

Prehospital management of patients suspected for non ST-elevation acute coronary syndrome

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Hoofdstuk 12

Impact



Conducting research and attempting to further improve the quality of care requires a lot of time, energy, endurance, and perseverance. This especially when researchers aim to be innovative and introduce new topics to the research agenda. Often, it takes years for research results to be incorporated into guidelines and protocols. In the initial phases, researchers frequently face skepticism and resistance due to entrenched habits in daily practice.

In this “impact paragraph,” a reflection is provided on the scientific and societal impact of the research compiled in this thesis. The central focus of this thesis is the Famous Triage study, as summarized in the preceding chapter. The study demonstrates, in various phases, the feasibility of prehospital triage in patients with chest pain, using a risk stratification tool combined with a point-of-care (POC) troponin determination. This supports ambulance care professionals in deciding whether or not to refer a patient to the hospital. Additionally, it has been shown that the evolution of troponin measurements, now including high-sensitivity troponin on a POC device, contributes to an even safer approach when appropriate cut-off values are applied in the risk stratification tool.

The Famous Triage study began its initial preparations in 2010, making it unique in its kind. With vision and an innovative mindset, the first phase of the research was initiated. Despite several attempts, funding from potential grants could not be obtained in the early years. There was initially much skepticism about whether this intended prehospital triage strategy would be successful.

Nowadays, we know better. After various abstracts and publications, numerous presentations at both national and international scientific congresses, the study gained increasing attention. The Famous Triage research group received several jury and audience awards over the years. The research has inspired other groups, both nationally and internationally, to initiate similar studies in the same domain. This has led to the formation of a consortium under the auspices of the Dutch Society of Cardiology. This consortium, comprising various experts in (prehospital) triage for chest pain, covers the entire chain of acute cardiac care. General practitioners, ambulance care professionals, clinical chemists, and cardiologists collaborate on a consensus document based on the most recent scientific evidence combined with expert opinion. It is expected that this will contribute to a new prehospital guideline for triage in patients with chest pain.

Societally, results of the Famous Triage study has significant consequences as well. Healthcare partners in the chain of acute cardiac care are challenged to better align prehospital and in-hospital guidelines and to think and work more in terms of chain care. The patient is inherently at the center of this approach. Avoiding unnecessary hospital referrals is safer for patients and reduces stress and anxiety. These developments seamlessly fit the current challenges in healthcare, where there are significant hurdles to keeping healthcare accessible, of high quality, and affordable. Proposals to change prehospital management in patients with chest pain who may have non ST-elevation acute coronary syndrome are value-driven and focused on providing “the right care in the right place” for patients.

In chapter 10 of this thesis, a more detailed description is provided of what the implementation of this prehospital triage strategy means for further collaboration in the chain of acute cardiac care. Attention in the education curriculum for ambulance care professionals is crucial, as well as training for other chain partners such as general practitioners, emergency department personnel, and cardiologists. It is also essential to establish a transparent system that can demonstrate the safety of the approach and allow for adjustments if necessary. Financially, there is significant gain to be made. The strategy, on one hand, leads to a decrease in hospital presentations of patients classified as "low-risk." On the other hand, collaboration and coordination of processes in the healthcare chain can ensure that patients referred to the hospital for further analysis move through the system more quickly. With a shorter duration of stay in a hospital emergency department, healthcare costs are also being reduced.

Thus, the research in this thesis has both scientific and societal impact. Primarily, it promotes the safety and quality of care for patients but also has implications for all involved healthcare providers in acute cardiac care, health insurers, and policymakers.

A number of ambulance services are starting to implement this new prehospital approach in a controlled manner. It is expected that in the near future it will become part of the diagnostic process in ambulance services both in the Netherlands and internationally.