

DANISH AIR AMBULANCE

RESEARCH STRATEGY
2021 – 2026

RESEARCH AND DEVELOPMENT – WHEN TIME IS VITAL



CONTENTS

Introduction.....	1
Purpose.....	1
Priority research areas	1
Ethics.....	1
Collaboration/networks	2
Use of DAA data	2
Turnover and dissemination	2
Organisation	3
Finances.....	3

INTRODUCTION

This research strategy constitutes the overall framework for research under the auspices of Danish Air Ambulance – called DAA in the following.

Since its start in 2014, DAA has developed and supported research into the prehospital performance of the emergency medical helicopters. In 2021, this work was strengthened by the establishment of a five-year professorship.

The research strategy is operationalised with concrete research projects as well as by developing and supporting collaboration and networking both nationally and internationally.

PURPOSE

The research aims to improve treatment of patients and evidence-based operation of the emergency medical helicopters by initiating and contributing to high-standard clinical research projects with both national and international interest and collaboration.

The research can also lead to new and better diagnostic methods and treatments, better and more coherent and time-optimal patient flows, fewer complications, as well as greater patient satisfaction, and highlight possible socio-economic importance by studying optimised resource utilisation.

The purpose of research under the auspices of DAA is to:

1. optimise the patient's survival and condition from acute illness or injury to discharge from the hospital;
2. promote the understanding of acute time-critical conditions;
3. examine and further develop DAA in the prehospital context;
4. explore new medical equipment and new medical treatments in the prehospital field.

PRIORITY RESEARCH AREAS

The DAA research strategy includes the timeline from the 112 emergency call until the patient is discharged from hospital, primarily in relation to the performance of the emergency medical helicopters and secondarily to the prehospital service.

The strategy is defined by the following research areas:

- Scientific excellence studies involving prehospital service
- Studies with a wide range of high-quality collaboration
- Clinical studies involving the prehospital service, mapping the impact of the overall healthcare service – assessed in terms of patient flows and outcomes
- Development and testing of medicines and/or medical equipment in the prehospital phase
- Education and training in prehospital treatment

ETHICS

All research projects are implemented in accordance with good clinical practice and must be covered by the Helsinki II Declaration. Where appropriate, the projects must also be approved by the Regional Committee on Health Research Ethics, the Danish Data Protection Agency, the

Danish Medicines Agency and other relevant authorities. Projects must generally be registered on relevant online websites such as clinicaltrials.gov and/or EudraCT.

All projects are planned and implemented with due consideration for operational activities and patients.

COLLABORATION/NETWORKS

The research will contribute to collaboration between the entities, research groups and networks involved in prehospital research both nationally and internationally. Cross-regional collaboration must support a nationwide research perspective. This collaboration can be very broad between different specialist fields and locations or limited to specialist emergency medicine in the prehospital environment.

The aim is to develop and maintain the collaboration through specific projects and by promoting collaboration and networking with relevant partners; companies, institutions as well as national and international prehospital organisations and research institutions.

Efforts have been initiated to establish solid collaboration especially in a Scandinavian context, as the prehospital services are largely comparable. In addition, there will be a wish to establish close collaboration with other international helicopter emergency medical services.

DAA-related research must be internationally recognised within the prehospital field, especially in relation to the emergency medical helicopters, and will contribute to Denmark being considered an attractive research partner that can actively contribute to the development of clinical practice and the emergency medical helicopter scheme.

USE OF DAA DATA

DAA has a comprehensive database of data on the performance of emergency medical helicopters, and this data can be provided for relevant research projects. When providing data, the provisions of the Danish Data Protection Agency (or an equivalent local authority) apply and there must be a plan for purpose, hypothesis, analysis and dissemination of findings in the form of scientific articles in national or international journals and other fora.

All projects where helicopter data plays a substantial role must have a partner affiliated with Danish Air Ambulance. In addition, all projects and publications using DAA data must state this in the methodology section, for example using the wording: "Data collected by Danish Air Ambulance".

Writing must comply with the Vancouver criteria at all times.

TURNOVER AND DISSEMINATION

One of the success criteria for good research projects is well-functioning interaction between the healthcare professions and medical specialisations involved. It is therefore essential that the research developed is targeted to the interdisciplinary and cross-sectoral reality.

The individual researchers are obliged to make their research findings available to the public, present them in accordance with general scientific and academic principles and avoid distorted or incomplete presentations.

All projects supported by DAA must be sought published in peer reviewed journals.

ORGANISATION

Research under the auspices of DAA should support and collaborate with other established research environments in the prehospital field in order to exploit the inherent synergies.

The overall research organisation in DAA consists of a five-year professorship and a cross-regional Research Committee. In addition, the strategy includes recruitment of research year students, junior doctors and paramedics, PhD students and associated postdoc/senior researchers.

Professorship

The purpose of the professorship is to strengthen and develop advanced prehospital emergency medicine in relation to the helicopter emergency medical service, so that acutely ill patients and injured patients can receive the best possible treatment.

At the same time, the focus must be on ensuring strong collaboration across professional groups and sectors, and the professorship will help facilitate collaboration across the research environments of all five regions in order to ensure a national research perspective. In addition, the professorship should contribute to the development of strategic and practical collaboration on a Scandinavian basis, as well as close collaboration with other international research environments and helicopter emergency medical services.

Research Committee

The DAA Steering Committee has set up a cross-regional Research Committee responsible for the implementation of the research strategy. The Research Committee makes all overall decisions about the use of DAA's research funds, the provision of data and project applications, and is to support the prehospital network in Denmark.

The Danish Air Ambulance professor is chairman of the Research Committee, and the chief medical officer of the helicopter scheme is a permanent member of the committee. The five regions each appoints one representative as a permanent member of the Research Committee. In addition, 3-5 representatives can be appointed from among the associated helicopter doctors, and research-active representatives can be attached on an ad hoc basis.

The secretariat of Danish Air Ambulance provides secretariat services to the Research Committee.

FINANCES

An annual financial framework of DKK 1,200,000 (2016 price level) has been allocated for distribution between projects based on the research strategy. Attempts will also be made to raise additional funding from both public and private sources.