

Supplementary File 1: Additional tables and figures

Table S1. Definitions of potential core domains considered for shoulder disorder clinical trials (administered in Delphi round one)

Core Area	Domain	Definition
Life impact	Overall pain intensity	How much a person's shoulder hurts overall, reflecting the general magnitude of the pain experience.
	Temporal aspects of pain	Variability of shoulder pain over time, namely frequency and duration of pain episodes.
	Rest pain intensity	How much a person's shoulder hurts while resting/not making any shoulder movement.
	Intensity of pain with activity	How much a person's shoulder hurts after performing any movement which involves use of the shoulder (e.g. reaching for an object on a high shelf).
	Intensity of pain on resisted movement	How much a person's shoulder hurts when they move the shoulder against resistance (e.g. pushing the shoulder away from the body with someone pushing it in the opposite direction).
	Day pain intensity	How much a person's shoulder hurts during the day time.
	Night pain intensity	How much a person's shoulder hurts during the night time.
	Analgesic use	The amount of prescription and over the counter analgesic medication a person takes for their shoulder condition.
	Physical functioning	A person's ability to carry out daily physical activities required to meet basic needs, ranging from self-care (e.g. bathing, combing hair) to more complex activities that require a combination of skills (e.g. driving a car).
	Health-related quality of life	The physical, psychological and social domains of health, taken together, seen as distinct areas that are influenced by a person's experiences, beliefs, expectations and perceptions.
Social functioning	A person's ability to interact with people in a contextually and socially appropriate manner (e.g. showing consideration and esteem when appropriate, responding to the feeling of others), to create and maintain close relationships with others (excluding members of the family), to engage in desired aspects of community social life (e.g. charitable organizations, service clubs or	

Core Area	Domain	Definition
		professional social organizations).
	Recreation and leisure activity	A person's ability to engage in any form of play, recreational or leisure activity acts (e.g. sports of any kind or levels).
	Work ability	A worker's ability to meet physical and/or psychological demands of work.
	Depression	Negative mood, loss of self-confidence, loss of motivation and enjoyment.
	Anxiety	Fear, extreme worrying and hyperarousal symptoms.
	Fear avoidance beliefs	The belief that any shoulder movements that result in pain need to be avoided
	Sleep functioning	Sleep functions like onset, maintenance, quality, amount of sleep, and functions involving the sleep cycle. This domain also includes the impact on perceptions of alertness and sleepiness during usual waking hours.
	Fatigue	Fatigue, ranging from mild subjective feelings of tiredness to an overwhelming, debilitating, and sustained sense of exhaustion that it is likely to decrease one's ability to carry out daily activities (including work activities) and to function at one's usual levels in family or social roles.
	Satisfaction with treatment services	A person's satisfaction with care received, including treatment and care providers.
	Global assessment of treatment success	A person's assessment of their recovery or degree of improvement.
	Severity of the main complaint	Unavoidable painful or limited functional activity during daily life in which the shoulder is chiefly involved. It is a person-specific individualized approach for measuring limitation of shoulder function during daily activities.
Resource use/ economical impact	Work productivity	Economical impact on paid or unpaid job employment due to shoulder condition, including absenteeism and presenteeism.
	Health care services	Utilization of health care services within the formal health care system for treating shoulder conditions, including: visits, laboratory tests, imaging, days of admission to a hospital, medications.
	Non-health care services	Utilization of health care services not included in the formal health care system for treating shoulder conditions, including for example: visits to professionals of alternative medicine, over-the-

Core Area	Domain	Definition
Pathophysiological manifestations		counter medications, patient's time and travel expenses.
	Requiring re-operation or revision surgery	Utilization of additional surgical procedures following the failure of the first attempt.
	Range of motion	The distance and direction that the shoulder is able to move, either when initiated by the person with shoulder pain or when guided by the care provider (e.g. amount of shoulder flexion, abduction, external rotation, internal rotation).
	Muscle strength	Force generated by the contraction of a muscle or of a group of muscles of the shoulder and/or of other adjacent body parts.
	Muscle tone	A slight tension or firmness present in the resting muscles of the shoulder and/or of other adjacent body parts (i.e. a slight resistance offered when trying to move them passively).
	Pain on palpation	Pain following palpation of muscle, tendon and bony prominences of the shoulder region, where patients are instructed to say “yes” at the moment when they start to feel pain or discomfort.
	Testing positive on specific tests during physical examination	In some clinical trials, tests are used for diagnostic purposes to decide if the person is eligible for the trial (e.g. “painful arc test” or “Neer impingement test” or “empty can test” for rotator cuff disease; “apprehension test” or “relocation test” for shoulder instability). In some trials, these examinations are repeated post-treatment to assess whether or not the test is still positive, which may suggest that the shoulder condition is still present
	Shoulder instability	Loosening of connective tissue surrounding the shoulder joint which enables the bones forming the joint to move excessively on each other. In some cases the upper arm bone (humerus) may move partially or completely out of the socket during certain arm movements (i.e. subluxation or dislocation).
	Scapular dysfunction	Problems with rotating the scapular (the two wing shaped bones on the upper back) or poor motor control of the scapular.
	Proprioception	The person’s sense of the position and movement of the shoulder and/or of other adjacent body parts.
Weakness on movement	The person’s sense that more effort than normal is required to move the shoulder	

Core Area	Domain	Definition
	Shoulder swelling	Abnormal enlargement of an area of the shoulder that is caused by accumulation of fluid in the shoulder joint.
	Shoulder posture	The position in which the shoulder is held upright against gravity while standing, sitting or lying down. Good posture places the least strain on supporting muscles and ligaments during movement.
	Radiographic outcomes	Any measure of the structure of the bones/joints/tendons measured via imaging (e.g. x-ray, MRI or ultrasound to measure anterior subluxations, acromiohumeral distance reduction success, tendon thickness).
	Failure of surgery	Failure of the surgery to correct a specific structural problem (e.g. malunion of a fracture after surgery).
	Surgical process outcomes	Measures of the implementation of a surgical intervention (e.g. length of time of the surgery, reduction manoeuvre time, number of reduction attempts).
	Haemodynamic variables	Any measure of blood flow, such as blood pressure or heart rate. Such outcomes are sometimes measured in trials of surgical interventions for shoulder conditions.
Death	Number of deaths	Reporting of the number of deaths that occurred within a clinical trial.

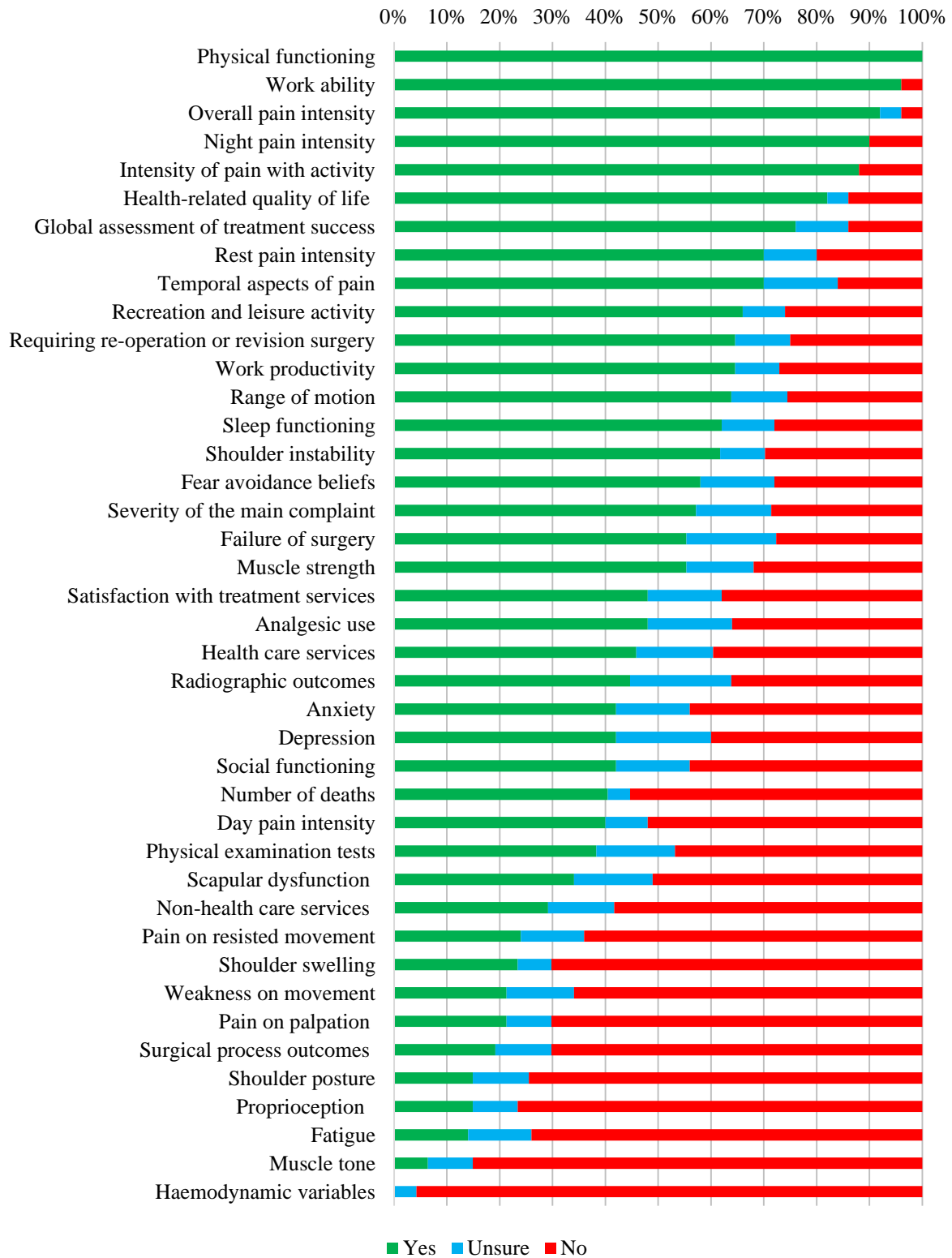


Figure S1. Ratings by health clinicians/researchers (n=50) of potential core domains in the first Delphi round

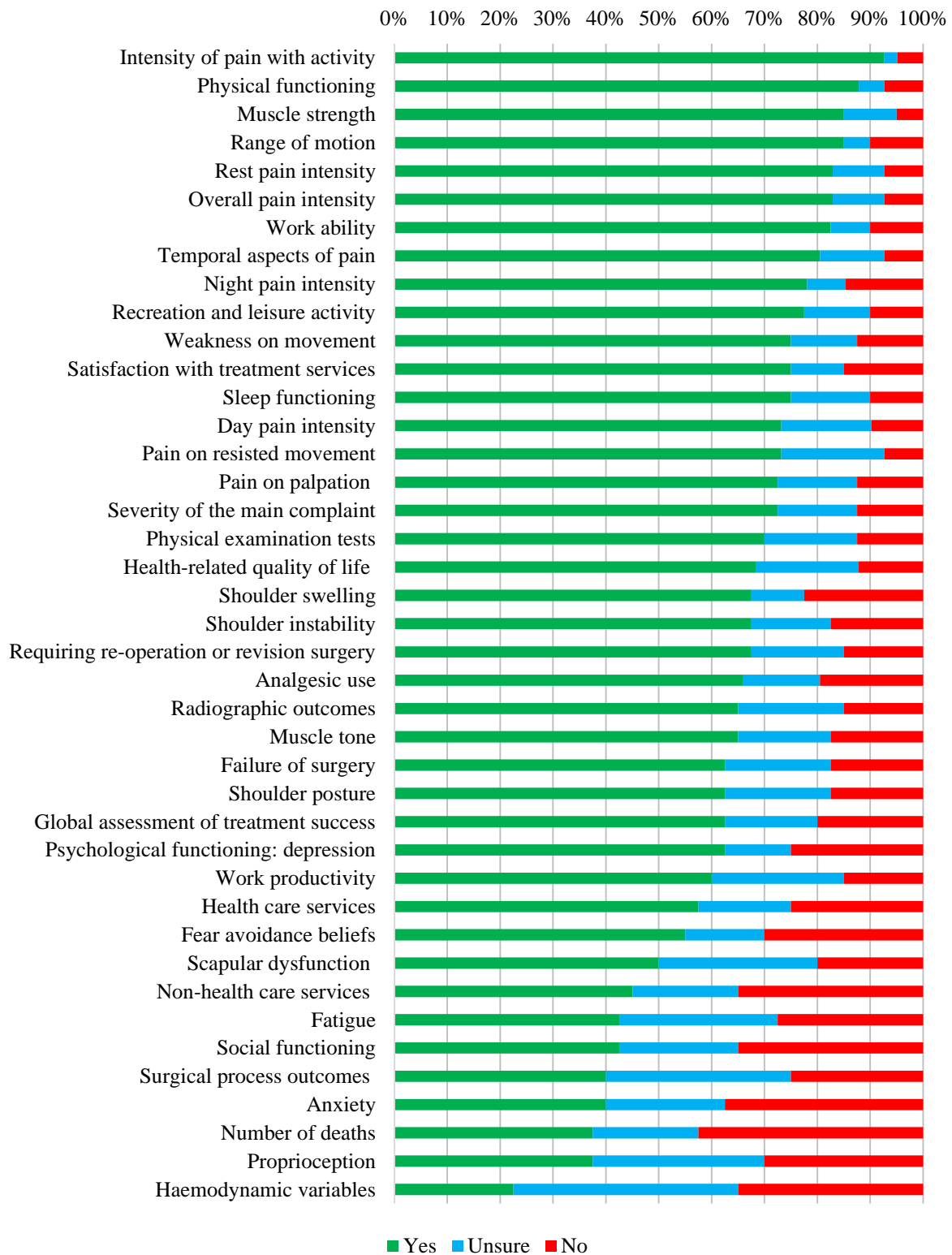


Figure S2. Ratings by patients (n=41) of potential core domains in the first Delphi round

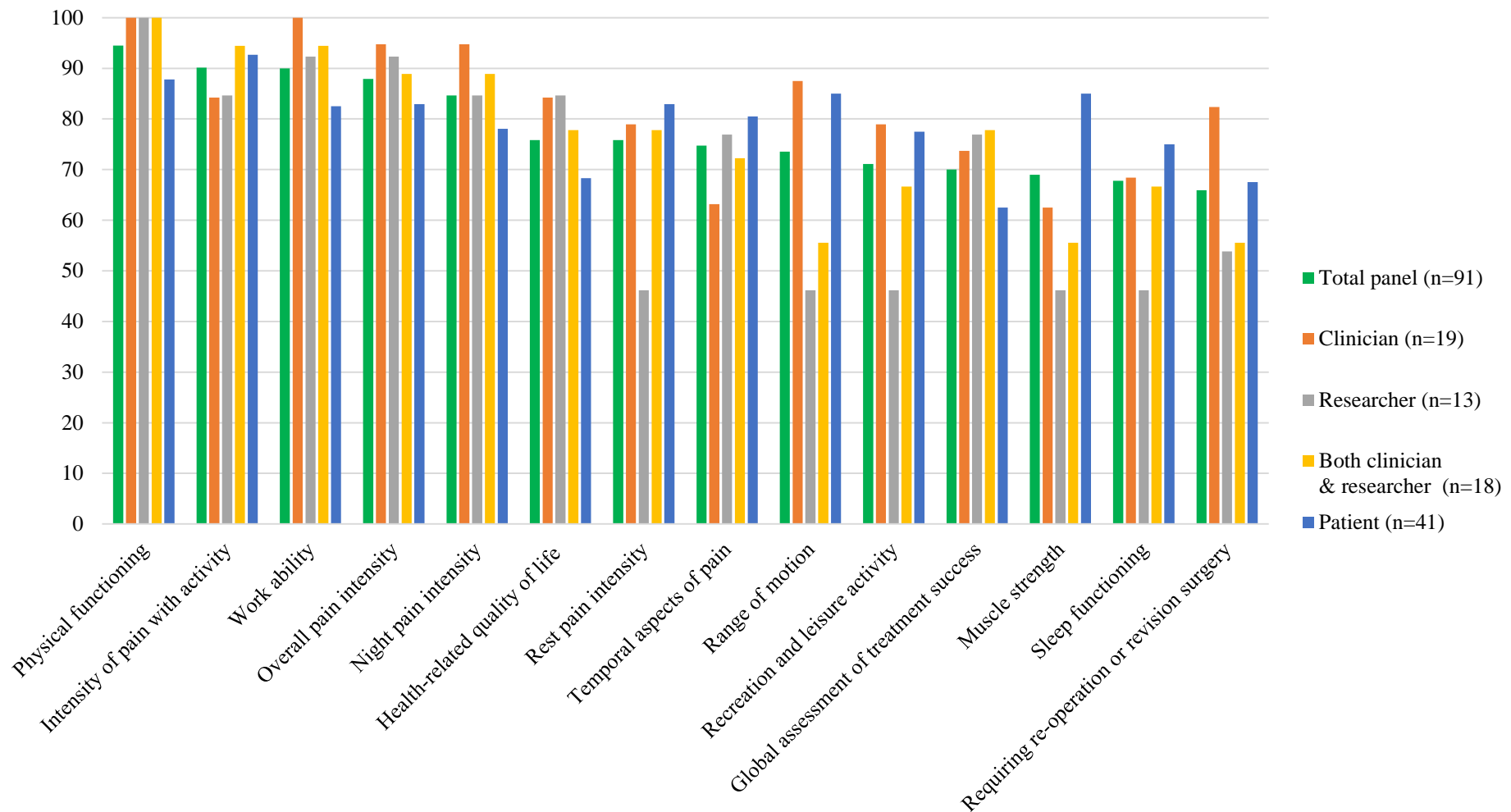


Figure S3. Ratings of core domains stratified by stakeholder group in the first Delphi round (top 14 ranked domains). The percentage of participants agreeing that a domain is important to include is presented.

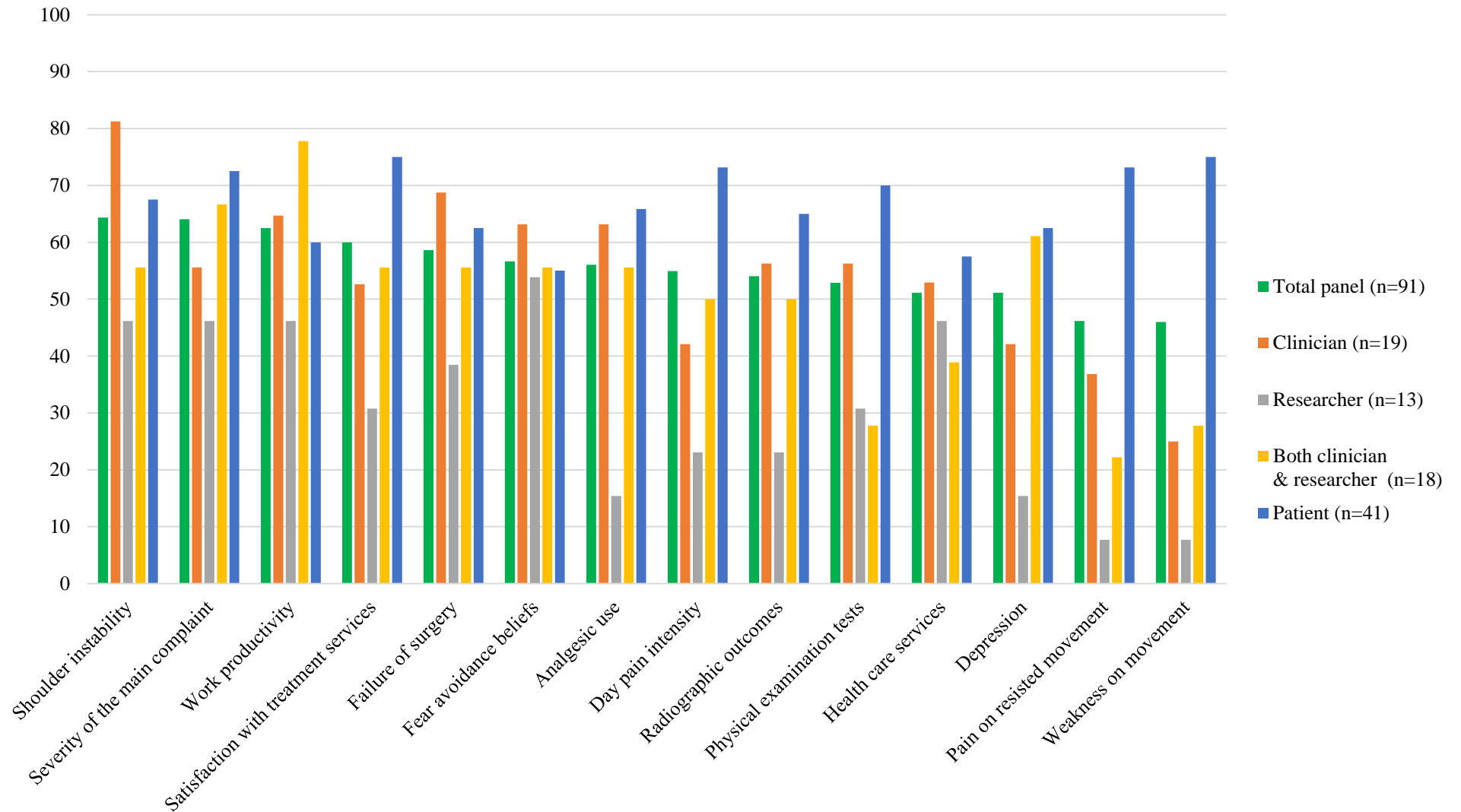


Figure S4. Ratings of core domains stratified by stakeholder group in the first Delphi round (middle 14 ranked domains). The percentage of participants agreeing that a domain is important to include is presented.

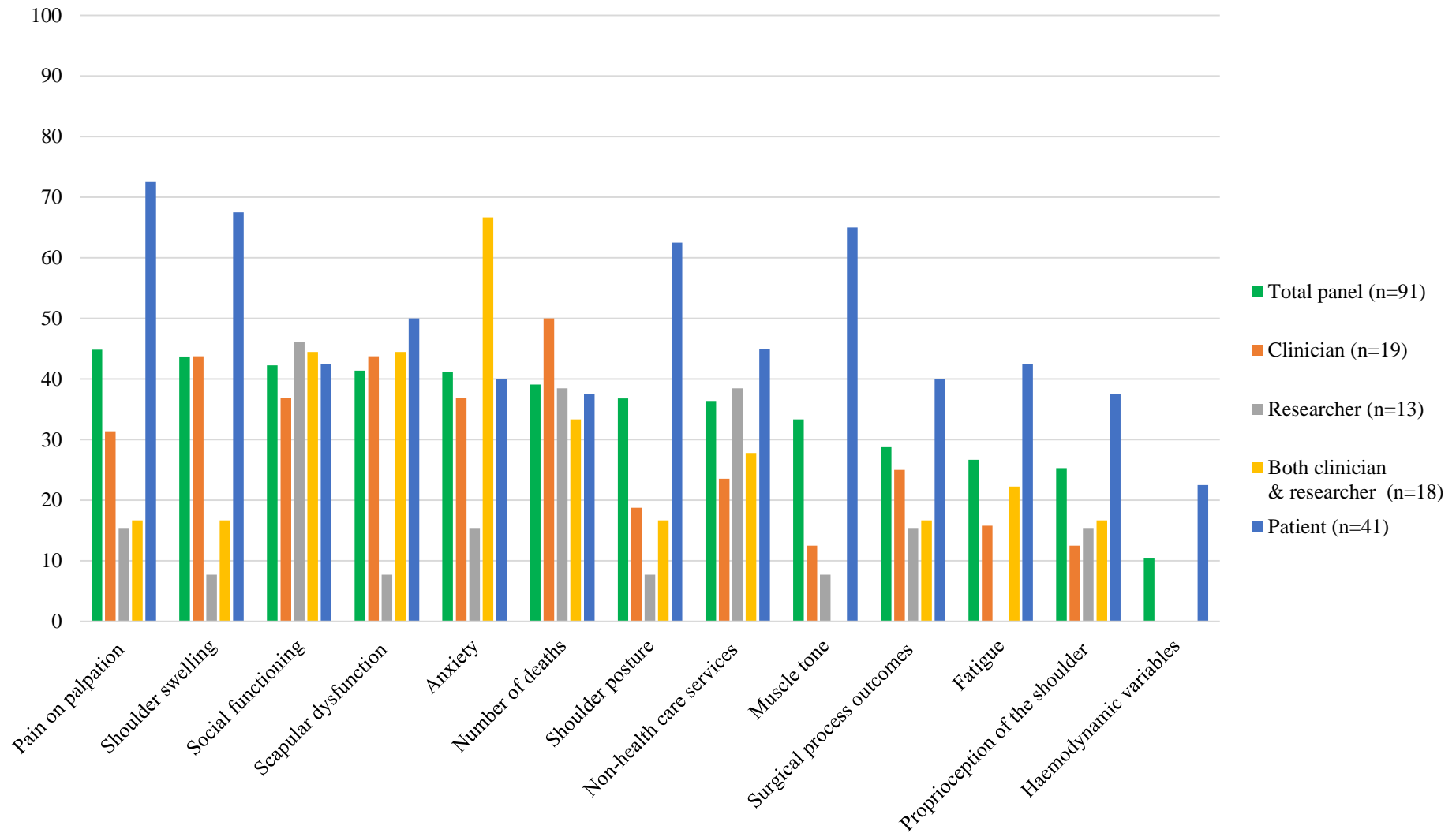


Figure S5. Ratings of core domains stratified by stakeholder group in the first Delphi round (bottom 13 ranked domains). The percentage of participants agreeing that a domain is important to include is presented.

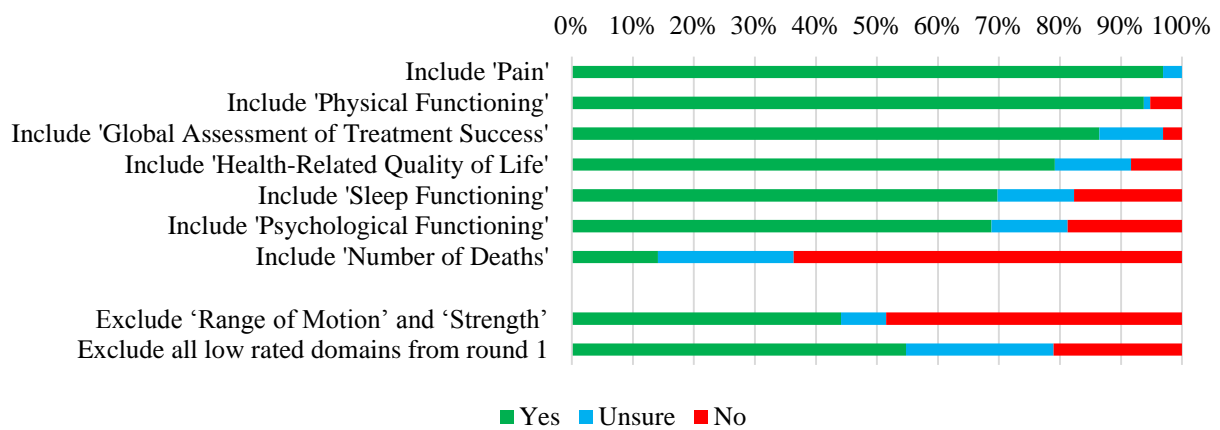


Figure S6. Ratings by total panel (n=96) of potential core domains in the second Delphi round.

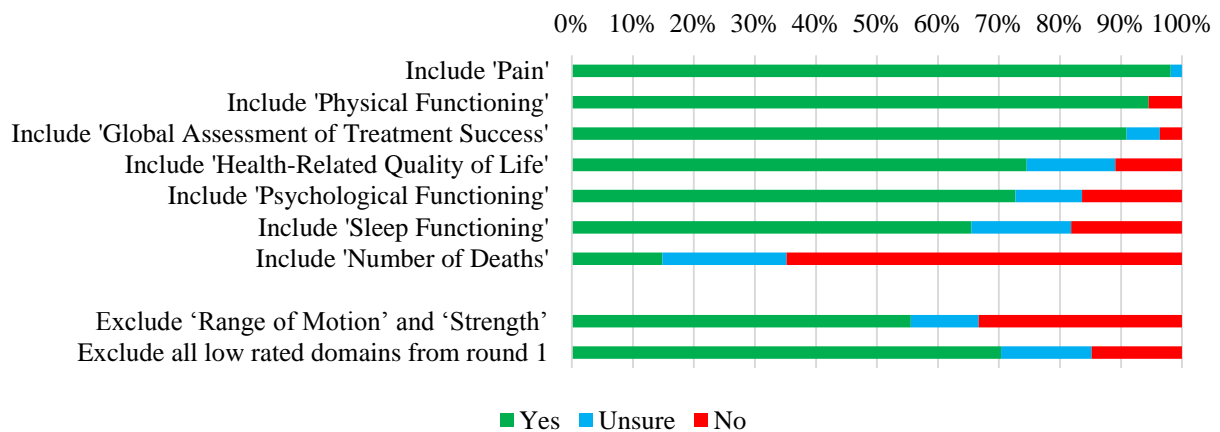


Figure S7. Ratings by health clinicians/researchers (n=55) of potential core domains in the second Delphi round.

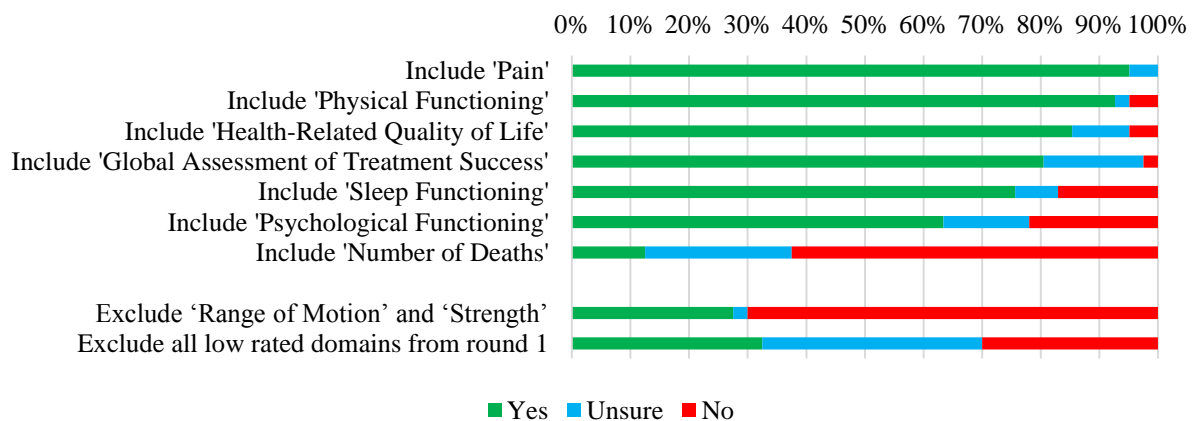


Figure S8 Ratings by patients (n=41) of potential core domains in the second Delphi round