**Appendix 1.**

**Search strategies for bibliographic databases:**

Note: The bibliographic databases of CINAHL, EMBASE, Medline, were accessed through NICE healthcare database advanced search <https://hdas.nice.org.uk/>

**Cochrane search strategy**

A systematic search was run on central the Cochrane 15/12/2020 and used Mesh term synostosis exploded all the trees and yielded 0 trials for congenital radioulnar synostosis.

**CINAHL search strategy**

A systematic search was run on 15/12/2020 using terms *SYNOSTOSIS restricted to English language* through NICE healthcare database advanced search <https://hdas.nice.org.uk/>. The search yielded 114 results which were then screened for title and abstract. The screening of titles resulted in 25 results. The screening of abstract from titles isolated 7 studies. (\*SYNOSTOSIS/ [Languages eng])

**Directory of open access journals (DOAJ) search strategy**

A systematic search was run on DOAJ on 15/12/2020 using term *SYNOSTOSIS without any filters* on the DOAJ. Search yielded 162 results. On screening the titles 12 studies were isolated. Further screening of the abstract lead to isolation of 6 studies.

**EMBASE search strategy**

A search strategy was run in EMBASE on 15/12/2020 using major term SYNOSTOSIS in title and abstract of articles in English language through NICE healthcare database advanced search <https://hdas.nice.org.uk/> and obtained 724 results. The screening of titles yielded 158 results. Screening of abstracts isolated 28 studies. (\*SYNOSTOSIS/ [English language])

**Medline search strategy**

A systematic search was run on Medline on 15/12/2020 using terms synostosis major in MESH subject field of articles in English language through NICE healthcare database advanced search <https://hdas.nice.org.uk/> obtained 703 results. The screening of titles yielded 164 results. Screening of abstracts narrowed down results to 45 studies. (\*SYNOSTOSIS/ [Languages English]

**Proquest search strategy**

A systematic search was run on 15/12/2020 with mesh terms (((mesh.Exact("Synostosis") AND mesh.Exact("Radius" OR "Synostosis") OR mesh.Exact("Radius" OR "Ulna" OR "Synostosis")) AND la.exact("English")) AND la.exact("English")) AND la.exact("English") and 863 studies were isolated. Screening of titles yielded 45 studies. Further screening of abstract narrowed to 8 studies.

**Pubmed search strategy**

A systematic search was run on pubmed on 15/12/2020 with search strategy Mesh terms ((("synostosis/surgery"[MeSH Terms]) OR ("synostosis/therapy"[MeSH Terms])) AND ("radius"[MeSH Terms])) OR ("ulna"[MeSH Terms]) with filters Humans, English, Child: birth-18 years, Child: 6-12 years, Preschool Child: 2-5 years on 22/11/2020 and obtained 1625 results. Screening of the titles yielded 89 studies and screening of abstracts isolated 32 studies.

**Scopus search strategy** A systematic search was run on Scopus with search strategy TITLE-ABS-KEY ( radioulnar  AND synostosis )  AND  ( LIMIT-TO ( SUBJAREA ,  "MEDI" ) )  AND  ( LIMIT-TO ( LANGUAGE ,  "English" ) ) on 15/12/2020 . The search yielded 413 results. Screening of titles and abstract yielded 51 and 27 studies.