

## IV fluids in children

### Intravenous fluid therapy in children and young people in hospital

*Appendix D*

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Health and Care Excellence*



**Disclaimer**

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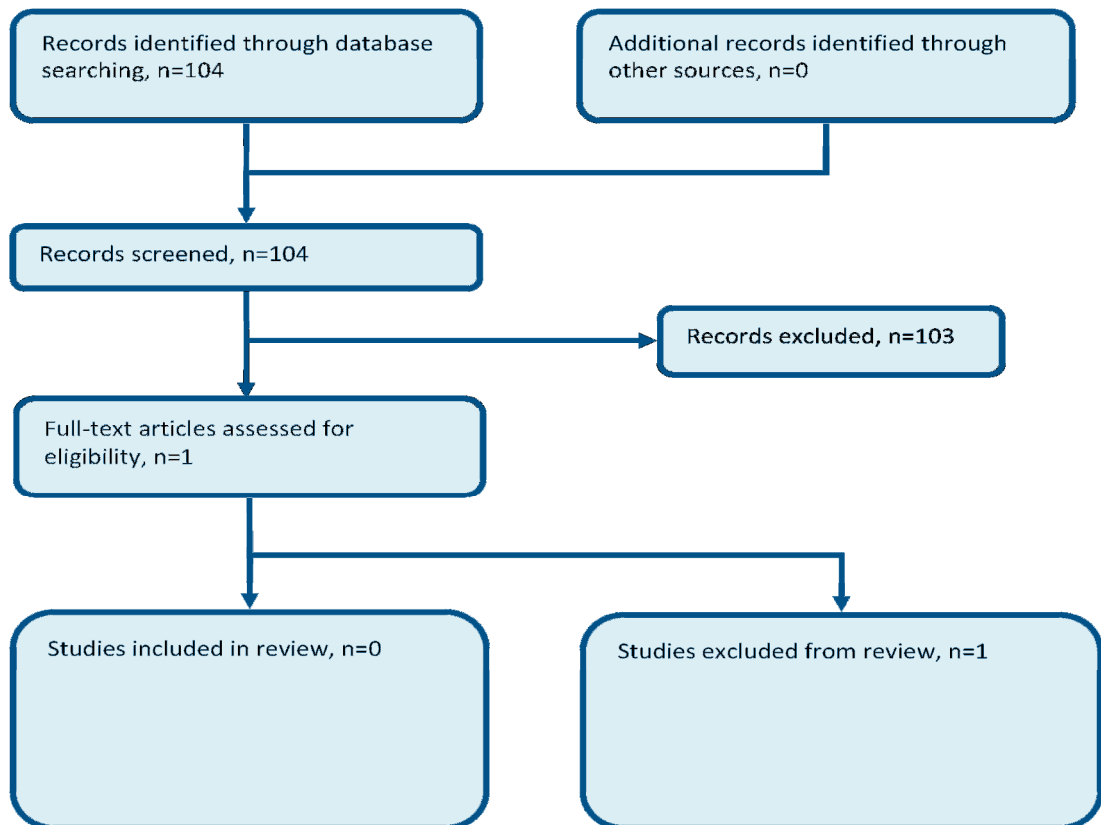
## Appendix D: Clinical article selection

### D.1 Assessment and reassessment

#### D.1.1 Methods of assessing IV fluid requirements

##### D.1.1.1 Body weight versus body surface area

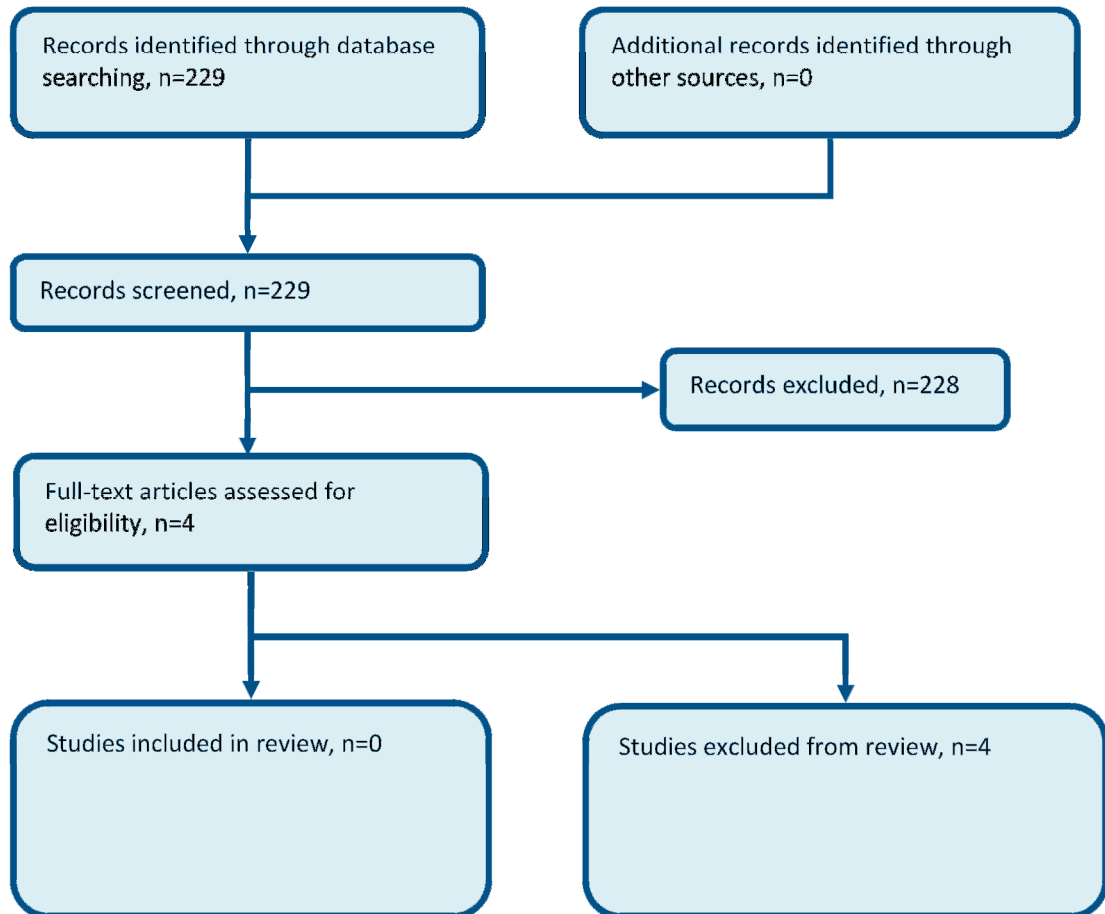
**Figure 1: Flow chart of clinical article selection for the review of: How effective is assessing body weight compared with body surface area for predicting IV fluid requirements in children?**



## D.1.2 Methods of calculating IV fluid requirements

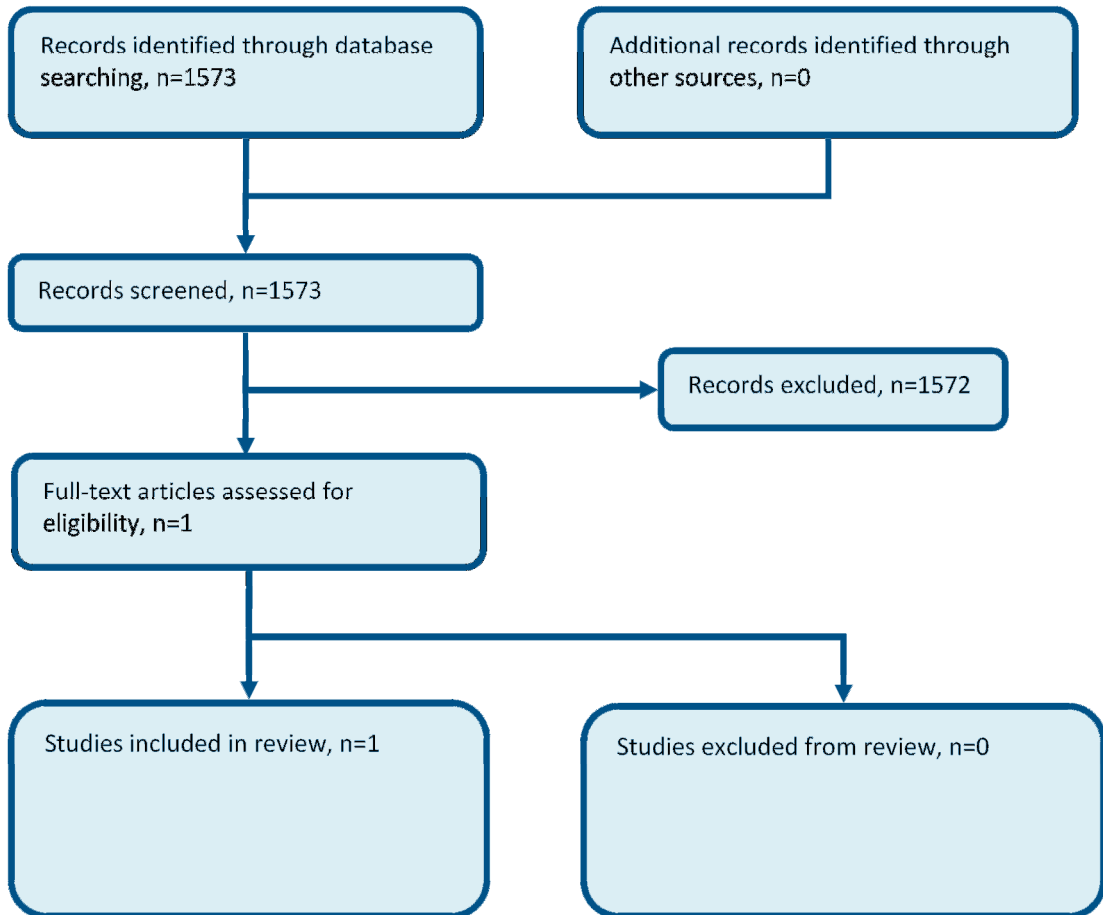
### D.1.2.1 Measurement and documentation

**Figure 2: Flow chart of clinical article selection for the review of: What are the key components to be measured and documented on an IV fluid balance and/or prescription chart to ensure appropriate prescribing of IV fluids?**



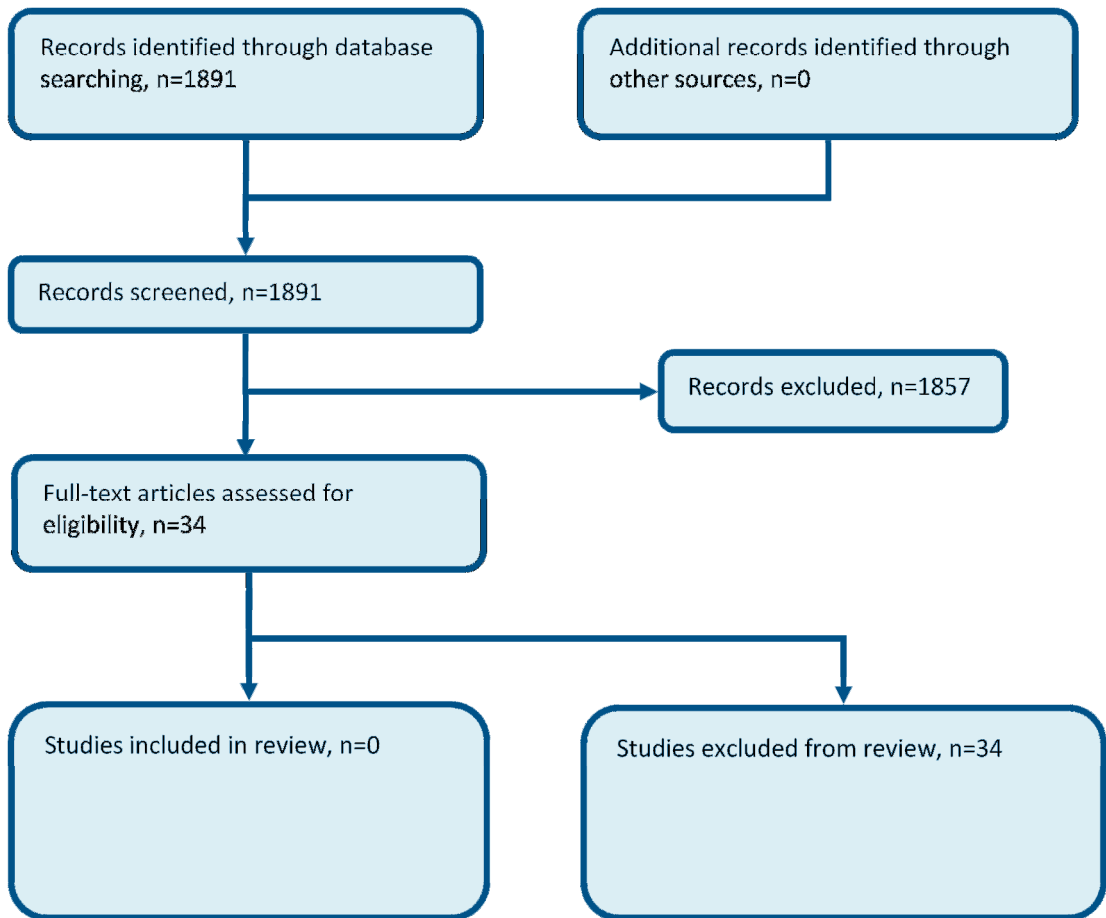
**D.1.2.2 Laboratory-based methods versus point-of-care testing**

**Figure 3: Flow chart of clinical article selection for the review of: What is the clinical- and cost-effectiveness of laboratory-based methods versus point-of-care testing for assessing electrolyte estimations in children?**



**D.1.2.3 Assessing dehydration and hypovolaemia**

**Figure 4: Flow chart of clinical article selection for the review of: What are the most clinically- and cost-effective methods for assessing dehydration and hypovolaemia?**

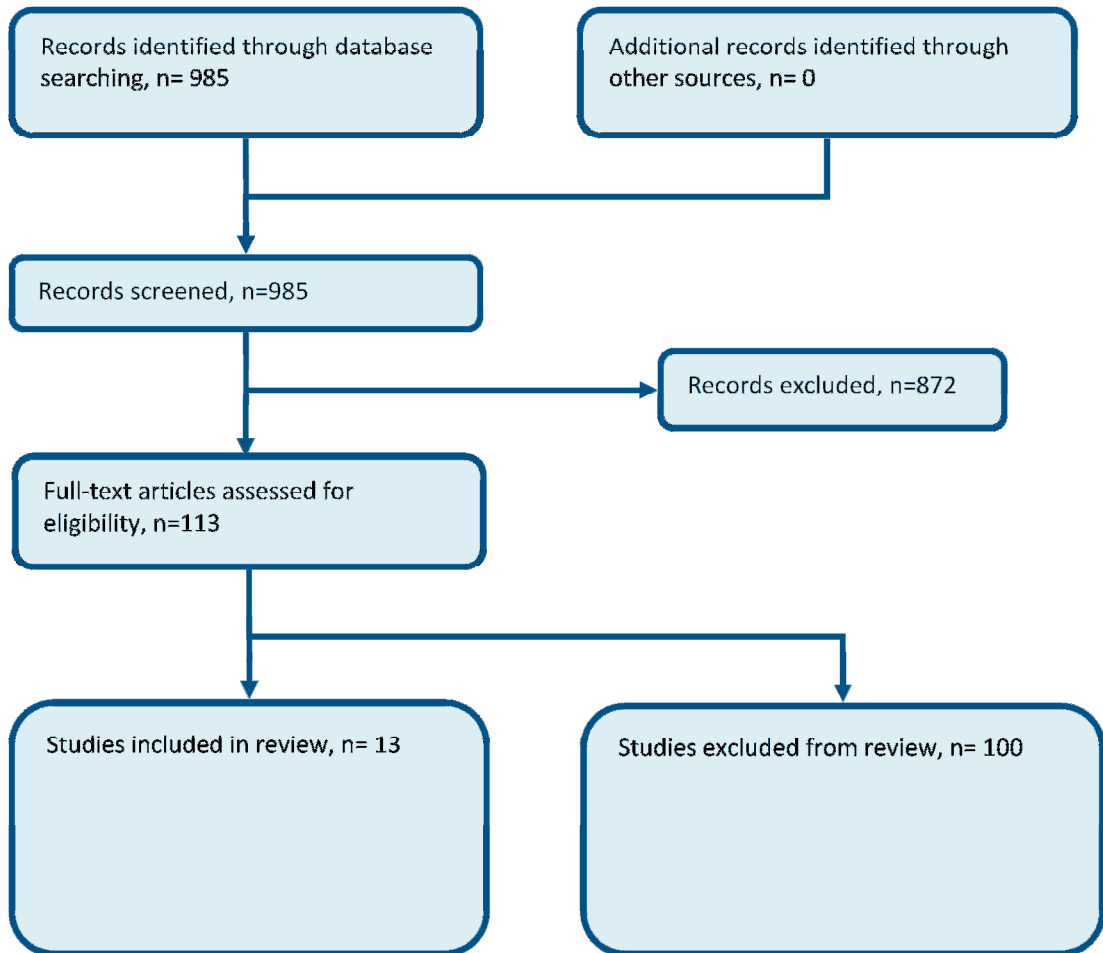




## D.2 IV fluid therapy for fluid resuscitation

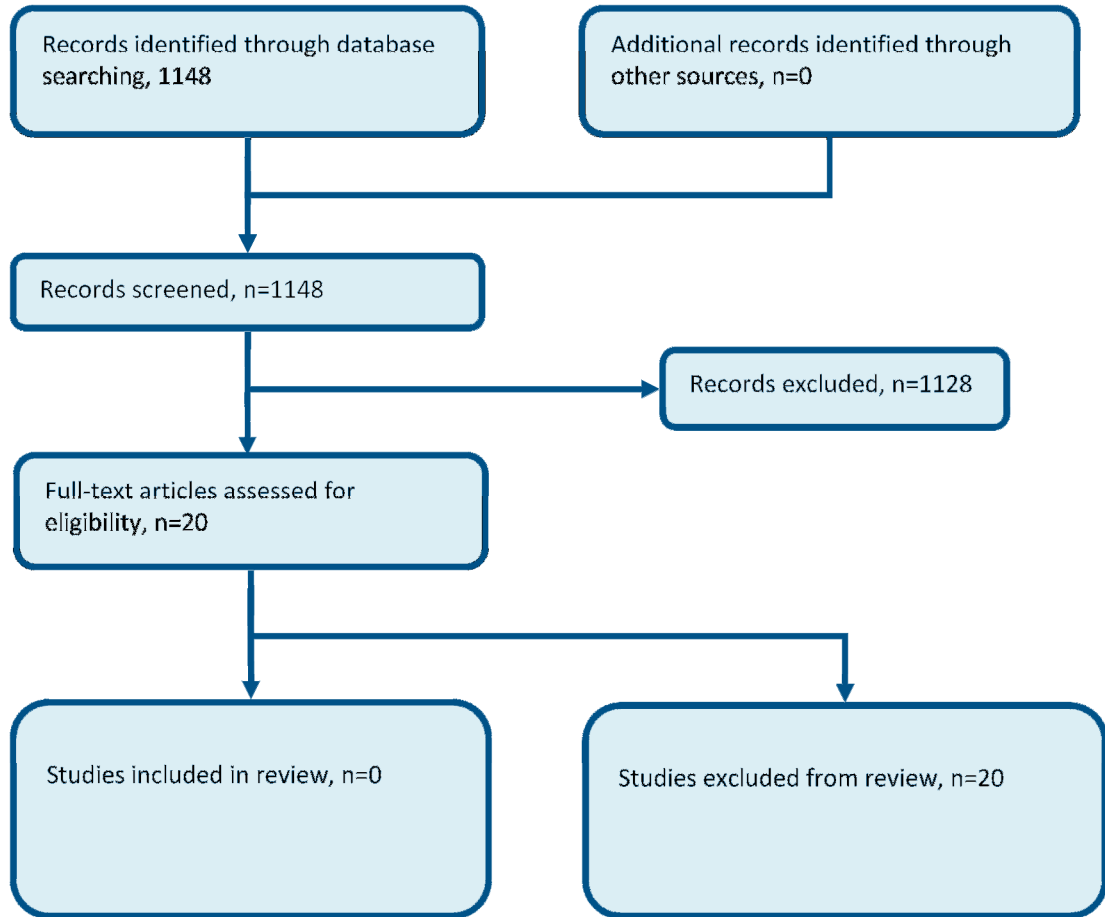
### D.2.1 Fluid type for fluid resuscitation

Figure 5: Flow chart of clinical article selection for the review of: What is the most clinically and cost-effective fluid type for fluid resuscitation in children?



### D.2.2 Volume and rate of administration for fluid resuscitation

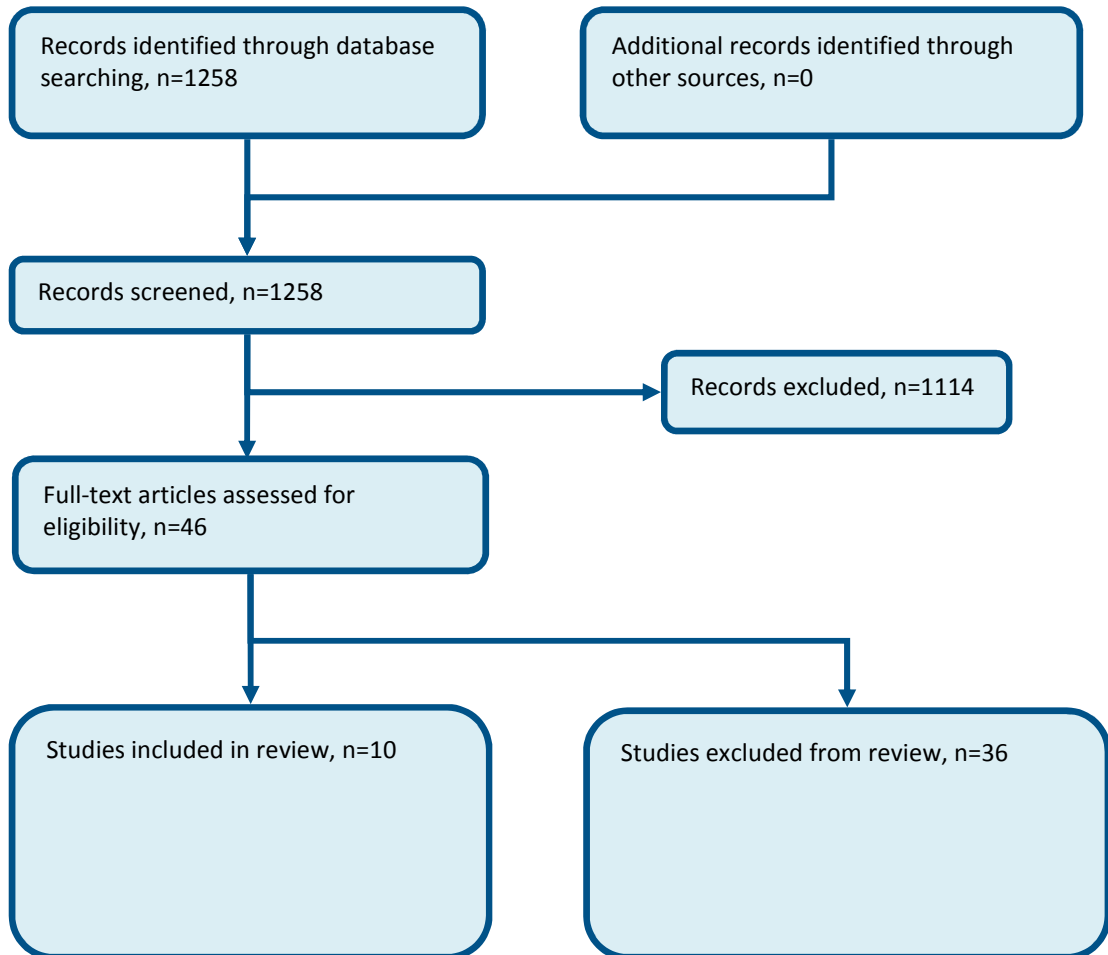
**Figure 6: Flow chart of clinical article selection for the review of: What is the most clinically- and cost-effective volume and rate of administration for IV fluid resuscitation?**



### D.3 IV fluid therapy for routine maintenance

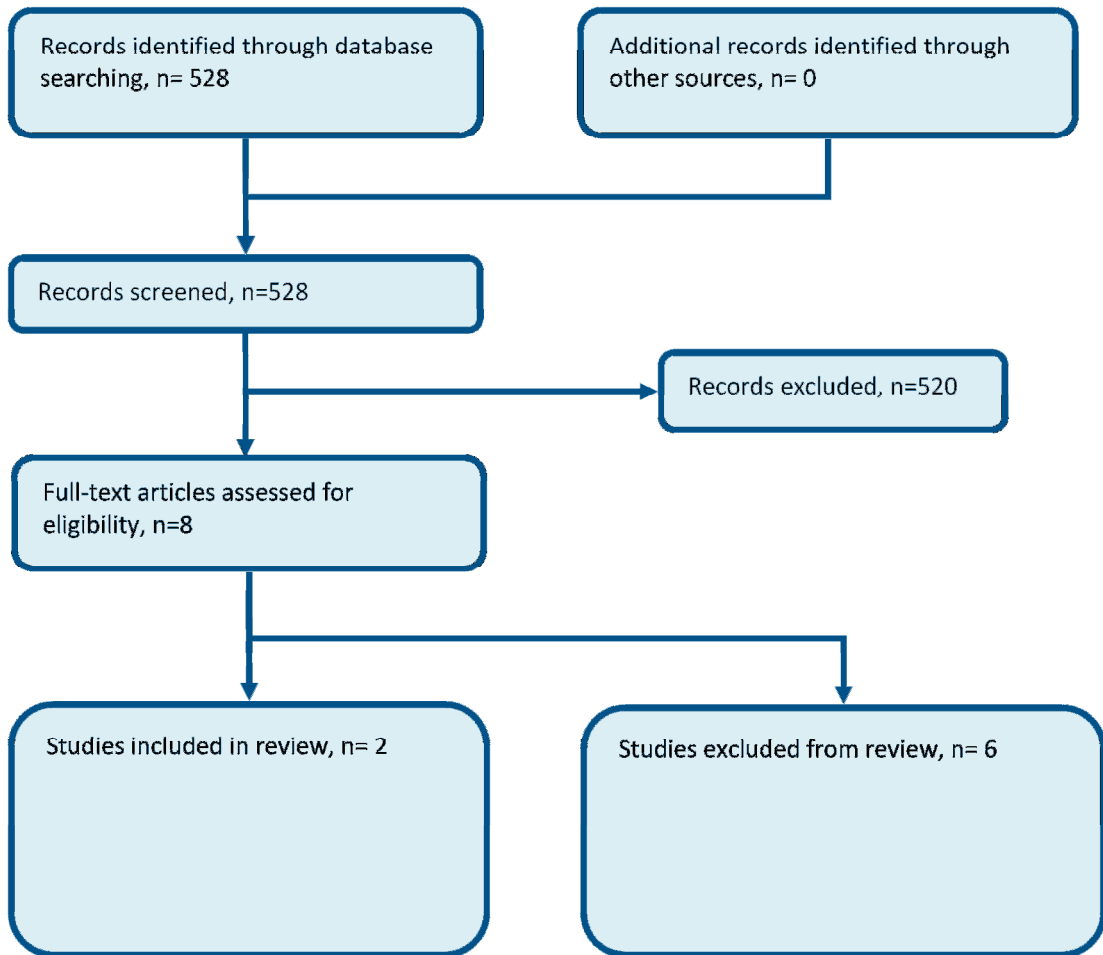
#### D.3.1 Fluid type for routine maintenance

**Figure 7: Flow chart of clinical article selection for the review of: What is the most clinically- and cost-effective fluid type for IV fluid maintenance in children?**



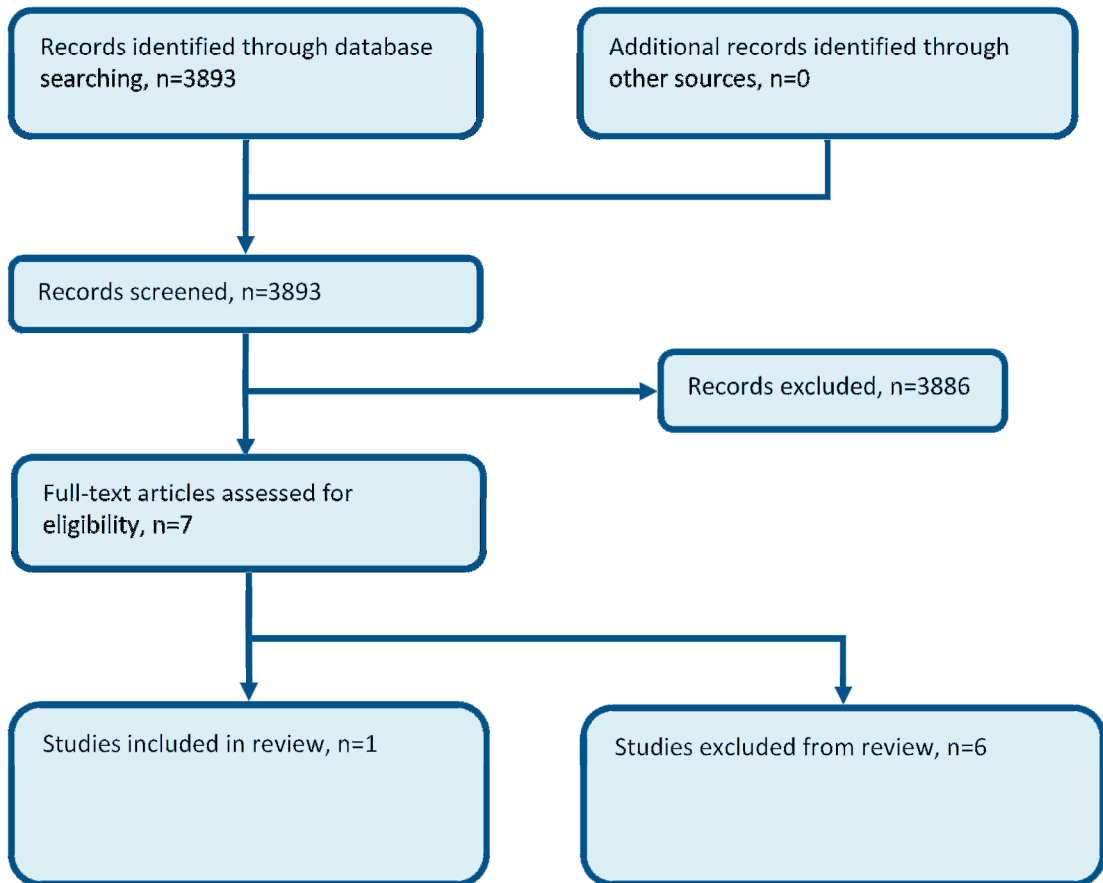
### D.3.2 Rate of administration for routine maintenance

**Figure 8: Flow chart of clinical article selection for the review of: What is the most clinically- and cost-effective rate of administration of IV fluids for routine maintenance?**



## D.4 IV fluid therapy for replacement and redistribution

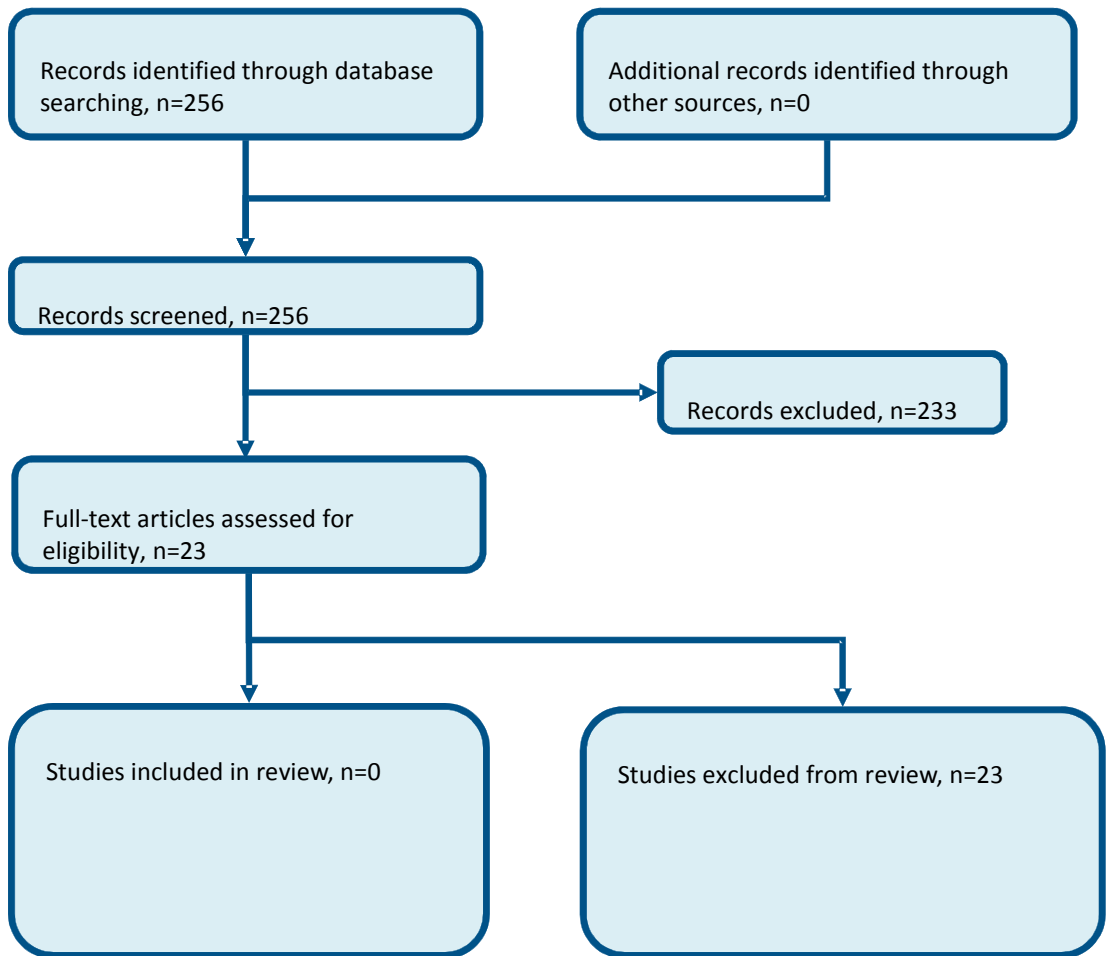
**Figure 9: Flow chart of clinical article selection for the review of: What fluid types are the most clinically- and cost-effective to address abnormal deficits or excesses, or to replace abnormal losses?**



## D.5 Management of hypernatraemia and hyponatraemia developing during IV fluid administration

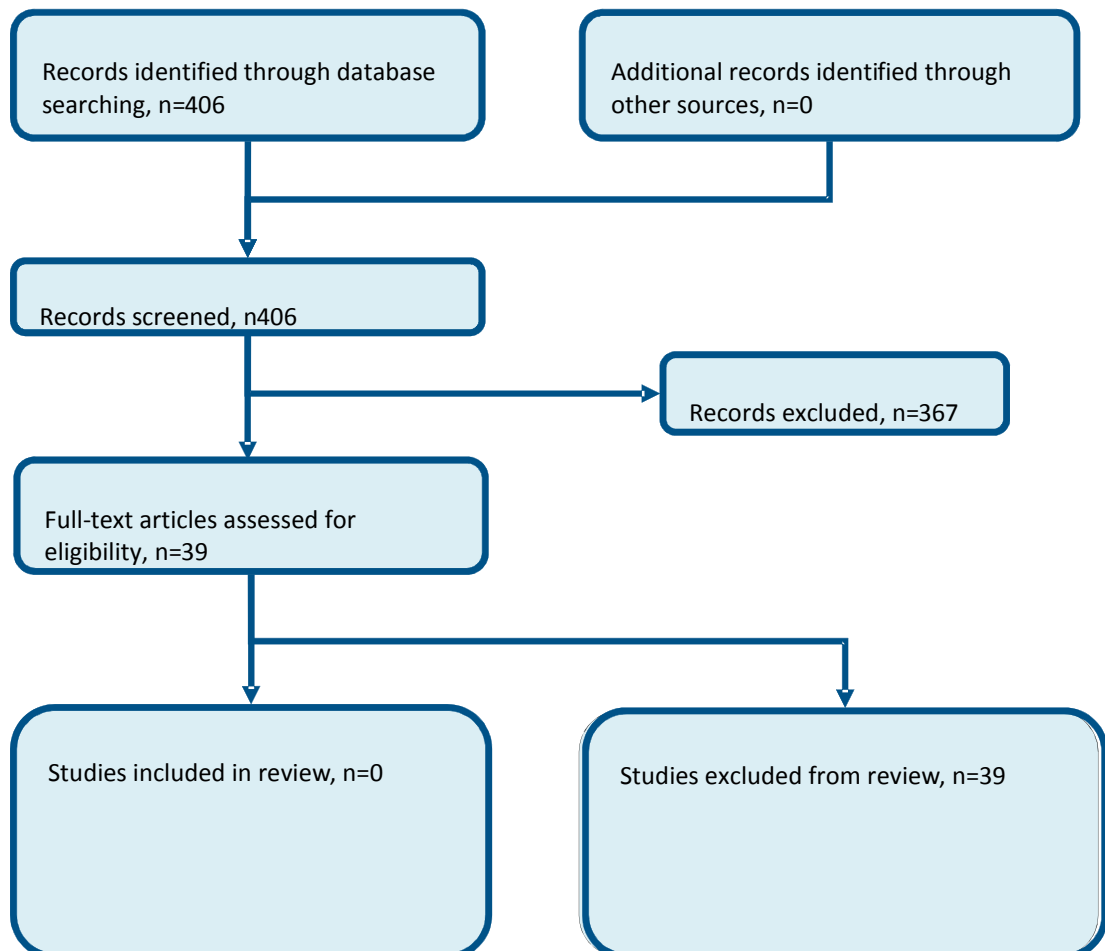
### D.5.1 Management of hypernatraemia

Figure 10: Flow chart of clinical article selection for the review of: What are the most clinically- and cost-effective methods to address hypernatraemia developing during IV fluid administration?



## D.5.2 Management of hyponatraemia

**Figure 11: Flow diagram of clinical article selection for the review of: What are the most clinically- and cost-effective methods to address hyponatraemia developing during IV fluid administration?**







## D.6 Training and education of healthcare professionals for management of IV fluid therapy

**Figure 12: Flow chart of clinical article selection for the review of: What skills are needed for the adequate training and education of healthcare professionals involved in prescribing and administering IV fluids?**

