



## STEP CARE trial: Sedation, Temperature and Pressure after Cardiac Arrest and Resuscitation – June 2026

### FAST FACTS:

- Cardiac arrest is a leading cause of death worldwide.
- Cardiac arrest affects more than 3.8 million people worldwide each year, with the burden increasing over time.
- Only 12% of patients treated by ambulance survive cardiac arrest.

### PROJECT CYCLE:

2022 - 2027

### PARTNERS:

The George Institute for Global Health, Australia

Region Skåne, Sweden

Lund University, Sweden

Helsinki University Hospital, Finland

Copenhagen Trial Unit

Medical Research Institute of New Zealand  
Rangahautia Te Ora

### SUPPORTERS:

Medical Research Future Fund Grant, Australia

Health Research Council of New Zealand, New Zealand

The Swedish Research Council, Sweden

South Swedish Health Region, Sweden

Swedish Cultural Foundation, Sweden

The Academy of Finland, Finland

The Finnish Society of Medicine, Finland

Sigrid Jusélius Foundation, Finland

The Swedish Heart Lung Foundation

Medical Support Association Life and Health, Finland

The Dorothea Olivia, Karl Walter and Jarl Walter Perklén Memorial Foundation, Finland  
Clinical Research Programme, Directorate of Health, Ministry of Health and Social Security, Luxembourg

### STUDY PRINCIPAL INVESTIGATOR:

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### BACKGROUND:

- Cardiac arrest is a sudden medical condition that occurs when the heart stops beating. Without urgent treatment, it is often fatal.
- Survival after cardiac arrest is still low, highlighting the need to improve care after hospital admission.
- Among survivors discharged from hospital, ~50% experience some level of cognitive impairment, which is associated with reduced quality of life and increased caregiver burden.
- The STEP CARE trial is the largest trial to date investigating intensive care unit (ICU) management after cardiac arrest.

### AIMS:

- To improve intensive care treatment after cardiac arrest by identifying the best approaches to sedation, body temperature control and blood pressure management.
- To assess survival at 180 days, brain function, and quality of life after recovery.

### METHOD:

- Participants are randomly assigned to different treatment approaches comparing:
  - » Continuous sedation for 36 hours or minimal sedation
  - » Fever management with or without a feedback-controlled device
  - » Higher or lower blood pressure targets during treatment (>85 mmHg or >65 mmHg)
- Each approach will be evaluated separately for safety and patient outcomes.

### IMPACT

- This research may lead to better long-term outcomes for patients following a cardiac arrest.
- It may also improve quality of life for patients and reduce the burden on families and the healthcare system.

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