# Time registration for the development of evidence-based first aid guidelines for Flanders (Belgium)

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### **INTRODUCTION & OBJECTIVES**

In 2015, Belgian Red Cross-Flanders updated its evidence-based first aid guidelines. Effective time tracking is helpful for different reasons including a better project time/cost estimation and an increased production, engagement and performance. Therefore, we aimed to register the time necessary to perform the different steps in the development of evidence-based first aid guidelines.

### **METHODS**

Each research question was formulated/reviewed by 1 trained methodologist and 2 methodologists in parallel

### Figure 1: Stepwise systematic approach

1. Formulating research (PICO) questions



- trained methodologist, and 3 methodologists in parallel worked on this guideline project.
- Time tracking by the 3 methodologists was executed for every step that was used in the systematic approach for literature search and the critical appraisal and interpretation of data (Figure 1).<sup>1</sup> The mean amount of minutes (±SD) was calculated to express the time needed to complete each step.
- Additionally, the total amount of time (in hours) spent for discussions/feedback (including feedback on draft recommendations, internal meetings and expert meetings) was registered.
- Finally, the total amount of time (in hours) needed to complete the entire process was calculated.
- Time tracking was performed manually into a predefined Excel-file.



- Developing search strategies in 3 databases (PubMed, Embase, Central)
- 3. Title and abstract screening



4. Full text assessment(based on predefined inclusion/exclusion criteria)



- 5. Data extraction
- 6. Quality appraisal (GRADE<sup>2</sup>)
- 7. Developing evidence conclusions

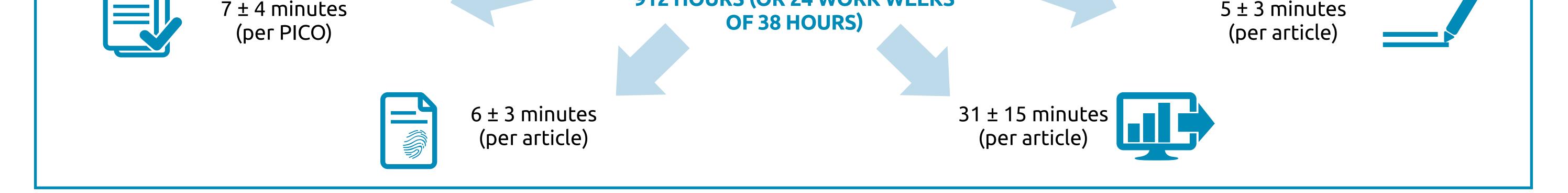








# Time registration for 288 research (PICO) questions, across 16 chapters, was carried out: injuries of the abdomen/back (n=38), animal bites and stings (n=38), injuries of the head and neck (n=34), injuries of the limbs (n=27), pregnancy and delivery (n=23), infections (n=20), injuries/problems of the chest (n=20), travet illnesses (n=17), burn wounds (n=16), bleeding (n=13), problems with heat and cold (n=12), poisoning (n=11), skin wounds (n=10), drowning (n=7), electrical and lightening injuries (n=1) and allergies (n=1). An overview of the time spent in the different steps of the guideline development is provided in Figure 2. Figure 2: Time tracking of evidence-based first aid guidelines for Flanders (Belgium) 10 ± 8 minutes (per PICO) 10 ± 8 minutes (per PICO) 134 hours 134 hours 134 hours 134 hours 51 ± 24 minutes (per 100 hits) 144 minutes (PECO) 151 ± 24 minutes (per 100 hits) 151 ± 24 minutes (per 100 hits) 152 HOURS (OR 24 WORK WEEKS) 54 minutes (per 100 hits)



### CONCLUSIONS

- Developing and updating evidence-based first aid guidelines is time-consuming but ensures recommendations with effective interventions.
- Further validation of this analysis to evidence-based guidelines in other fields is needed to increase its generalizability

**References:** <sup>1</sup> Atkins D et al. Grading quality of evidence and strength of recommendations. BMJ 2004;328:1490.

<sup>2</sup> De Buck E et al. Use of evidence-based practice in an aid organisation: a proposal to deal with the variety in terminology and methodology. Int J Evid Based Healthc. 2014; 12: 39-49.



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## Belgian Red Cross