

Additional file 4. Main interviews and survey questionnaires barriers with corresponding possible solutions.

Main barriers identified	Possible solution/recommendations to researchers from the literature
<i>Practitioner level</i>	
Ineffective recruitment	Target chiropractors with a practices focusing on neck pain patients; Provide clear and precise study material and appropriate administrative support [1] and financial incentives to participate [2, 3]. Provide clear information about expected time commitment at the outset.
Follow-up contact	Schedule short (15 min) monthly follow-ups by a research coordinator/assistant by telephone, email and if possible in person and ensure that participants understand the importance of their participation in the study and to data collection [4].
Retention	Encourage participants to remain in a study for the full duration by engaging with them early on and maintaining contact [5]. Schedule regional meetings of study participants with local opinion leaders or researchers, and study coordinators at the beginning and midpoint of the study to increase adherence, accountability and to any answer questions they may have.
Adherence to the guideline recommendations	Adherence may be increased by incorporating guideline recommendations into an electronic health record, designing flow charts and patient assessment tools coupled with educational support from peer opinion leaders [6].
<i>Patient level</i>	
Patient education	Educative strategies should be interactive and participatory. Education can be delivered in person or online [7].
Difficulty in understanding the information of the study	Use lay language (maximum of grade 8 reading level); attractive images of graphics; overall visual appeal adapted to the target audience [8].

Staff education and engagement	Educate all levels of staff by providing the original scientific literature supporting the proposed interventions, along with concise summaries of importance of study and a check-list of the evidence [9].
Study remuneration	Offer participating clinicians incentives for recruited patients. Reimburse recruited patients for their time spent for the study [1].
Paper-work both for clinician and patients	Simplify the paper work with complete information in a single page or two pages maximum.
Health issues for clinicians e.g., sickness, pregnant, accident	Confirm their availability to participate when they return to work.

References

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