


Lægelig Videreuddannelse, AUH  
Årsmøde på Sabro Kro 13.09.19  
Lise Brogaard MD, PhD



**Video og high-performance teams**

**mdt**  
Regional Hospital  
Horsholm


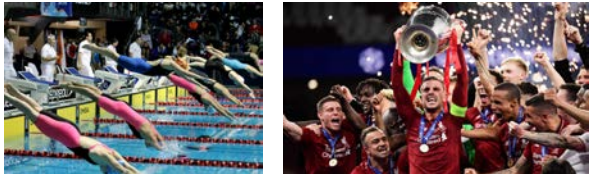
AARHUS  
UNIVERSITY  
FACULTY OF HEALTH,  
AARHUS UNIVERSITY

AARHUS  
UNIVERSITY  
HOSPITAL

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**Video til høj performance i sportens verden**



2

2

**Bedre performance ved analyse af suboptimale forløb**



3

3

**200 år fra single player til team player**



1. Two Hundred years of surgery, Gawande A. NEJM 2015  
2. The incidence and nature of surgical adverse events in Colorado and Utah, Surgery 1999

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### Video til høj performance team (sundhedsprofessionelle)

WJCI 52(2)/2014 465-472 (2014)  
 THE JOURNAL OF TRAUMA  
 Copyright © 2014 by The Williams & Wilkins Co. Vol. 28, No. 4  
 Printed in U.S.A.

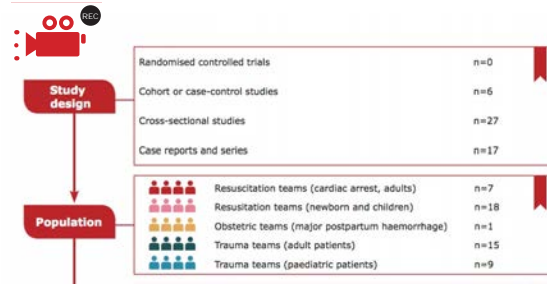
## Video Recording Trauma Resuscitations: An Effective Teaching Technique

DAVID B. HOYT, M.D., STEVEN R. SHACKFORD, M.D.,  
 PEGGY HOLLINGSWORTH FRIDLAND, R.N., ROBERT C. MACKERSIE, M.D.,  
 JOHN F. HANSBROUGH, M.D., THOMAS L. WACHTEL, M.D.\*, AND JOHN B. FORTUNE, M.D.†



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### Real-life video af akutte teams



Study design	n
Randomised controlled trials	0
Cohort or case-control studies	6
Cross-sectional studies	27
Case reports and series	17


Population	n
Resuscitation teams (cardiac arrest, adults)	7
Resuscitation teams (newborn and children)	18
Obstetric teams (major postpartum haemorrhage)	1
Trauma teams (adult patients)	15
Trauma teams (paediatric patients)	9

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### Video og patienterne



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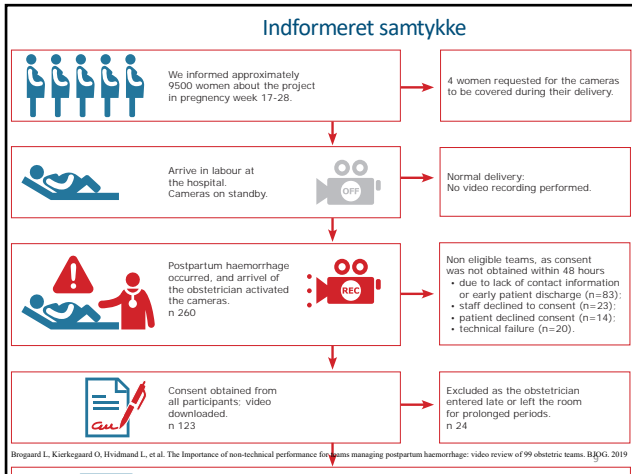
### Lov og etik

1. Dansk straffelov § 264a
2. Ethiske hensyn
3. Data tilsynet
4. Din arbejdsgiver



8

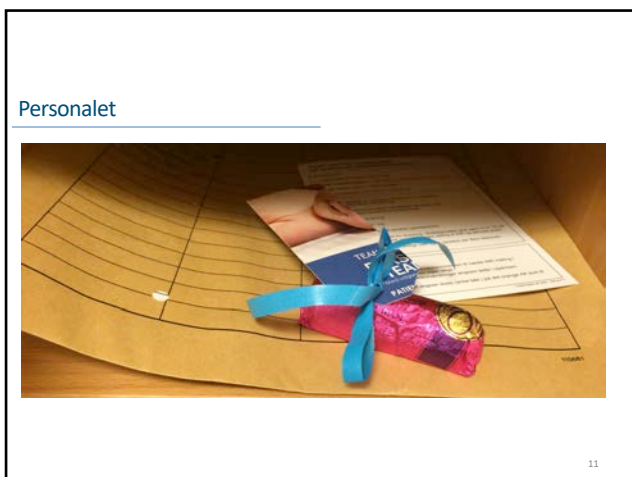
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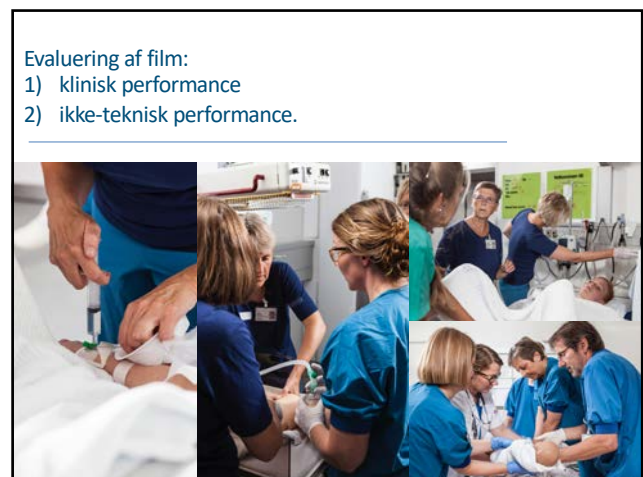
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Udvikling af checklist til klinisk performance

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**AOGS ORIGINAL RESEARCH ARTICLE**

**Development of the TeamOBS-PPH – targeting clinical performance in postpartum hemorrhage**


LISE BROGAARD<sup>1</sup>, LONE HVIDMAN<sup>2</sup>, KIM HINSHAW<sup>3</sup>, OLE KIERKEGAARD<sup>1</sup>, TANJA MANSER<sup>4</sup>, PETER MUSAEUS<sup>5</sup>, JULIE ARAFEH<sup>6</sup>, KAY I. DANIELS<sup>7</sup>, AMY E. JUDY<sup>8</sup> & NIELS ULDBJERG<sup>9</sup>

<sup>1</sup>Department of Obstetrics and Gynecology, Regional Hospital, Horsens, <sup>2</sup>Department of Obstetrics and Gynecology, Aarhus University Hospital, Skejby, Denmark, <sup>3</sup>Department of Obstetrics and Gynecology, Sunderland Royal Hospital, Sunderland, UK, <sup>4</sup>Institute for Patient Safety, Faculty of Medicine, University Hospital Bonn, Bonn, Germany, <sup>5</sup>Center for Health Sciences Education, INCUBA Science Park, Skejby, Denmark, <sup>6</sup>Center for Advanced Pediatric and Perinatal Education, Stanford University, Palo Alto, CA, and <sup>7</sup>Department of Obstetrics and Gynecology, School of Medicine, Stanford University, Palo Alto, CA, USA

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 Delphi panel: →

The expert group consisted of 12 experts from different departments from five countries.



**Iceland**  
1: Reynir T. Geirsson, Professor, MD, PhD, FRCOG, University of Iceland, Reykjavik

**Norway**  
2: Birgitte Sanda, Consultant Obstetrician (CO), Sorlandet Hospital Trust, Kristiansand

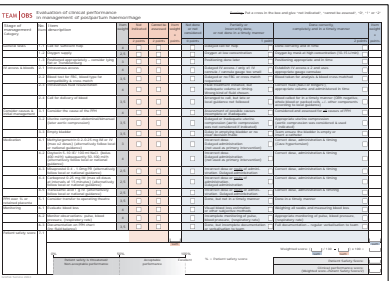
**Sweden**  
3: Torbjørn Moe Eggelboe, Professor, PhD, CO, Sect. s Olav's Hospital, Trondheim  
4: Charlotta Grunewald, Associate Professor, CO, Director of Obstetric unit, Karolinska University Hospital, Stockholm

**Denmark**  
5: Jan Leyon, CO, Head of delivery department, Skaraborg Hospital, Skovde  
6: Nana Wilberg, PhD, CO, University Hospital Lund  
7: Lise Lotte T. Andersen, CO, OUH, Odense

**United Kingdom**  
8: Lone Krebs, CO, DMSc, Associate professor, Holbaek Hospital  
9: Jette Led Sorensen, PhD, MMed, Associate professor, CO, Rigshospitalet, Copenhagen  
10: Kim Hinshaw, FRCOG, CO, Visiting Professor, Sunderland, Royal Hospital, Tyne & Wear  
11: Tim Draycott, FRCOG, CO, North Bristol NHS trust  
12: Philip J. Steer, FRCOG, Emeritus Professor, Imperial College London Chelsea and Westminster Hospital

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Development of checklist



**TEAM OBS**

TeamOBS-PPH app

*Brogard L, Hvidman L, Hinshaw K, et al. Development of the TeamOBS-PPH – targeting clinical performance in postpartum hemorrhage. Acta Obstet Gynecol Scand. 2018;97(6)*

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**TEAM | OBS**

Implemter din checkliste i hverdagen

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### Forskning i Human Factor

Electronic Flight Bag | Vertical situation display | Flight Management Computer | Electronic Checklist | Airport moving map

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### De ikke-tekniske færdigheder

1. Human error in anesthetic mishaps. Gaba D. 1989, International Anesthesiology Clinics  
 2. Preventing anesthesia accidents. Cooper J, Gaba D 1990, Anesthesiology  
 3. Crisis resource management to improve patient safety Rall M, Diekmann P 2005

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### Checklister til evaluering af ikke-tekniske færdigheder

**SYSTEMATIC REVIEW**

**Observer-based tools for non-technical skills assessment in simulated and real clinical environments in healthcare: a systematic review**

Helen Higham,<sup>1</sup> Paul R Greig,<sup>1</sup> John Rutherford,<sup>2</sup> Laura Vincent,<sup>1</sup> Duncan Young,<sup>1</sup> Charles Vincent<sup>3</sup>

1. Uddrag af artiklen i jeres handouts.

BMJ Open 2018; first published as 10.1136/bmjopen-2018-021000

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Forståelse af de elementer der scores.

1. Uddrag af reskabet GAOTP jeres handouts.

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Forståelse af de elementer der scores.

	1	5
3. Teamwork	There is no obvious team leader or leader is autocratic and the leadership approach limits open exchange; team members not engaged in problem identification / problem solving; unclear roles and responsibilities; roles not quickly established; team members do not monitor each others performance or provide feedback on improvement	Leader identified and encourages participation and identifies opportunities for improvement; roles and responsibilities are clear; roles quickly established; trust and respect demonstrated among team members; team members monitor each others performance and provide feedback

1. Uddrag af reskabet GAOTP jeres handouts.

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Video klip – eksempel scorer vi ikke-tekniske færdigheder

1. The Non-technical skills for surgeons System Handbook. Flin et al 2006  
2. Safety at the sharp end. Flin F. 2008

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Forståelse af de elementer der scores.

DOI: 10.1111/1471-0528.15455  
www.bjog.org

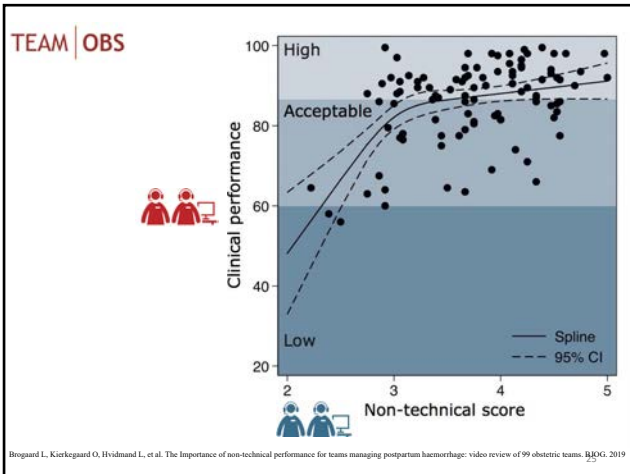
**The importance of non-technical performance for teams managing postpartum haemorrhage: video review of 99 obstetric teams**

L Brogaard,<sup>a</sup> O Kierkegaard,<sup>a</sup> L Hvidman,<sup>b</sup> KR Jensen,<sup>a</sup> P Musaeus,<sup>c</sup> N Uildbjerg,<sup>b</sup> T Manser<sup>d</sup>

<sup>a</sup> Department of Obstetrics and Gynaecology, Regional Hospital in Horsens, Horsens, Denmark <sup>b</sup> Department of Obstetrics and Gynaecology, Aarhus University Hospital, Aarhus, Denmark <sup>c</sup> Centre for Health Sciences Education, INCUBA Science Park, Aarhus, Denmark <sup>d</sup> School of Applied Psychology, University of Applied Sciences and Arts Northwestern Switzerland, Altus, Switzerland

Correspondence: L Brogaard, Department of Obstetrics and Gynaecology, Regional Hospital in Horsens, Sandvej 30, 8700 Horsens, Denmark. Email: brogaard@rhd.eu

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**TEAM | OBS**

Ikke tekniske færdigheder og klinisk performance

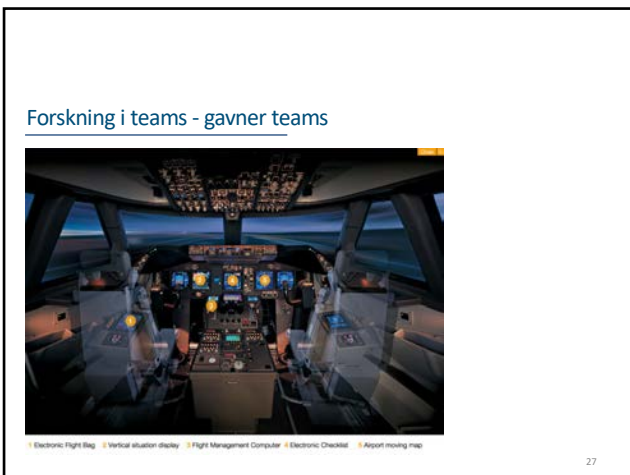
**Table 2. Risk/chance of clinical performance and blood loss according to the level of non-technical performance**

Non-technical score	Clinical performance: Risk of low score*	Clinical performance: Chance of high score**	Risk of delayed transfer to the operating theater***
2 (poor)	80.0 % (21.0-99.5 %)	0.3 % (0.01-15.2 %)	31.7% (10.1-58.5 %)
3 (average)	3.8 % (1.3-7.5 %)	46.5 % (32.6-60.3 %)	17.9% (8.7-28.8 %)
4 (good)	0.8 % (0.1-1.8 %)	70.7 % (63.1-78.7 %)	8.6% (4.5-13.0 %)
5 (excellent)	0.2 % (0.01-1.2 %)	83.7 % (68.5-94.1 %)	3.5% (0.8-9.1 %)

These figures are based on 99 recordings from real-life teams managing major postpartum hemorrhage, risk (95%CI)  
 \* TeamOBS-PPH score below minimal pass (score <60)  
 \*\* TeamOBS-PPH score above high performance (score >85)  
 \*\*\* Defined as blood loss >1500 mL in the delivery room

Brogard L, Kierkegaard O, Hvidmand L, et al. The Importance of non-technical performance for teams managing postpartum haemorrhage: video review of 99 obstetric teams. *BJOG*. 2019

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Støj og teams

**PLOS ONE**

RESEARCH ARTICLE

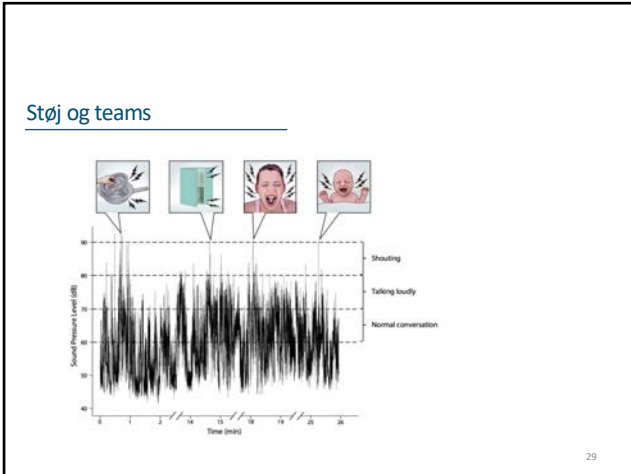
Noise as a risk factor in the delivery room: A clinical study

Kristiane Roed Jensen<sup>1\*</sup>, Lone Hvidman<sup>2</sup>, Ole Kierkegaard<sup>1</sup>, Henrik Gliese<sup>3</sup>, Tanja Manser<sup>4</sup>, Niels Ulbjerg<sup>3</sup>, Lise Brogaard<sup>1</sup>

1 Department of Obstetrics and Gynecology, MEH-Horsens Regional Hospital, Horsens, Denmark, 2 Department of Obstetrics and Gynecology, Aarhus University Hospital, Aarhus, Denmark, 3 ArbejdsmiljøEksperter A/S, Occupational and environmental consultants, Esbjerg, Denmark, 4 School of Applied Psychology FHNW, University of Applied Sciences and Arts Northwestern Switzerland, Olten, Switzerland

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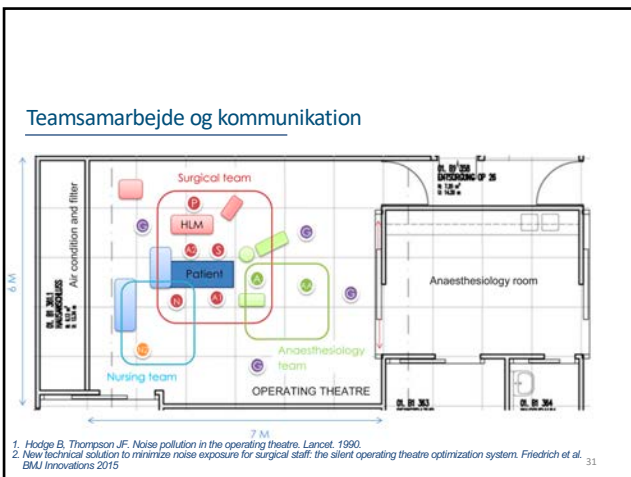


### Støj og teams

Exposed to noise >90dB	High clinical performance*		
	n	Risk %	(95%CI)
No	23	91.3	(72.0 - 98.9)
Yes	73	58.9**	(46.8 - 70.3)

\*TeamOBS-PPH score  $\geq 85\%$   
 \*\* p value <0.001

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## Debriefing efter teamtræning

Grund model:

1. **Sæt rammen:** Eks.. Vi har nu 40 min til.
2. **Reaktionsfase:** Følelser og Facts.
3. **Forstå:** Gå i dybden med emner der bliver nævnt i reaktionsfasen (spørgeteknik forskellig)
4. **Resume:** take-home massage.



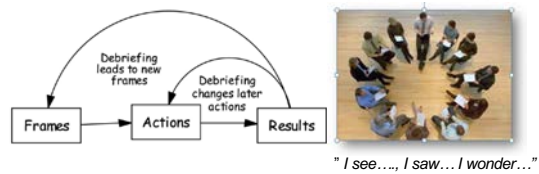
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## Debriefing efter teamtræning

CONCEPTS AND COMMENTARY

There's No Such Thing as "Nonjudgmental" Debriefing: A Theory and Method for Debriefing with Good Judgment

*Jenny W. Raulolph, PhD, Robert Simon, EdD, Ronald L. Dufresne, MS, and Daniel B. Raemer, PhD*



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## Debriefing efter teamtræning

- "Hvad skete der?"
- "Hvilke handlinger førte til det?"
- "Hvordan påvirkede det patienten?"
- "Hvad kan vi gøre for at det sker igen/ undgå det sker igen?"



- Ingen følelser
- Kun fakta
- Professionel debriefing

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