

Appendix 1. Theoretical Domains Framework definitions for coding

TDF Domain	Description
Knowledge	<p><i>An awareness of the existence of something</i></p> <ul style="list-style-type: none"> - Awareness of scientific rationale regarding patients at risk of no clinically meaningful improvement from surgery - Awareness of own percentage of patients who don't respond - Awareness of decision aids to assist in identifying surgical candidates
Skills	<p><i>An ability or proficiency acquired through practice</i></p> <ul style="list-style-type: none"> - Ability required/acquired through practice/experience to help decide if a patient is likely to benefit from surgery or not - Use of tool to assist in identifying suitable candidates for surgery
Social/ Professional role/identity	<p><i>A coherent set of behaviours and displayed personal qualities of an individual in a social or work setting</i></p> <ul style="list-style-type: none"> - Surgeons' expressions about their own professional identity/job/role/professional boundaries when managing a person at high risk of no clinically meaningful improvement
Beliefs about capabilities	<p><i>Acceptance of the truth, reality or validity about an ability, talent or facility that a person can put to constructive use</i></p> <ul style="list-style-type: none"> - The surgeon's confidence that they can identify patients at risk of no clinically meaningful improvement and can employ the skills needed to refuse to operate on the patients
Optimism	<p><i>The confidence that things will happen for the best, of that desired goals will be attained</i></p> <ul style="list-style-type: none"> - The confidence expressed that a decision aid will reduce the rate of surgery in patients at high risk of no clinically meaningful improvement
Beliefs about consequences	<p><i>Acceptance of the truth, reality or validity about outcomes of a behaviour in a given situation</i></p> <ul style="list-style-type: none"> - Perceptions about outcomes, advantages and disadvantages of using a decision aid - Any legal or ethical concerns about using a decision aid
Reinforcement	<p><i>Increasing the probability of a response by arranging a dependent relationship, or contingency, between the response and a given stimulus</i></p> <ul style="list-style-type: none"> - What incentives would influence the surgeon using a decision aid
Intentions	<p><i>A conscious decision to perform a behaviour or a resolve to act in a certain way</i></p> <ul style="list-style-type: none"> - Intentions to use a decision aid
Goals	<p><i>Mental representation of outcomes or end states that an individual wants to achieve</i></p>
Memory, attention and decision processes	<p><i>The ability to retain information, focus selectively on aspects of the environment and choose between two or more alternatives</i></p> <ul style="list-style-type: none"> - The processes involved and factors taken into account when the surgeon makes decisions about whether to operate or not - If the surgeon surgical decision making will be influenced by the decision aid - Surgeon's perceptions of acceptable levels of risk
Environmental context and resources	<p><i>Any circumstance of a person's situation or environment that discourage or encourage the development of skills and abilities, independence, social competence and adaptive behaviour</i></p> <ul style="list-style-type: none"> - Availability of, and confidence in, non-operative alternatives

	<ul style="list-style-type: none"> - Public versus private differences - How a decision aid might best be packaged/implemented - Attitudes towards mandating use of a decision aid - How surgeons can agree on level of acceptable risk with decision aid
Social influences	<p><i>Those interpersonal processes that can cause an individual to change their thoughts, feelings or behaviours</i></p> <ul style="list-style-type: none"> - The influences that other surgeons have on surgeon decision to operate or not - The influences patients have on surgeon decision to operate or not - How the surgeon believes patients might respond to the use of a decision aid
Emotion	<p><i>A complex reaction pattern, involving experiential, behavioural and physiological elements, by which the individual attempts to deal with a personally significant matter or event</i></p> <ul style="list-style-type: none"> - The emotional responses of the surgeon to using a decision aid
Behavioural regulation	<p><i>Anything aimed at managing or changing objectively observed or measured actions</i></p> <ul style="list-style-type: none"> - Consistency of decisions to operate or not in patients at high risk of not responding - Processes that help regulate behaviour