

The use of hydrogels in out-of-hospital treatment of thermal burns: A scoping review

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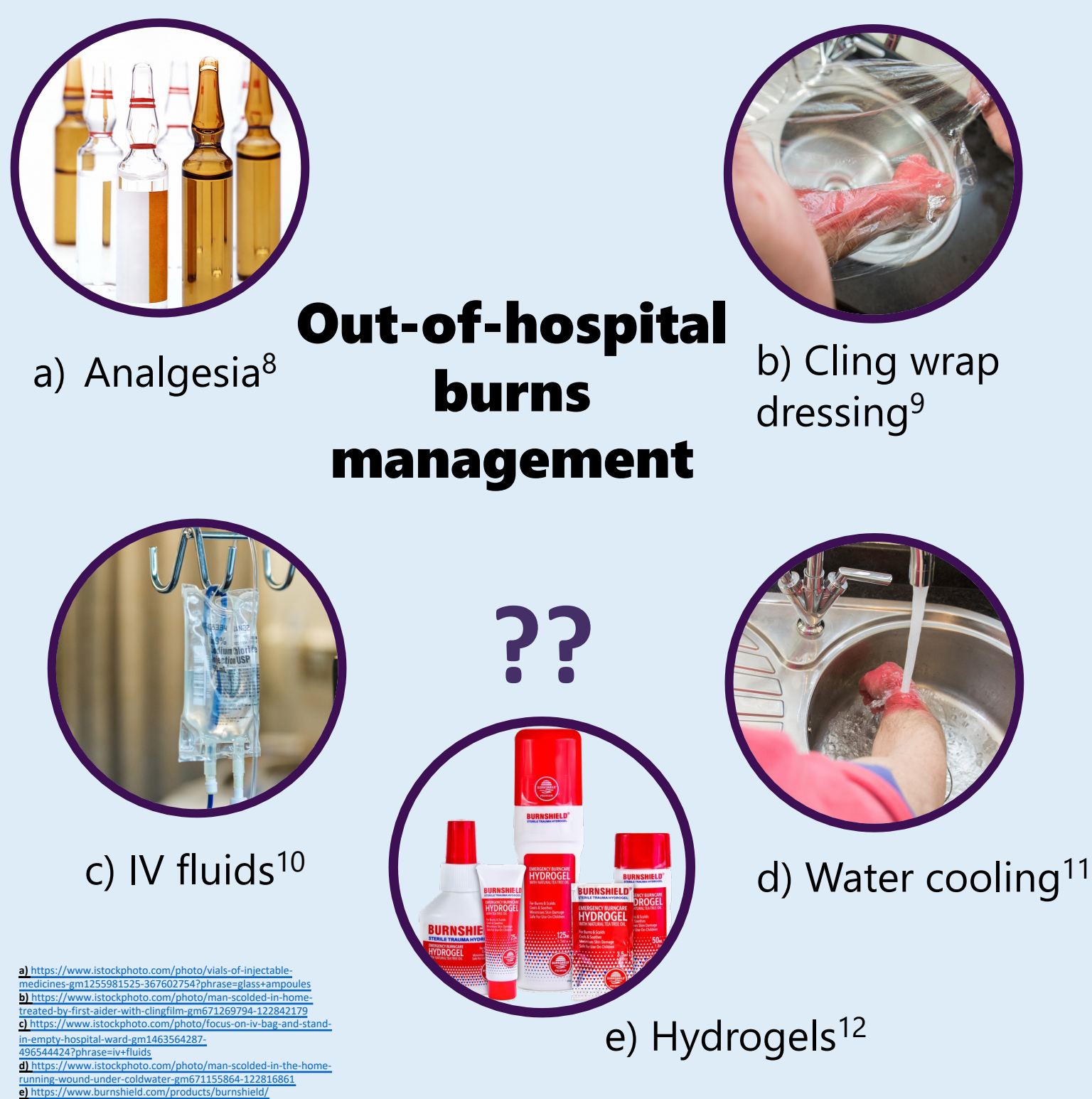
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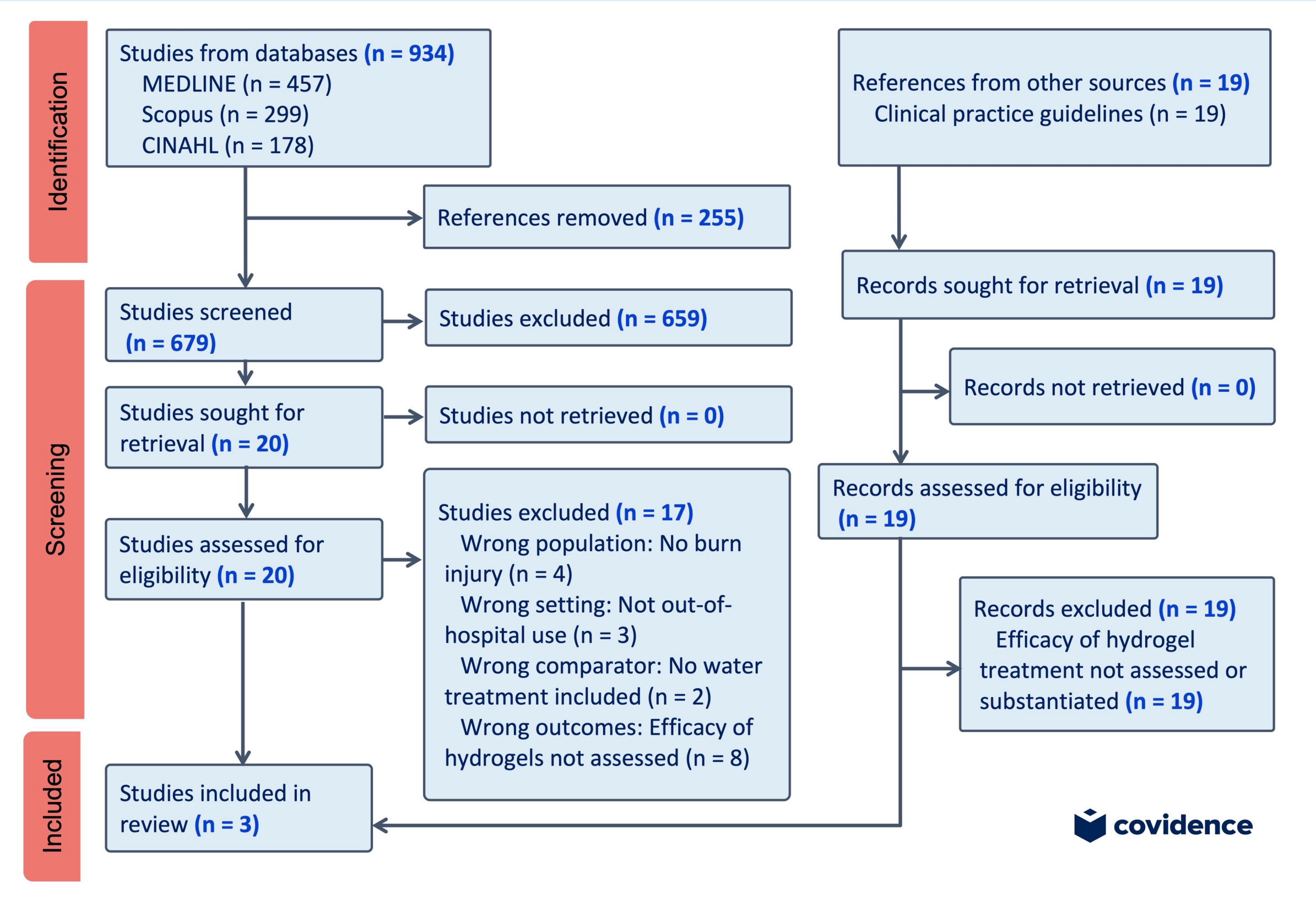
The use of **hydrogels** in the out-of-hospital setting **lacks supporting evidence**

Background: Gold standard out-of-hospital thermal burns care involves cooling the wound with running water for 20 minutes, applying a cling wrap dressing and analgesia administration.¹⁻⁴ Hydrogels are marketed as a first aid product which cools and soothes a burn, minimising the injury's severity.⁵

Figure 1: Do hydrogels have a place in out-of-hospital management of burns?



Results: Figure 2 - PRISMA Flowchart of studies included for review.



What evidence supports the use of hydrogels in the out-of-hospital management of thermal burns?

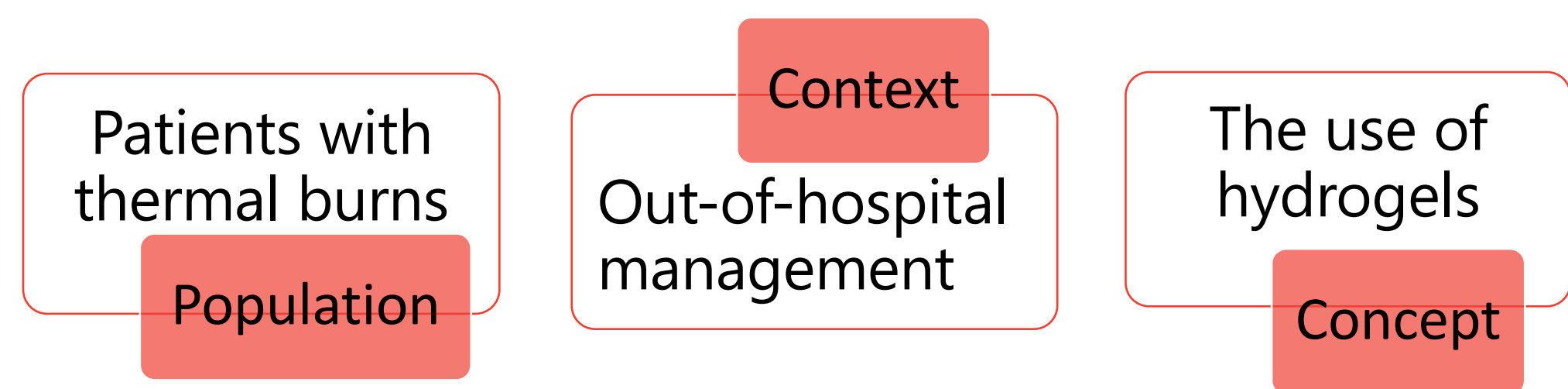


Figure 3: Scoping review method.

Methods: A systematic search of CINAHL, MEDLINE and Scopus databases included keywords 'burn' and 'hydrogel' and, their variants, as per the JBI methodological guidelines⁶ and reported using the PRISMA framework.⁷ Citation and hand searching of relevant grey literature was conducted as part of the review.

Conclusions: The evidence for the use of hydrogels in the out-of-hospital care setting for burns management is weak. Literature mostly investigates hydrogel use in definitive care. Further research is required to determine the efficacy of hydrogel use in settings where running water is not accessible.



Scan for references

Natalie is a Paramedicine Honours student at ACU based in Melbourne. She completed her Bachelor of Paramedicine with Distinction in 2022. Natalie has an interest in evidence based practice and looks forward to a future career in paramedicine research.