

Supplemental File for Review – Survey Instrument

The overuse of the health system compromises the patient safety in an unwarranted way and involves a loss of opportunity cost.

Through this research, funded by Instituto de Salud Carlos III through the project PI16/00971, we aim to analyze this issue and to develop recommendations for improve the patient safety.

Several professionals and research societies of different Spanish regions (Andalucía, Aragón, Castilla La Mancha, Comunidad Valenciana, Madrid, Murcia, Navarra y País Vasco) collaborates in this study.

We request your collaboration asking you to fill this questionnaire, according to your professional experience. The survey aims to explore the frequency and causes of low value surgical practices.

Please, be aware that the questionnaire must be done once per participant. Estimated time for complete the questionnaire is around 7 minutes.

With the fulfillment and sending of this questionnaire, you show your consent for participate in this study.

Thank you for your collaboration.

1. According to your experience ¿What kind of unwarranted procedures are the most requested by the patients? (mark all options you consider properly)

- ☐ [1.1] Electrocardiogram
- ☐ [1.2] Computed axial tomography
- ☐ [1.3] Magnetic resonance
- ☐ [1.4] Other radiological studies
- ☐ [1.5] Antibiotic therapy
- ☐ [1.6] Non-steroidal anti-inflammatories
- ☐ [1.7] Prostate Specific Antigen
- ☐ [1.8] Routine check-up analytics
- ☐ [1.9] Cytology
- ☐ [1.10] Bone densitometry
- ☐ [1.11] Referral to other specialists
- ☐ [1.12] Other procedures (free text space)

2. According to your experience. What is the patient profile which usually requests unwarranted health procedures?

2.1 Gender

☐ Female

☐ Male

☐ DK/DA

2.2 Age

☐ 18 to 30 years old

☐ 31 to 50 years old

☐ 51 to 65 years old

☐ ≥ 65 years old

☐ DK/DA

2.3 Patient's Health Situation

☐ Multi-pathological patient'

☐ Low prevalence disease

☐ Undiagnosed disease

- ☐ Patient consulting on the Internet
- ☐ DK/DA
- ☐ Other procedures (free text space)_____

3. Please, mark how often you are in the following situations:

	Never	Monthly	Almost every week	Almost every day	Every day
[3.1] Patients request unwarranted medical tests or procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[3.2] You indicate unwarranted medical tests or procedures due to patient pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[3.3] You persuade the patient that the unwarranted medical procedures he requests are not appropriate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[3.4] You receive patient's negative or aggressive reaction after a justified refusal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Please, mark the main causes that make you to indicate unwarranted health procedures (mark all options you consider properly)

- ☐ [4.1] To get more clinical control and patient safety.
- ☐ [4.2] Due to the habit of performing this procedure in your setting[4.3] Fear of being sued.
- ☐ [4.4] To get patient satisfaction.
- ☐ [4.5] To respect patient's expectations
- ☐ [4.6] Lack of time in the consultation.
- ☐ [4.7] For not knowing how to explain to the patient that it is unnecessary
- ☐ [4.8] To avoid a claim or complaint.
- ☐ [4.9] To conduct an epidemiological or clinical study.
- ☐ [4.10] Recommendations in obsolete guidelines.
- ☐ [4.11] Persistent patient pressure.

5. According to your experience, ¿What is the effectiveness level of the following arguments to persuade patient about the inadequacy of medical procedures?

	None	Lack	Moderate	High	Very High
[5.1] Clinical reasons based on knowledge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[5.2] Patient's own safety.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[5.3] The obtaining of the same result by other tests or previous procedures.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[5.4] Saving of time and costs that have a positive effect on other patients.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[5.5] Saving of discomfort for the patient.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. According to your opinion, mark the degree of responsibility regarding overuse of the following collectives (0 means "Lowest responsibility " and 10 "Highest responsibility"):

6.1. Top management of health systems

[illegible]

6.2. Directors of healthcare setting

[illegible]

6.3. Medical coordinators / Heads of department

[illegible]

6.4. Medical Doctors

Lowest												Highest responsibility
responsibility	0	1	2	3	4	5	6	7	8	9	10	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

6.5. Nursing/other health professions

Lowest												Highest responsibility
responsibility	0	1	2	3	4	5	6	7	8	9	10	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

6.6. Patient's Associations

Lowest												Highest responsibility
responsibility	0	1	2	3	4	5	6	7	8	9	10	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

6.7. Mass media (Press, radio, television)

Lowest												Highest responsibility
responsibility	0	1	2	3	4	5	6	7	8	9	10	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

6.8. Managers of health sites on the Internet

[illegible]

7. According to your opinion, mark the association between the indication of unwarranted health procedures and defensive medicine.

Lowest association

0 1 2 3 4 5 6 7 8 9 10

Highest association

□ □ □ □ □ □ □ □ □ □

8. Please, mark true or false.

	True	False
[8.1] The early detection of urinary tract infection must be mandatory in all patients with urinary catheter, with weekly infection screening cultures.	<input type="checkbox"/>	<input type="checkbox"/>
[8.2] Hair removal only must be done if it is compromised the surgical field visibility. If it is necessary, it must be done with electric shavers or chemical hair removal, never with shaving blades.	<input type="checkbox"/>	<input type="checkbox"/>
[8.3] The patient's consent prior any intervention or invasive procedure can be obtained in an auto-administrated way.	<input type="checkbox"/>	<input type="checkbox"/>
[8.4] The Prostate Specific Antigen, for the prostate cancer screening, must be indicated in every male patient older than 55 years old.	<input type="checkbox"/>	<input type="checkbox"/>
[8.5] For a whole preoperative assessment, it always must be indicated: chest radiography, biochemical analysis, complete blood count, and coagulation test.	<input type="checkbox"/>	<input type="checkbox"/>
[8.6] Peri-operative antibiotic prophylaxis must be indicated at least 1 hour before any intervention, with a remaining administration between 24 – 48 hours.	<input type="checkbox"/>	<input type="checkbox"/>
[8.7] All hospitalized patients must receive proton pump inhibitor for gastroduodenal ulcer prophylaxis	<input type="checkbox"/>	<input type="checkbox"/>

9. According to your opinion, mark the degree of usefulness of an educational campaign to reduce the requirement of patients for unwarranted medical tests and procedures (0 means "Not agree at all" and 10 "Fully agree"):

Not agree at all 0 1 2 3 4 5 6 7 8 9 10 Fully agree

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

10. Do you know the "Commitment to the Quality of Scientific Societies" (ICC) initiative, launched by the Spanish Ministry of Health, Social Services and Equality, collecting most relevant unwarranted clinical practices of each medical fields ("do not do practices")?

☐ Yes

☐ No

11. Professional Experience

☐ < 1 year

☐ 1 to 5 years

☐ 6 to 15 years

☐ 16 to 29 years

☐ ≥ 30

11. Gender

☐ Female

☐ Male