



Stavanger Universitetssjukehus
Helse Stavanger HF

Eldar Søreide
Professor og Seksjonsoverlege
Anestesi- og Intensivavdelingen

Sesjon B6: Prehospital luftveishåndtering

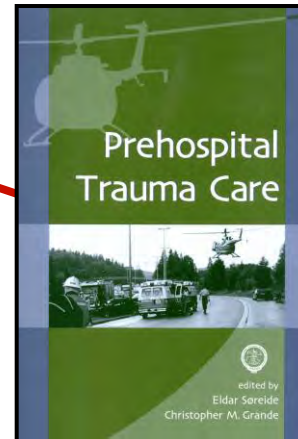
**Sikring av luftveier prehospitalt -
har vi kontroll på risikofaktorene?**

Professor dr. med. **Eldar Søreide,**

Sesjon B6: Prehospital luftveishåndtering

**Sikring av luftveier prehospitalt -
har vi kontroll på risikofaktorene?**

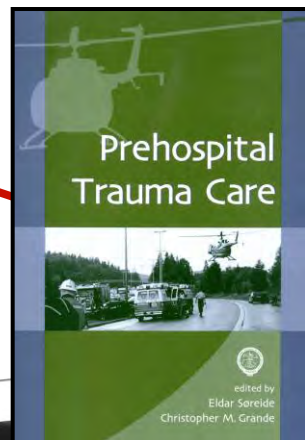
Professor dr. med. **Eldar Søreide,**



Sesjon B6: Prehospital luftveishåndtering

**Sikring av luftveier prehospitalt -
har vi kontroll på risikofaktorene?**

Professor dr. med. Eldar Søreide,



**Luftambulansesele
og PhD stipendiat
Stephen Sollid**





www.ribspreader.com



www.ribspreaders.com

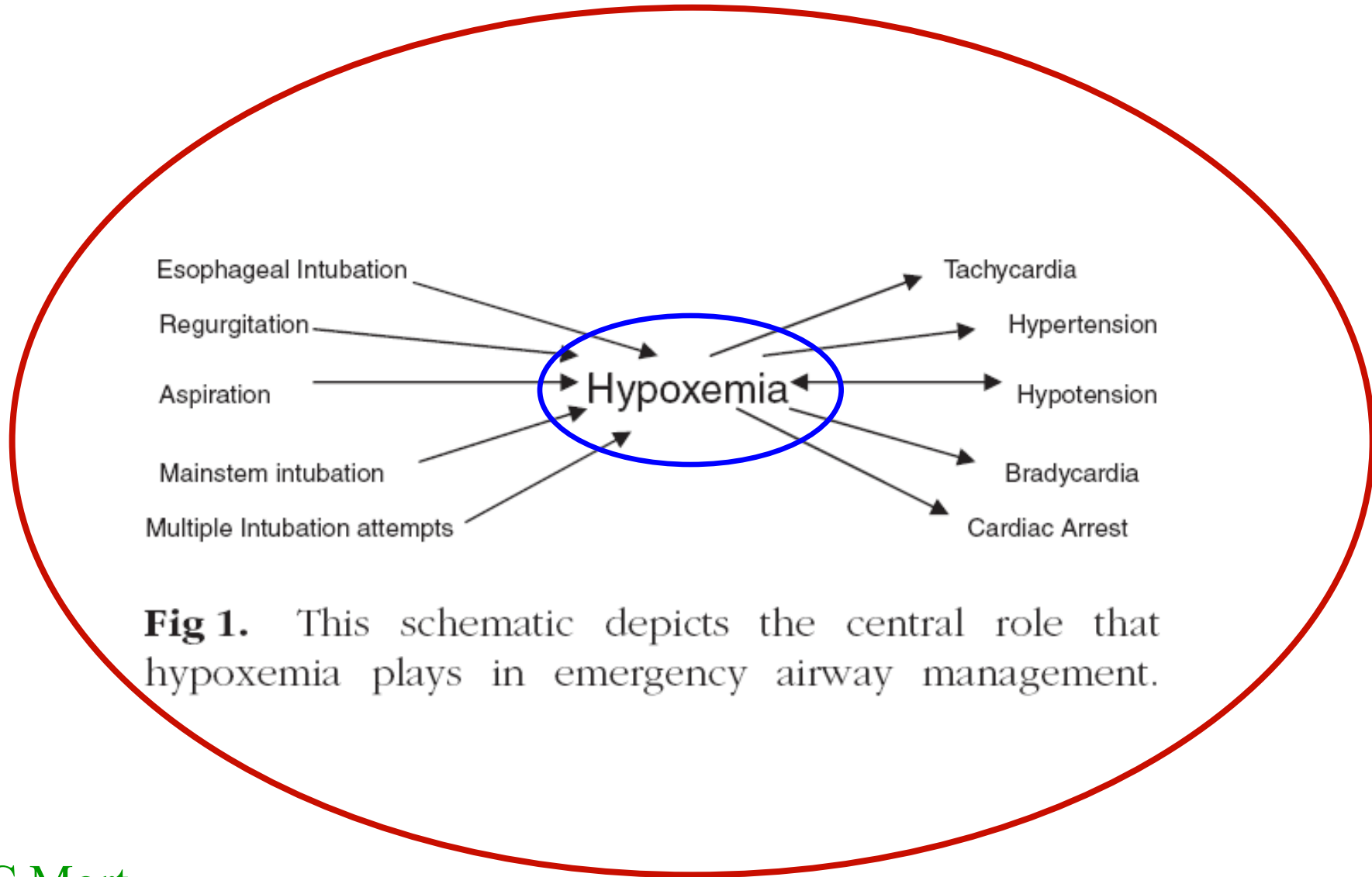


Fig 1. This schematic depicts the central role that hypoxemia plays in emergency airway management.

Risk assessment in critical care medicine - a tool to assess patient safety

S. J. M Sollid

Stavanger University Hospital, Norway

K. Eidesen

University of Stavanger, Norway

T. Aven

University of Stavanger, Norway

E. Søreide

Stavanger University Hospital, Norway

Table 2: Distribution of X

Intervals for X	[0, 0.15]	(0.15, 0.35]	(0.35, 0.55]	(0.55-1.0]
P	0.70	0.20	0.10	0.00



Figure 2: Schematic overview the risk analysis with the information available, the analysis and the prediction of future observables of A, X and B, Y.

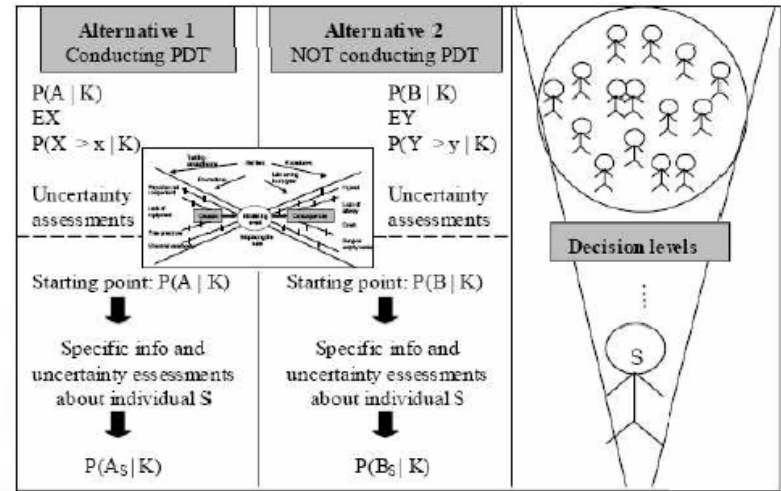


Figure 3: Sketch of the risk assessment approach for both decision levels and alternatives.

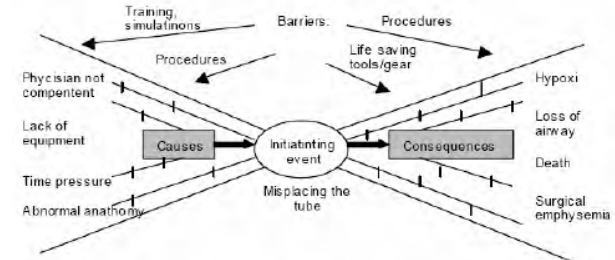


Figure 1: An illustration of cause-hazard-consequence-relationships of the event misplacing the tube (bow-tie diagram)

Bakgrunn: et stort akutt sykehus



Anestesiologen's perspektiv





Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine



Original research

Open Access

Pre-hospital advanced airway management by anaesthesiologists: Is there still room for improvement?

Stephen JM Sollid^{*1}, Jon Kenneth Heltné², Eldar Søreide¹ and Hans Morten Lossius³

Address: ¹Department of Anaesthesia and Intensive Care, Division of Acute Care Medicine, Haukeland University Hospital, Haugesund, Norway; ²Department of Anaesthesia and Intensive Care, Haukeland University Hospital, Bergen, Norway and ³Department of Research and Development, Norwegian Air Ambulance Foundation, Drøbak, Norway

Email: Stephen JM Sollid^{*} - sollid@haukeland.no; Jon Kenneth Heltné - khel@helse-bergen.no; Eldar Søreide - soreide@haukeland.no; Hans Morten Lossius - hlossius@haukeland.no

* Corresponding author

Published: 21 July 2008

Received: 9 July 2008
Accepted: 21 July 2008

Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine 2008,
18(2): doi:10.1186/1757-7241-18-2

This article is available from: <http://www.sjtem.com/content/18/2/1>

© 2008 Sollid et al; licensee BioMed Central Ltd.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/2.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Abstract

Background: Endotracheal intubation is an important part of pre-hospital advanced life support that requires training and experience, and should only be performed by specially trained personnel. In Norway, anaesthesiologists serve as Helicopter Emergency Medical Service (HEMS) physicians. However, little is known about how they themselves evaluate the quality and safety of pre-hospital advanced airway management.

Method: Using a semi-structured questionnaire, we interviewed anaesthesiologists working in the three HEMS programs covering Western Norway. We compared answers from specialists and non-specialists as well as full- and part-time HEMS physicians.

Results: Of the 17 available respondents, most (88%) felt that their continuous intubation practice was not sufficient. Additional training was mainly acquired through simulation practice and mannequin- or cadaver-based skills training. Of the respondents, 71% reported having experienced difficult and failed intubations, regardless of their level of knowledge of airway management-related deaths in their service. Specialists had more than part-time HEMS physicians had experienced difficult intubations, but 29% were new to the equipment in their service, but 29% were new to the equipment in their service.

Conclusion: The majority of anaesthesiologists serving as HEMS physicians in Norway



Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine



Original research

Open Access

Pre-hospital advanced airway management by anaesthesiologists: Is there still room for improvement?

Stephen JM Sollid^{*1}, Jon Kenneth Heltné², Eldar Søreide¹ and Hans Morten Lossius³

Address: ¹Department of Anaesthesia and Intensive Care, University of Oslo, Ullevål University Hospital, Oslo, Norway; ²Department of Anaesthesia and Intensive Care, Haukeland University Hospital, Bergen, Norway and ³Department of Research and Development, Norwegian Air Ambulance Foundation, Drammen, Norway
Email: Stephen JM Sollid^{*} - sollid@postboks.no; Jon Kenneth Heltné - khel@helse-bergen.no; Eldar Søreide - soreide@postboks.no; Hans Morten Lossius - hlossius@postboks.no
^{*} Corresponding author

Published: 21 July 2008
Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine 2008, 18:2 doi:10.1186/1757-7241-18-2
Received: 9 July 2008
Accepted: 21 July 2008

This article is available from: <http://www.biomedcentral.com/18/2/2>
© 2008 Sollid et al; licensee BioMed Central Ltd.
This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/2.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

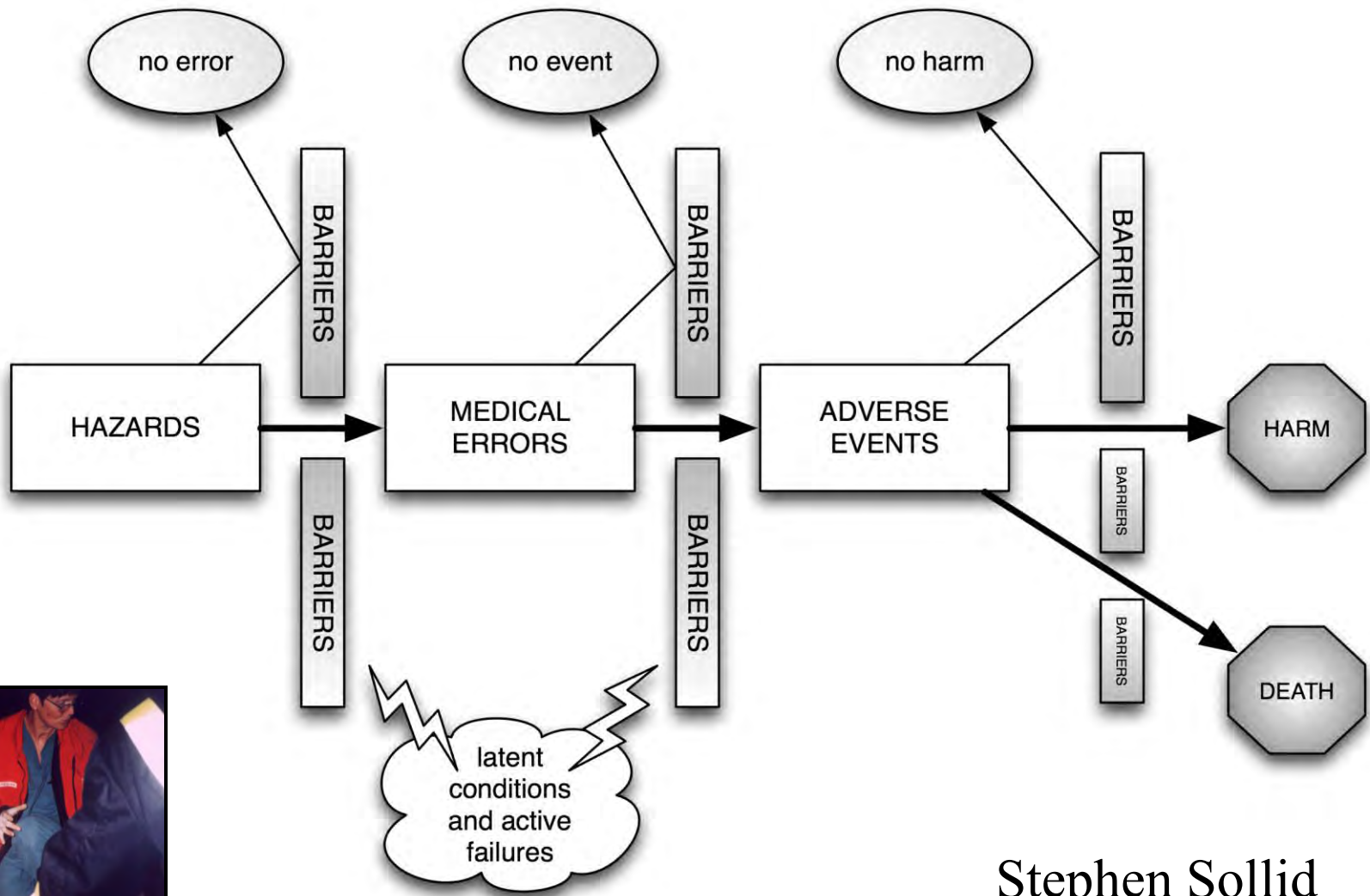
Abstract

Background: Endotracheal intubation is an important part of pre-hospital advanced life support that requires training and experience, and should only be performed by specially trained personnel. In Norway, anaesthesiologists serve as Helicopter Emergency Medical Service (HEMS) physicians. However, little is known about how they themselves evaluate the quality and safety of pre-hospital advanced airway management.

Method: Using a semi-structured questionnaire, we interviewed anaesthesiologists working in the three HEMS programs covering Western Norway. We compared answers from specialists and non-specialists as well as full- and part-time HEMS physicians.

Results: Of the 17 available respondents, most (88%) felt that their continuous education in airway management was not sufficient. Additional training was mainly acquired through simulation practice and mannequin- or cadaver-based skills training. Of the respondents, 59% reported having experienced difficult and failed intubations, regardless of their level of experience. Knowledge of airway management-related deaths in their service was higher among full-time than part-time HEMS physicians. Full-time HEMS physicians had experienced the same number of deaths as part-time HEMS physicians, but 29% were not reported to the national database.

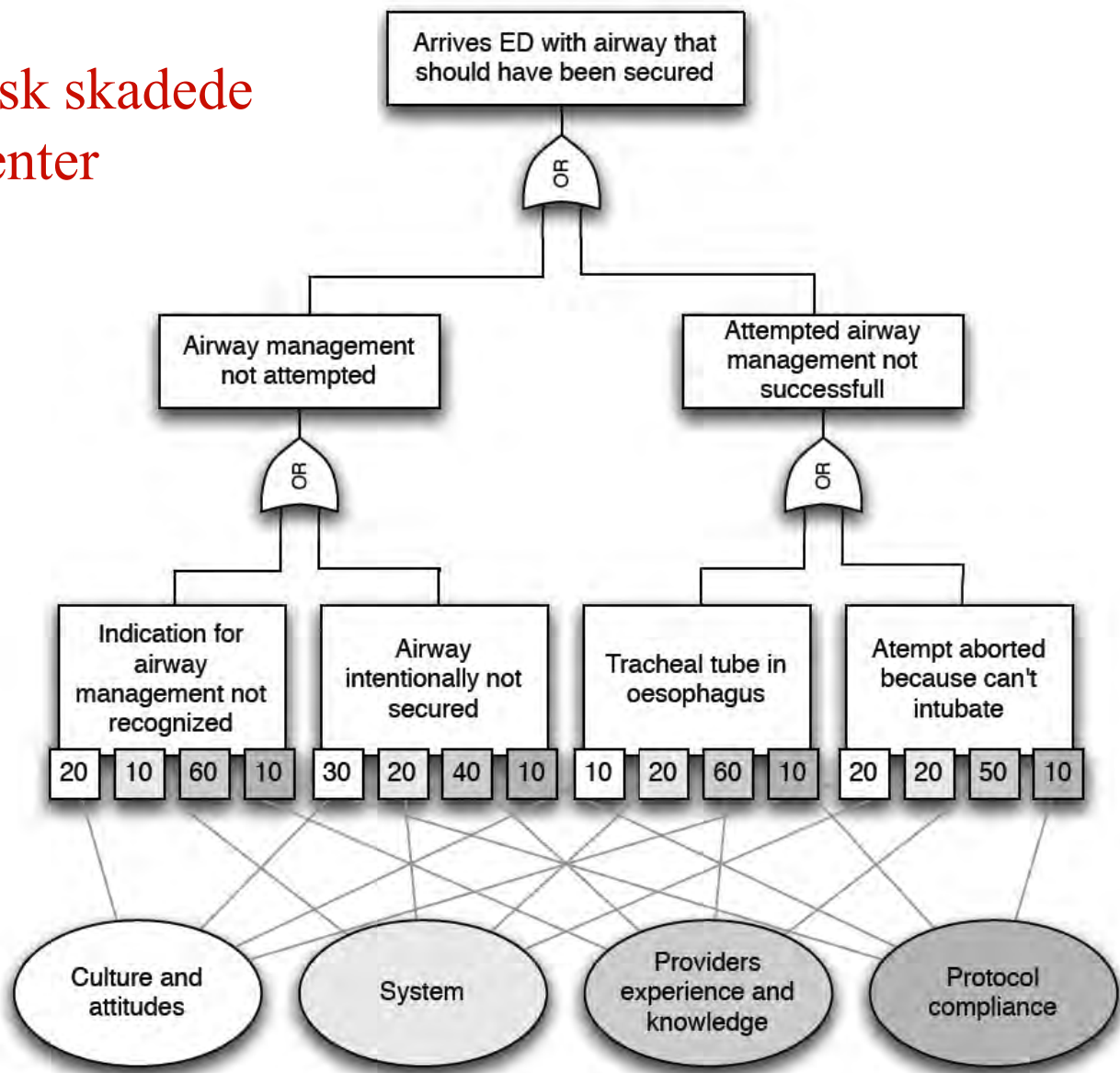
Conclusion: The majority of pre-hospital advanced airway management is performed by anaesthesiologists. The majority of respondents felt that their continuous education in airway management was not sufficient. Additional training was mainly acquired through simulation practice and mannequin- or cadaver-based skills training. Of the respondents, 59% reported having experienced difficult and failed intubations, regardless of their level of experience. Knowledge of airway management-related deaths in their service was higher among full-time than part-time HEMS physicians. Full-time HEMS physicians had experienced the same number of deaths as part-time HEMS physicians, but 29% were not reported to the national database.



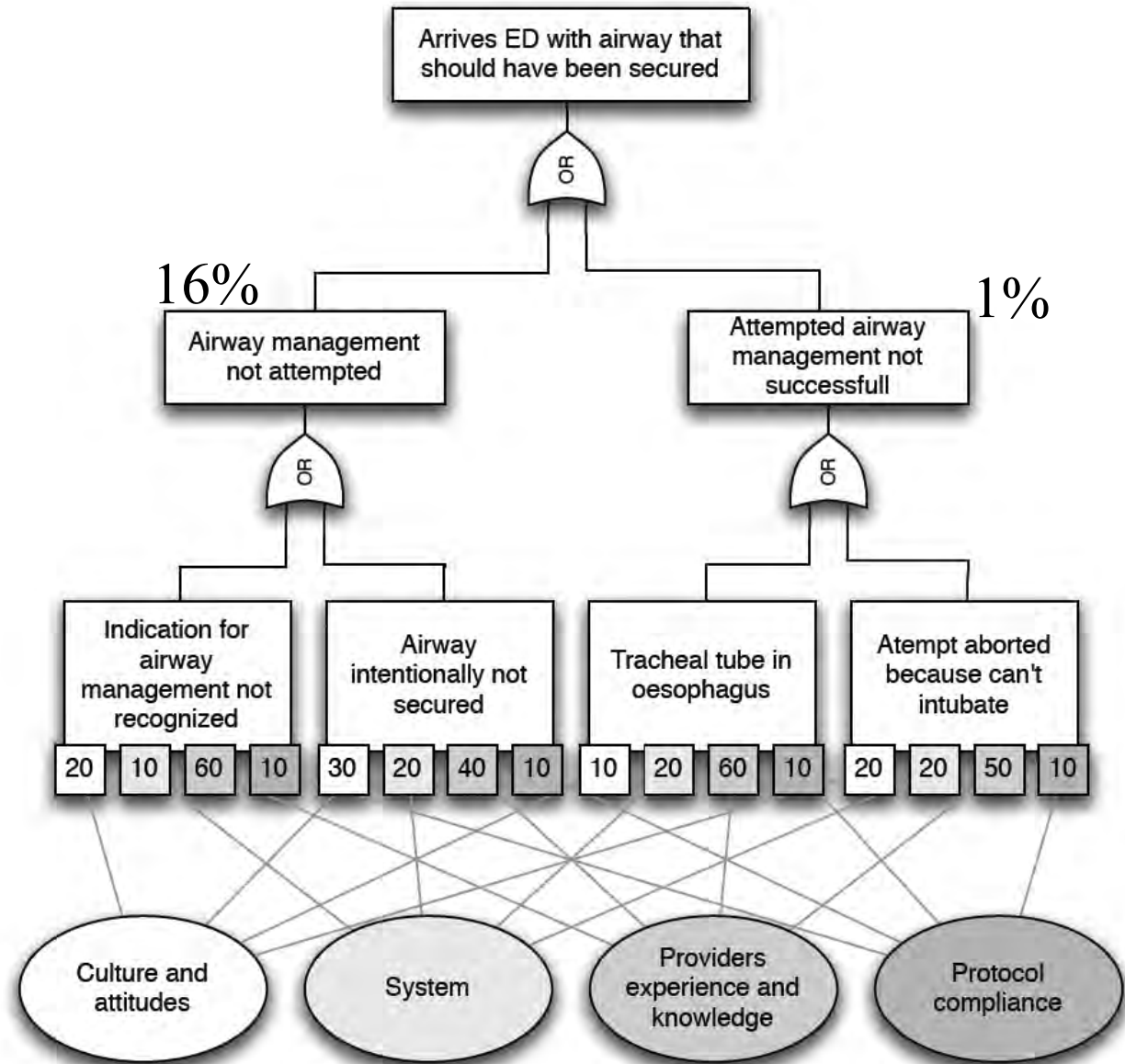
Stephen Sollid

Kritisk skadede pasienter

Fault Tree

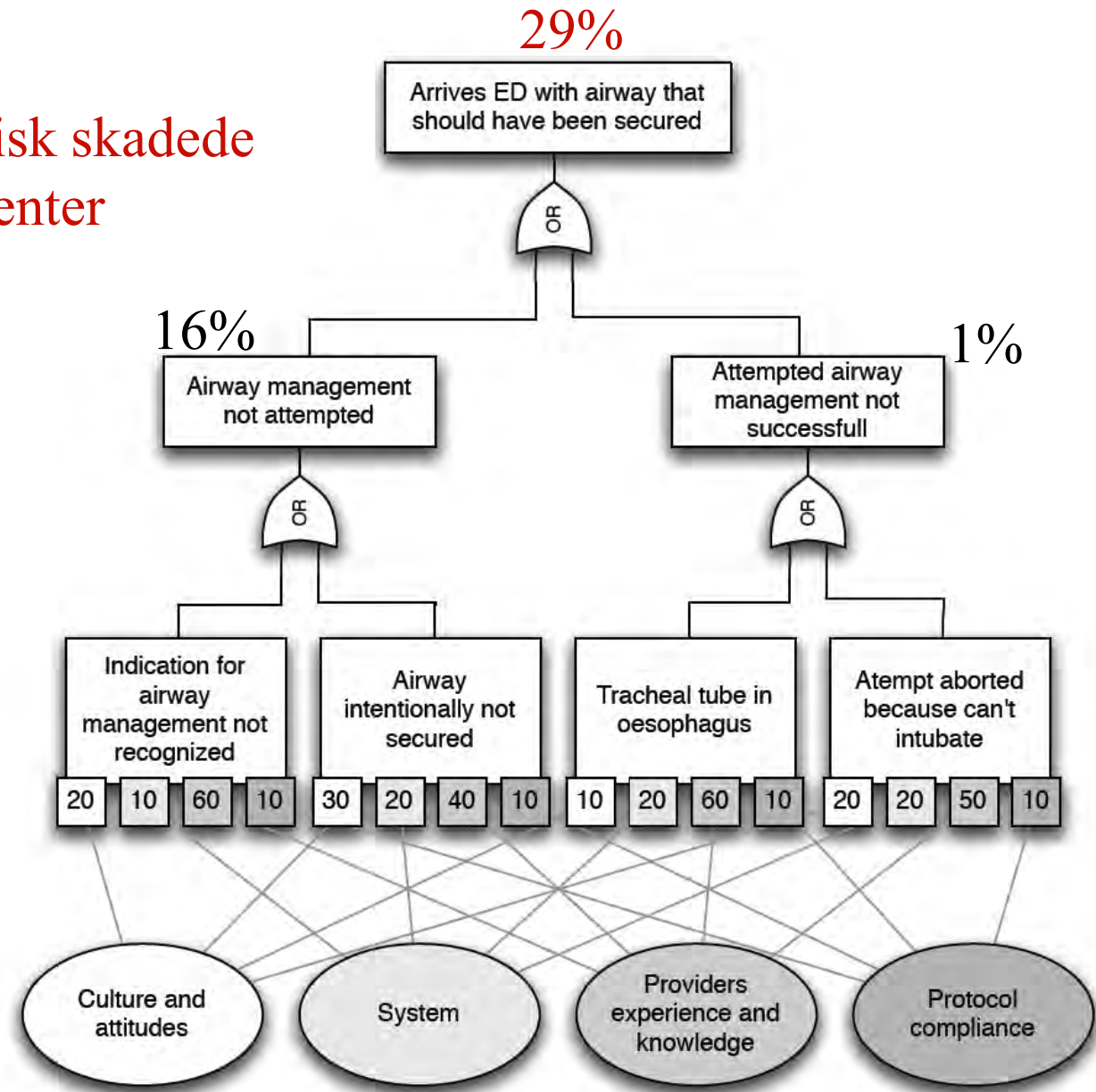


Fault Tree



Kritisk skadede pasienter

Fault Tree



Forbedringspotential?

- JA!
- Simulering som trenings- og læringsverktøy

Luftambulans basert simulering?



Fremtiden?



Konklusjon?

Sesjon B6: Prehospital luftveishåndtering

**Sikring av luftveier prehospitalt -
har vi kontroll på risikofaktorene?**

Professor dr. med. Eldar Søreide,



**Luftambulanselege
og PhD stipendiat
Stephen Sollid**



Konklusjon?

**Sesjon B6: Prehospital
luftveishåndtering**

**Sikring av luftveier prehospitalt -
har vi kontroll på risikofaktorene?**

Professor dr. med. Eldar Søreide,

Ja, men bare delvis



**Luftambulanselege
og PhD stipendiat
Stephen Sollid**

