

e-Supplement 1: Search Strategy- Manuscript ID bmjresp-2020-00651 “Management of tracheostomies in the intensive care unit: A scoping review”

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A search of three databases, PubMed, EMBASE and Cumulative Index of Nursing and Allied Health Literature (CINAHL) was completed on the 3rd of October, 2019, including all studies from inception to the search date.

The following search terms were used:

Search: ((icu) OR (intensive care unit)) AND (tracheostomy)

((("intensive care units"[MeSH Terms] OR (("intensive"[All Fields] AND "care"[All Fields]) AND "units"[All Fields])) OR "intensive care units"[All Fields]) OR "icu"[All Fields]) OR ((("intensive care units"[MeSH Terms] OR (("intensive"[All Fields] AND "care"[All Fields]) AND "units"[All Fields])) OR "intensive care units"[All Fields]) OR (("intensive"[All Fields] AND "care"[All Fields]) AND "unit"[All Fields])) OR "intensive care unit"[All Fields])) AND (("tracheostomy"[MeSH Terms] OR "tracheostomy"[All Fields]) OR "tracheostomies"[All Fields])

Translations

icu: "intensive care units"[MeSH Terms] OR ("intensive"[All Fields] AND "care"[All Fields] AND "units"[All Fields]) OR "intensive care units"[All Fields] OR "icu"[All Fields]

intensive care unit: "intensive care units"[MeSH Terms] OR ("intensive"[All Fields] AND "care"[All Fields] AND "units"[All Fields]) OR "intensive care units"[All Fields] OR ("intensive"[All Fields] AND "care"[All Fields] AND "unit"[All Fields]) OR "intensive care unit"[All Fields]

tracheostomy: "tracheostomy"[MeSH Terms] OR "tracheostomy"[All Fields] OR "tracheostomies"[All Fields]

The study was not limited by year, language, or country of origin. No filters were used.

Electronic searches conducted retrieved a total of 8,801 citations across the PubMed (2,198), EMBASE (5,805), and CINAHL (798) databases. An additional 47 citations were identified from other sources, including:

- hand-searched reference lists of included studies, review articles and editorials
- review of guidelines and resources published by professional bodies and government agencies
- review of conference proceedings
- online searches of search engines including Google Scholar, Google and Bing.

After removal of duplicates, there were 6,132 records that were underwent screening of title and abstract. Titles and abstracts were screened independently by two authors (KAW and KBL) for potential inclusion.

One hundred and twenty-eight articles met inclusion criteria based on title and abstract review were included for full text review. Full text articles were reviewed independently by two authors (KAW and SCT), with discrepancies between the two reviewers resolved by a third. There were 102 articles identified that met the inclusion criteria and were included in the review. The reasons for exclusion were:

- 4 studies were duplicates
- 9 studies were not set in the intensive care unit
- 8 studies did not meet inclusion criteria
- 4 studies contained no primary data
- 1 studies was a review article.

Please see **Figure 1. PRISMA flow diagram for study identification and inclusion** for further detail.