

Compairing 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

Ethische beoordeling	Positief advies
Status	Werving nog niet gestart
Type aandoening	-
Onderzoekstype	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.^{2,3,4}

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, anaphylaxis, 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 questionnaire on their situational awareness. The second scenario the teams are randomized to start with one of the two emergency manuals and on the scenario's. The third scenario they will automatically use the other emergency manual and the teams are 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

Register	ID
NTR-new	NL8354
Ander register	METC AMC : W19_189

Resultaten