

THE FROG STUDY



Can we compare urine collection methods for children under 16 yrs with suspected UTIs?

We need to collect a urine sample to check if your child has a urine infection.



WHY DOES THIS MATTER?

A urine test helps doctors decide if a child has a UTI and whether they need antibiotics.

CLEAN CATCH (Currently recommended)



- ✓ Non-invasive
No pain
- ⚠ Can take a long time
- ⚠ Samples may become contaminated

CATHETER



- ✓ Small tube into the bladder
- ✓ Faster collection
- ✓ Lower contamination risk
- ⚠ May cause discomfort

NEEDLE METHOD (Suprapubic aspiration)



- ✓ Needle through lower tummy into bladder
- ✓ Can provide a clean sample
- ⚠ More invasive and potentially distressing

i We don't yet know which method is best. FROG was a small study to find out if a larger study is possible.

WHAT IS FROG?

THE FROG STUDY

A feasibility study to see if a larger trial comparing urine collection methods in children is possible.

We wanted to know:



Will enough families agree to take part?



Can the different methods be used in hospitals?



What information should we collect to compare the methods?

THE FROG STUDY: 3 PARTS

1

Comparing ways of collecting urine



Children in hospital who needed a urine test were randomised to clean catch or catheter (needle method considered at some hospitals).

We recorded:

- ✓ Whether urine was successfully collected
- ✓ How long collection took
- ✓ Pain or distress experienced
- ✓ Need for further hospital care

2

Finding out what parents and professionals thought



Parents completed questionnaires and some took part in interviews. Healthcare professionals took part in group discussions.

We asked about:

- ✓ Their experiences of the study
- ✓ The different urine collection methods

3

Deciding what a future study should look like



Parents and healthcare professionals took part in an online meeting to discuss the findings and agree what should be included in a future larger study.

KEY FINDINGS

RECRUITMENT RESULTS



64 out of 170 families agreed to randomisation (about 38%)

✓ **Target for success: at least 33% TARGET ACHIEVED**

RANDOMISED PARTICIPANTS

32
allocated to
CLEAN CATCH

32
allocated to
CATHETER



NEEDLE METHOD: No families agreed when this option was included. It will not be included in a future larger study.



Hospitals recruited enough children each month to show a larger study is possible.



We collected information on success, time, pain/distress and further care.



Not every sample was sent to the laboratory. Future studies will need to consider how to measure contamination.



No problems or unexpected harms related to the study were reported.

WHAT DID PARENTS AND HEALTHCARE PROFESSIONALS THINK?



What they liked

- ✓ Approach to families was appropriate
- ✓ Study information was clear
- ✓ Both clean catch and catheter could be included in future research



Key considerations

- Balance between:
 - getting a urine sample quickly and reliably
 - possible pain or distress to the child



Why the needle method was excluded

Not widely available and no families agreed to randomisation when it was included.

WHAT SHOULD HAPPEN NEXT?



Parents and healthcare professionals agreed that a future larger study should:

- ✓ Include children under 18 months old who come to hospital with a suspected UTI
- ✓ Compare **CLEAN CATCH** with **CATHETER** urine collection
- ✓ **NOT** include the needle method
- ✓ Focus on the most important question: whether each method provides an accurate urine result and what happens when a sample is contaminated

WHAT DOES THIS MEAN?



FROG showed that a larger study comparing clean catch with catheter urine collection appears to be possible.



FROG was not large enough to tell us which method is best. A larger study is now needed to find out which method gives the most reliable urine sample while causing the least pain and distress for children.

Thank you to all the families and healthcare professionals who took part in the FROG study.