

Appendix 1: Survey and interview questions

A) High value care consensus survey questions

1. Is there anything missing from our definitions and themes?
2. What is your perception or opinion on high value care?
3. As a practising clinician, what do you prioritise out of the themes outlined above for high value and high-quality care?
4. Do you want to discuss these themes and definition further in a short 15-minute interview with us?

B) High value care consensus interview questions exploring knowledge gaps identified in our evidence review

Interview Guide Questions:

1. Is there anything you would like to expand on in reference to your answers to the survey?

2. Value(S)

- How do you know or measure how much the patient actually values a particular outcome?
 - Do you ever get a patient to rank particular outcomes?

3. Cost effectiveness

- In your view, how well do current concepts in high value care definitions capture what it is like to provide cost-effective care in private practice physiotherapy?
 - Are there other things that come into providing cost-effective care for YOU? For example, treatment that can be performed in the allotted time with patient.
 - What do you think about the cost the patient is willing to pay for treatment? Does this impact what 'cost-effective' care is?

4. Reducing waste

Most ways to reduce overuse revolve around improved patient understanding and shared decision making. But these often revolve around specific, discrete aspects of care, like one-off decisions about treatment modalities/types.

- Are there aspects of shared decision making that may help reduce overuse?
 - For example, how do you decide where/what practitioner you will refer a patient?

5. Effective care

- In your view, how is effective care related to evidence based care?
 - Can you expand on how this plays out in practice?
 - Would you prefer the RIPN statement to include evidence-based care or effective care as a core component to high quality care? Why?

6. Measuring care

There are currently no overarching standards or mechanisms to ensure care from physiotherapists is high quality (effective/evidence-based, safe, consistent).

- How would you measure care quality?

- Is this different for the different constructs of quality as we found in our rapid review?
 - Safety?
 - Consistency?
- Do you think we need to include something about this in our RIPN statement?

7. Equitable care

From our rapid review, we've found that equitable care can be roughly defined as care that allows all people, from all walks of life, to shape, or be actively involved, in their care.

- How do you ensure equitable care in practice?
 - How can we do this better as a group (RIPN)?

Appendix 2: Qualitative data that led to theme development

Area	Item	Supporting qualitative data
Additions or changes to our model of high value care		
High value care: Reducing waste domain	1. Adding a definition for low value care: Low value care is not patient-centred, or aligned with the patient's goals, and is ineffective and/or unnecessary.	<i>"I don't think it's a dichotomy [low value care and the absence of high value care]. I think these are separate constructs that we're talking about. That are related, but I think they're separate I think."</i> (Participant 08) <i>"So, if we know that things don't work then I think that it's pretty clear to have no value.... So, it might be evidence-based and effective, then if they're not engaged with it, then it's probably low value.... So if you can't ensure that intervening would have a greater effect than not intervening than not intervening."</i> (Participant 01)
	2. Add the following text: Waste is defined as a cycle of care issues such as unnecessary tests, treatments, procedures, and referrals.	<i>"And if you're going to send for an MRI, that's fine. You know, because I know that there is often a clinical justification, you still have to check the spinal cord or, you know, rule out red flags, that's fine. But then the conversation needs to be had with the patient about what that disc bulge means. And the language you frame around that because, you know, that's where you're then burdening the health system with waste. Because that person goes on this six month merry go round of shopping surgeons and having laminectomies for a nonspecific episode of back pain that, all in all might have resolved without such aggressive early intervention."</i> (Participant 04)
	3. Add the following text under clinician: And processes that contribute to care (like clinical reasoning that lead to care decisions).	<i>"So maybe sometimes our cleverness in our clinical reasoning can lead us to decision making, be it diagnostic, prognostic, or prescriptive, in terms of treatment decision-making, that still may not necessarily reflect perhaps high value care. And in fact, may sometimes give rise to low value care perhaps in some instances."</i> (Participant 06)
High value care: Patient values	4. Change the domain name: From Patient Centred (ValueS) to Patient values.	<i>"Prior to this RIPN project I was not aware of the difference between high value and high quality care. Having read the rapid review I agree with the proposed relationships and definitions, although perhaps a change in the wording of the model could improve its clarity, ie re-phrasing of 'value' from the patient centred circle and the cost effectiveness circle?"</i> (Participant 07)
High value care: Cost effectiveness	5. Change the domain name: From Value/cost-effective to Cost effectiveness	

	<p>6. Make Effective and Evidence-based two separate themes</p>	<p><i>“Evidence-based care, or the process of evidence-based practice, leads you to understanding what is effective healthcare.”</i>(Participant 01)</p> <p><i>“Effective care is how we deliver care. Do we have the skills to deliver care in an effective way.... “Our practice needs to be evidenced informed so that our own biases within clinical practice are being challenged. But it needs to be delivered in an effective manner and made compelling enough for the consumer to choose.”</i> (Participant 02)</p> <p><i>“So, something might be effective but it could be harmful. You know, probably answers the question, you look at the evidence... So I think evidence-base is crucial and it has a crucial role in what we do, but I don’t think it’s the whole puzzle.”</i> (Participant 05)</p>
<p>High value care: Effective</p>	<p>7. Add the following explanatory text for Effective theme:</p> <p>Care that achieves its intended outcome. Effective care and evidence-based care are subtly different.</p> <p>Effective care should be evidence-based, but just being evidence-based is not sufficient for effective care. [Agenda item 27]</p> <p>Effective care is determined by the process of care, which is underpinned by skilled communication and understanding patient beliefs and values. [Agenda item 28]</p>	<p><i>“Effectively, we are saying we are producing an effect.”</i> (Participant 06)</p> <p><i>“I could be really evidence based in my care but that does not mean I deliver it in an effective manner.”</i> (Participant 02)</p> <p><i>“So, you know, it’s up to you to do your assessments and see what sort of, you know, see if that person is responding to that and if they’re not responding. Try something that might not be evidence based, you know, that’s out there in the research. That the research said isn’t more effective than other care. But for that person it might be heaps more effective because it speaks to that belief patterns.”</i> (Participant 04)</p>
<p>High quality care: Accountable</p>	<p>8. Add a theme: Accountable</p>	<p>[In response to ‘Is there anything missing from our definitions and themes?'] <i>“Section in high quality care to consider therapy being measurable and accountable.”</i> (Participant 14)</p> <p><i>“Rather than just, ‘here’s some things to look at (outcomes).’ It’s like, this is gunna happen and we’re gunna do this. This is how we’re gunna know. So I think it has a bit more of an impact on</i></p>

		<p>delivery.” (Participant 01)</p> <p>“So I would suggest some level of accountability. Again, I don’t know what that would look like, in the weeds of it, but yeah. The medical field do it and do it effectively. So, it’s not completely uncharted territory.” (Participant 05)</p>
	<p>9. Add in the following explanatory text for Accountable: Care that is provided with the explicit understanding of being benchmarked against standards and open to critical appraisal by peers.</p>	<p>“So I guess, when we say unwarranted variations, I guess in some ways we’re saying there are variations that exist that are impacting patient outcomes or system outcomes. That can’t be just meaningfully justified... Are we actually doing stuff that we don’t need to be doing because we’re allowing too much flexibility in some of our systems?”(Participant 05)</p> <p>“Perhaps something that could be put in there is the capacity to have a senior person or a peer review of your decision making process or some sort of thing like that? Um, an escalation process?” (Participant 08)</p>
Accompanying statements to high value		
	<p>1. Different stakeholders may have different perspectives on what high value care is.</p>	<p>Versus maybe, this is maybe from a lens perspective, but from a third-party payer having to pay for a service and having to weigh up what’s in the best interest for the community with limited resources, what, where do we put the highest value. So you know, that concept of a relative term.”(Participant 06)</p>
	<p>2. Different stakeholder perspectives should be considered when delivering high value care.</p>	<p>“You know, it makes it tricky. Having a common understanding that you can be high quality and yet still not be necessarily a priority or considered as high quality as other parts of the service, then yeah that allows and permits that type of reasoning.” (Participant 05)</p>
High value care	<p>3. High value care is not an absolute threshold, rather it is a process of care delivery relative to the situation and context of care.</p>	<p>“And then that is the idea of relativity, in terms of, is this in fact high as in an absolute definition or is it a relative definition. Can we have, this is high value care, but this is in fact, higher again.”(Participant 06)</p>
	<p>4. High value care can mean not providing care.</p>	<p>“But high value care doesn’t always necessarily mean that there is an intervention. It could be the absence of an intervention.” (Participant 08)</p>
	<p>5. Low value care does not have to include all characteristics listed in our definition to be labelled low value. For example, care can be low value when it is aligned with the</p>	<p>“So, if we know that things don’t work then I think that it’s pretty clear to have no value.... So, it might be evidence-based and effective, then if they’re not engaged with it, then it’s probably low value.... So if you can’t ensure that intervening would have a greater effect than not intervening than not intervening.” (Participant 01)</p>

	patient's goals but not delivered in a way specific to the patient's preferences.	
	6. When attempting to understand what a patient values, a clinician may perceive a tension between their own thoughts and beliefs about what care is best for the patient and what the patient expects to receive.	<i>"I think being aware of the tension is the first part."</i> (Participant 05) <i>"And just just ask them. I mean, they also show it on their face or in their body language, if what we're doing is incongruent. Because sometimes what I want to be doing what I think is the right outcome measure for us to be pushing towards is different what the patient wants to be doing."</i> (Participant 05)
High value care: Patient values	7. A perception of tension between the clinician's own thoughts about what care is best for the patient and what the patient expects to receive can be resolved through communication, which involves interpreting the patient's needs and translating them into clinical outcomes amenable to patient care.	<i>"I guess like my role is to pull down the layers of what they say that they might not intentionally be saying. You know and categorize that into, okay they want this function or they're wanting that range, or wanting that pain or they're wanting this conditioning."</i> (Participant 04)
	8. Meeting patient expectations may be necessary for high value care provision, but this alone does not constitute high value care.	<i>"If we only offer the patient what WE see as high value care, even if it is objectively the best available option, and it doesn't meet the expectations of our patients we potentially lose the perception of high value in their eyes. This doesn't mean pandering to their notions of high value care, but at least considering their expectations and opening a dialogue around why we might be able to offer them a solution that is better."</i> (Participant 20)
	9. To optimise the value of care, communication should involve a two-way exchange where patients learn from clinicians and clinicians learn from patients.	<i>"This is why I think the community involvement is really important because we can have our heads so far up our own assess that much, but it may not matter that much to the recipient of healthcare. That I'll have people coming quite regularly who think that they need something or they want something and I'll think that they probably don't. And then that's a conversation."</i> (Participant 01)
High value care: Cost effective	10. Funding structure may incentivise care options that maximise clinic income relative to clinician's time, and lead to low value care provision.	<i>"It's more cost-effective to deliver what I could consider low-value care. Because it's lower effort. It's faster. It's much less effort. And is much more generic in it's nature. So it's much easier to fill time with more repeatable exposures or appointment billings schedules than it is to try and deliver more comprehensive and individualised rehab plans."</i> (Participant 01)
High quality	11. Physiotherapists should be open to	<i>"And it's not necessarily a fault with clinical reasoning per se, but clinical reasoning used in the</i>

care: Accountable	having their clinical reasoning, decision making, and care provision peer reviewed.	<i>wrong way can lead to that type of decision making.” (Participant 06)</i>
High quality care: Safe	12. The concept of harm in musculoskeletal conditions should be expanded to include how clinicians communicate with patients.	<i>“I could easily say the way that we communicate with people that can be unsafe. In regard to feeding into their catastrophisation or fear avoidance.” (Participant 03)</i> <i>“I would like to work in a community where a patient with wry neck could attend any primary health care practitioner - physio, GP, chiro, osteo etc. and have their story listened to - rule out sinister pathology and create differential list, thorough assessment to confirm/refute diagnoses, provide education and reassurance and stay clear of harmful language.” (Participant 14)</i>
High quality care: Connected	13. Connected care should promote the connection of ideas and knowledge, not just the movement of patients across sectors and services.	<i>“To address your concerns, ask the questions that you need and come to an agreed, you know, a collaborative resolution with someone that has the knowledge that you don't have, and I think in one of these points I'm not sure which one it was. You had connected, I think, is what it was?” (Participant 08)</i>
High quality care: Evidence-based	14. All care providers, patients, and stakeholders should be critical of using low quality evidence to justify treatment.	<i>“Evidence-based care gets twisted into whatever framework the person is speaking about and wants to justify. So evidence-based care has been used to describe the use of manual therapy and the non-use of manual therapy, and they're both evidence-based care.” (Participant 01)</i>
High quality care: Equitable	15. Private practice physiotherapy is inequitable for those who cannot afford the fee for service.	<i>“Well, I mean, my clinic is not equitable. You have to be able to afford it.” (Participant 01)</i> <i>“Well I guess, equitable care. I feel very hamstrung to what I can provide as equitable care. You know, I'll be honest and I'm very bound by financial model.” (Participant 04)</i> <i>“So I think a lower SES cohort or people with poor health education, probably aren't aware of, and don't get the same quality of care as their counterpart. You know, higher SES people, people with higher health education and we don't have a funding model that really supports that in private practice because at best they're going to get like I said a EPC program which will cover only half the physiotherapy sessions and only then for five of them.” (Participant 05)</i> <i>“Yep. I think private practice exists because the public system isn't enough. Theoretically if the public system was able to provide high quality, effective care that was timely and able to access you wouldn't have a need for the private setting. So, inherently there is inequity in being able to access care. .” (Participant 23)</i>
High value	16. A clinician's own belief system and	<i>“And if you're talking about values, then it taps into belief systems and identity and all this other</i>

care: Patient values	values may contribute to a perceived tension between what the patient wants and what the clinician thinks is best for their health outcomes.	<i>[expletive] that people bring to the table.</i> " (Participant 03)
High value care: Reducing waste	17. Reducing waste in musculoskeletal care should account for other aspects of the care cycle, such as unnecessary referrals.	<i>"And if you're going to send for an MRI, that's fine. You know, because I know that there is often a clinical justification, you still have to check the spinal cord or, you know, rule out red flags, that's fine. But then the conversation needs to be had with the patient about what that disc bulge means. And the language you frame around that because, you know, that's where you're then burdening the health system with waste. Because that person goes on this six month merry go round of shopping surgeons and having laminectomies for a nonspecific episode of back pain that, all in all might have resolved without such aggressive early intervention."</i> (Participant 04)
	18. Clinical reasoning that may not reflect high value care, or give rise to low value care, is a form of waste.	<i>"You know, we've got very clever clinicians out there that can make very clever arguments for why they want to do something, but that still doesn't necessarily mean that it's high quality. And it's not necessarily a fault with clinical reasoning per se, but clinical reasoning used in the wrong way can lead to that type of decision making."</i> (Participant 06)
High quality care: Accountable	19. More consistent use of high value care requires a commitment to a benchmarked standard of care.	<i>"I guess, to ensure that we are confident that we are delivering what we think we should. We probably have some reference point, be it outcome measures or patient goals or something, that tethers what we're doing to a process as opposed to doing it until someone decides that we're not doing it anymore. I guess benchmarking what we're doing against some external - well maybe not external - but against some measure."</i> (Participant 04)
High quality care: Effective	20. Effective care should be evidence-based, but just being evidence-based is not sufficient for effective care. [Agenda item 27]	<i>"I could be really evidence based in my care but that does not mean I deliver it in an effective manner."</i> (Participant 02)
	21. Effective care is determined by the process of care, which is underpinned by skilled communication and understanding patient beliefs and values. [Agenda item 28]	<i>"Effective care is how we deliver care. Do we have the skills to deliver care in an effective way. This includes communication skills, patient therapeutic alliance building, manual therapy skills."</i> (Participant 07)

Appendix 3: Results of consensus meeting.

Additions or changes to our model of high value care			
Area	Item	Agreement	Decision
High value care: Reducing waste domain	1. Adding a definition for low value care: Low value care is not patient-centred, or aligned with the patient's goals, and is ineffective and/or unnecessary.	13/16 (81.25%)	Add to model
	2. Add the following text: Waste is defined as a cycle of care issues such as unnecessary tests, treatments, procedures, and referrals.	16/16 (100%)	Add to model
	3. Add the following text under clinician: And processes that contribute to care (like clinical reasoning that lead to care decisions).	15/16 (93.75%)	Add to model
High value care: Patient values	4. Change the domain name: From Patient Centred (ValueS) to Patient values.	16/16 (100%)	Change wording
High value care: Cost effectiveness	5. Change the domain name: From Value/cost-effective to Cost effectiveness	16/16 (100%)	Change wording
	6. Make Effective and Evidence-based two separate themes	16/16 (100%)	Make two separate themes. Effective modified to include statement 20 and 21.
High value care: Effective	7. Add the following explanatory text for Effective theme: Care that achieves its intended outcome. Effective care and evidence-based care are subtly different.	16/16 (100%)	Add to model
	Effective care should be evidence-based, but just being evidence-based is not sufficient for effective care. [Agenda item 27]	13/15* (86.67%)	Not agreed as a standalone statement
	Effective care is determined by the process of care, which is underpinned by skilled communication and understanding patient beliefs and values. [Agenda item 28]	12/15* (80%)	Not agreed as a standalone statement

High quality care: Accountable	8. Add a theme: Accountable	15/16 (93.75%)	Add a theme
	9. Add in the following explanatory text for Accountable: Care that is provided with the explicit understanding of being benchmarked against standards and open to critical appraisal by peers.	16/16 (100%)	Add to model

Accompanying statements to high value

Agreed statements

Area	Statement	Agreement?	Decision
High value care	1. Different stakeholders may have different perspectives on what high value care is.	16/16 (100%)	Agreed as standalone statement
	2. Different stakeholder perspectives should be considered when delivering high value care.	15/16 (93.75%)	Agreed as standalone statement
	3. High value care is not an absolute threshold, rather it is a process of care delivery relative to the situation and context of care.	16/16 (100%)	
	4. High value care can mean not providing care.	16/16 (100%)	
	5. Low value care does not have to include all characteristics listed in our definition to be labelled low value. For example, care can be low value when it is aligned with the patient's goals but not delivered in a way specific to the patient's preferences.	15/15* (100%)	
High value care: Patient values	6. When attempting to understand what a patient values, a clinician may perceive a tension between their own thoughts and beliefs about what care is best for the patient and what the patient expects to receive.	15/15 (100%)	Modified to include [and belief] from statement 16
	7. A perception of tension between the clinician's own thoughts about what care is best for the patient and what the patient expects to receive can be resolved through communication, which involves interpreting the patient's needs and translating them into clinical outcomes amenable to patient care.	15/15 (100%)	
	8. Meeting patient expectations may be necessary for high value care provision, but this	15/15 (100%)	

	alone does not constitute high value care.		
	9. To optimise the value of care, communication should involve a two-way exchange where patients learn from clinicians and clinicians learn from patients.	13/15 (86.67%)	
High value care: Cost effective	10. Funding structure may incentivise care options that maximise clinic income relative to clinician's time, and lead to low value care provision.	15/15 (100%)	
High quality care: Accountable	11. Physiotherapists should be open to having their clinical reasoning, decision making, and care provision peer reviewed.	14/15 (93%)	
High quality care: Safe	12. The concept of harm in musculoskeletal conditions should be expanded to include how clinicians communicate with patients.	13/15 (86.67%)	
High quality care: Connected	13. Connected care should promote the connection of ideas and knowledge, not just the movement of patients across sectors and services.	15/15 (100%)	
High quality care: Evidence-based	14. All care providers, patients, and stakeholders should be critical of using low quality evidence to justify treatment.	12/15 (80%)	
High quality care: Equitable	15. Private practice physiotherapy is inequitable for those who cannot afford the fee for service.	10/12** (83.33%)	Modified to remove clause about public health service options**
<i>Not agreed statements</i>			
High value care: Patient values	16. A clinician's own belief system and values may contribute to a perceived tension between what the patient wants and what the clinician thinks is best for their health outcomes.	2/15 (13.33%)	Re-voted to include as part of statement 6 (Agreement 12/15 (80%))
High value care: Reducing waste	17. Reducing waste in musculoskeletal care should account for other aspects of the care cycle, such as unnecessary referrals.	0/15 (0%)	Do not include

	18. Clinical reasoning that may not reflect high value care, or give rise to low value care, is a form of waste.	0/16 (0%)	Do not include
High quality care: Accountable	19. More consistent use of high value care requires a commitment to a benchmarked standard of care.	2/15 (13.33%)	Do not include
High quality care: Effective	20. Effective care should be evidence-based, but just being evidence-based is not sufficient for effective care. [Agenda item 27]	6/15 (40%)	Include as explanatory text for Effective theme (Agreement 13/15 (86.67%))
	21. Effective care is determined by the process of care, which is underpinned by skilled communication and understanding patient beliefs and values. [Agenda item 28]	0/15 (0%)	Include as explanatory text for Effective theme (Agreement 13/15 (86.67%))

*One participant left the consensus meeting after accompanying statement 4.

**Three more participants left the consensus meeting before we finalised the voting on statement on accompanying statement 15. Statement 15 was originally worded, "*Private practice physiotherapy is not equitable because those who cannot afford the fee for service may not be able to access private practice physiotherapy, and public funding options may not completely ameliorate the difficulty these patients experience in accessing care.*" Participants felt that they were too uncertain about how publicly funded health service options (e.g., hospital outpatient departments) impact care access and decided to remove this statement.

