

Supplementary Table 1. Coding framework

SECTION 1

CONTEXT: The Choosing Wisely format deliberately uses “don’t” or similar wording, and is expressly intended to incite discussion about interventions. One of the “5 Things Physical Therapists and Patients Should Question” by the American Physical Therapy Association in 2014 was:

RECOMMENDATION: Don’t employ passive physical agents except when necessary to facilitate participation in an active treatment program.

QUESTION: In the context of the intent of the Choosing Wisely campaign do you think style of wording is an acceptable method to engage the physiotherapy profession in a conversation about evidence based clinical practice?

CODING FRAMEWORK:**Response suggests disagreement**

- 1. Unqualified statements are inappropriate**
 - Any negative comment regarding the use of strong language
- 2. Would benefit from further refining**
 - Any suggestion/comment for how the wording could be changed
- 3. Clinical experience is more valuable than evidence**
 - Any comment suggesting that the respondents experience is more trustworthy than research evidence
- 4. Shift framing from negative to positive**
 - Any comment suggesting that recommendations need to be more positive (e.g. providing a high-value alternative alongside a ‘don’t’ recommendation, instructing clinicians what to do)
- 5. Threat to autonomy or the profession**
 - Any comment expressing concern about clinicians not being able to apply clinical reasoning
 - Any comment expressing concerns that the recommendations could negatively impacting the profession
- 6. New evidence might change recommendations**
 - Any comment that suggests new evidence might contradict current recommendations

Response suggests disagreement

- 7. Using unqualified statements is important**
 - Any positive comment regarding the use of strong language
- 8. Provokes discussion**
 - Any mention of discussion or debate prompted by the recommendations
- 9. Will help change practice**
 - Any mention of how the recommendations will change practice
- 10. No further comment**
 - Any form of agreement that does not specify the reason for agreement (e.g. “I agree with this statement”)

SECTION 2

RECOMMENDATION: Don't use imaging where validated decision rules indicate imaging is not necessary.

EXPLANATION: Imaging should only be requested when clinically appropriate. Physiotherapists should use appropriate clinical decision making tools such as Ottawa Ankle Rules, Canadian C-Spine Rule, Nexus, and should not be used in cases of non-specific low back pain with no signs of serious pathology.

QUESTION: Do you agree that physiotherapists should not use imaging when validated decision rules indicate it is not necessary?

CODING FRAMEWORK:**Response suggests disagreement**

- 1. Blanket rules are inappropriate**
 - Any comment that suggests the recommendation is inappropriate because it does not apply to every patient
- 2. Clinical experience is more valuable than validated decision rules**
 - Any comment suggesting that the respondents experience is more trustworthy than validated decision rules
- 3. Threat to autonomy or the profession**
 - Any comment expressing concern about clinicians not being able to apply clinical reasoning
 - Any comment expressing concerns that the recommendations could negatively impacting the profession

Response suggests agreement

- 4. No further comment**
 - Any form of agreement that does not specify the reason for agreement
- 5. Educating patients and clinicians will support adoption**
 - Any comment suggesting that educating patients and clinicians will support uptake of this recommendation

Feedback on wording

- 6. Would benefit from further refining**
 - Any suggestion/comment for how the wording could be improved
- 7. Unqualified statements are inappropriate**
 - Any negative comment regarding the use of strong language

Not area of expertise

- Any acknowledgement that this recommendation is outside the expertise of the respondent

SECTION 3

RECOMMENDATION: Don't use incentive spirometry after upper abdominal and cardiac surgery.

EXPLANATION: Physiotherapists should not routinely use incentive spirometry after upper abdominal and cardiac surgery. Physiotherapists should instead consider adding other interventions to standard care. For example, there is high level evidence for the addition of preoperative inspiratory muscle training when added to usual care.

QUESTION: Do you agree that physiotherapists should not use incentive spirometry after upper abdominal and cardiac surgery?

CODING FRAMEWORK:**Not area of expertise**

- Any acknowledgement that this recommendation is outside the expertise of the respondent

Response suggests disagreement**1. Blanket rules are inappropriate**

- Any comment that suggests the recommendation is inappropriate because it does not apply to every patient

2. Clinical experience is more valuable than evidence

- Any comment suggesting that the respondents experience is more trustworthy than research evidence

3. Questions the purpose of the recommendation

- Any comment that questions why the recommendation made the Choosing Wisely 'Top Five' list

4. Threat to autonomy or the profession

- Any comment expressing concern about clinicians not being able to apply clinical reasoning
- Any comment expressing concerns that the recommendations negatively impacting the profession

Response suggests agreement**5. No further comment**

- Any form of agreement that does not specify the reason for agreement

6. Will help promote evidence-based care

- Any comment that suggests this recommendation will increase clinicians' use of evidence-based care

Feedback on wording**1. Would benefit from further refining**

- Any suggestion/comment for how the wording could be changed

2. Shift focus from negative to positive

- Any comment suggesting that recommendations need to be more positive

3. Unqualified statements are inappropriate

- Any negative comment regarding the use of strong language

SECTION 4

RECOMMENDATION: Don't use electrotherapy modalities in the management of patients with low back pain.

EXPLANATION: Clinical practice guidelines don't recommend electrotherapy modalities to manage low back pain. Physiotherapists should instead consider other interventions to manage low back pain, for example exercise prescription and education.

QUESTION: Do you agree that physiotherapists should not use electrotherapy modalities in the management of patients with low back pain?

CODING FRAMEWORK:**Response suggests disagreement**

- 1. Appropriate to use as adjunct to high-value treatments**
 - Any comment highlighting the value of using electrotherapy alongside other treatments (e.g. exercise)
- 2. Clinical experience is more valuable than evidence**
 - Any comment suggesting that the respondents experience is more trustworthy than research evidence
- 3. Blanket rules are inappropriate**
 - Any comment that suggests the recommendation is inappropriate because it does not apply to every patient
- 4. Threat to autonomy and the profession**
 - Any comment expressing concern about clinicians not being able to apply clinical reasoning
 - Any comment expressing concerns that the recommendations negatively impacting the profession
- 5. New evidence might change recommendations**
 - Any comment that suggests new evidence might contradict the recommendation

Response suggests agreement

- 6. No further comment**
 - Any form of agreement that does not specify the reason for agreement
- 7. The use of electrotherapy must be reduced**
 - Any comment highlighting the need to reduce the use of electrotherapy
- 8. Other evidence-based treatments are available**
 - Any comment that highlights the availability of evidence-based treatments for low back pain

Feedback on wording

- 9. Absolute statements are inappropriate**
 - Any negative comment regarding the use of strong language
- 10. Better define the disease presentation and modality of electrotherapy provided**
 - Any comment that suggests the recommendation should be clearer about the type of low back pain (or musculoskeletal condition) it's referring to (e.g. acute low back pain)
 - Any comment that suggests the recommendation should be clearer about the type of electrotherapy it's referring to (e.g. ultrasound)

11. Shift framing from negative to positive

- Any comment suggesting that recommendations need to be more positive

Not area of expertise

- Any acknowledgement that this recommendation is outside the expertise of the respondent

SECTION 5

RECOMMENDATION: Don't use ongoing manual therapy for patients following acute adhesive capsulitis of the shoulder.

EXPLANATION: Physiotherapists should consider a range of other interventions to manage acute adhesive capsulitis, like exercise to optimize function, education and appropriate management of pain.

QUESTION: Do you agree that physiotherapists should not use ongoing manual therapy for patients following acute adhesive capsulitis of the shoulder?

CODING FRAMEWORK:**Response suggests disagreement**

- 1. Blanket rules are inappropriate**
 - Any comment that suggests the recommendation is inappropriate because it does not apply to every patient
- 2. Clinical experience is more valuable than evidence**
 - Any comment suggesting that the respondents experience is more trustworthy than research evidence
- 3. Threat to autonomy and the profession**
 - Any comment expressing concern about clinicians not being able to apply clinical reasoning
 - Any comment expressing concerns that the recommendations negatively impacting the profession
- 4. Appropriate to use as adjunct to evidence-based care**
 - Any comment highlighting the value of using ongoing manual therapy alongside other treatments interventions (e.g. exercise)
- 5. New evidence might change recommendations**
 - Any comment that suggests new evidence might contradict the recommendation

Response suggests agreement

- 6. No further comment**
 - Any form of agreement that does not specify the reason for agreement
- 7. Other evidence-based treatments may be available**
 - Any comment that highlights the availability of evidence-based treatments for adhesive capsulitis
- 8. No evidence manual therapy alters natural history**
 - Any comment that highlights the lack of benefit of manual therapy for adhesive capsulitis or the favourable natural history of adhesive capsulitis

Feedback on wording

- 9. Better define the presentation and manual therapy provided**
 - Any comment that suggests the recommendation should be clearer about the stage of adhesive capsulitis it's referring to (e.g. early vs. late stage)
 - Any comment that suggests the recommendation should be clearer about the type of manual therapy it's referring to (e.g. massage, manipulation, passive movements)
- 10. Unqualified statements are inappropriate**

- Any negative comment regarding the use of strong language

Not area of expertise

- Any acknowledgement that this recommendation is outside the expertise of the respondent

SECTION 6

RECOMMENDATION: Don't use ongoing physiotherapy in cases where there isn't improvement in measurable patient outcomes.

EXPLANATION: Physiotherapists should facilitate and empower the patient's independent management of chronic conditions.

QUESTION: Do you agree that physiotherapists should not use ongoing physiotherapy in cases where there is no improvement in measurable patient outcomes?

CODING FRAMEWORK:**1. Not area of expertise****Response suggests disagreement****1. Physiotherapy could prevent deterioration in symptoms**

- Any comment highlighting that the role of a physiotherapist can be to maintain a patient's function or prevent deterioration

2. Blanket rules are inappropriate

- Any comment that suggests the recommendation is inappropriate because it does not apply to every patient

3. Concerns over use of outcome measures

- Any comment highlighting potential issues with outcome measures (e.g. availability, suitability, sensitivity to detect change, relevance to patients)

4. Threat to autonomy and the profession

- Any comment expressing concern about clinicians not being able to apply clinical reasoning
- Any comment expressing concerns that the recommendations negatively impacting the profession

Response suggests agreement**5. No further comment**

- Any form of agreement that does not specify the reason for agreement

6. Physiotherapy should focus on outcomes and try to reduce overtreatment

- Any comment highlighting the potential harms of overtreatment in physiotherapy (e.g. unnecessary spending, diminishes the value of physiotherapy services)

Feedback on wording**7. Better define ambiguous terms**

- Any comment that suggests the recommendation should be clearer about the meaning of 'ongoing' and the type of patient outcomes it's referring to

8. Unqualified statements are inappropriate

- Any negative comment regarding the use of strong language

9. Shift framing from negative to positive

- Any comment suggesting that the recommendation needs to be more positive

Unclear response

- Any response that could not be interpreted