Review title and timescale

1. Review title
   Reliability of measurements of the fractured clavicle. A systematic review.

2. Original language title
   English, Dutch

3. Anticipated or actual start date
   07/01/2014

4. Anticipated completion date
   03/01/2015

5. Stage of review at time of this submission
   Indicate the stage of progress of the review by ticking the relevant boxes. Reviews that have progressed beyond the point of completing data extraction at the time of initial registration are not eligible for inclusion in PROSPERO. This field should be updated when any amendments are made to a published record.

   The review has not yet started   ×

   Review stage
   Preliminary searches   Started   Completed
   Yes   Yes
   Piloting of the study selection process   Yes   Yes
   Formal screening of search results against eligibility criteria   Yes   Yes
   Data extraction   Yes   Yes
   Risk of bias (quality) assessment   Yes   Yes
   Data analysis   Yes   Yes

   Provide any other relevant information about the stage of the review here.

Review team details

6. Named contact
   The named contact acts as the guarantor for the accuracy of the information presented in the register record.
   Paul Hoogervorst

7. Named contact email
   Enter the electronic mail address of the named contact.
   Paul.hoogervorst@radboudumc.nl

8. Named contact address
   Enter the full postal address for the named contact.
   Department of Orthopaedics, Radboud university medical center
   P.O. Box 9101, 6500 HB Nijmegen, the Netherlands

9. Named contact phone number
   Enter the telephone number for the named contact, including international dialing code.
   0031 24 36 14148

10. Organizational affiliation of the review
    Full title of the organizational affiliations for this review, and website address if available. This field may be completed as 'None' if the review is not affiliated to any organization.
    Department of Orthopaedics, Radboud university medical center, Nijmegen, the Netherlands
    Website address: https://www.radboudumc.nl/

11. Review team members and their organizational affiliations
    Give the title, first name and last name of all members of the team working directly on the review. Give the organisational affiliations of each member of the review team.

    | Title | First name | Last name | Affiliation |
    |-------|------------|-----------|-------------|
    | Mr    | Paul       | Hoogervorst | Department of Orthopaedics, Radboudumc |
    | Mr    | Gerjon     | Hannink   | Department of Orthopaedics, Radboudumc |
    | Mr    | Arnoud     | Van Geene | Department of Orthopaedics, OLVG |
    | Mr    | Albert     | Van Kampen | Department of Orthopaedics, Radboudumc |

12. Funding sources/sponsors
    Give details of the individuals, organizations, groups or other legal entities who take responsibility for initiating, managing, sponsoring and/or financing the review. Any unique identification numbers assigned to the review by the individuals or bodies listed should be included.
    N/A
13 Conflicts of interest
List any conditions that could lead to actual or perceived undue influence on judgements concerning the main topic investigated in the review.

None
Are there any actual or potential conflicts of interest?
No

14 Collaborators
Give the name, affiliation and role of any individuals or organizations who are working on the review but who are not listed as review team members.

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**Review methods**

15 Review question(s)
State the question(s) to be addressed / review objectives. Please complete a separate box for each question.

The objective of this systematic review is to evaluate the reliability and reproducibility of measurements of shortening in MSCF using any available imaging technique.

16 Searches
Give details of the sources to be searched, and any restrictions (e.g. language or publication period). The full search strategy is not required, but may be supplied as a link or attachment.

Search Electronic databases (PubMed, EMBASE and Cochrane) from their inception to November 2016. Use the search strategy as described in Appendix 1.

17 URL to search strategy
If you have one, give the link to your search strategy here. Alternatively you can e-mail this to PROSPERO and we will store and link to it.

I give permission for this file to be made publicly available

18 Condition or domain being studied
Give a short description of the disease, condition or healthcare domain being studied. This could include health and wellbeing outcomes.

Measurements of shortening in the fractured clavicle

19 Participants/population
Give summary criteria for the participants or populations being studied by the review. The preferred format includes details of both inclusion and exclusion criteria.

Studies aiming to assess shortening of the fractured clavicle for intrarater and interrater reliability.

- Studies investigating methods of imaging of the fractured clavicle for intrarater and interrater reliability.
- Only original studies were included.
- Studies in Dutch or English.
- Study population aged 9 years and older

20 Intervention(s), exposure(s)
Give full and clear descriptions of the nature of the interventions or the exposures to be reviewed

N/A

21 Comparator(s)/control
Where relevant, give details of the alternatives against which the main subject/topic of the review will be compared (e.g. another intervention or a non-exposed control group).

N/A

22 Types of study to be included initially
Give details of the study designs to be included in the review. If there are no restrictions on the types of study design eligible for inclusion, this should be stated.

All types of study design except abstracts, theses or conference proceedings.

23 Context
Give summary details of the setting and other relevant characteristics which help define the inclusion or exclusion criteria.

24 Primary outcome(s)
Give the most important outcomes.

Give information on timing and effect measures, as appropriate.

Intrarater and interrater reliability for assessing shortening of the fractured clavicle.

Intrarater and interrater reliability for methods of imaging of the fractured clavicle.
Secondary outcomes
List any additional outcomes that will be addressed. If there are no secondary outcomes enter None.

Give information on timing and effect measures, as appropriate.
None

Data extraction, (selection and coding)
Give the procedure for selecting studies for the review and extracting data, including the number of researchers involved and how discrepancies will be resolved. List the data to be extracted.
Extract data from all included studies with respect to specific characteristics. These are number of clavicles reviewed, study design, imaging technique, method of measurements, statistical analysis, and the authors conclusion. PH and GH will extract data independently. If disagreement persisted after discussion, consensus will be reached after consulting AvK.

Risk of bias (quality) assessment
State whether and how risk of bias will be assessed, how the quality of individual studies will be assessed, and whether and how this will influence the planned synthesis.
Methods and quality are independently assessed (PH and GH), any discrepancies were discussed to achieve consensus, using a third reviewer (AvK) for all included studies.

Strategy for data synthesis
Give the planned general approach to be used, for example whether the data to be used will be aggregate or at the level of individual participants, and whether a quantitative or narrative (descriptive) synthesis is planned. Where appropriate a brief outline of analytic approach should be given.
A descriptive analysis is planned

Analysis of subgroups or subsets
Give any planned exploration of subgroups or subsets within the review. 'None planned' is a valid response if no subgroup analyses are planned.
None planned

Review general information

Type of review
Select the type of review from the drop down list.
Systematic Review

Language
Select the language(s) in which the review is being written and will be made available, from the drop down list. Use the control key to select more than one language.
Will a summary/abstract be made available in English?
English

Country
Select the country in which the review is being carried out from the drop down list. For multi-national collaborations select all the countries involved. Use the control key to select more than one country.
The Netherlands

Other registration details
Give the name of any organization where the systematic review title or protocol is registered together with any unique identification number assigned. If extracted data will be stored and made available through a repository such as the Systematic Review Data Repository (SRDR), details and a link should be included here.
N/A

Reference and/or URL for published protocol
Give the citation for the published protocol, if there is one.

Give the link to the published protocol, if there is one. This may be to an external site or to a protocol deposited with CRD in pdf format.

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Dissemination plans
Give brief details of plans for communicating essential messages from the review to the appropriate audiences.
Disseminate results in a peer-review journal
Do you intend to publish the review on completion?
Yes

Keywords
Give words or phrases that best describe the review. (One word per box, create a new box for each term)

Details of any existing review of the same topic by the same authors
Give details of earlier versions of the systematic review if an update of an existing review is being registered, including full bibliographic reference if possible.  
No

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