

## **Who is responsible for the treatment of the most critically ill patient?**

### **A nationwide study on leaders of hospital cardiac arrest teams**

**Background:** In-hospital cardiac arrest carries a poor prognosis. Resuscitation system errors often occur and jeopardize survival. Effective leadership of a cardiac arrest team may minimize errors, improve quality of care, and ultimately survival. Furthermore, resuscitation includes ethically difficult decisions e.g. deciding when to abandon resuscitation in which clinical experience and leadership is important. The aim of this study was to investigate the characteristics of leaders of hospital cardiac arrest teams.

**Methods:** All public Danish hospitals with a cardiac arrest team were contacted. In a previous study we identified all doctors on the respective hospital cardiac arrest teams. We decided to “randomly” sample one of each of these doctors who were contacted when on call at the hospital. Telephone interviews were performed using a structured questionnaire. All interviews were performed during one week in 2014.

**Results:** In total 93 doctors from 45 hospitals participated. Of these, 51 doctors (41% female, median age 35 years (interquartile range 30;38) stated they were leaders of the cardiac arrest team. The majority of team leaders were doctors in training (86%) with a median clinical experience of 3.5 (2;7) years. In eight hospitals (18%) the cardiac arrest team leader was a locum doctor (medical student, n=2) or in the first year of post-graduate clinical training (n=6). In total, 82% of the non-specialist team leaders reported that a more experienced senior colleague were available at the hospital, but not included in the cardiac arrest team. The majority of team leaders (92%) stated that they felt confident in deciding when to abandon ongoing resuscitation, however only 10% were able to correctly state the European Resuscitation Council guidelines on when to abandon resuscitation.

**Conclusion:** Cardiac arrest team leaders are younger non-specialist doctors with limited clinical experience, even though more clinically experienced doctors are available at the hospital. Further studies are needed to assess the importance of clinical experience and to develop standards to improve in-hospital resuscitation.