



From dream to reality

Establishing a specialized unit for emergency management of the acute airway

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We present the step by step process of the establishment of a highly specialized emergency unit at Aarhus University Hospital. We have implemented a new concept of first line advanced airway intervention in patients presenting with acute and life-threatening conditions in the head, neck and airway.

Background

Acute airway management is one of the most challenging areas in medicine. It makes high demands on logistics, facilities, medical and technical skills and communication. The merging of hospitals in Aarhus county into one "super-hospital" was a game changer for acute airway management at Aarhus University Hospital (AUH).

AIM

Re-organize and reinvent acute airway management at AUH based on the following basic concepts:

- Multidisciplinary approach.
- Specialist-level management
- Fully equipped environment for airway management.
- First-line treatment: Instantly available airway team and up-front OR-unit.
- Organized in-situ simulation training.

Method

A working taskforce was established and key personal was invited to participate. A Board of implantation & management and a Board of Directors was formed. The working process proceeded as follows.

- Analytical phase #1: Data collection, interviews, assessment of current work flow, flaws and limitations.
- Analytical phase #2: Identification of key concepts, definition of goals and solutions.
- Strategical phase: Building new concepts.

- Executional phase: New concepts were tested, retested, adjusted and implemented. After implementation, subsequent evaluations and adjustments were executed.

Results

The process was initiated in 2016 and terminated in 2018. Achievements:

- Establishment of a state-of-the-art OR for acute airway management, located in the emergency department
- Establishment of an airway emergency call for quick mobilization of the airway-team
- Establishment of work flow diagrams and algorithms
- Establishment of an organized in-situ simulation training program

TODAY patients, with critical airway conditions, are treated up-front, in a "one-stop-shop"-fashion, systematically and fast, by a skilled team of specialists, around the clock, 24-7. The concept has proven to be very effective and is considered a great success.

Take home messages

- Have the organization ready before starting the project.
- Set the right team: Involve people "on the floor" and "decision-makers". Keep an open line to the board of directors.
- Define specific and realistic aims.
- Know your assignments and limitations.

