

# Comparing two cognitive aids

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Which design of cognitive aid (emergency manual) is easier to use and results in less missed critical actions during anesthetic emergencies

<b>Ethische beoordeling</b>	Positief advies
<b>Status</b>	Werving nog niet gestart
<b>Type aanpak</b>	-
<b>Onderzoekstype</b>	Interventie onderzoek

## Samenvatting

### ID

NL-OMON21025

### Bron

NTR

### Verkorte titel

COMCA-study

### Aandoening

anesthetic emergencies

## Ondersteuning

**Primaire sponsor:** none

**Overige ondersteuning:** none

## Onderzoeksproduct en/of interventie

## Uitkomstmaten

### Primaire uitkomstmaten

Which emergency manual is most easy to use with the least missed critical actions and therefore improve patient care during anesthetic emergencies

# Toelichting onderzoek

## Achtergrond van het onderzoek

In the Netherlands, two University Hospitals have developed a hospital specific version of an emergency manual. These emergency manuals are care-bundles of Cognitive Aids that help care providers to perform and speed up all the critical steps to be taken in an emergency situation.

The evidence of using a Cognitive Aid in emergencies is not yet conclusive. This lack of evidence, however, is caused by the limited research that has been performed and the deficiencies in design and evaluation of currently used cognitive aids.<sup>2,3,4</sup>

Therefore we want to compare two different emergency manuals used in critical anesthetic situations. One of these bundles was developed in 2014 by the department of anesthesiology of the Amsterdam UMC. It is based on the emergency manual from Stanford Anesthesia Cognitive Aids group and national and institutional guidelines. The second emergency manual is developed by the department of anesthesiology of the UMC Utrecht in 2016. Its content is based on the emergency manual from Stanford Anesthesia Cognitive Aid group and the layout is based on emergency checklists of the Dutch Royal Air force.

During the first phase, 24 volunteers - anesthesiologists, unfamiliar with one or both of the emergency manuals - receive a questionnaire based on the content of both emergency manuals. The questionnaire will contain 25 questions on critical steps during anesthetic emergencies. The answers can be found in the manuals.

After writing down their initial choice for one of the two bundles, the volunteers are divided in two groups either to use bundle A or B to answer the questionnaire. Time necessary to answer the questions of manual A or B will be taken and reported.

In phase two, 24 voluntary teams consisting of a consultant anesthesiologist and anesthetic nurse with a third medical professional, unfamiliar with both emergency manuals in their daily practice, will be observed during a simulated critical anesthetic situation on their response. The scenarios will be performed on site in their regular environment. Five different scenarios will be used, two resuscitation scenario's (PEA, VF) and 3 other anesthetic emergencies ( massive bleeding, anafylaxis, severe bronchospasm. Anesthesiologists in The Netherlands are used to this training modality, as it is a mandatory part of the residency programmes.

All voluntary teams will get 4 standardized simulation scenarios. For the first scenario they don't use an emergency manual and are randomized on which resuscitation scenario they start with. After the first scenario the teams will answer a questionair on their situational awareness. The second scenario the teams are randomized to start with on of the two emergency manuals and on the scenario's. The third scenario they will automatically use the other emergency manual and are the teams randomized between the two remaining scenario's. At last for the fourth scenario the other resuscitation scenario is being used and the teams have to choose which emergency manual they will use. After the last scenario again the teams have to fill in the situational awareness questionnaire.

## **Doel van het onderzoek**

Which design of cognitive aid (emergency manual) is easier to use and results in less missed critical actions during anesthetic emergencies

## **Onderzoeksopzet**

stop inclusion oktober 2020

## **Onderzoeksproduct en/of interventie**

use of different emergency manuals

## **Contactpersonen**

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## **Deelname eisen**

### **Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)**

voluntary teams consisting of a consultant anesthesiologist and anesthetic nurse with a third medical professional

## Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

clinical inactive personnel

## Onderzoeksopzet

### Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Cross-over
Toewijzing:	Gerandomiseerd
Blinding:	Dubbelblind
Controle:	N.v.t. / onbekend

### Deelname

Nederland	
Status:	Werving nog niet gestart
(Verwachte) startdatum:	05-02-2020
Aantal proefpersonen:	24
Type:	Verwachte startdatum

## Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

**Wordt de data na het onderzoek gedeeld:** Nog niet bepaald

## Ethische beoordeling

Positief advies	
Datum:	05-02-2020
Soort:	Eerste indiening

## Registraties

## Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

## Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

## In overige registers

<b>Register</b>	<b>ID</b>
NTR-new	NL8354
Ander register	METC AMC : W19_189

## Resultaten