Supplemental file 1.

Keywords used initially that led to many articles which were not related to stakeholder engagement in the research process.

There were four main types of terms that we needed to identify: those relating to knowledge translation, those relating to service providers, those pertaining knowledge users and those relating to decision making and collaboration. Like terms were combined using OR and all four concepts were combined using AND.

The keywords were adapted according to each database (ie MEDLINE, EMBASE, CINAHL, PsycINFO); however, the search strategy for EMBASE is listed below:

Terms relating to knowledge translation
1. translational strateg*.mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword]
or
2. exp Translational Medical Research/
or
3. translational research.mp.
or
4. exp "Diffusion of Innovation"/
or
5. implementation science.mp.
or
6. exp Information Dissemination/
or
7. information dissemination.mp.
or
8. exp "Diffusion of Innovation"/
or
9. diffusion of innovation.mp.

AND
Terms relating to service providers
10. occupational therap*.mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword]
or
11. physio*.mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword]
or
12. physical therap*.mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword]
or

13. speech language patholog*.mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword]
or
14. pediatric*.mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword]
or
15. audiolog*.mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword]
or
16. Rehabilitation/
or
17. exp Physical Therapy Modalities/
or
18. exp Physical Therapy Specialty/
or
19. rehabilitation.mp.
or
20. rehabilitation*.mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword]

AND

Terms relating to knowledge users
21. exp Family/
or
22. child*.mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword]
or
23. exp Administrative Personnel/
or
24. exp Adolescent/
or
25. youth.mp.
or
26. occupational therapist.mp.
or
27. exp Physical Therapists/
or
28. physiotherapist.mp.
or
29. speech language pathologist.mp.
or
30. pediatrician.mp.

or

31. audiologist.mp.

or

32. exp Patients/

or

33. patient.mp.

or

34. client.mp.

or

35. stakeholder.mp.

AND

Terms relating to decision making and collaboration

36. exp Decision Making/

or

37. exp Cooperative Behavior/

or

38. exp Communication/

AND

39. limit to (english language and yr="2003 -Current")

The initial search did not effectively address the research question, particularly with respect to engaging stakeholders. Therefore, researchers decided to conduct a new search strategy by choosing keywords from target papers that effectively addressed the research question. Engagement, participatory research and participation were combined using OR. Rehabilitation, rehabilitation medicine and rehabilitation nursing were also combined using OR. Translational research, translational medical research, knowledge translation, information dissemination and knowledge management were combined using OR. The three concepts were combined using AND, and the list of articles was limited to English language and those published from 2003 onwards. The revised search strategy for EMBASE is below:

1. engagement.mp.

or

2. exp participatory research/

or

3. participation.mp.

AND

4. exp rehabilitation/
or
5. exp rehabilitation medicine/
or
6. exp rehabilitation nursing/
or
7. rehabilitation.mp.

AND

8. exp translational research/
or
9. translational medical research.mp.
or
12. knowledge translation.mp.
or
13. exp information dissemination/
or
14. exp knowledge management/

AND

16. limit to (english language and yr="2003 -Current")

Supplemental file 2: Strategies, theoretical approaches and methods, and objectives for engaging stakeholders

Key strategies used for engagement
Cognitive interviews (Amtman et al., 2011)
Focus/structured groups (Buettgen et al., 2012; Gillard et al., 2012; Walmsley et al., 2009)
Workshops (Dawn et al., 2013)
Regular teleconferences and/or in-person meetings (Buettgen et al., 2012; Dawn et al., 2013; Gillard et al., 2012; Walmsley et al., 2009; Williams et al., 2005; Suarez-Balcazar et al., 2005a)
Sporadic meeting in specific steps of the research process at the stakeholder's locations (e.g school, community center) (Hutton et al., 2008)
Brainstorming sessions about outcomes and possible applications (Suarez-Balcazar et al., 2005b)
Service users developed and conducted semi structured interviews (Gillard et al., 2012; Sax et al., 2007)
Stakeholders helped to design project's web page-members and provided feedback (Suarez-Balcazar et al., 2005b)
Stakeholders paid as co-researchers (Bigby et al., 2010; Dawn et al., 2013; Williams et al., 2005; Wood et al., 2003)
Stakeholders participating in steering/advisory committee (Buettgen et al., 2012; Dawn et al., 2013; McGrath et al., 2009; Langston et al., 2005; Ottman et al., 2008; Suarez-Balcazar et al., 2005a; Taylor et al., 2004; Walmsley et al., 2009)
Training stakeholders to engage in research: formal and informal training (Williams et al., 2005; Wood et al., 2003)
Use of different media and materials to ascertain engagement and understanding: lay summaries, flipchart, videos, drafts of project at different stages (Bigby et al., 2010; Dawn et al., 2013; Sax et al., 2007; Walmsley et al., 2009; Williams et al., 2005)