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# Cardiac arrest survivors' perspectives on a web-based support and learning platform: an interview study

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**RESUSCITATION**  
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GUIDELINES  
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# Background



Survivors of cardiac arrest often face multifaceted challenges:

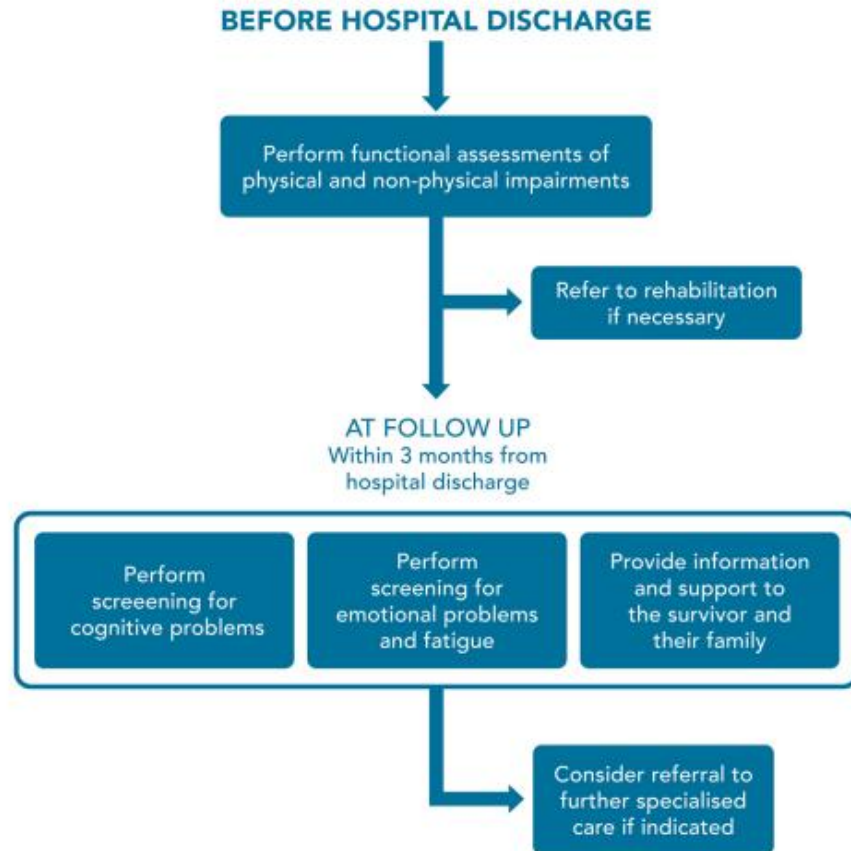
- cognitive,
- emotional,
- physical problems,
- existential thoughts.



Usual symptoms:

- anxiety and depression,
- post-traumatic stress,
- fatigue and sleep disturbances
- kinesiophobia.

## RECOMMENDATIONS FOR IN-HOSPITAL FUNCTIONAL ASSESSMENTS, FOLLOW-UP AND REHABILITATION AFTER CARDIAC ARREST

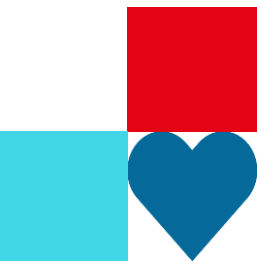


# Background

International and national guidelines emphasize the importance of follow-up within three months, including patient education and psychosocial screening.

Follow-up care is often insufficient.

Survivors with non-cardiac arrest aetiology – may fall outside the scope of specialist clinics and are often left to seek support through primary care or digital platforms.



# Background



Many patients turn online to find knowledge and tools for self-management.



There is limited knowledge about what survivors perceive as relevant in content, structure and delivery of digital support.



Broader initiatives to address post-cardiac arrest care are still lacking.

# Aim

To explore survivors' perspectives on digital support and identify relevant content and delivery formats for a web-based support and learning platform.






# Study design

Qualitative design, combining focus group and individual interviews to gain in-depth insight into survivors' experiences and preferences.

## Procedure

- The study was conducted in Sweden between November 2024 and February 2025.
  - Participants were recruited via the national peer support network for cardiac arrest survivors and their family members.
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# Participants

Inclusion criteria:

≥ 18 years old, Swedish-speaking and having survived a cardiac arrest.

- ✓ 20 participants 44 to 80 years, 8 women and 12 men.
- ✓ Time since cardiac arrest: 3 months to 19 years.
- ✓ All participants reported daily use of both a computer and a smartphone, and 19 used the Internet daily.



# Data collection



Four semistructured focus group interviews (17 participants) and 3 individual interviews.



Participants were encouraged to speak freely, share experiences in their own words, and emphasise aspects they considered important.



The focus group interviews 6-113 minutes; the individual 27-44 minutes.

# Analysis

Qualitative content analysis was used.

Three main categories and six sub-categories were identified, reflecting survivors' needs, wishes, and preferences for a digital support program.

Main categories	Sub-categories	Codes
<b>Need of clear communication &amp; healthcare..</b>	<b>Guided support throughout the recovery process</b>	Ambulance care Intensive care Hospital ward care Leaving hospital and returning home Physical activity in the recovery Healthcare follow-up

# Main findings



## Need of clear communication & healthcare guidance

*Clear and tailored digital communication*

*Guided support throughout the recovery process*



## Need of comprehensive recovery support and handling obstacles

*Managing life post-cardiac arrest*

*Address emotional and physical aftermath*



## Need of safe social contexts

*Family members are essential, yet often vulnerable and forgotten*

*Social connection and intimacy – beyond survival*

The web-based support and learning platform was developed through co-creation together with survivors, the research team, and various subject-matter experts.

### Research group



**Ingela Thylén**  
RN, Asst. Professor  
Principal Investigator



**Annette Waldemar**  
RN, cardiac specialist  
nurse, PhD



**Johan Israelsson**  
RN, PhD



**Anders Bremer**  
RN, ambulance nurse,  
professor



**Kristopher Årestedt**  
RN, ICU nurse, professor

### Participating researchers



**Per Nordberg**  
Senior physician in  
cardiac care, asst.  
professor



**Erik Blennow  
Nordström**  
Psychologist, PhD



**Katarina Heimburg**  
Spec. physiotherapist,  
PhD



**Gisela Lilja**  
Occupational  
therapist, asst.  
professor

### Experts who contributed knowledge, material and fact-checking

**Mats Pettersson**  
Senior physician  
in heart diseases

**Johan Herlitz**  
Chief physician,  
professor,  
cardiac arrest  
researcher

**Marie Lindgren**  
Senior physician  
in rehabilitation  
medicine

**Gunilla Edholm**  
RN, member of the  
CPR Council

**Anne Eriksson**  
ICU nurse, doctoral  
student

**Marianne Björegren**  
Dietitian in heart  
diseases

**Annika Landewall**  
RN, rehabilitation  
coordinator

**Lars Hermansson,**  
Hospital chaplain

**Nina Carlsson**  
Senior lecturer,  
PhD

**Carina Svenlin**  
Specialist nurse  
cardiac care

**Patrik Hellström**  
University lecturer,  
doctoral student

**Pär Källén**  
Specialist nurse  
ambulance care

**Magnus Nilsson**  
Specialist nurse  
ambulance care

# The digital support and learning platform

Cardiacarrestsurvivors.se



[About cardiac arrest](#) ▾

[Life after cardiac arrest](#) ▾


[Recovery](#) ▾

[Support for the environment](#) ▾

[Movies](#) ▾

[Links](#) ▾

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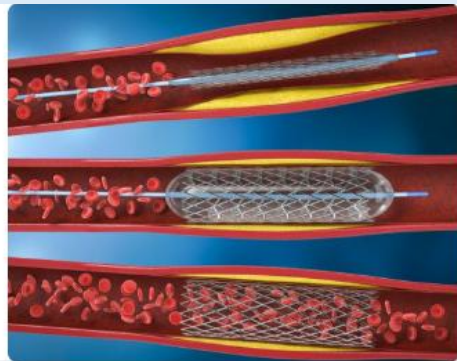
 [English](#) ▾

## Care after cardiac arrest

Here you will find information about hospital care after cardiac arrest, percutaneous coronary intervention (PCI), medications, ICD treatment and guidelines for follow-up after cardiac arrest.



[Hospital care after cardiac arrest](#)



[Balloon dilation / PCI](#)



[Drug](#)



[ICD treatment](#)



[Guidelines for follow-up after cardiac arrest](#)

## Treatment during cardiac arrest

The links in the “chain that saves lives” show which actions are needed to save a life. These actions are strongly supported by research studies and treatment guidelines regardless of where the cardiac arrest occurs. The four links are usually called “Warning signs and early alarm – to prevent cardiac arrest”, “Early cardiopulmonary resuscitation – to buy time”, “Early defibrillation – to restart the heart” and “Care after cardiac arrest – to maintain a good quality of life”.



## Out-of-hospital cardiac arrest

According to the CPR Council's goal, the alarm and start of cardiopulmonary resuscitation (CPR) should occur within 1 minute, while the first defibrillation should be performed within 5 minutes. This is currently an ambitious goal outside of hospitals, as few patients are treated with defibrillation before the ambulance arrives.

Sudden central chest pain or severe shortness of breath can be signs of a heart attack and therefore warning signs, heart attack is a common cause of cardiac arrest. It is therefore important to quickly call an ambulance if you have such symptoms. Early alarm to 112 is crucial for the possibility of receiving rapid help from an ambulance. In sudden cardiac arrest, the heart stops pumping blood. The oxygen supply to all organs of the body ceases and the victim loses consciousness. Early CPR increases the chance of survival by up to 2-3 times.

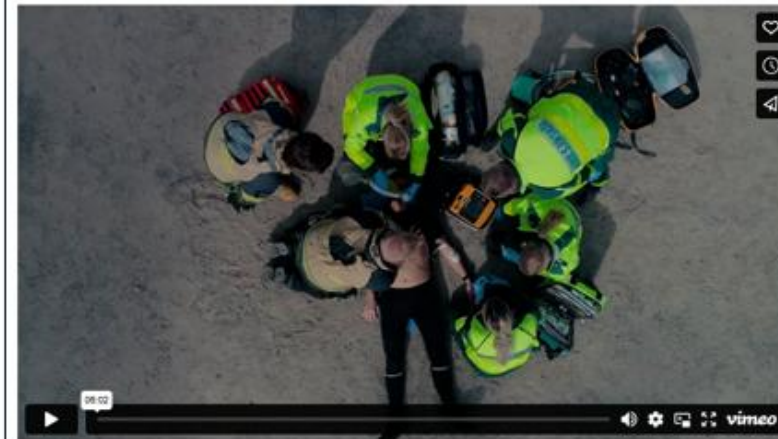


## Cardiac arrest in hospital

Even in the event of cardiac arrest in a hospital, the measures described in the life-saving chain are of crucial importance for the chance of survival. According to the CPR Council's goal, the alarm and start of CPR should also be carried out in hospitals within 1 minute, while defibrillation should be carried out within 3 minutes. Since most hospitals have strategically placed defibrillators, these goals are achieved in the vast majority of cardiac arrests in Sweden.



From the CPR Council you can watch a film about prehospital cooperation in cardiac arrest.



From the CPR Council you can complete a free 15-minute online training course on adult CPR.

[Take part in the training here \(opens in a new window\) »](#)

 Afrikaans	 Čeština	 עברית	 Latin	 Português	 Тоҷикӣ
 Shqip	 Dansk	 हिन्दी	 Latviešu valoda	 ਪੰਜਾਬੀ	 தமிழ்
 አማርኛ	 Nederlands	 Hmong	 Lietuvių kalba	 Română	 తెలుగు
 العربية	 English	 Magyar	 Lëtzebuergesch	 Русский	 ไทย
 Հայերեն					
 Azərbaycan dili					
 Euskara					
 Беларуская мова					
 বাংলা					
 Bosanski					
 Български					
 Català					
 Cebuano	 Deutsch	 Қазақ тілі	 తెలుగు	 Slovenščina	 Yorùbá
 Chichewa	 Ελληνικά	 ಕನ್ನಡ	 नेपाली	 Afsoomaali	 Zulu
 简体中文	 ગુજરાતી	 한국어	 Norsk bokmål	 Español	
 繁體中文	 Kreyol ayisyen	 کوردی	 پښتو	 Basa Sunda	
 Corsu	 Harshen Hausa	 Кыргызча	 فارسی	 Kiswahili	
 Hrvatski	 Ōlelo Hawaiʻi	 ភាសាខ្មែរ	 Polski	 Svenska	

The support and learning platform can be translated into 104 languages

The support program covers 40 different subject areas, based on what survivors wish for



### Return to activities and work

Here you will find information about getting back to a functioning everyday life, network support, and starting to drive again after cardiac arrest.

[Read more](#)



### Lifestyle

Here you will find information about physical activity, stress, diet, alcohol, nicotine and high blood pressure.

[Read more](#)



### Relaxation exercises

Here you will find various exercises such as Mediyoga, relaxation, breathing meditation and mindfulness that can help you in your recovery.

[Read more](#)

The support program includes 40 films

In this film we meet Annmargreth who saved her husband Stefan by performing CPR for 20 minutes before the ambulance arrived. In conversation with nurse and researcher Johan Israelsson, she talks about her experiences and how she supported and was by his side after the cardiac arrest. This film is produced by the research team behind [Hjartstoppsoverlevare.se](http://Hjartstoppsoverlevare.se).



The support program includes 160 Links for those seeking more information

## Care after cardiac arrest

### Hospital care after cardiac arrest

In the Swedish Intensive Care Register you can read more about the intensive care unit, information for patients, relatives or visitors .

[Swedish Intensive Care Register. Information.](#)

In the CPR Council's information material you can read more about survivors and relatives .

[CPR Council. Survivors and relatives tell their stories.](#)

In Läkartidningen you can read more about *the Swedish CPR Council's recommendations for intensive care after cardiac arrest*. The article is primarily aimed at healthcare professionals. The content and language can therefore be perceived as somewhat advanced and professional.

[Intensive care after cardiac arrest](#)

## About cardiac arrest

### Cardiac arrest

#### What is a cardiac arrest?

At the Swedish Heart and Lung Association you can read more about sudden cardiac arrest. [Swedish Heart and Lung Association. Sudden cardiac arrest.](#)

#### Common causes of cardiac arrest

At the Swedish Cardiopulmonary Resuscitation Register you can read more about annual reports and statistics. [Swedish Cardiopulmonary Resuscitation Register.](#)

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Thanks for your  
attention!

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