

# Discovering

## **physiotherapy research priorities**

that matter to patients,  
carers and clinicians

# James Lind Alliance Physiotherapy Priority Setting Partnership

## Appendices

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## Appendix 1 Developing and sharing models of good practice for reducing the burden on secondary care Search Strategy and Results

The brief: To conduct a broad search of the literature to identify research recommendations/questions to inform our understanding of unanswered research questions. Evidence to be specific to physiotherapy and will aid verifying PSP questions/areas.

### Theme 1 Developing and sharing models of good practice for reducing the burden on secondary care

Sources	Search terms	Inclusion	Exclude
<ul style="list-style-type: none"> <li>• OVID database</li> <li>• Pubmed</li> </ul>	Physiotherapy OR physical therapy OR physical therapy modalities OR physical therapy specialty  Secondary care OR hospital admission OR hospitalisation OR hospitalization OR length of stay	<ul style="list-style-type: none"> <li>• Meta-analysis or systematic reviews of interventional research, national guidelines</li> <li>• Focus on <i>reducing</i> OR <i>preventing</i> hospital admission OR <i>reducing length of stay</i></li> <li>• Studies published 1997-2017. Most recent available guidelines</li> <li>• <b>Only reviews</b></li> </ul>	<ul style="list-style-type: none"> <li>• Studies not available in English</li> <li>• Purely qualitative studies</li> <li>• Protocols/incomplete studies</li> <li>• Feasibility studies</li> <li>• Studies which do no measure hospital admissions or length of stay.</li> <li>• Issue or recommended area of focus is not amenable to physiotherapy e.g. difference in surgical techniques, difference between medications etc.</li> <li>• Publications from non-peer reviewed journals</li> </ul>
<ul style="list-style-type: none"> <li>• PEDRO</li> </ul>	Physiotherapy OR physical therapy AND Hospital admission OR length of stay	As above	As above
<ul style="list-style-type: none"> <li>• Cochrane</li> </ul>	Physiotherapy AND “hospital admission” OR Physiotherapy AND “length of stay”	As above	As above
<ul style="list-style-type: none"> <li>• NICE Evidence</li> </ul>	Physiotherapy AND “hospital admission” OR Physiotherapy AND “length of stay”  OR  Physiotherapy AND Evidence uncertainties	As above	As above

Data extraction sheet

Search engine	No. hits	Articles excluded								Final no. included
		Not focused on hospital admission/length of stay	Not interventional/ interventional review	Protocol only	Feasibility	Abstract only	Not in English	Not physiotherapy	Duplicate	
Ovid (Pubmed)	46	16	3	2	1	0	0	2	0	22
EBSCO (CINHAL)	165	54	30	4	0	3	2	22	24	26
PEDro	95	7	52	0	0	0	2	4	12	18
Cochrane	7	0	0	0	0	0	0	2	5	0
NICE Evidence	52	14	3	0	0	0	0	15	14	6
Totals	365	91	88	6	1	3	4	45	55	72

Appendix 2 Promoting good practice in primary care for people with multi-morbidities Search strategy and results

The brief: To conduct a broad search of the literature to identify research recommendations/questions to inform our understanding of unanswered research questions. Evidence to be specific to physiotherapy and will aid verifying PSP questions/areas.

Theme 2 Promoting good practice in primary care for people with multi-morbidities

Sources	Search terms	Inclusion	Exclude
OVID (MEDLINE)	<p>(1) "Physiotherapy" OR "Physical therapy modalities" [<i>incl : modalities, physical therapy OR modality, physical therapy OR neurological physiotherapy OR neurophysiotherapy OR physical therapy modalities OR physical therapy modality OR physical therapy technique OR physical therapy techniques OR physiotherapies (techniques) OR physiotherapy (techniques) OR physiotherapy OR neurological Techniques Or physical therapy</i>]</p> <p>AND</p> <p>(2) "Primary care" OR "Primary Health Care" [<i>incl. "care, primary" OR "care, primary health" OR "health care, primary" OR "healthcare, primary" OR "primary care" OR "primary health care" OR "primary healthcare"</i>]</p> <p>AND</p> <p>(3) Comorbidity [<i>incl. "comorbidities" OR "comorbidity" OR "multimorbidities" OR "Multimorbidity"</i>]</p> <p>AND</p> <p>(4) "Review" [<i>incl. "review" OR "review, academic" OR "review literature" OR "review, multicase" OR "Review, systematic" OR "review of reported cases"</i>] OR "scientific integrity review" OR "meta-analysis"</p>	<ul style="list-style-type: none"> <li>• Meta-analysis, national guidelines or systematic reviews of interventional research or research exploring risk factors for increased primary care usage</li> <li>• Focus on interventions/models in primary care which <i>reduce primary care usage</i> OR <i>reduce hospital admission</i> OR <i>reduce length of stay</i></li> <li>• Studies published 2006-2017. Most recent available guidelines</li> <li>• <b>Only reviews</b></li> </ul> <p>As above</p> <p>As above</p>	<ul style="list-style-type: none"> <li>• Studies not available in English</li> <li>• Purely qualitative studies</li> <li>• Protocols/incomplete studies</li> <li>• Feasibility studies</li> <li>• Studies which do not measure primary care usage, hospital admissions or length of stay.</li> <li>• Issue or recommended area of focus is not amenable to physiotherapy e.g. difference in surgical techniques, difference between medications etc.</li> <li>• Publications from non-peer reviewed journals</li> </ul> <p>As above</p> <p>As above</p>
EBSCO (CINHAL)	<p>(1) "Physical Therapy") OR "physiotherapy" OR (MH "Chest Physical Therapy") OR (MH "Physical Therapy Practice, Research-Based")</p> <p>AND</p> <p>(2) (MH "Primary Health Care") OR "primary care")</p>	<p>As above</p> <p>As above</p>	<p>As above</p> <p>As above</p>

PEDRO	<p>AND (3) (MH "Comorbidity") OR "multimorbidity" OR "multimorbidities"</p> <p>AND (4) (MH "Literature Review") OR (MH "Scoping Review") OR (MH "Systematic Review") OR (MH "Cochrane Library") OR (MH "Meta Analysis") OR "review of literature" or "literature review" or "meta-analysis" or "systematic review"</p> <p>Phys* AND "primary care"</p> <p>Phys* AND "primary care"</p>		
Cochrane			
NICE Evidence	Physiotherapy AND Primary care [limited to systematic reviews, 01/01/2007-25/06/2017]	As above	As above

Search engine	No. hits	Articles excluded										Final no. included
		Not primary care	Not focused on reducing primary care usage/hospital admission/length of stay	Not interventional/interventional review	Protocol only	Feasibility	Abstract only	Not in English	Not physiotherapy	Duplicate	Not available	
Ovid (Pubmed)	17	0	6	6	0	0	0	1	4	N/A		0
EBSCO (CINHAL)	21	0	6	7	0	0	0	1	0	4	1	2
PEDro	53	0	20	1	0	0	0	0	26	2		4
Cochrane	52	0	6	2	1	0	0	0	37	4		2
NICE Evidence	84	5	29	15	1	0	0	0	28	3		3
<b>Totals</b>	<b>227</b>											<b>11</b>

Data extraction Sheet

Appendix 3 Search strategy to verify uncertainties

Search order	Search engine/ source	Date range	Keywords	Hits	New IQ contributions	Indicative questions
1	Reducing burden in secondary care' search	2006-2017	See Ref Doc	365	8	<b>E03; A08; A10; E10; E13; E14; E15; A03</b>
2	Primary care' search	2006-2017	See Ref Doc	227	0	
3	Cochrane Database of Systematic Reviews	2006-2017	Physiotherapy' or 'Physical Therapy' or 'Exercise'	658	5	<b>E07; E05; E08; E09; M01</b>
4	NICE	2006-2017	Physiotherapy'	27	7	<b>D03; SD03; P03; PE03; PE06; O01; OP01</b>
5	PEDRO	2006-2017	Physiotherapy OR 'Physical Therapy' AND 'systematic review'	1135	11	<b>A12; D02; D05; P08; TM02; DP01; PE08; E12; TM01; P02; SD04</b>
6	OVID	2006-2017	Physiotherapy' OR 'physical therapy modalities' AND 'meta-synthesis' OR 'systematic review' AND 'access' or 'availability'	19	3	<b>A02; SD01; PC02.1</b>
7	OVID	2006-2017	Physiotherapy' OR 'physical therapy modalities' AND 'meta-synthesis' OR 'systematic review' AND 'waiting lists'	2	0	DUPLICATES

8	OVID	2006-2017	Physiotherapy' OR 'physical therapy modalities' AND 'meta-synthesis' OR 'systematic review' AND 'non-attendance' OR 'did not attend'	0	0	N/A
9	OVID	2006-2017	Physiotherapy' OR 'physical therapy modalities' AND 'meta-synthesis'	25	1	<b>P05</b>
10	OVID	2006-2017	Physiotherapist' OR 'physical therapist' AND 'meta-synthesis' AND 'Education, Professional' OR 'Education' OR 'Education, Graduate' OR 'Curriculum' OR 'training'	12	3	<b>P01; P06; DP02</b>
11	Google Scholar	2015-2017	Cited by search Synnott, A et al 2015.	56	1	<b>E01</b>
12	OVID	2006-2017	Physiotherapist' OR 'physical therapist' AND 'meta-synthesis OR systematic review' AND 'job satisfaction OR burn-out OR workplace satisfaction'	0	0	N/A
13	OVID	2006-2017	Physiotherapist' OR 'physical therapist' AND 'job satisfaction OR burn-out OR workplace satisfaction'	17	0	N/A
14	OVID	2006-2018	Physiotherapist' OR 'physical therapist' AND 'job satisfaction OR burn-out OR workplace satisfaction'	18	0	N/A



15	Google Scholar	2006-2017	("attending" OR "attendance") AND ("physiotherapy" OR "physical therapy") AND "systematic review"	13,000	1	<b>PC02</b>
16	Google Scholar	2006-2017	'Technology/ or Technology Assessment, Biomedical/ or Wireless Technology/ or Telemedicine/ Equipment and Supplies' AND 'Physiotherapy/or Physical Therapy/or Exercise Therapy	34	0	0
17	Google Scholar	2006-2017	('tools' OR 'devices') AND 'monitor' AND 'patient adherence' AND 'physiotherapy' AND 'systematic review'	16,100	1	<b>PE01</b>
			Total IQs verified		<b>41</b>	

Appendix 4 Prioritisation survey – demographics of respondents

AGE	Average age (yrs)	Age range (yrs)
All respondents	41.88	17-87
Patient Group	54.19	17-87
Physiotherapist Group	39.91	18-75

  

LOCATION		England	NI	Scotland	Wales	Outside UK	Channel Islands	Isle of Man
	No.	No.(%)	No.(%)	No.(%)	No.(%)	No.(%)	No.(%)	No.(%)
Patients	67	53 (79.10)	4 (5.97)	6 (8.96)	3 (4.48)	1 (1.49)	0 (0)	0 (0)
Carers	14	13 (92.86)	1 (7.14)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Public	6	5 (83.33)	0 (0)	0 (0)	0 (0)	1 (16.67)	0 (0)	0 (0)
Patient group	87	71 (81.61)	5 (5.75)	6 (6.90)	3 (3.45)	2 (2.30)	0 (0)	0 (0)
Physiotherapists	489	303 (61.96)	119 (24.34)	37 (7.57)	15 (3.07)	12 (2.45)	1 (0.20)	2 (0.41)
Support workers	9	6 (66.67)	2 (2.22)	1 (11.11)	0 (0)	0 (0)	0 (0)	0 (0)
Students	44	9 (20.45)	31 (70.45)	1 (2.27)	0 (0)	3 (6.82)	0 (0)	0 (0)
Other HCPs	5	3 (60)	2 (40.00)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Physiotherapist group	547	321 (58.68)	154 (28.15)	39 (7.13)	15 (2.74)	15 (2.74)	1 (0.18)	2 (0.37)
All groups	634	392 (61.83)	159 (25.08)	45 (7.10)	18 (2.84)	17 (2.68)	1 (0.16)	2 (0.32)

ETHNIC BACKGROUND		White	Mixed/multiple ethnic gps	Chinese or other ethnic gp	Asian / Asian British	Black / Black British	Prefer not to say
	No.	No.(%)	No.(%)	No.(%)	No.(%)	No.(%)	No.(%)
Patients	67	63 (94.03)	0 (0)	0 (0)	0 (0)	0 (0)	4 (5.97)
Carers	14	14 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Public	6	5 (83.33)	0 (0)	0 (0)	1 (16.67)	0 (0)	0 (0)
Patient group	87	82 (94.25)	0 (0)	0 (0)	1 (1.15)	0 (0)	4 (4.60)

Physiotherapists	487	456 (93.63)	9 (1.85)	2 (0.41)	9 (1.85)	10 (1.85)	10 (2.05)
Support workers	9	7 (77.78)	0 (0)	0 (0)	1 (11.11)	2 (11.11)	1 (11.11)
Students	44	42 (95.45)	0 (0)	1 (2.27)	0 (0)	0 (0)	1 (2.27)
Other HCPs	5	5 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Physiotherapist group	545	510 (93.58)	9 (1.65)	3 (0.55)	10 (1.83)	1 (0.18)	12 (2.20)
All groups	632	592 (93.67)	9 (1.42)	3 (0.47)	11 (1.74)	1 (0.16)	16 (2.53)

GENDER		Female	Male	Prefer not to say
	No.	No.(%)	No.(%)	No.(%)
Patients	66	54 (81.82)	12 (18.18)	0 (0)
Carers	14	13 (92.86)	1 (7.14)	0 (0)
Public	6	5 (83.33)	1 (16.67)	0 (0)
Patient group	86	72 (83.72)	14 (16.28)	0 (0)
Physiotherapists	488	399 (81.76)	88 (18.03)	1 (0.20)
Support workers	9	8 (89.89)	1 (11.11)	0 (0)
Students	44	30 (68.18)	14 (31.82)	0 (0)
Other HCPs	5	4 (80)	1 (20)	0 (0)
Physiotherapist group	546	441 (80.77)	104 (19.05)	1 (0.18)
All groups	632	513 (81.17)	118 (18.67)	1 (0.16)

## Physiotherapy priorities 65 questions – final ranking

Position	Questions
<b>1</b>	When health problems are developing, at what point is physiotherapy most/least effective for improving patient results compared to no physiotherapy? What factors affect this?
<b>2</b>	When used by physiotherapists, what methods are effective in helping patients to make health changes, engage with treatment, check their progress, or manage their health after discharge?
<b>3</b>	What are the best ways to deliver physiotherapy services to meet patients' needs and improve outcomes for patients and services?
<b>4</b>	To stop health problems occurring or worsening, what physiotherapy treatments, advice or approaches are safe and effective? Where more than one treatment/approach works, which work best and in what dose?
<b>5</b>	What are patients' expectations regarding recovery, how do these compare to physiotherapists' views and, where recovery is not possible, how is this managed?
<b>6</b>	How does waiting for physiotherapy affect patient and service outcomes?
<b>7</b>	What parts of physiotherapy treatments cause behaviour change or physical improvement?
<b>8</b>	What approaches are effective for enabling parents, relations or carers to support physiotherapy treatment or to help patients to manage their own health problem?
<b>9</b>	How is patient progress and/or the results of physiotherapy treatment measured? How is service performance measured and checked?
<b>10</b>	How can access to physiotherapy be improved for groups who have reduced access?
<b>11</b>	How does the amount of physiotherapy received affect results for patients and services? What are optimal session lengths, frequency and duration of treatment?
<b>12</b>	What do the people who fund services and internal budget holders understand about the role of physiotherapy and how do they make funding decisions?
<b>13</b>	What do patients expect of physiotherapy and understand in terms of remaining healthy, their condition and their role in self-management?
<b>14</b>	Do staffing levels and skill mix impact patient and service outcomes? What are the best staffing levels and skill mixes in different areas of physiotherapy and how do these compare to current staffing provision?
<b>15</b>	When trying to improve patient and service outcomes, what types of exercises, doses and methods of delivery are effective?
<b>16</b>	What factors predict the onset of health problems, patient responses to physiotherapy or their abilities to make health changes/self-manage? Which patients (if any) are likely to benefit most/least from physiotherapy?
<b>17</b>	How well do patients recall physiotherapy advice and to what extent do patients follow this advice?
<b>18</b>	What methods do physiotherapists use to treat patients, to help them gain skills to

	manage their condition and to use them in their daily lives?
<b>19</b>	What types of exercises, doses and methods of delivery are effective in stopping health problems occurring or worsening?
<b>20</b>	What training is available to physiotherapists for developing their skills either working with different conditions or using more specialist approaches?
<b>21</b>	How do physiotherapists decide on what their treatment plans include and/or when to refer on? What influences the types of evidence they use?
<b>22</b>	What are patients offered nationally in terms of treatment sessions, appointment times and follow-on care? How is it checked that this is enough?
<b>23</b>	What's the availability of physiotherapy services nationally, how does this compare between specialisms, countries, or to documented need? What affects service availability across the UK?
<b>24</b>	How are different physiotherapy services provided, staffed and accessed across the UK and what influences this?
<b>25</b>	What are the physiological effects of different physiotherapy treatments?
<b>26</b>	What physiotherapy treatments, advice or approaches are safe and effective at improving outcomes for patients and services? Where more than one treatment/approach works, which work best and in what dose?
<b>27</b>	What knowledge and skills are developed during physiotherapy undergraduate training? How does this training compare to emerging clinical need and what are the implications for post-qualification training needs?
<b>28</b>	What complementary therapies or mainstream exercise approaches are effective at improving patient and service outcomes when used in physiotherapy settings?
<b>29</b>	What tools or devices allow physiotherapists to effectively monitor treatment progress or results?
<b>30</b>	What technologies or aids are used to support patients to monitor their health and/or to engage in physiotherapy?
<b>31</b>	What methods are effective for finding: 1) those at risk of getting a health problem, 2) those who need different amounts of treatment or 3) those who may/may not respond to physiotherapy?
<b>32</b>	When referring patients to physiotherapy, what expectations do other NHS professionals have in relation to its scope and the management offered?
<b>33</b>	What technologies help patients to keep checking and/or managing their health after discharge?
<b>34</b>	What tools are effective for measuring physiotherapy adherence, health problems or treatment results? Where tools are effective, what amount of change is needed to show an important improvement?
<b>35</b>	What are the post-qualification skills of physiotherapists working in different specialisms and what are their training needs?
<b>36</b>	How are referrals, waiting times and/or patient non-attendances managed and what affects the uptake of these practices?
<b>37</b>	What is the impact of limiting access to therapy equipment on patient and service outcomes?

<b>38</b>	To prevent health problems or improve patient and service outcomes, what technologies or strategies are safe and effective?
<b>39</b>	What are the reasons that patients choose to either attend or not attend for physiotherapy?
<b>40</b>	How possible is it to use new technologies or ways of delivering services and what can help or stop successful delivery?
<b>41</b>	For different health problems, what symptoms should prompt the physiotherapist to refer on to other NHS services?
<b>42</b>	What access options best enable patients to engage with physiotherapy services?
<b>43</b>	What methods of delivering services improve team working and communication within multidisciplinary teams and/or between services?
<b>44</b>	What sources of self-help information available to patients can be trusted and which do patients prefer?
<b>45</b>	What approaches are effective for setting and managing people's expectations as to what physiotherapy should involve?
<b>46</b>	What services or groups (NHS or non-NHS) do physiotherapy services refer patients to after treatment? How are these links made and maintained?
<b>47</b>	What training approaches or packages are effective in developing physiotherapists' skills either in working with special client groups, changing behaviour, and/or using specific approaches? What is the impact of such training on patient and service outcomes?
<b>48</b>	How can access to health technology or equipment be supported in different physiotherapy settings and areas?
<b>49</b>	How safe and effective are physiotherapists in emerging roles in terms of improving patient and service results when compared to routine delivery?
<b>50</b>	How safe and effective is physiotherapy when given before or after medical treatment in improving patient and service results, compared to no extra physiotherapy?
<b>51</b>	What are the experiences and views of patients on the different routes to accessing services and the treatment received? Where do patients go to when they cannot access physiotherapy?
<b>52</b>	What are the roles and skills of physiotherapists working in different settings and how do they differ from the skills of other health professionals working in the same area?
<b>53</b>	Why do patients want physiotherapy and how do they find out about physiotherapy services? What affects the spread of information about services?
<b>54</b>	When training junior physiotherapists, what methods are effective?
<b>55</b>	What approaches or technologies do patients believe enable them to start and maintain healthy behaviours/behaviour change?
<b>56</b>	Where common conditions are known to naturally resolve without physiotherapy, how long does healing/recovery take?
<b>57</b>	How is the role of physiotherapy promoted in different health fields and settings?
<b>58</b>	In terms of NHS services, what are patient or physiotherapists' experiences and views of these services and if they meet their population's needs?

<b>59</b>	What are the experiences and views of physiotherapists (NHS or non-NHS) in terms of their working environment, work satisfaction and things which affect this?
<b>60</b>	What skills and attributes do NHS employers of physiotherapists value in their employees and how they retain valued staff members?
<b>61</b>	What are the non-attendance rates and/or waiting times for physiotherapy in different physiotherapy specialisms? What factors affect these?
<b>62</b>	What are the best ways of communicating access routes to patients needing physiotherapy?
<b>63</b>	What are physiotherapists' or student physiotherapists' knowledge or views on different health problems, use of technology in practice, and/or current evidence?
<b>64</b>	How possible is it to use new methods to give health information on different health topics and/or to different patient groups?
<b>65</b>	What are physiotherapists' views on the definition of 'physiotherapy', the contribution it makes, its role and remit in different health fields and areas for role growth?

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