources: American College of Radiology, Royal College of Radiologists  
Evidence level: Multiple retrospective cohort studies |
| **5.** Continuing long-term treatment of gastrointestinal symptoms with proton pump inhibitors without titrating to the lowest effective dose needed. | The indication for treatment should be regularly reviewed with patients, as side-effects may outweigh benefits, particularly with long-term treatment. Also applies to histamine 2 receptor antagonists.  
Sources: American Gastroenterological Association, National Institute for Health and Clinical Excellence  
Evidence level: Randomized controlled trials and prospective cohort studies |
Creating a List of Low-Value Health Care Activities in Swiss Primary Care

JAMA Internal Medicine April 2015 Volume 175, Number 4

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Smarter Medicine Campaign

Information to Swiss physicians through Swiss professional journals

Residents training

Public campaign
Obtaining imaging studies during the first six weeks in patients with non-specific low back pain.

Performing the Prostate Specific Antigen (PSA) test to screen for prostate cancer without a discussion of the risks and benefits.

Prescribing antibiotics for uncomplicated upper respiratory tract infections.

Obtaining preoperative chest radiography in the absence of a clinical suspicion for intrathoracic pathology.

Continuing long-term treatment of gastrointestinal symptoms with proton pump inhibitors without titrating to the lowest effective dose needed.

www.smartermedicine.ch
Limitations and acceptability

- Final choice of ‘Top 5’ made by consensus of a small committee
- Difficult to have equal representation of all regions of Switzerland.
- Acceptability of such recommendations by practicing primary care providers remains unknown.
- Cultural and regional differences may influence acceptability
- Fear of hijacking by health insurance companies as well
Next steps Swiss “Smarter Medicine”

• Evaluation of the awareness of the campaign by Swiss Primary care physicians.

• Evaluation of their knowledge about the items and of the acceptability of the campaign

• Top 5 list for hospital medicine (? ambulatory medicine) in May 2016
Thank you for your attention