





We are inviting you to become part of our public engagement group for designing research on the use of ultrasound in cardiac arrest in children.

Can you help us design research on the use of ultrasound during cardiac arrest in children?

PROJECT PLAN

This work is being carried out as part of a PhD application. We aim to:

- **Review** the literature on how ultrasound is currently used in children with cardiac arrest
- Ask healthcare professionals who manage cardiac arrest in children about their opinion and experiences
- **Develop** a protocol for how ultrasound could be safely used and implemented in life support protocols
- **Test** this in a simulated resuscitation setting, recollections, interviews,

PATIENT AND PUBLIC INVOLVEMENT

We need your help to make sure what we are studying is relevant for patient and families. Studies have shown that patient and public involvement makes our research better and participants can find it a positive way to contribute to future research. Your involvement will ensure that patients and public will be appropriately represented throughout the projects and help us design the study in the most patient focused way possible.







Mirjam

Esther

Julie

If you have any questions, please e-mail our main researcher Mirjam Kool on mirjam.kool@nhs.net.

What is this research about?

CARDIAC ARREST IN CHILDREN

Cardiac arrest is defined as a medical emergency when the heart stops beating. Approximately 1500 children suffer a cardiac arrest in the UK each year and sadly some children may not survive. Finding treatments to help improve our success in the treatment of cardiac <u>arrest is therefore very important.</u>

BEDSIDE ULTRASOUND

Ultrasound is a handheld scanning device, easy to use and painless and is already used to guide treatment in other life-threatening emergencies. We believe it could be useful to help identify and treat reversible problems in cardiac arrest in children but currently we do not have good quality research to support this.

Research Team

Dr Mirjam Kool, main researcher for this project. She is a doctor, training to be a paediatrician and a research fellow at the University of Birmingham.

Esther Kwong is a member of Young Patients Advisory Group at Birmingham Women's and Children's Hospital working with us to set up a public engagement group for this project.

Dr Julie Menzies (Nurse Researcher) will supervise this project together with Dr Barney Scholefield (Consultant in Paediatric Intensive Care).

All members of this team have been DBS checked. You would be joining us as part of our public engagement group.

We are seeking people to join our public engagement group !!

- Children and young people who have experienced a cardiac arrest; AND/OR
- Parents, carers or family members of children and young people who have experienced a cardiac arrest

WHAT HAPPENS IF I DECIDE TO TAKE PART?

You will be asked to sign a consent form to say you are happy to take part and asked for some details of yourself. This information helps us to ensure our public engagement group is as diverse as the patients we treat. This is optional, so if you do not feel comfortable sharing these details you can leave it blank.

Any patient or public participant will be free to leave, or take a temporary break, at any time, for any reason throughout the development of the PhD application

You be able to give feedback on

- The project designs
- Research questions
- What outcomes are the most important?
- The plain English summary of the study
- Discuss how to involve public engagement

You will be invited to 2 zoom meetings, 1 hour long each, between August – October 2021. You can choose to be part of a group discussion or an individual meeting with the research team. The private chat functions will be disabled for safety.

BENEFITS

You will receive compensation for each meeting you attend, and the review of documents before each meeting.

You will be offered love2shop vouchers of £25 for each meeting (1 hour) and £25 compensation for preparatory work before the second meeting (approx. 1 hour).

RISKS

Participation in the design of this research will not affect your rights and treatment in the NHS. We do not believe there are any extra risks in taking part in the design of this research. Your data will be stored safely and will not be shared with anyone without your permission.

We understand that being part of this research may be upsetting as you remember your own experiences. If this is the case, you can withdraw or pause your involvement at any time without giving a reason. If you need more support to discuss your feelings around your experience of cardiac arrest, we can help you arrange this.

Glossary

Cardiac arrest: A medical emergency where the heart stops beating **National Institute for Health Research:** The main funding source of research in healthcare in the UK

Ultrasound: A scanning tool where sound waves are beamed into the body, and their return echoes enable technicians to visualize what is happening under the skin

