**Supplemental Appendix 2**: ENTREQ Checklist (Enhancing transparency in reporting the synthesis of qualitative research)

| Item No. | **Guide and Description** | **Report Location** |
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| 1. Aim | The aim of the study was synthesise factors that can hinder (act as barriers) or encourage (act as facilitators) the multidisciplinary teamwork in acute care settings | Background (line 132) |
| 2. Synthesis methodology | A thematic synthesis was conduct using the Sandelowski and Barroso (2007) method, because the research question requires an interpretation of the original findings with a realistic approach. | Methods (line 190) |
| 3. Approach to searching | A pre-planned comprehensive search strategy was done following the SPIDER tool guidelines then set up in databases. | Methods- *Eligibility criteria, search strategy, screening, data extraction, and quality* (line 158, 161) |
| 4. Inclusion criteria | Inclusion criteria were focused on (I) the concept of multidisciplinary teams as a set of HCP with different educational and professional backgrounds who collaborate to provide the best integrated patient care (Taberna et al., 2020); (II) HCP as WHO (2010) definition; (III) teams working in AC settings as AIHW (2019) definition; (IV) qualitative method design including phenomenological studies, ethnographies, grounded theories and mix-method or multi-method whose qualitative data can be separated from the quantitative data (Paterson, Thorne, Canam, & Jillings, 2001; Sandelowski, Docherty, & Emden, 1997); (V) also experience of a single professional category toward multidisciplinary teamwork. No limits were applied to publication date or study location.<br>Exclusion criteria were studies that (I) included students, interns, or residents; (II) investigated barriers and facilitators to multiprofessional education; (III) are conducted on non-graduate or lay professionals except if studies include less than 15% of these health care professionals and if their findings are deemed particularly relevant; (IV) were not in English or Italian; (V) were thesis, dissertation, or congress abstracts | Methods- *Eligibility criteria, search strategy, screening, data extraction, and quality* (line 147-157) |
| 5. Data sources | Three different databases (MedLine, Embase and Scopus) were explored due to ensure a systematic search. Last search was performed on 10 May 2023. Different research strings have been created to fit the different databases.<br>A snowball search backward and forward has been done at the end of the screening process to check for other studies accidentally excluded from the search strings. | Methods- *Eligibility criteria, search strategy, screening, data extraction, and quality* (line 158-162) |
| 6. Electronic Search | Following SPIDER tool, the search term combinations was | Supplemental appendix 1: URL |

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| strategy | created and were entered into each database (see Supplementary Appendix A). Figure 1 provides an overview of database search. | to search strategy; Fig. 1 PRISMA flow diagram |
| 7. Study screening methods | Five reviewers independently screened 8759 records by title and abstract. Same reviewers screened 244 records by full text reading, by five reviewers independently, with the support of the reference manager software Zotero | Methods- *Eligibility criteria, search strategy, screening, data extraction, and quality* (line 136)*;* Fig 1. PRISMA flow diagram |
| 8. Study characteristics | Study characteristics, such as author's name, country, publication year, study design and method, type of study population, number and profession of participants, findings, and limitations were reported on Table 1. | Results (line 214-237) Table 1 - *Characteristics of included studies* |
| 9. Study selection results | After removal of duplicates, 8759 were screened by title and abstract, then 244 records were screened by full text reading, and 15 of these were included in the review. Other 2 studies were identified and included by backward and forward snowball searching. The reasons for exclusion were due to the type of participants included in the studies, or to points of view external to the multidisciplinary team (e.g. patients or third parties), non-exclusive acute care settings, studies centred on the effects of educational methodologies on the multidisciplinary team. | Results; Fig 1 - PRISMA flow diagram |
| 10. Rationale for appraisal | The methodological quality of studies was assesed using the Checklists Critical Appraisal Skills Programme to reduce bias. The quality of each study was evaluated but its results were not used as exclusion criteria in according to Sandelowski and Barroso methodology. | Methods- *Eligibility criteria, search strategy, screening, data extraction, and quality* (line 176) |
| 11. Appraisal items | Ten appraisal items of CASP were followed for an assessment of the trustworthiness, relevance, and quality of the synthesised studies. Each question has three answer options ("yes," "cannot tell," and "no"): 1 point is assigned for "yes", 0 for "cannot tell" and "no". Higher overall scores suggested higher quality. | Table 2 - Quality assessment of included studies Method (line 180) |
| 12. Appraisal process | Five author blindly assessed the methodological quality of studies. Then the authors discussed any discrepancies and solved them through consensus. | Methods- *Eligibility criteria, search strategy, screening, data extraction, and quality* (line 176) |
| 13. Appraisal results | The methodological quality of included studies was found to be high for most of them. Four studies achieved a top-quality score. The goal setting, data collection methods, rigour in data analysis and presentation of results were adequate in most of included studies. The research design was insufficiently detailed in seven studies. Most of the | Result*s - Quality appraisal of the included studies;* Tab. 2 - Quality assessment of included studies; |

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| | studies published before 2010 gave short shrift to ethical issues or did not state or underestimated biases arising from the researcher-participant. | Results (line 255-261) |
| 14. Data extraction | All text under the headings “results /conclusions” were extracted electronically and entered into a computer software (Excel) and analysed in ad-hoc data extraction template due to condense the variables, sub-themes and themes. | Methods-*Synthesis data analysis* (line 187) |
| 15. Software | Zotero reference management software. Excel data management software. | Methods; Methods-*Synthesis data analysis* (line 165) |
| 16. Number of reviewers | Five reviewers were involved in the coding analysis. | Methods-*Synthesis data analysis* (line 164) |
| 17. Coding | The reviewers carried out line-by-line coding, grouping sub-themes and generated descriptive themes. Constant and ongoing comparison of results was performed. | Methods-*Synthesis data analysis* (line 188, line 193) |
| 18. Study comparison | During the preliminary readings of the studies, the main concepts relating to the purpose of the research were identified. As the researchers coded, new codes were generated and added to previous ones. | Methods-*Synthesis data analysis* (line 189) |
| 19. Derivation of themes | Thematic synthesis of initial codes was an inductive approach, that involved discussion between five authors. | Methods-*Synthesis data analysis* (line 186, 193) |
| 20. Quotations | The participants' quotes from the included primary studies were also coded and used to construct sub-themes and themes. | Findings (line 309-467) |
| 21. Synthesis output | Variables (8 barriers, 7 facilitators and 24 neutral) that facilitate or hinder multidisciplinary team, were synthesised, and grouped into 10 sub-themes and 4 main themes to specify their nature as shown in Figure 2. | Discussion - main *findings;* Fig. 2 Results tree diagram |