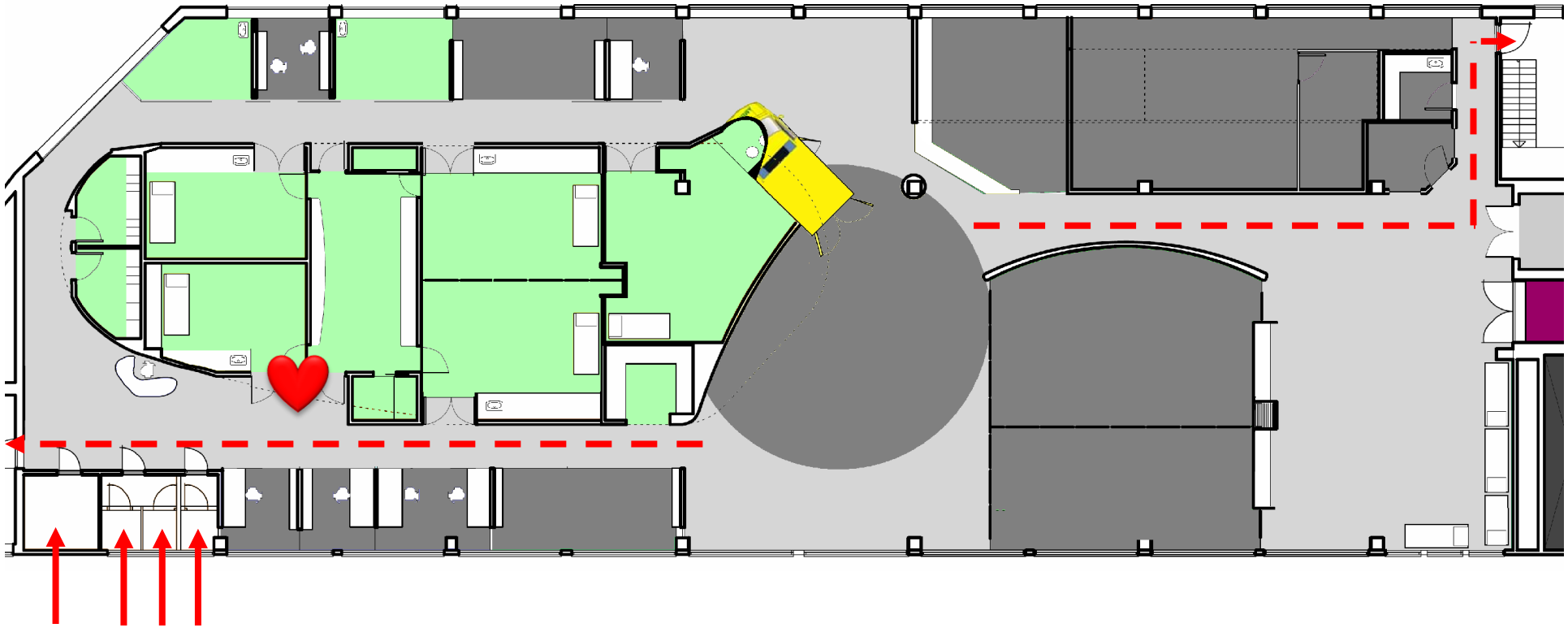
SAFER
Stavanger Acute Medicine Foundation
for Education and Research



NØDUTGANG

Velkommen til
SAFER
Julesymposium
17.Desember 2019

JULESYMPOSIUM 2019

TIRSDAG 17. DESEMBER, KL 9-14

Act locally and think globally

09.00	**Velkommen**	Elsa Søyland
09.20	**Act locally and think regionally – RegSim i Vest: pågående leveranser og tanker videre**	Sigrun Anna Qvindesland
09.35	**Fra Eu-prosjekt til integrert Talk debrief i klinikk**	Gunhild Bjørnå, Raymond Madsen
09.45	**Succeeding with rapid response systems a never-ending process**	Siri Lerstøl Olsen
09.55	**Struktur og forankring av simulering i Helse Stavanger**	Jorunn FLyngset
10.05	**Just in time trening for å ivareta barn på intensiv**	Hilde Konradsen
10.15	**Tillit; Når det brenner på dass. Trust in the Heat of the Moment**	Christian Søreide
10.30	**BEINSTREKK OG MINGLING**	
10.55	**Hvilke muligheter gir SIMeLEARN for et helsevitenskapelig fakultet i sterk vekst?**	Thor Ole Gulsrud
11.10	**Peer-to-Peer Learning. Helping solve educational challenges?**	Brynjar Foss
11.20	**Why don`t train the really hard stuff?**	Patrik Nyström
11.35	**Integrating simulation into curriculum in India and Nepal, why and how?**	Rashmi Aradhya, Asmita Acharya
11.55	**Going glocal, how can SAFER develop simulation in India and vice versa?**	Unni Silkoset
12.05	**Forskerblikk på «act locally and think globally"**	Hege Ersdal
12.15	**Offshore vind- et nytt «SAFER-bein?»**	Kjetil Torgeirsen
12.25	**HelseCampus Stavanger – synergier og samarbeid på tvers**	Ragne Farmen
12.35	**Norwegian Smart Care Cluster - hva innebærer Status som Arena Pro-klynge?**	Arild Kristensen
13.00-	**MINGLING RUNDT JULEGRØTEN**	

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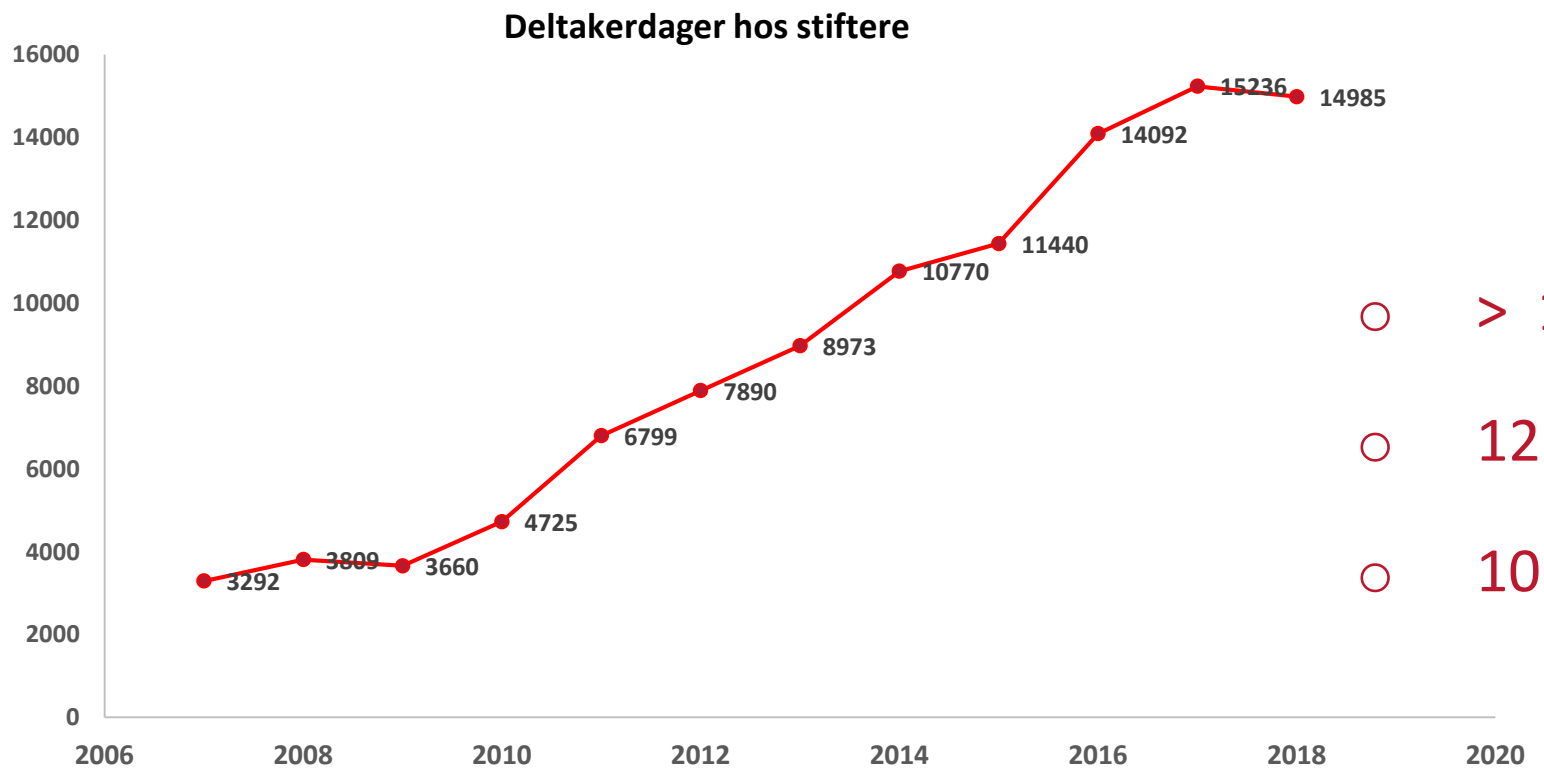
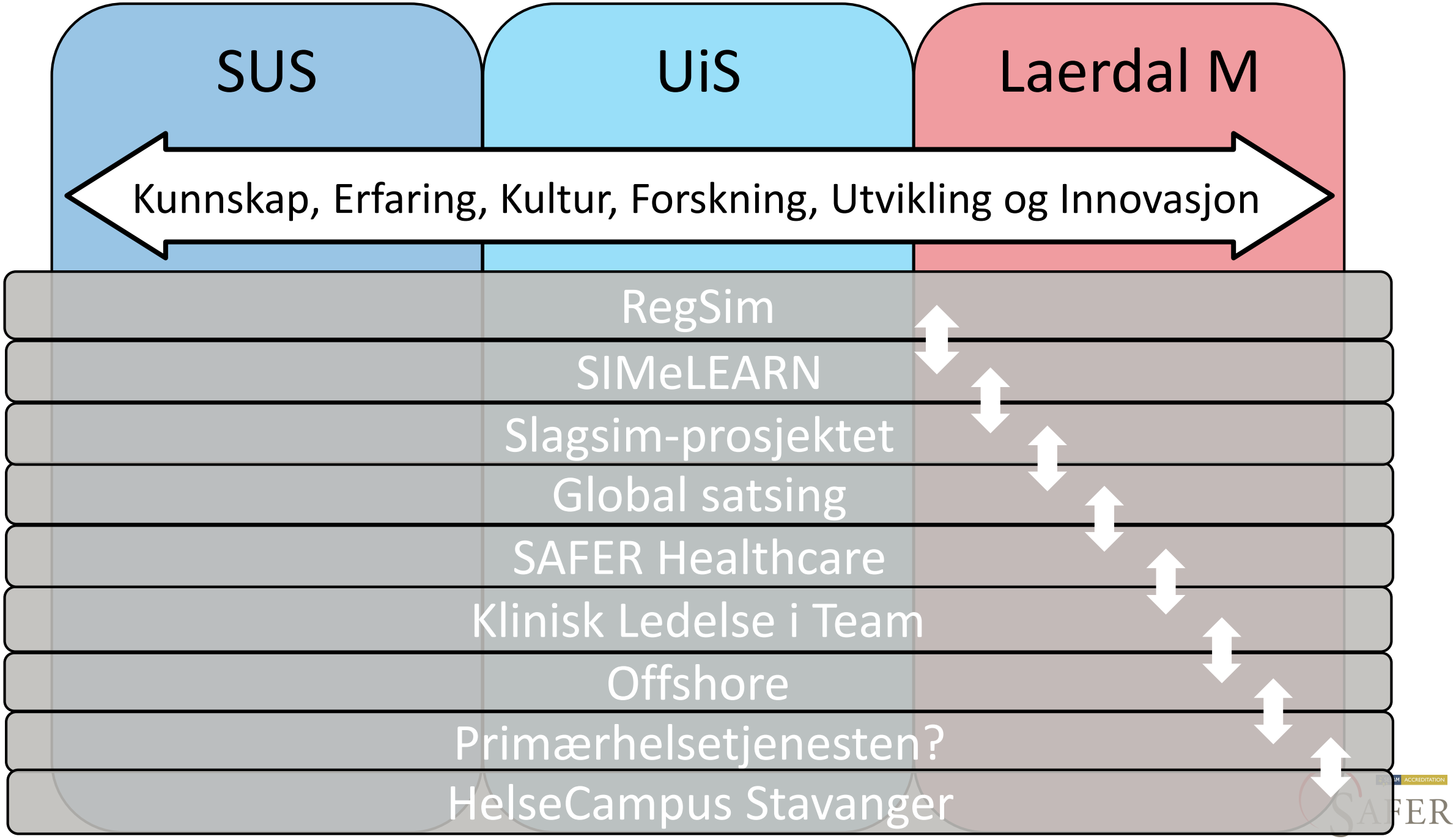
5-dobling av undervisningsaktiviteten



- > 100 publikasjoner,
- 12 Bjørn Lind forsningsstipender
- 10 PhD studier


SUS
UiS
Laerdal M
Kunnskap, Erfaring, Kultur, Forskning, Utvikling og Innovasjon
RegSim
SIMeLEARN
Slagsim-prosjektet
Global satsing
SAFER Healthcare
Klinisk Ledelse i Team
Offshore
Primærhelsetjenesten?
HelseCampus Stavanger

SAFER Utvikling-
fra «nice to have to need to have!»

2006

Akuttmedisin

Simulering som metode

Pedagogikk

- hele læringssirkelen
- Implementering
- Livslang læring

Kvalitetsforbedring

- Return of Investment
- Økt in-situ simulering
- Favner alle fag og disipliner

2020-2030

SESAM ACCREDITATION

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Samme behov lokalt og globalt

Utrulling av fasilitatorkurs, kvalitetssikre kompetanse, bygge strukturer, infrastruktur og forankring i institusjonene

Formel for vellykket simuleringsimplementering

Kunnskap:

Forskning på simulering, ferdighetstrening & læring

×

Effektiv Utdanning av:

Instruktører (ferdighetstrening),

Fasilitatorer (scenario simulering),

Ledere (forbedring/ kvalitet / evaluering i praksis)

×

Lokal implementering:

Organisasjon som vil og kan anvende simulering

Kultur for forbedring

Bærekraft

Lærende organisasjon

=

Forbedret praksis

Økt trygghet av studenter/ansatte

Økt kompetanse

Pasientsikkerhet

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HELSE STAVANGER
Stavanger universitetssjukehus

RegSim

Act locally and think regionally; pågående leveranser og tanker videre

Ellen Kathrine Bø, Sek.Led.Kompt/Utdanning, Helse Førde

Elisabeth Haga Jacobsen, Beredskapssjef, RegSim Stavanger

Solveig Gjertsen, RegSim Stavaner

Asgaut Viste, RegSim koordinator Helse Bergen

Pål Morten Mellemstrand-Paulsen, RegUT Stavanger/RegSim

Eirik Klykken Johnsen, RegSim Haraldsplass DS

Christian Søreide, RegSim Stavanger

Line Anita Hjorthaug, Rådgiver Komp/Utdan. Helse Førde

Jorunn Flaten Lyngset, Simuleringskoordinator Helse Stavanger

Sigrun Qvindesland, leder RegSim

Hilde Klippen Hetland, RegSim Stavanger

(Ikke på bilde - Rolf Brattli, RegSim Fonna)

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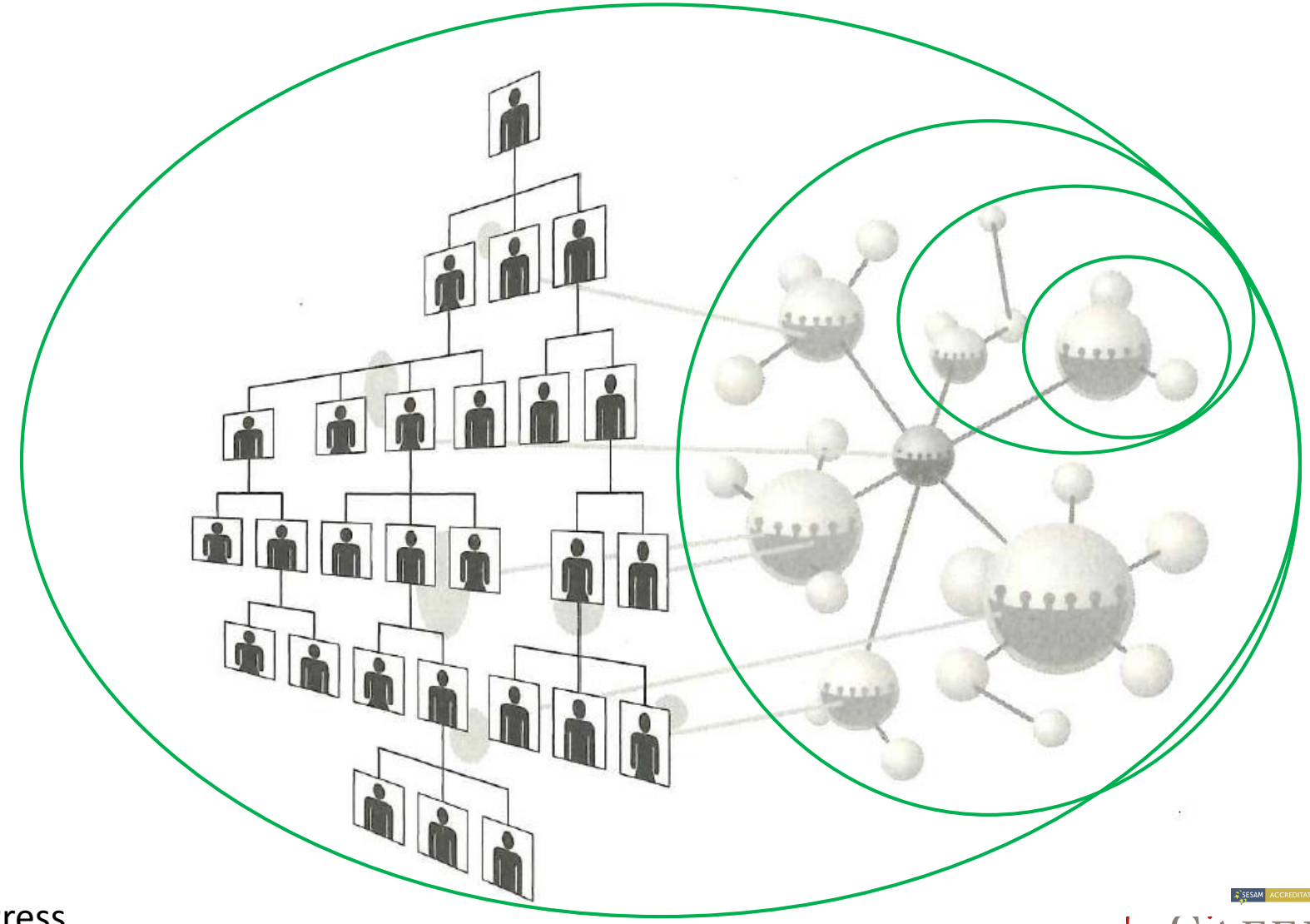
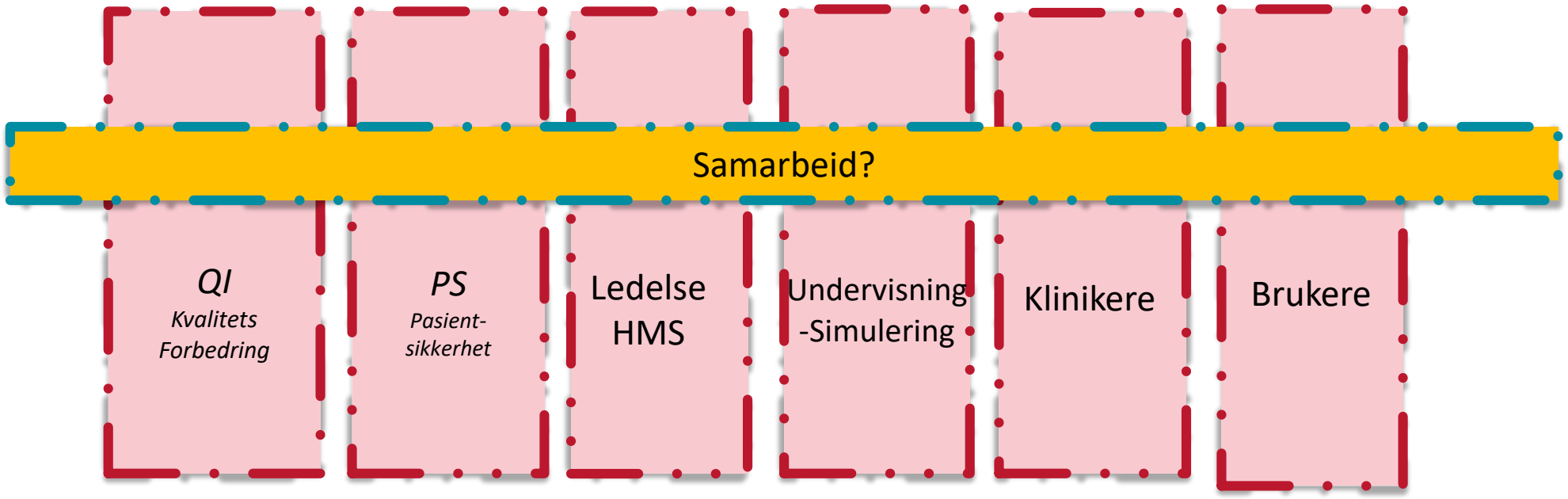
Fra grasrot til forankring



JP Kotter: (2014) Accelerate. Harvard Press

2. Samarbeid i struktur i hvert foretak



Samarbeid mellom siloene → verdi til pasienter, ansatte, organisasjonene, samfunnet

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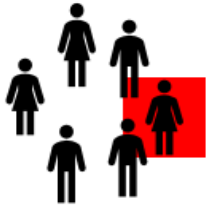
2. Strukturerte enheter for simulering/ferdighetstrening –

1. **Hvert foretak bør ha en simuleringskoordinator**
   - Høre til en hensiktsmessig avdeling/enhet

2. **Opprette infrastruktur for simulering**
   - Strategi, Handlingsplan, Simråd, Eierskap



3. **Sikre kompetanse om simulering**
   - I foretaket: ledere, undervisningsansvarlige, og ansatte
   - Kompetanseplan og nettverk for fasilitatorer

4. **Sikre at simulering gir verdi til organisasjonen**

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2. Milepæl for etablering av struktur / infrastruktur for simulering i Helse Vest

Foretak → **Milepæl ↓**	**Helse Førde**	**Helse Bergen**	**Haraldsplass**	**Helse Fonna**	**Helse Stavanger**
1. RegSim koord. tilhører egnet avdeling	Ja – Kompetanse og Utdanning	Ja - FOU seksjon for Læring og Utdanning	Ja	Ja - (1.1.20 – Eining for Fag og Foretaks- utvikling – Kval. & PS	Ja - Under-Visningsavd.
*2. **Sim-komite/råd***	Ja	(Har fra før – må revitaliseres)	Ja	Nei	Ja Første møte 11.12.2019
*3. **Fasilitator nettverk** opprettet*	Ja	Ja	Ja	Nei. Har oversikt	Ja Identifisering av Superfasilitatorer pågår
*4. **Handlings-plan***	I saksbehandling	Plan for Ferdighets-senteret fra før; Ikke for Simulering i foretaket	Ja & godkjent	Nei	Ja In situ plan gjenstår

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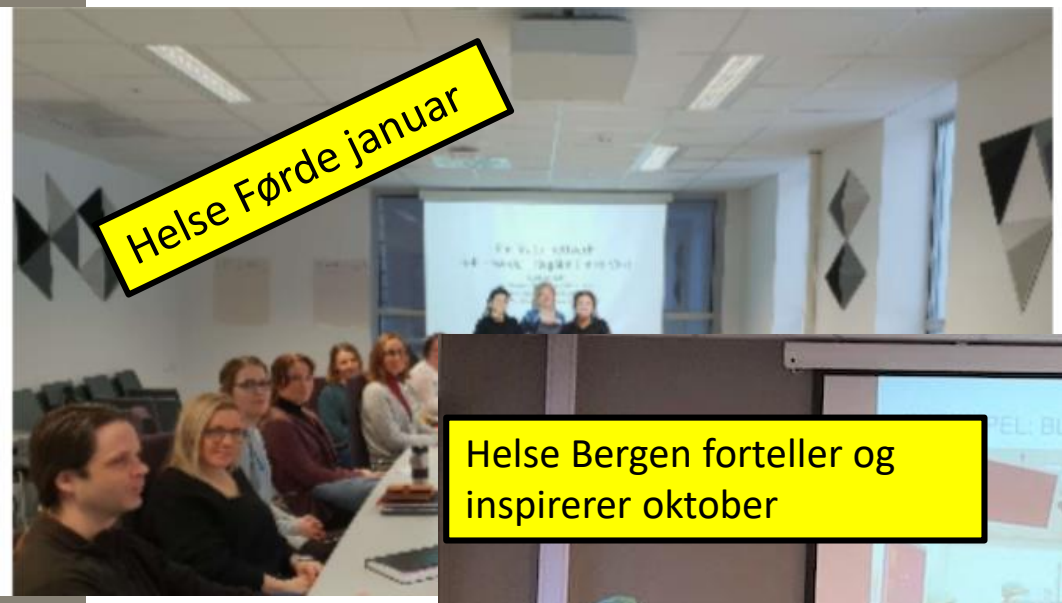
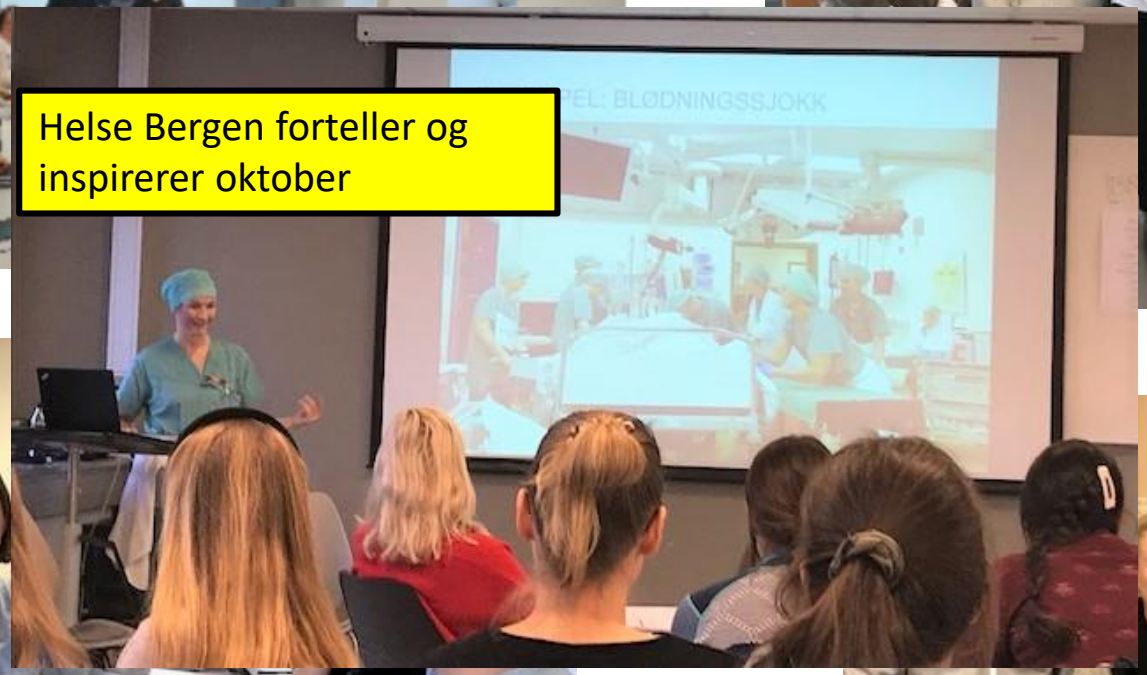


Helse Førde januar

Helse SørØst 6. november



Helse Bergen forteller og inspirerer oktober

RegSim In situ seminar november i Stavanger

Helse Fonna TTT november

Pågående leveranser RegSim Helse Vest

- TTT Fasilitatorkurs, utvikle lokale instruktører!
- Workshop for ledere
- Kontaktmøter v/behov
- Fasilitatoroppfølgingsdager
- Kompetanseplaner
- TTSkills kurs
- Evalueringsverktøy for in situ sim…
- Registreringsarbeid for sim og trening
- RegSim Seminar hver høst? Bergen 2020?
- TTPatient kurs
- Course Director Course 2020
- Advanced TTT kurs 2020
- Identifisere og samle faggrupper i sim (slag, KSV, Stans, mm)
  - Enes om framgang/standard – samarbeide til evaluering?
- Teamarbeid – modul?
- E-læring for briefing

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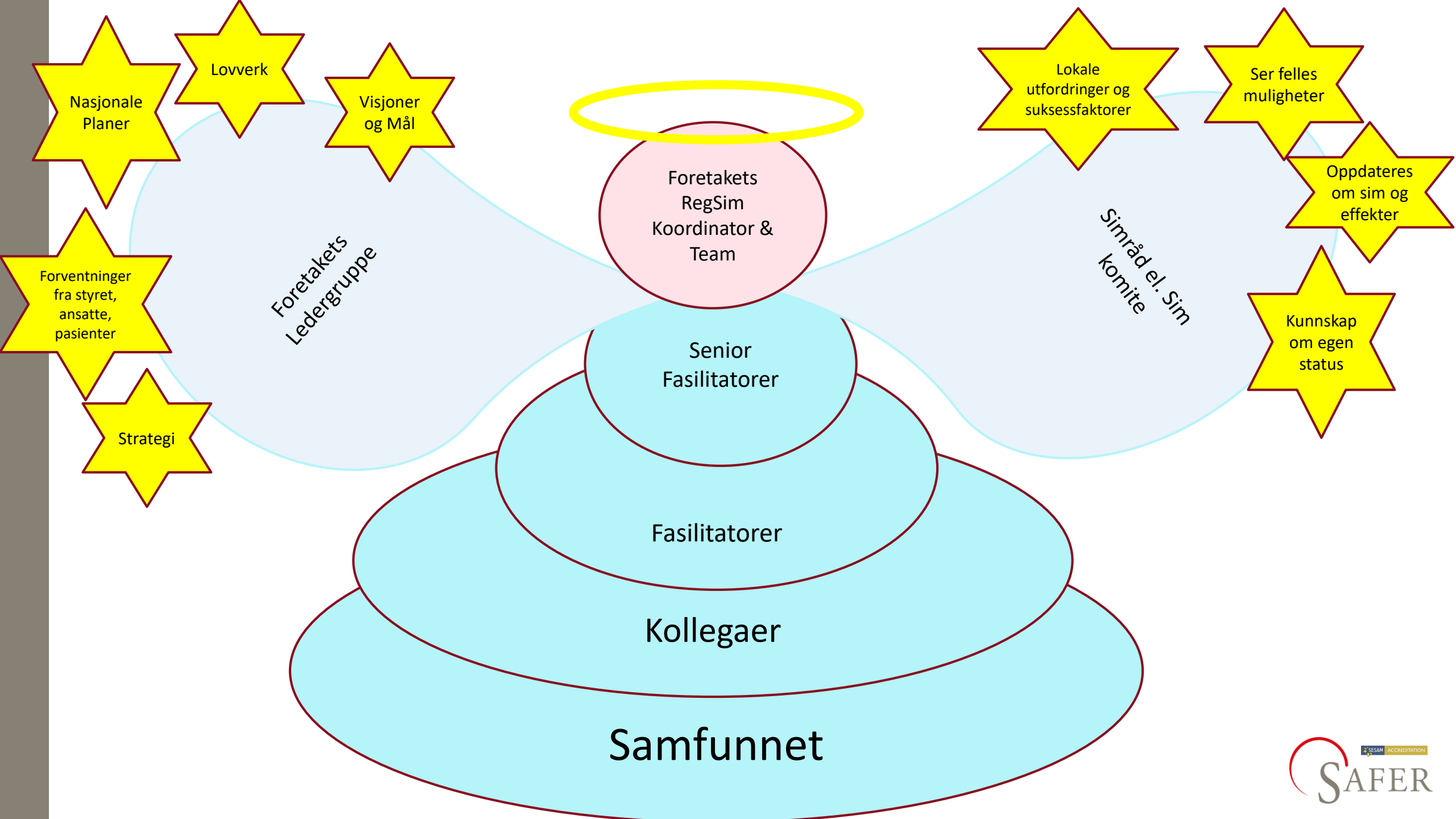
Nasjonale Planer
Lovverk
Visjoner og Mål
Forventninger fra styret, ansatte, pasienter
Strategi
Foretakets Ledergruppe
Foretakets RegSim Koordinator & Team
Senior Fasilitatorer
Fasilitatorer
Kollegaer
Samfunnet
Lokale utfordringer og suksessfaktorer
Ser felles muligheter
Oppdateres om sim og effekter
Kunnskap om egen status
Simråd el. Sim komite

En oppsummering av

DET KONGELIGE HELSE- OG OMSORGSDEPARTEMENT

Meld. St. 7
(2019–2020)
Melding til Stortinget

Nasjonal helse- og sykehusplan
2020–2023

Med simuleringsbriller;

1: Om å skape pasientenes helsetjeneste

1.2 Hvordan skal vi få det til?

Helseforetakene skal ta imot flere lærlinger i helsefag. Simuleringstrening skal tas mer i bruk.

5: Psykisk helsevern

5.5.3 Raskere innføring av nye arbeidsformer og metoder

Bruke simulering: I noen sammenhenger er trening ved hjelp av simulering et godt virkemiddel for å gi pasienten god behandling; både individuell ferdighetstrening og trening på samhandling i akutte og komplekse situasjoner. For å utnytte kapasitet og kunnskap, skal det opprettes et nasjonalt nettverk for deling av metoder for utvikling av simuleringsopplegg, jf. avsnitt 9.10.

Boks 5.11 BUP-prosjektet

Bruker simulering, ferdighetstrening og digitale verktøy for å styrke kompetanse og læringsprosesser.

6: Akuttmedisinske tjenester

Boks 6.2 Raskest i verden på hjerneslag

Stavanger universitetssjukehus har gjennom systematisk simuleringstrening redusert mediantiden fra pasienter kommer inn på sykehus til de får trombolyse fra 27 til 13 minutter. Ingen andre sykehus i verden har rapportert kortere mediantid.

9: Kompetanse

Boks 9.1 Hvor vil vi?

Simulering brukes aktivt i undervisning, når teamene trener på samarbeid, og for innøving av ferdigheter og prosedyrer. Helseforetakene samarbeider om å utvikle og dele simuleringsverktøy.

9.3.2 Kompetanseplanlegging

Det kan også gjøres i etterutdanning som for eksempel i interne kurs og organisert trening i team ved bruk av simulering.

REG SIM

9.3.4 Kompetanse i team

Teamarbeid må til for å gi helhetlige helse- og omsorgstjenester til pasientene. Solid kompetanse i egne fag er en forutsetning for godt teamarbeid. Kompetanse i å arbeide tverrfaglig kommer ikke av seg selv – det må læres. Innlæringen starter i grunnutdanningen og fortsetter i arbeid ved daglig samhandling, simulering og intern opplæring.

Boks 9.9 Simulering ved Sykehuset Innlandet HF

Sykehuset Innlandet etablerte i 2014 et senter for simulering og innovasjon ved det psykiatriske sykehuset Sanderud utenfor Hamar – SIMInnlandet. SIMInnlandet er en utviklingsarena i helseforetakets satsing på innovasjon og kompetanseutvikling. Flere fagmiljøer trener ved bruk av medisinsk og VR-basert (virtual reality) simulering: – simuleringstrening for spesialister og miljøterapeuter i akutte og komplekse scenarier – virtuell ferdighetstrening innenfor relasjonskompetanse og i forberedelse til ECTbehandling – terapeutisk konflikthåndtering, selvmordsforebyggende arbeid og traumeforståelse

9.10 Deling av kunnskap om simulering

Simulering er strukturerte opplegg for trening ved bruk av teori og praksis uten pasient og er en god læringsform for innøving av ferdigheter og generell kompetanse. Helseforetakene skal øke bruken av simulering for kompetanseheving og øke samarbeidet med andre helseforetak om utvikling og deling av opplegg for simulering. Simulering som læringsform har dokumentert effekt og kan brukes i mange sammenhenger, for eksempel ved innøving av kliniske prosedyrer og ferdigheter, trening på behandlingsforløp, til kommunikasjonstrening og teamarbeid for å nevne noe. Simulering gir effektiv kompetanseutvikling, forbedret behandlingskvalitet og ivaretar pasientsikkerheten fordi man skal ha oppnådd et gitt nivå av ferdigheter før man får gjøre det samme på en levende pasient. Utarbeiding av gode simuleringsopplegg krever høy faglig kompetanse i pedagogikk. God metodisk tilnærming er grunnleggende for å utvikle simuleringsopplegg av høy kvalitet som kan deles. For å utnytte ressursene riktig, er det viktig å koordinere arbeidet med grunnlaget for gode simuleringsopplegg. De regionale helseforetakene skal etablere et nasjonalt samarbeid om utvikling og bruk av simulering som metode. Helse Vest skal lede dette arbeidet.

Boks 9.10 Regjeringen vil

be Helse Vest RHF opprette et nasjonalt nettverk for deling av metoder for utvikling av simuleringsopplegg og deling av disse mellom helseforetakene.

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Fra Mads til Sigrund Anna

40 år med ferdighetstrening og Simulering

Tromsø 1981-1984

Haugesund Sjukehus 1984-

1986 og 1994

2004

Opplæring ved bruk av pasient simulator.

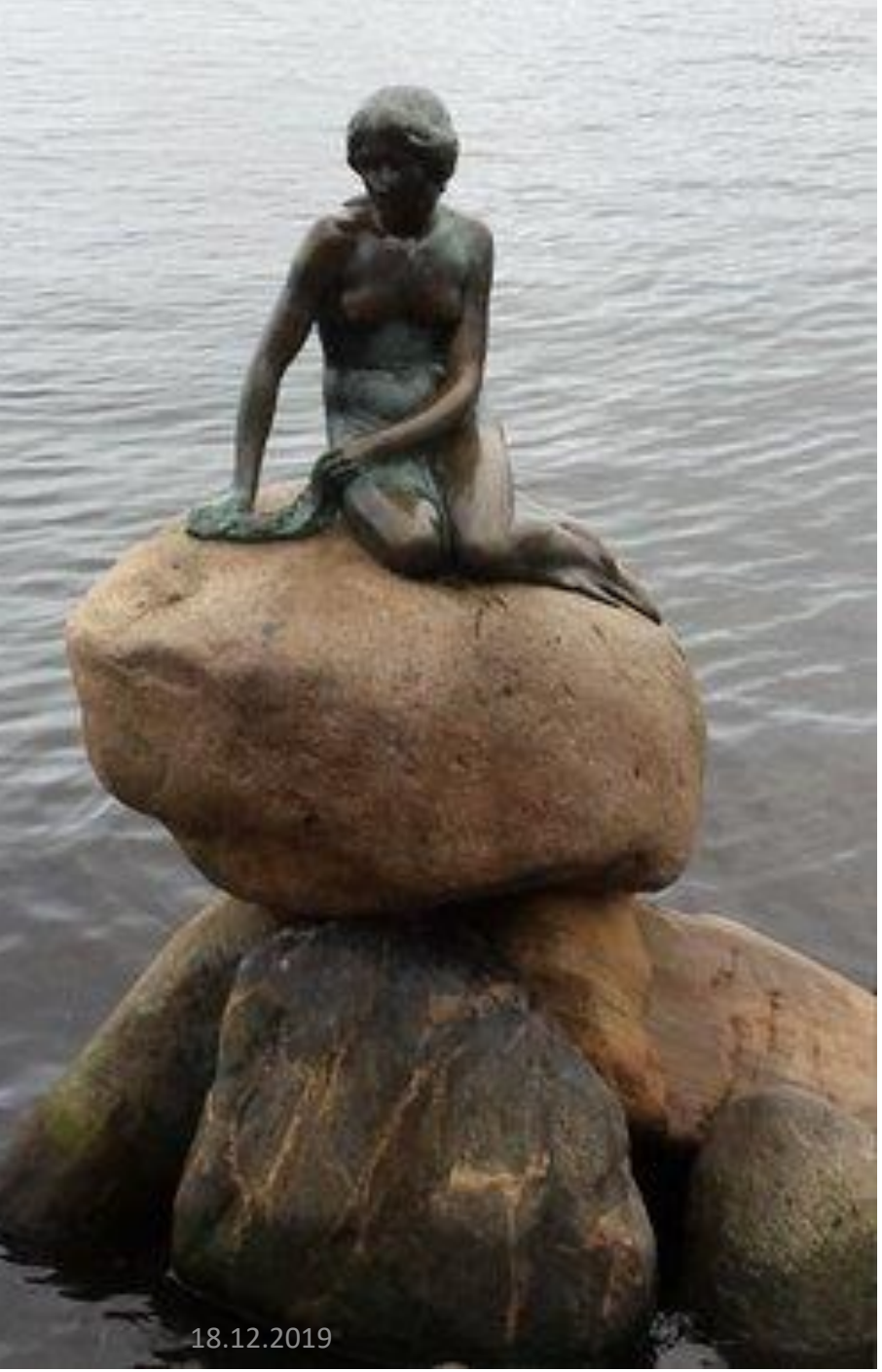
Er dette noe vi trenger i Helse Fonna?

Har vi råd til det?

Dagens pasienter vil i stadig større grad ikke akseptere å bli trent på , men de forventer derimot at helsepersonell skal være kompetent i alle situasjoner. På våre sykehus vil vi for en del situasjoner ikke få den nødvendige kliniske trening p.g.a. størrelsen. I flyindustrien vil man ikke akseptere at en flyver flyr uten å ha brukt lang tid på trening i simulator. Det er dit vi må komme i helsevesenet. I de seneste år har det vært en rivende utvikling på pasient simulator siden, og det er i dag tilgjengelig såkalt medium fidelity simulatorer til en svært overkommelig pris.
Den store fordelen med simulert basert trening er at pasienten ikke skades eller utsettes for noen risiko. Simulasjonen tillater "eleven" til å fokusere på både enkelt oppgaver og helhet. Feil er tillatt, og det er mulig å repetere. Dette er ikke mulig i klinisk praksis. Man kan trene på enkelt ferdigheter og på samspillet i gruppen, som ved trening av traumeteam. Det vil også være mulig å trene på sjeldne kritiske tilstander.
På bakgrunn av dette vil jeg si at dette er noe vi klart trenger i Helse Fonna. Flere norske sykehus er allerede i gang med dette.
Det snakkes mye om at framtidens pasienter vil gjøre sitt sykehusvalg etter å ha kikket oss litt i kortene via våre hjemmesider. For at vi skal være troverdige og attraktive må vi derfor ha et gode kvalitetssikring systemer, og trening ved bruk av pasient simulatorer er så absolutt noe slikt.
Når det gjelder økonomi biten, vil jeg bare si at vi har ikke råd å la være.
En av de ledende på dette markedet er Laerdal Medical i Stavanger , de har den såkallte Sim Man som vil være praktisk for oss både mht. pris og funksjonalitet. Det kan nevnes at Norsk Luftambulanse har installert en slik i sin opplæringsambualanse, den såkalte KIA ambulansen.
Prisen er kr. 263.540 eks. moms. Bruksområde vil da kunne være på samtlige rom på et sykehus.
Vi har allerede delfinansiert denne da Haugaland Hjertelag ved Martha Tønnenes har bevilget kr. 100.000 til kjøp av en slik simulator. Med andre ord det er det ikke mye penger vi trenger å finne til dette prosjektet.
Vil vi kunne få inntekter ved å ha en slik simulator?
Svaret fra undertegnede er ubetinget JA. I dag har vi en del sykepleiere som arbeider offshore som betaler for å hospitere en uke hos oss. Har vi en simulator vil vi kunne tilby en mye bedre hospitering for dem, og være attraktive for ikke bare de som bor rundt oss. Vi vil da kunne prise en ukes hospitering til kr. 10.000, og ved bare 5 slike hospitanter drar vi inn
 kr. 50 000/år. Så det er definitivt et potensiale for inntjening her.
Dette er ikke noe man kjøper via en katalog, derfor kommer det 2 representanter fra Laerdal Medical hit den 15/9 for å demonstrere nettopp Sim Man.
Jeg trenger derfor en påmelding via mail innen 10/9.

Mvh
Rolf H Brattli
Akuttklinikken

2004



Verdien av simulering

Helge Lorentzen. pedagogisk leder, SAFER

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Stavanger Acute medicine Foundation for Education and Research

1

2017 REGSIM

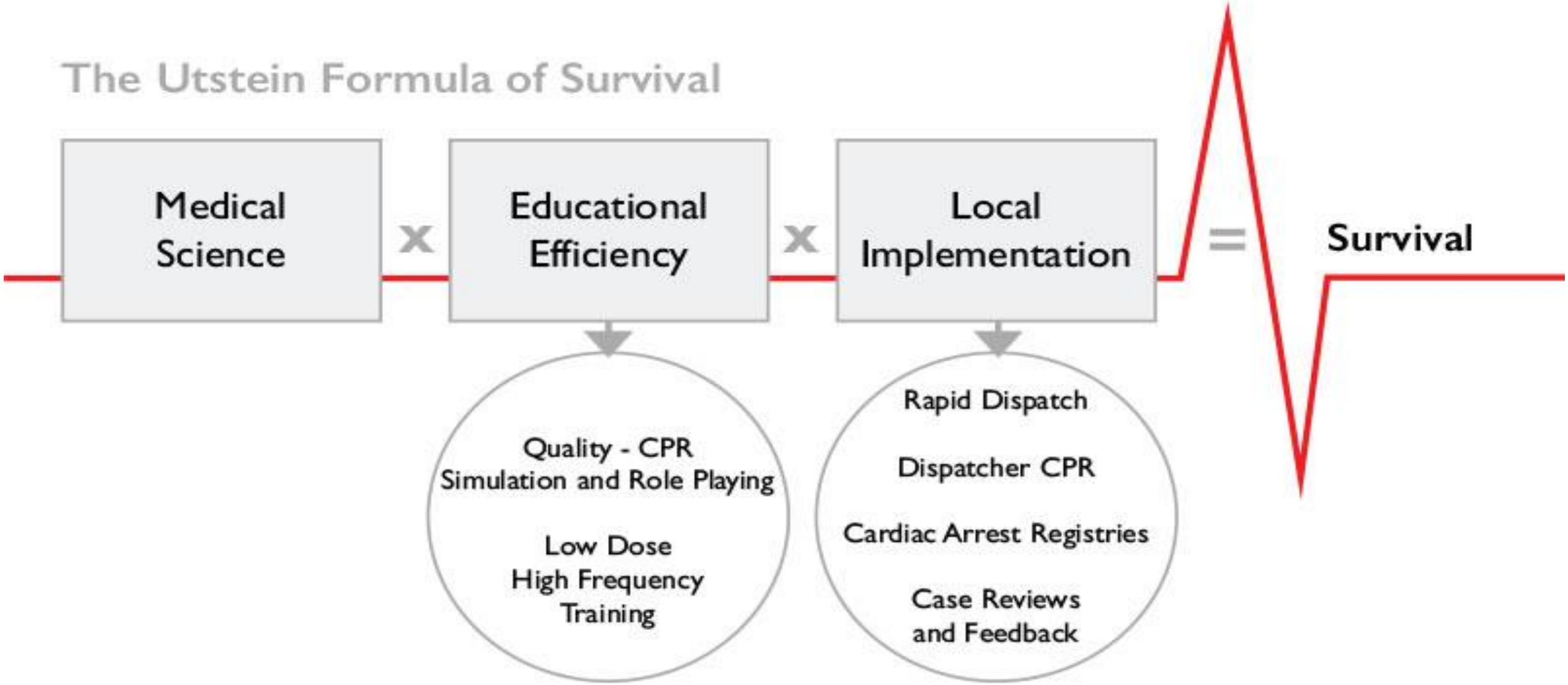
Regional koordinerende enhet for

Simulering i Helse Vest

Hva skal til for å lykkes med å skape en læringskultur med simulering og ferdighetstrening?

Utstein Formula of Survival

The Utstein Formula for Survival is widely recognized as a way of predicting survival from sudden cardiac arrest. The model employs three elements in hypothesizing potential surviv



Svein Robert Vestå

Clinical experience
Circle of Learning
Simulation in teams

Maastricht mai 2019
SIMULATED AND STANDARDIZED PATIENTS

Ledelsesforankring

Neste kapittel

Takk fra meg og mine!

EU Prosjekt
TALK Debrief 2017-2020
Barcelona – Cardiff - Stavanger

https://www.talkdebrief.org/

Raymond Madsen, Sigrun Qvindesland

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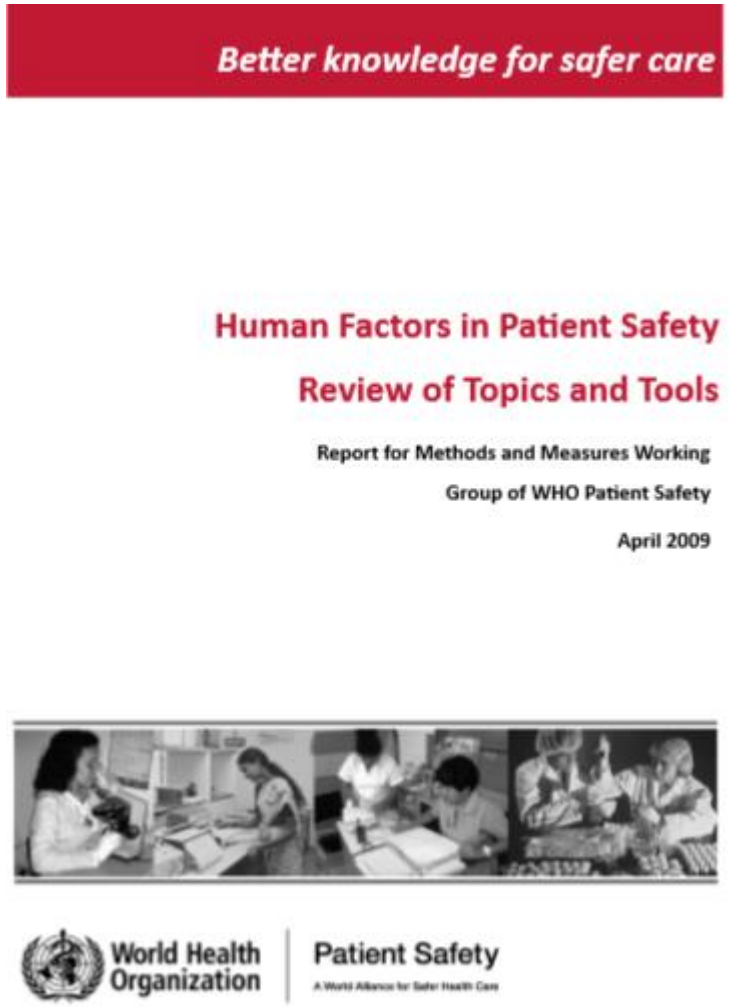
Debriefing – WHO 2009

I 2009 anbefalte WHO helsepersonell å utføre klinisk debriefing for å reflektere strukturert over oppgaver & situasjoner, lære, og identifisere strategi for forbedring og pasientsikkerhet.



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Stavanger universitetssjukehus

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Verdier

Gi **konstruktive tilbakemeldinger**.
Finn løsninger framfor å fordele skyld.
Identifiser gjerne **positive handlinger** og adferd.
Vær **profesjonell i kommunikasjonen** med andre.
Vær **lærevillig og verdsett** alle innspill.
Se etter **små tiltak** – og følg dem opp.

Skal vi ta en TALK?

T **Tema** Target

– Hva skal vi diskutere for å sikre pasientbehandling og sikkerhet?

Del ditt perspektiv – og bli enig om et felles tema.

A **Analyse** Analysis

– Hva hjalp eller hindret oss i situasjonen?

Analyser valgt tema – både det som gikk bra, og det som må forbedres.

L **Læringspunkter** Learning Points

– Hva har vi lært av situasjonen?

Belys ulike læringspunkter.

K **Kjernetiltak** Key Actions

– Hva gjør vi videre?

Bli enig om tiltak. Fordel ansvar, iverksett og følg opp.

SAFER

Forskning

- Intervensjonsforskning
- Protokoll fra EU prosjektet – omskrevet til norske standarder
- Thomas Lindner Principal Investigator
- INTENSIV – STOR TAKK!

  - Baseline datasamling: 21.sept - 6. okt 2019
  - **Intervensjon** - undervisning TALK første 2-3 uker i oktober
  - 3 måneder datasamling: 20.jan 2020 - 6. feb 2020
  - 6 måneder datasamling: 20. april - 4. mai 2020

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HELSE STAVANGER
Stavanger universitetssjukehus

Lederteam Intensiv Avd. SUS

TALK leder: Gunhild Bakkalia Bjørnå

Ass. Oversykepleier Intensiv

SAFER

Datainnsamling 1. runde okt 2019

Date	Day	2Øst (ENT recov.)	2M - Intensiv/ICU			1G Oppvåkning/Recovery		
	→→END OF SHIFT EXACT DATA COLLECTION TIMES TO BE DECIDED WITH GBB & RESEARCH LEAD	Day Shift only kl 1500 **data betw. 1430-1700**	Night shift: 22.00-08.00 **data at 0600-0700** NB report 0730	Day shift: 0730-1500 **data 1300-1400** report 1430-1500	Aft. shift 1430 - 2230 **data kl 2030-2130** Report 22-2230	Night shift: 22.00-08.00 **data at 0600-0700** 3 nurses Night Shift	Day shift: 0730 - 1500 **data 1300-1400** report 1430-1500	Aft. shift 1430-2230 **data kl 2030-2130** Report 22-2230
23.sep	Monday	SAQ	NO DATA COLL.	LM & CDN	LM & CDN	NO DATA COLL.	CD + NN?	CD + NN?
24.sep	Tuesday	SAQ	LM & CDN	LM & CDN	LM & CDN	CD + NN?	CD + NN?	CD + NN?
25.sep	Wednesday	SAQ	LM & CDN	LM & CDN	LM & CDN	CD + RM	CD + RM	CD + NN?
26.sep	Thursday	SAQ	LM & CDN	LM & CDN	LM & CDN	CD + NN?	CD + NN?	CD + NN?
27.sep	Friday	SAQ	LM & CDN	LM & CDN	CD & CDN	CD	CD	CD/SAQ
28.sep	Saturday	CLOSED WARD	LM & CDN	LM & CDN	SAQ & CDN			
29.sep	Sunday	CLOSED WARD	LM & CDN	CD & CDN	LM & CDN			
30.sep	Monday	SAQ	CD & CDN	LM & CDN	LM & CDN		CD + RM	
01.okt	Tuesday	SAQ	LM & MR (CDN)	LM & MR	CD + MR		CD +CDN	
02.okt	Wednesday	SAQ	CD + CDN	LM & CDN	LM + CDN		CD & MR	
03.okt	Thursday	SAQ	LM + MR	LM & CDN	CD + MR		CD & MR	
04.okt	Friday	SAQ	CD + CDN	LM & CDN	LM + CDN		CD & MR	
05.okt	Saturday	CLOSED WARD	LM + MR	CD + MR	CD + CDN			
06.okt	Sunday	CLOSED WARD	CD + CDN	LM + CDN	LM + MR			
07.okt	Monday	SAQ	LM + MR	NO DATA COLL.	NO DATA COLL.		NO DATA COLL.	NO DATA COLL.

Intervensjonen: Undervisning i bruk av TALK

- Intro og Relevans
- Bakgrunn
- Demonstrasjon med video
- Ferdighetstrening med video
- Scenario trening
- Oppsummering og veien vid

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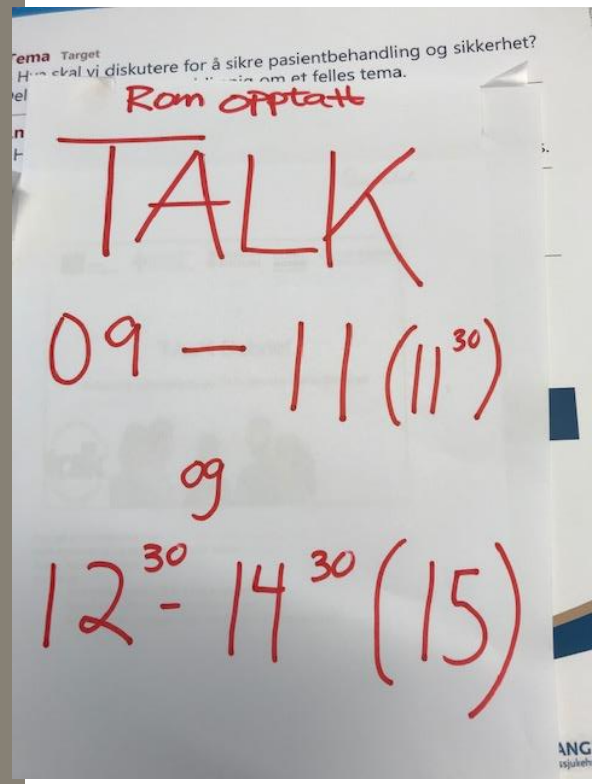
2M Forskning
Intervensjon: Undervisning



- Høy deltakelse - 96 svar (ca 110 spl totalt)
- Ledere også
- Score **9,15** på undervisning (KP1)
- Alle ville anbefalt undervisning (KP1)
- De lærte TALK – Synlig bruk (KP2)
- Kompetanseplaner
- Undervisningsteam: GBB, SAQ, KME, IM, PMMP. EJT, +
- *Fokus på at vi allerede er flinke vi skal bare heve oss litt mer :) Turte å snakke.*
- *Bra å få struktur på "snakk" etter situasjoner*
- *Fikk øve på det en hadde lært i undervisning*
- *Bedrer kommunikasjon og teamarbeid.*
- *… dermed letter arbeid og pasientsikkerhet.*
- *Absolutt! Vi kan alltid bli bedre og lære av hverandre.*
- *Skape en arbeidskultur der konstruktive tilbake-meldinger og åpenhet er en selvfølge i arbeidshverdagen.*

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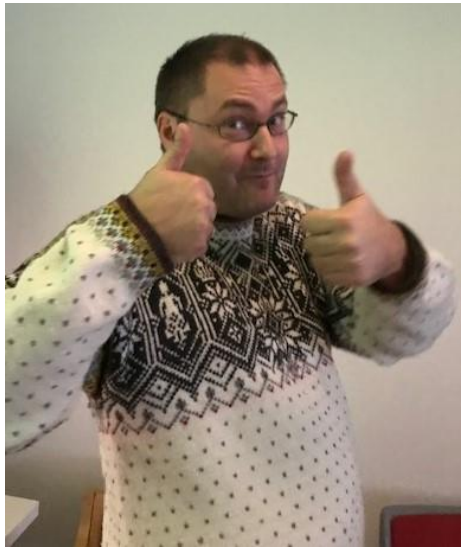
Legene får TALK undervisning



- «Onsdagsundervisning 1530-1630
- To ganger
- Ca 70-80%
- Positive
- Sitat…
- Kompetanseplan
- Team: Einar Johan, Pål Morten, Gunhild, Sigrun

SAFER

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Læringsnettverk nov 19- juni 20

- Kvalitetsforbedringsgruppe
  - Raymond Madsen og Karin Jensvold
- Utdanningsavdeling
  - Sigrun Qvindesland
- Avd. som implementerer TALK 1. runde
  - De som sendte hospitanter
  - Andre meget interesserte (ABK)
- 6 treff over 6 mnd å utveksle erfaringer

02.12.2019

TALK Debrief er i gang

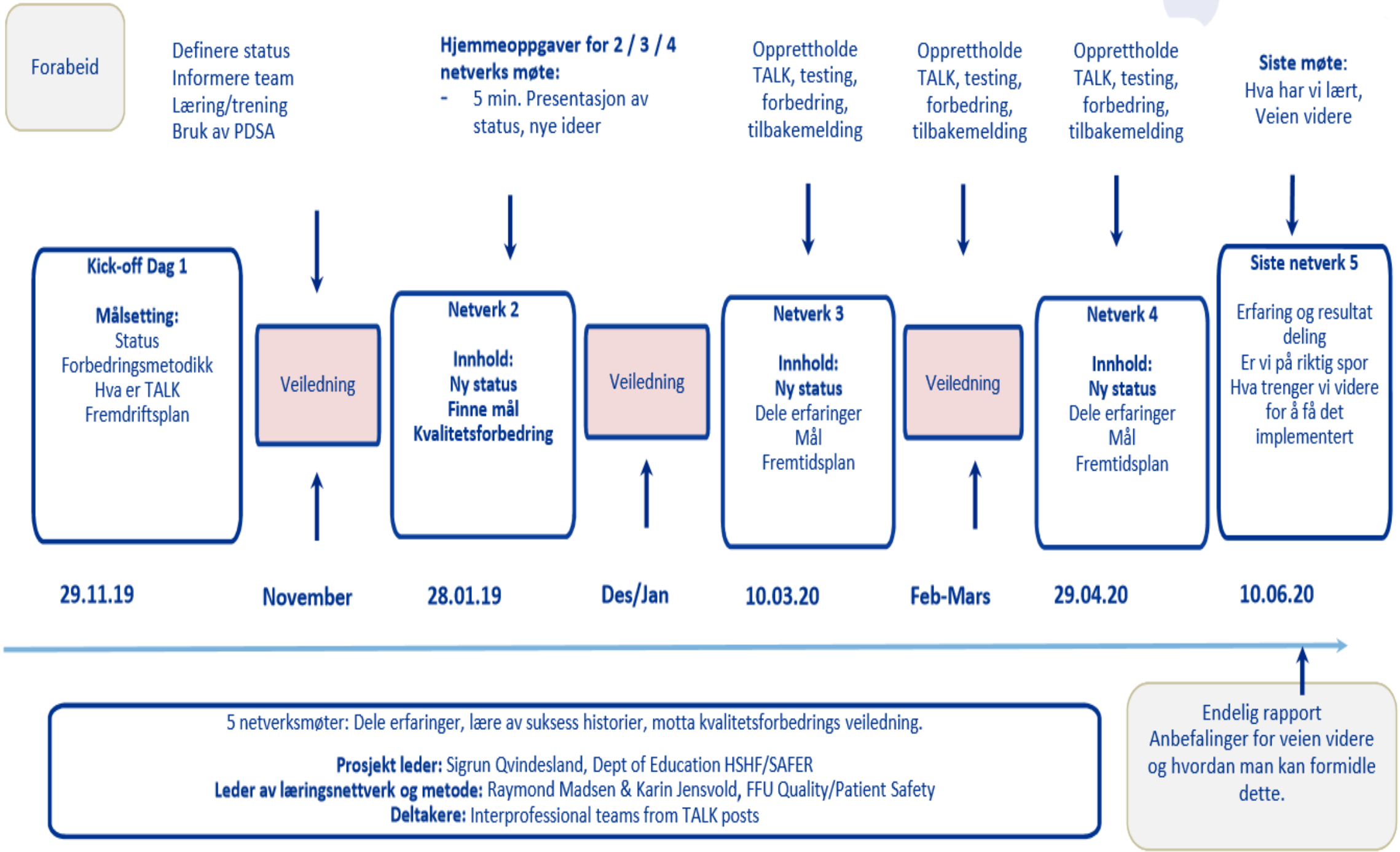
TALK© er et kommunikasjonsverktøy og konsept for debriefing av lærerike kliniske situasjoner i den daglige driften. Fredag 29. november var den offisielle starten av TALK på SUS.

Av: Aspelund, Caroline Karlsen
Foto: Lunde, Svein Gabrielsen

Her er implementeringsteamet – som har ansvaret for å innføre TALK på sine avdelinger.

Læringsnettverk

- Internasjonalt anerkjent metode for å implementere forbedringstiltak.
- Hvorfor er Læringsnettverk unikt?
- Jobber på samme «hus» men forskjellig praksis


Forabeid
Definere status
Informere team
Læring/trening
Bruk av PDSA
Hjemmeoppgaver for 2 / 3 / 4 netverks møte:
- 5 min. Presentasjon av status, nye ideer
Opprettholde TALK, testing, forbedring, tilbakemelding
Opprettholde TALK, testing, forbedring, tilbakemelding
Opprettholde TALK, testing, forbedring, tilbakemelding
Siste møte:
Hva har vi lært,
Veien videre
Kick-off Dag 1
Målsetting:
Status
Forbedringsmetodikk
Hva er TALK
Fremdriftsplan
Veiledning
Netverk 2
Innhold:
Ny status
Finne mål
Kvalitetsforbedring
Veiledning
Netverk 3
Innhold:
Ny status
Dele erfaringer
Mål
Fremtidsplan
Veiledning
Netverk 4
Innhold:
Ny status
Dele erfaringer
Mål
Fremtidsplan
Siste netverk 5
Erfaring og resultat deling
Er vi på riktig spor
Hva trenger vi videre for å få det implementert
29.11.19
November
28.01.19
Des/Jan
10.03.20
Feb-Mars
29.04.20
10.06.20
5 netverksmøter: Dele erfaringer, lære av suksess historier, motta kvalitetsforbedrings veiledning.
Prosjekt leder: Sigrun Qvindesland, Dept of Education HSHF/SAFER
Leder av læringsnettverk og metode: Raymond Madsen & Karin Jensvold, FFU Quality/Patient Safety
Deltakere: Interprofessional teams from TALK posts
Endelig rapport
Anbefalinger for veien videre og hvordan man kan formidle dette.

Forskning viser at opp til 70 % av alle forsøk på å skape forbedringer i organisasjoner ikke er holdbare over tid

Daft og Noe 2000

Thanks!

www.talkdebrief.org

@TALKdebriefing

Succeeding with Rapid response systems – a never-ending process:

A systematic review of how health-care professionals perceive facilitators and barriers within the limbs of the RRS

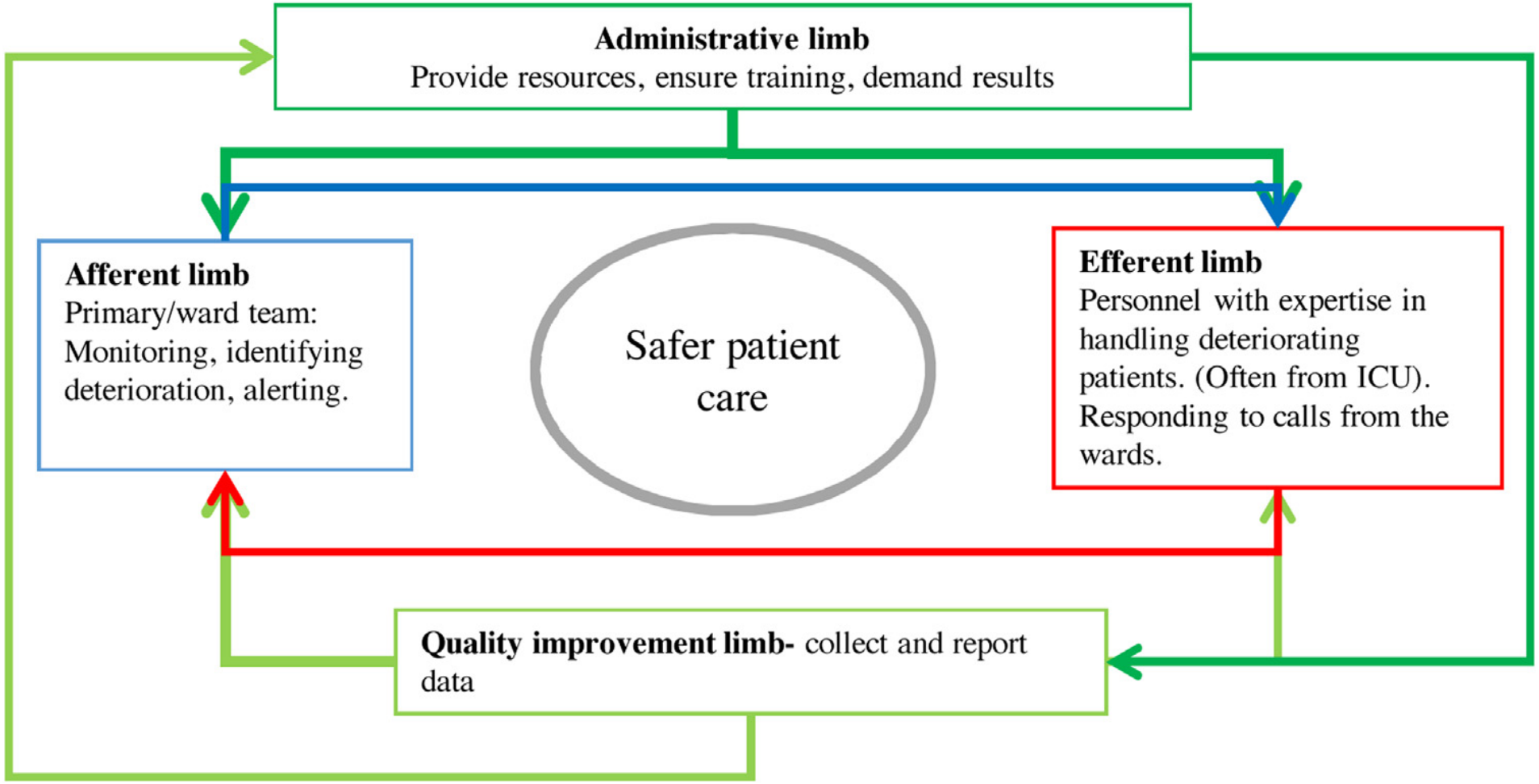
Siri Lerstøl Olsen, Eldar Søreide, Ken Hillman og Britt Sætre Hansen

Siri Lerstøl Olsen

PhD Stipendiat, SAFER Healthcare, UiS

- **Aspects of implementation and sustainability of Rapid Response Systems (RRSs) in hospitals: what makes them successful? A multi-method approach.**

Rapid Response System (RRS)



Et RRS er et sykehusovergripende system som sørger for systematiske observasjoner av pasientene for å tidlig oppdage forverring og sørge for riktig respons til pasienten.

Winters BD, Weaver SJ, Pfoh ER, Yang T, Pham JC, Dy SM. Rapid-response systems as a patient safety strategy: a systematic review. Ann Intern Med 2013;158:417 25.
Winters BD, DeVita MA. Rapid response systems history and terminology. In: DeVita MA, Hillman K, Bellomo R, editors. Textbook of rapid response systems: concepts and implementation. New York: Springer; 2011. p. 3 9.

Hvorfor en systematisk review?

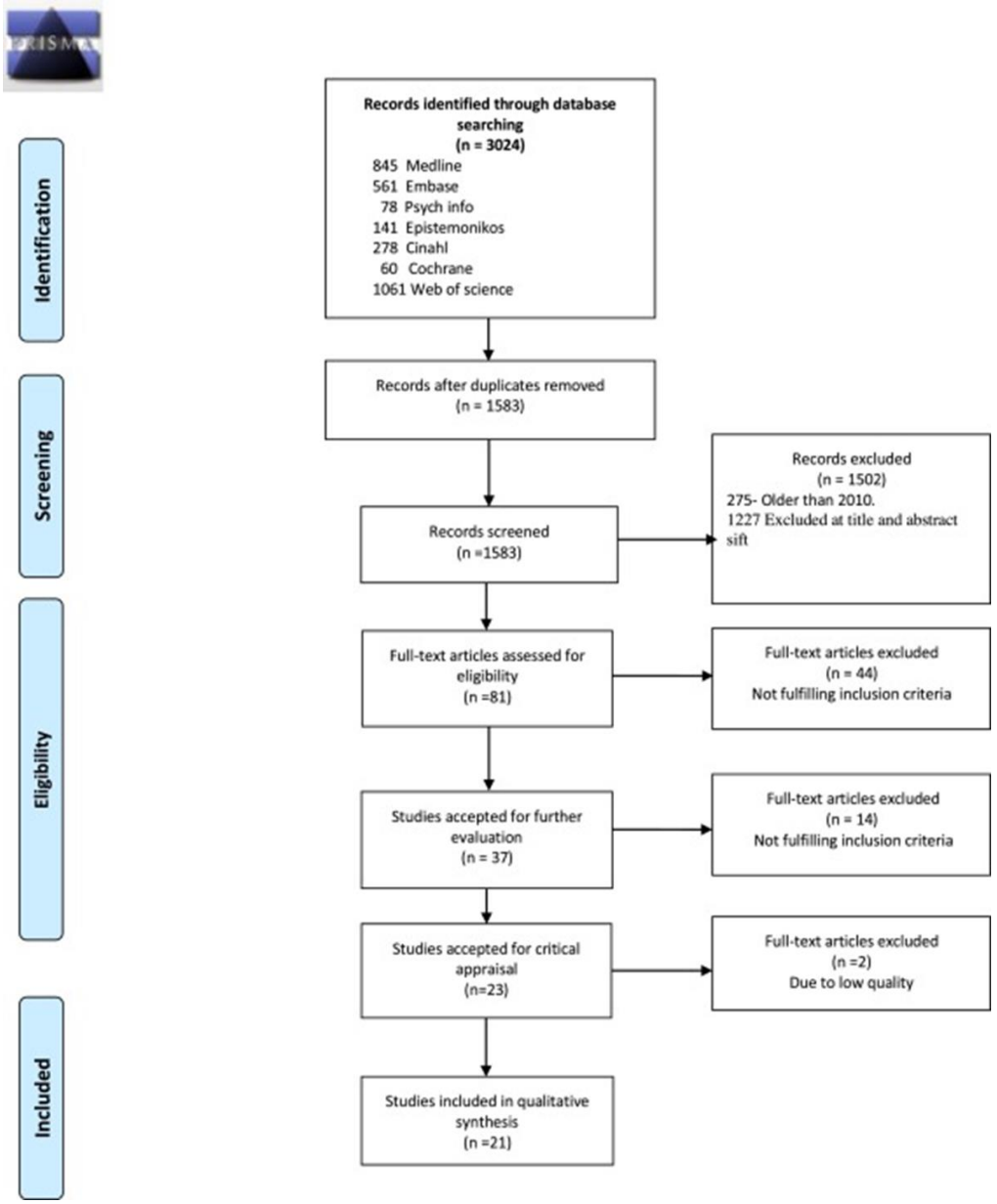
- Forskning med metaanalyser viser at RRS er assosiert med **redusert sykehus mortalitet og inhospital hjertestans.**
- Det er **bred støtte til implementering** av RRS fra kvalitetsforbedrings organisasjoner (IHI) og i internasjonale guidelines
- Det er etablert en **konsensus** angående elementene i et RRS,
- **Men;**
  - Dersom RRS ikke blir brukt slik det er tenkt, kan man da forvente effekt?

Review spørsmål

- **“How do healthcare professionals perceive potential facilitators and barriers within the limbs of a RRS?”**

Metode

- 21 artikler publisert i tidsrommet 2010-2018.
- Systematisk review metodikk
- Prisma guideline
- Inkluderte studier har brukt en kvalitativ metode, hovedsakelig fokusgruppe intervjuer eller individuelle intervjuer med helsepersonell.
- CASP brukt til å gjøre en kvalitetsvurdering
- Fra England, USA, Canada, Norge, Singapore. Australia, New Zealand, Irland, Iran og Danmark.



	Administrative and Quality improvement limbs							
Themes	**The barrier of disconnected leadership and vague lines of responsibility**							
Categories	*The influence of leadership and vision*	*Unclear protocols with lack of integration in handover processes*	*Inconsistent education*	*Lack of equipment, personnel and integration with other hospital systems*	*The value of involvement and continuous follow-up*			
	Afferent limb						**The connection of the Afferent and Efferent limb**	
Themes	**The barrier of underestimating complexity**						**The barriers lies in lack of trust and respectful behavior**	
Categories	*The missing link between measuring and interpreting*	*Challenges in the use of observation and documentation systems*	*The value of knowing the patient*	*The complex inter-professional "knotworking" processes*	*The severity of clinical change*	*RRS protocol vs. reality*	*Lack of inter-professional trust and challenges of collaboration*	*Not knowing the patient*

Hovedbarrierer:

- Det administrative leddet og kvalietsforbedringsleddet er svakt koplet på de operative leddene.
  - Overlatt til å fungere «av seg selv»

"Effectiveness of the MERTsystem depends entirely on the people within the team on that particular day".

Perceive that there is workload and staffing level imbalances in the wards. To few ward clinicians and to low seniority. Overwhelming workload for nurses

Lack of a system for electronic tracking of vital signs, and missing integration of monitoring with other infrastructure

-Education was not viewed as a high priority, staff were not released for training due to staff shortages

Lack of ownership of the deteriorating patient

-Lack of standard escalation pathways and procedures create confusion.

"There is one [Registrar] in the whole hospital and there could be six [rapid response] calls at once, and how can they possibly get to six?

Utfordringer i samarbeidet innad i og mellom afferent ledd og efferent ledd.

Mangel på intraprofesjonell tillit.
Kritikk nedover i hierakiet.

Fear of being viewed as clinically inept

Typically, MET calls were seen as a last resort, when all other options were exhausted

-Nurses describe exhausting all options before making an RT call

"Physicians are going to be very unhappy if you call the RRT and haven't called them".

"How dare you call a rapid response on my patient?"

Condescending tone in ICU nurse voice, "Why did you call?"

"The attending pulled me aside during the RRT to basically reprimand me for going above his head".

Fasilitatorer:

- **Ledere på alle nivå er «**Commited»
- **Kontinuerlig kvalitetsforbedring**
  - Hele tiden følge opp, identifisere og arbeide for å eliminere barrierer.
  - Inter-profesjonell trening/ simulering med pasienten i fokus.
  - Etterspørre og synliggjøre resultater.
- **Helsepersonell involvert i implementering og organsiering.**

"Leadership is very important; it's critical. I don't think it would get off the ground if you didn't have that support.

I think people believe in what we're doing. . . . we all have the same goal

"The CCOT trained ward staff. They learned how to care for patients more efficiently. They learned these things very well".

They suggested joint training sessions and education to strengthen teamwork and relations between ward staff and members of MET and align expectations both ways.

-The study participants identified future multidisciplinary training needs that included a focus on communication; using simulation

- **Incomplete implementation and sustainability of RRS remains a major issue.**
  - Successful system-wide implementation is dependent on continuously connected and involved administrative and quality improvement limbs.
  - “Ramme og trøer til sykkelen”

- **We suggest increased use of inter-professional simulation-based training to increase technical and non- technical skills, establish inter-professional trust and build support for the RRS**.
  - Hospital environments change continuously with the employment of new staff, integration of new technology, and provision of more advanced care.
  - “Hvordan sykle…”

to succeed with a RRS is not completed by a set date;

-it is a never-ending process.

Simulering Helse Stavanger HF – infrastruktur og veien videre

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Jorunn Flaten Lyngset
Utdanningsavdelingen

Kjerneverdier

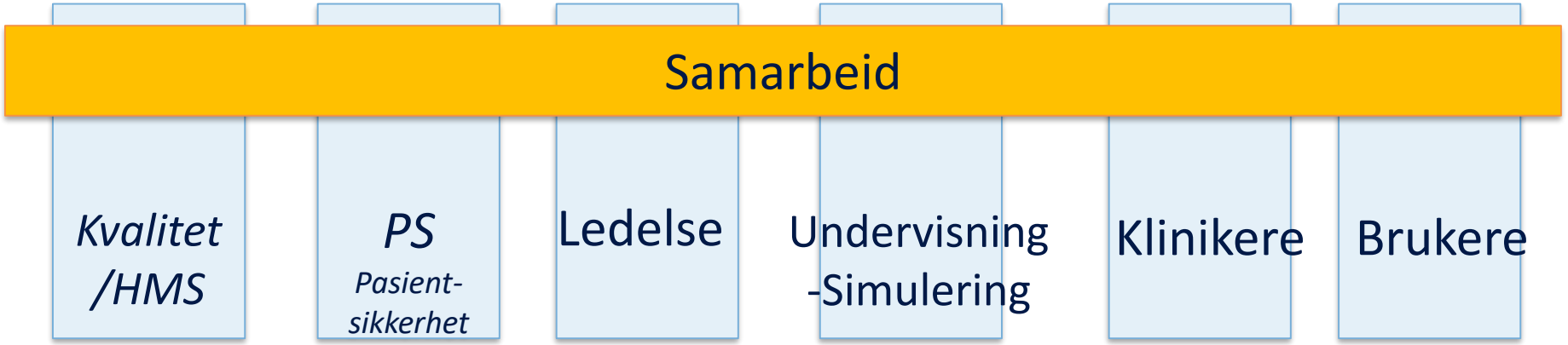
- Simulering skal fremme kvalitet og pasientsikkerhet i sykehuset

- Simulering er av høy pedagogisk kvalitet som ivaretar et trygt læringsmiljø som stimulerer til refleksjon og læring

- Simulering er forankret i læringsbehov og skal kvalitetssikres, evalueres og vedlikeholdes

Overorndet tankegang i Helse Stavanger

- Simuleringskompetanse
- Kaskademodell for fasilitatorkompetanse
- Infrastruktur
- Implementeringskompetanse
- Samarbeid mellom siloer → verdi til pasienter, ansatte, organisasjonene, samfunnet



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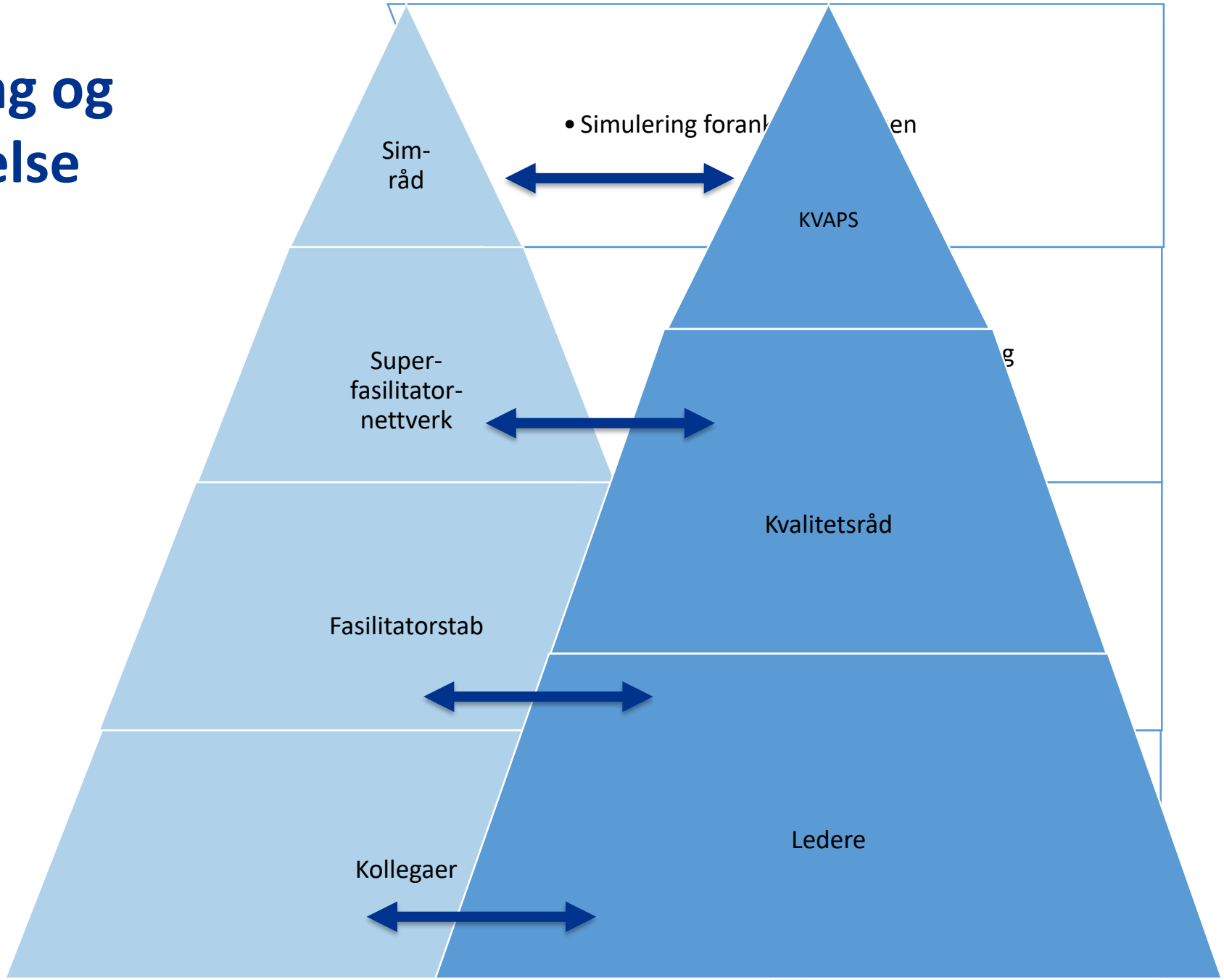
Struktur for simulering og ferdighetstrening i Helse Stavanger

- Simuleringskoordinator koordinerer simuleringsnettverket



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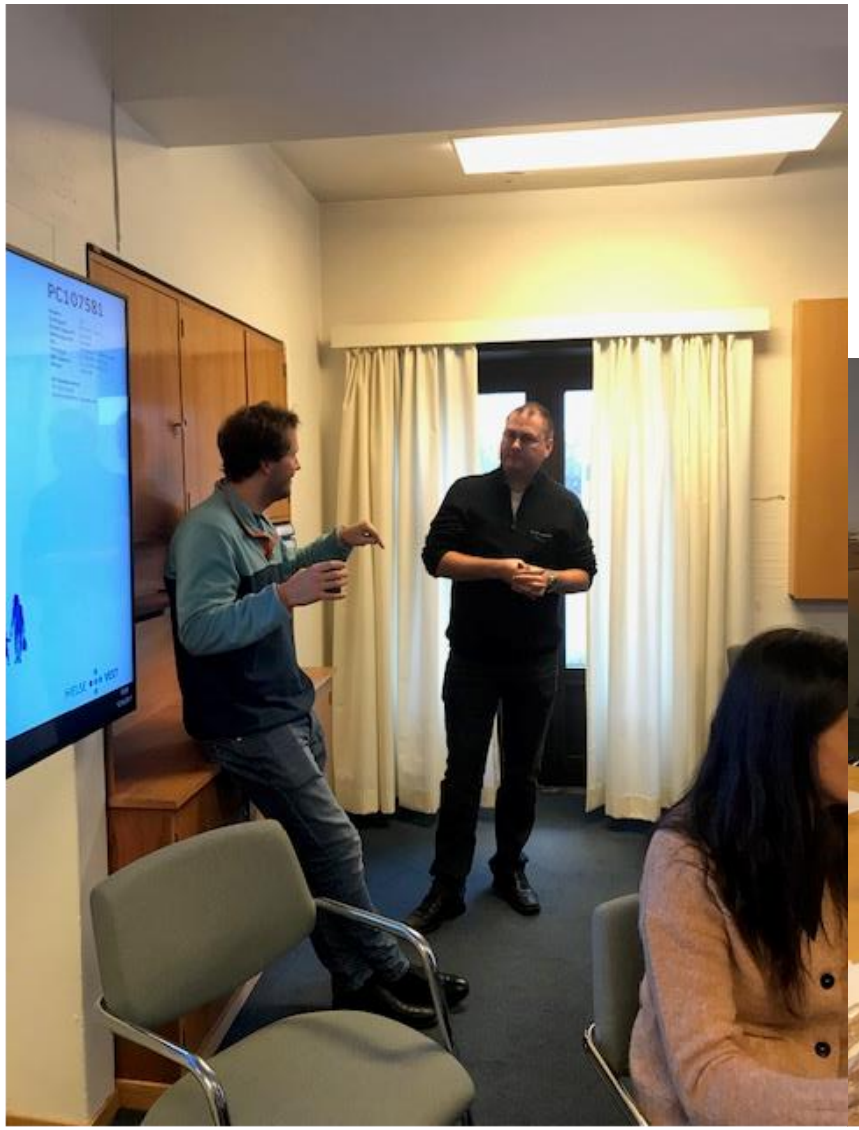
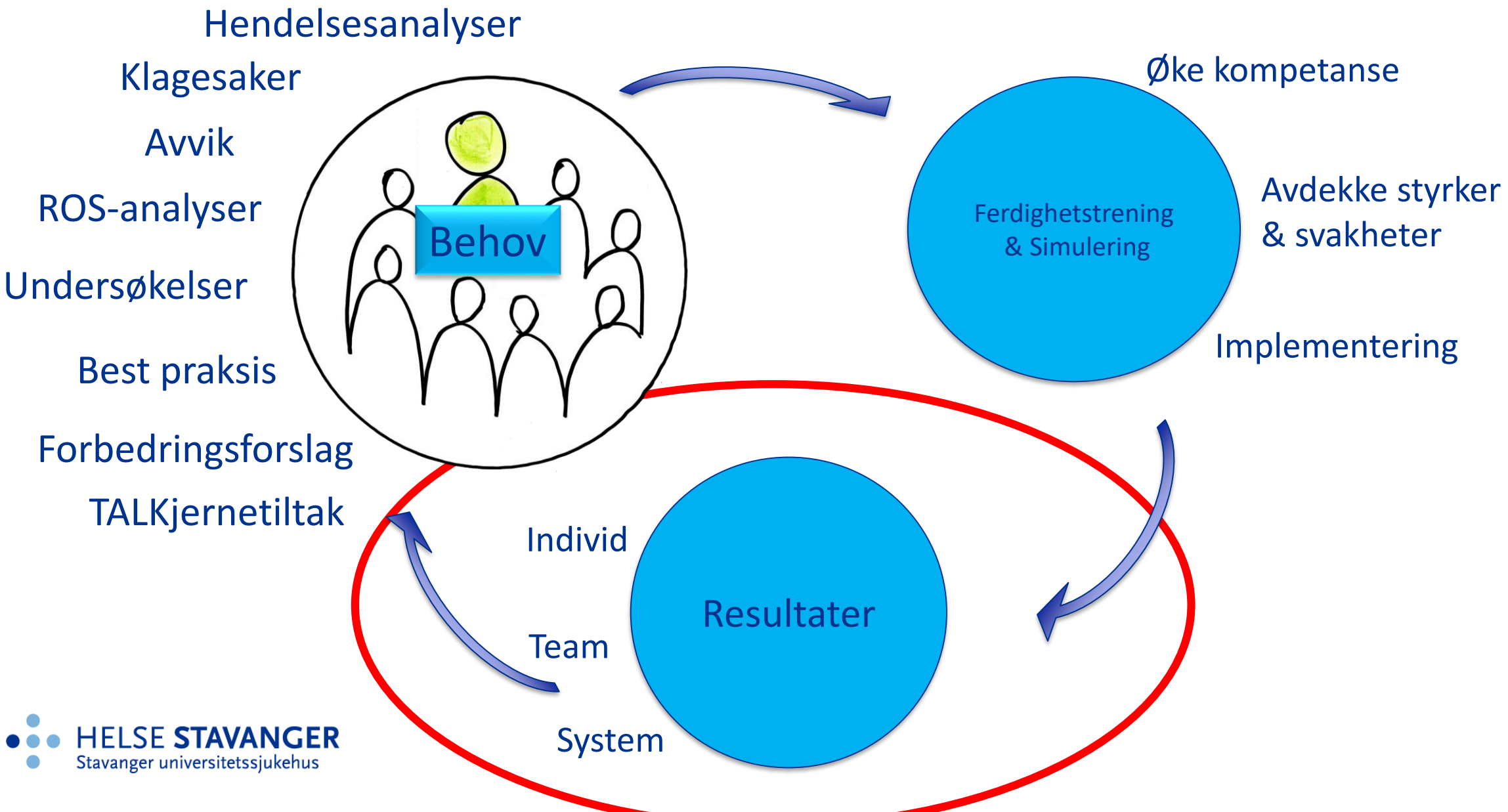
Kick off Simråd



(2) Feedback loop: Kvalitet & Simulering & Resultater



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Veien videre

- Implementering av strategiplan
- Prosedyre for in situ simulering
- Enklere løsning for registrering, evaluering og rapportering
- Kompetanseplaner for fasilitatorer

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frontiers in Psychology

BRIEF RESEARCH REPORT
published: xx December 2019
doi: 10.3389/fpsyg.2019.02921

Trust After Just 45 Seconds? an Experimental Vignette Study of How Leader Behavior and Emotional States Influence Immediate Trust in Strangers

Olav K. Olsen[1,2]*, Phillip v. Heesch[1], Christian Søreide[1] and Sigurd W. Hystad[1]

[1] University of Bergen, Bergen, Norway, [2] BI Norwegian Business School, Oslo, Norway

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Many critical and unexpected situations are handled by people that have never met. In the literature, development of immediate trust has been identified as a prerequisite for such temporary groups and leadership to function well. Limited experimental research has studied what leadership stimulates immediate trust between strangers. The present study investigate how four leadership styles, combining autocratic or democratic leadership behavior with low or high emotional stability, is related to immediate trust in a leader displayed through a 45-s video vignette of a car accident. A sample of 280 adults, randomly assigned to one of four conditions (1, autocratic/stable; 2, autocratic/unstable; 3, democratic/stable; 4, democratic/unstable) rated immediate trust after watching the vignette. The results show that autocratic and emotionally stable leaders were on average rated higher on immediate trust than all other leadership styles, after controlling for generalized trust.

Keywords: immediate trust, democratic leadership, autocratic leadership, emotional stability, temporary groups

SAFER

SESAM ACCREDITATION

Et samarbeid mellom

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Universitetet i Stavanger

Laerdal
helping save lives

Tillit

Sånn helt til vanlig og når det brenner på dass

“The willingness of a party to be vulnerable to the actions of another party based on the expectations that the other person will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party”

Mayer et al. (1995, p. 712)

Tillit - *Grenseland mellom kunnskap og ignoranse*

- Funksjonen til tillit
  - Vevet som holder mennesker og samfunn sammen
  - Sårbarhet og usikkerhet
  - Risiko og forventning
- Mistillit
  - Godtroende
- Generell tillit
  - Norge i verdenstoppen - Velferdssamfunn (Kleven, 2016)

SAFER

“

...the first guy goes left and the second guy is going right and he is driving his corner, he's not worrying about the guy on his left, he knows that that guy is taking care of any threat in that corner ”

- Kolditz, 2010

Filosofen Onora O’Neill

- Tillit er en respons

Så….

- Bygge tillit
- Tillitsvekkende mennesker og systemer

Hva er tillitsvekkende? (Colquitt et al., 2007; McKnight et al., 1998)

- Velvillighet/Benevolence
  - Et ønske om å gjøre andre godt
- Integritet/Integrity
  - Styrt av samme prinsipper og verdier som seg selv
- Evne/Ability
  - Har kompetansen og kunnskapen som kreves

Brannmann Sam du kan stole på ham

Kan vi stole på ukjente mennesker?

- Antakelse: Tillit tar tid å bygge
- Observasjon: Mennesker samarbeider som om de har tillit til hverandre

- Kan tillit oppstå på under 60 sekunder?
  - Kognitiv kategorisering
  - Uniform
- Leder
  - Væremåte

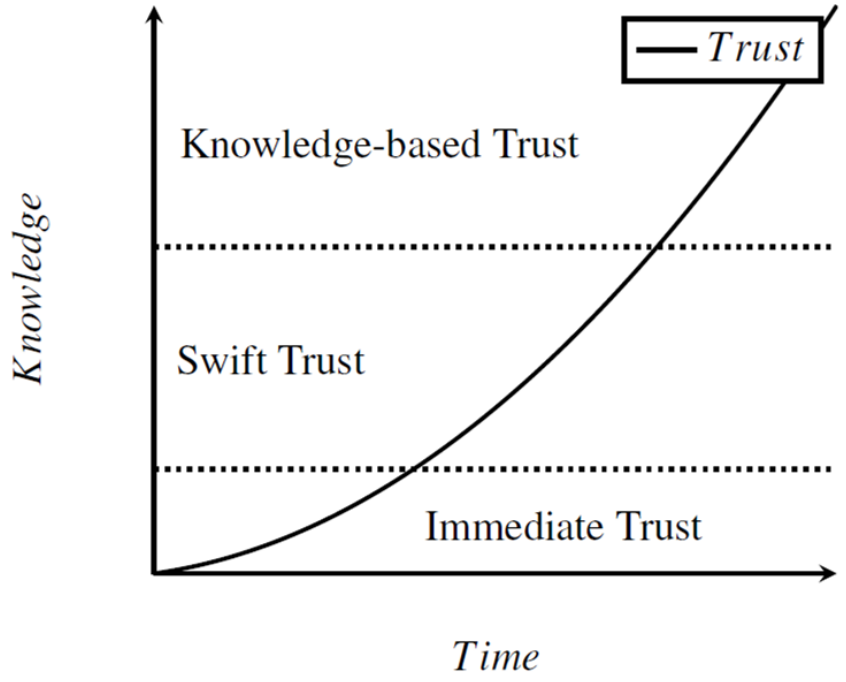
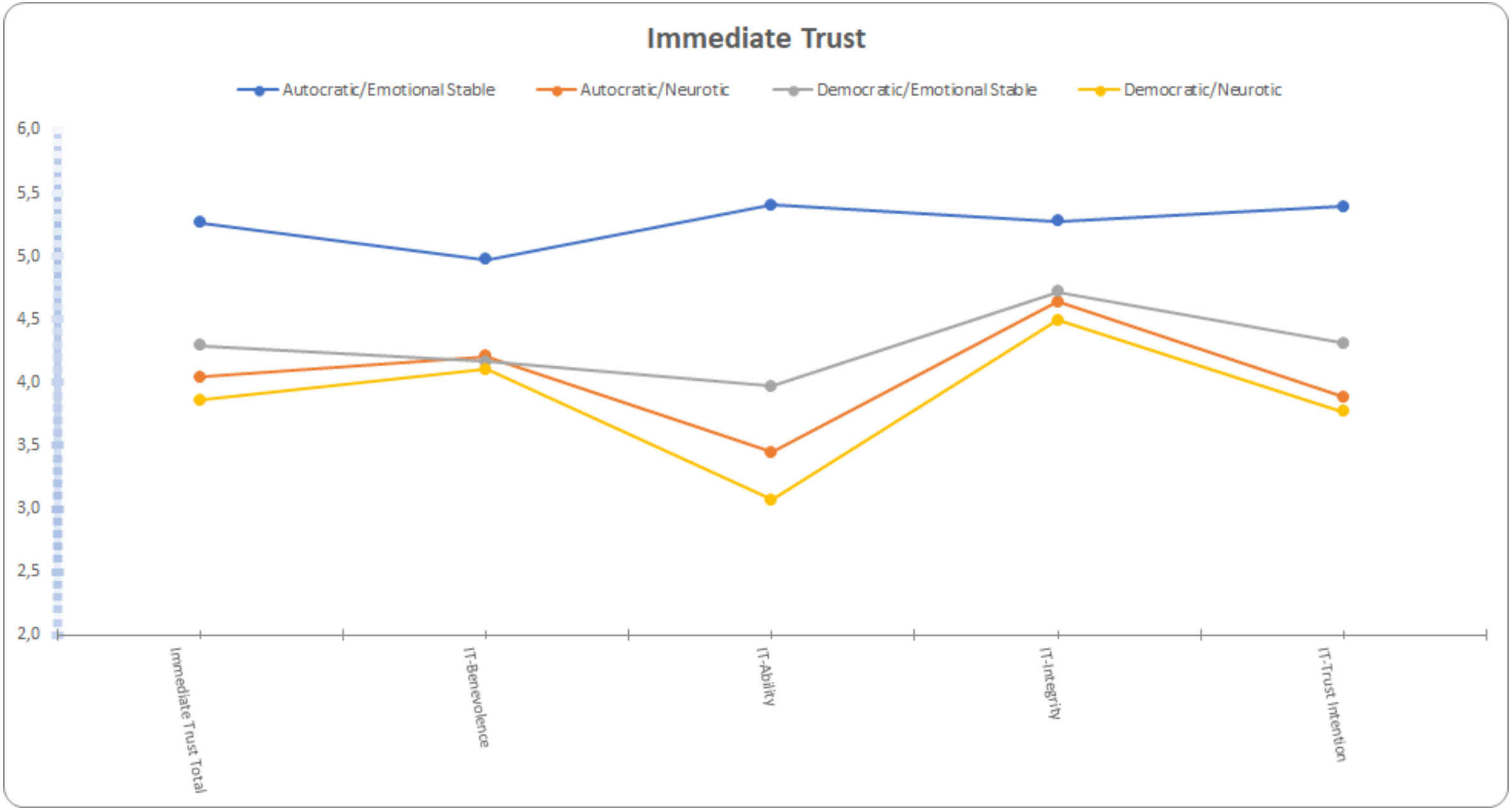


Figure 2. Simplified visualization of Trust Development


Immediate Trust
Autocratic/Emotional Stable
Autocratic/Neurotic
Democratic/Emotional Stable
Democratic/Neurotic
6,0
5,5
5,0
4,5
4,0
3,5
3,0
2,5
2,0
Immediate Trust Total
IT-Benevolence
IT-Ability
IT-Integrity
IT-Trust Intention

SAFER

Er det så viktig da?

- Tillit i gruppen øker engasjement og villighet til å delta i kritiske situasjoner (Colquitt et al., 2007)

- Mangel på tillit hindrer samarbeid, altruistisk og ekstrarolleatferd i grupper (Kramer & Tyler, 1996)

Pause

Beinstrekk og mingling

Universitetet i Stavanger

Hvilke muligheter gir SIMeLEARN for et helsevitenskapelig fakultet i sterk vekst?

Thor Ole Gulsrud, Avdelingsleder, Avdeling for kvalitet og helseteknologi, Det helsevitenskapelige fakultet, UiS

SIMeLEARN Visjon

- ✓ å tilby fremragende, innovative læringsmetoder
- ✓ for å utdanne og forberede helsepersonell for
- ✓ yrkeslivet, livslang læring og
- ✓ kontinuerlig kvalitetsforbedring

Laerdal helping save lives

University of Stavanger

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Hvilke utfordringer adresserer vi?

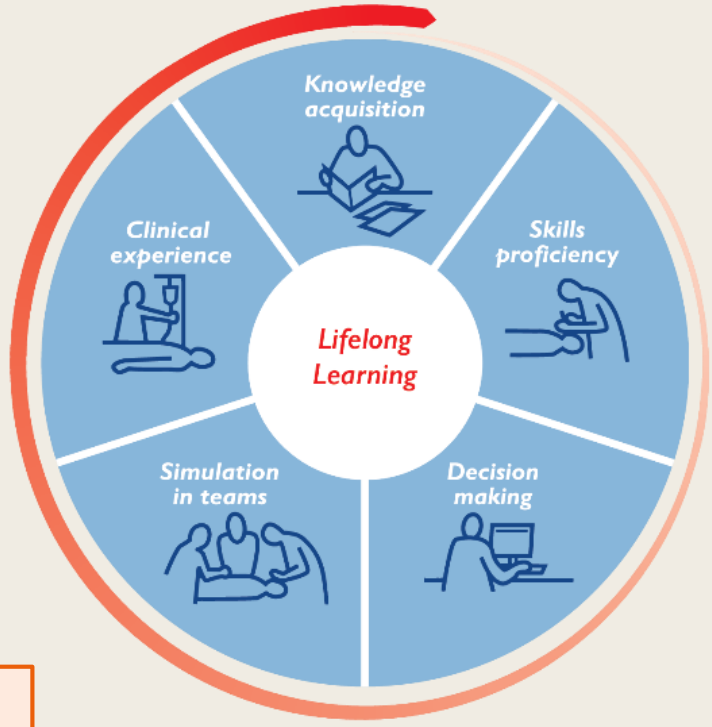
- Begrenset kompetanse, ressurser og personell i helsesektoren globalt og nasjonalt (i henhold til World Health Organization)
- Studentene dropper ut av utdanningen og helsearbeidere forlater jobbene sine
- Livslang læring er ikke tilstrekkelig implementert innenfor det kliniske området
- Tilfeldig formidling av beste praksis

Photo: Medscape

"Despite knowledge about the arriving ageing of the population for many years, too few nurses are educated. An already observed lack of nurses is expected to be strengthened in the years ahead." *Statistics Norway reports 2019/11.*

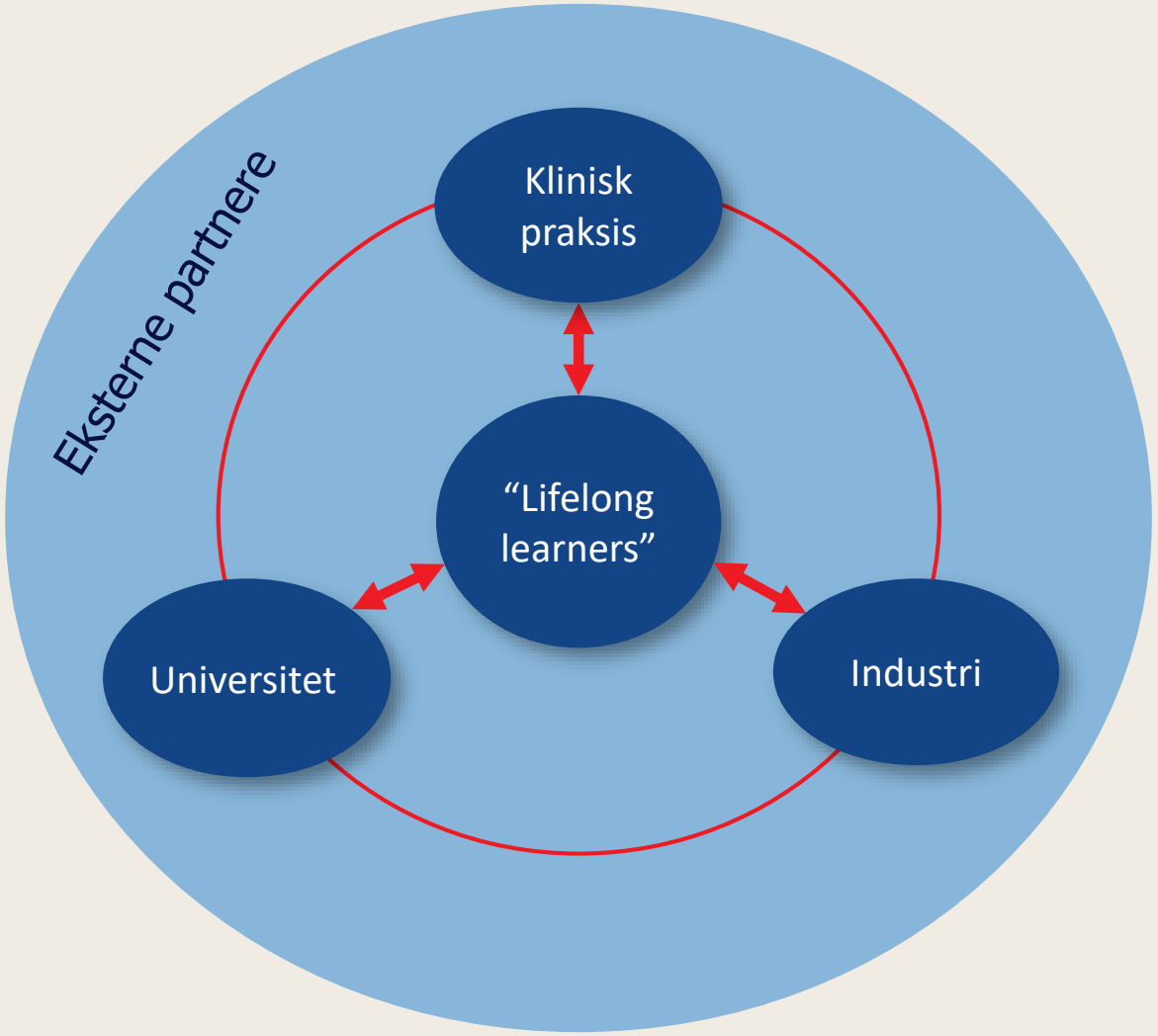
Hvordan kan SIMeLEARN møte disse utfordringene?

- Utdanne studenter og helsearbeidere for livslang læring ved å bruke simulering og E-læring som verktøy
- Utvikle metoder, løsninger og beste praksis som kan deles nasjonalt og globalt
- Være det foretrukne fakultetet for motiverte studenter innen helseutdanning

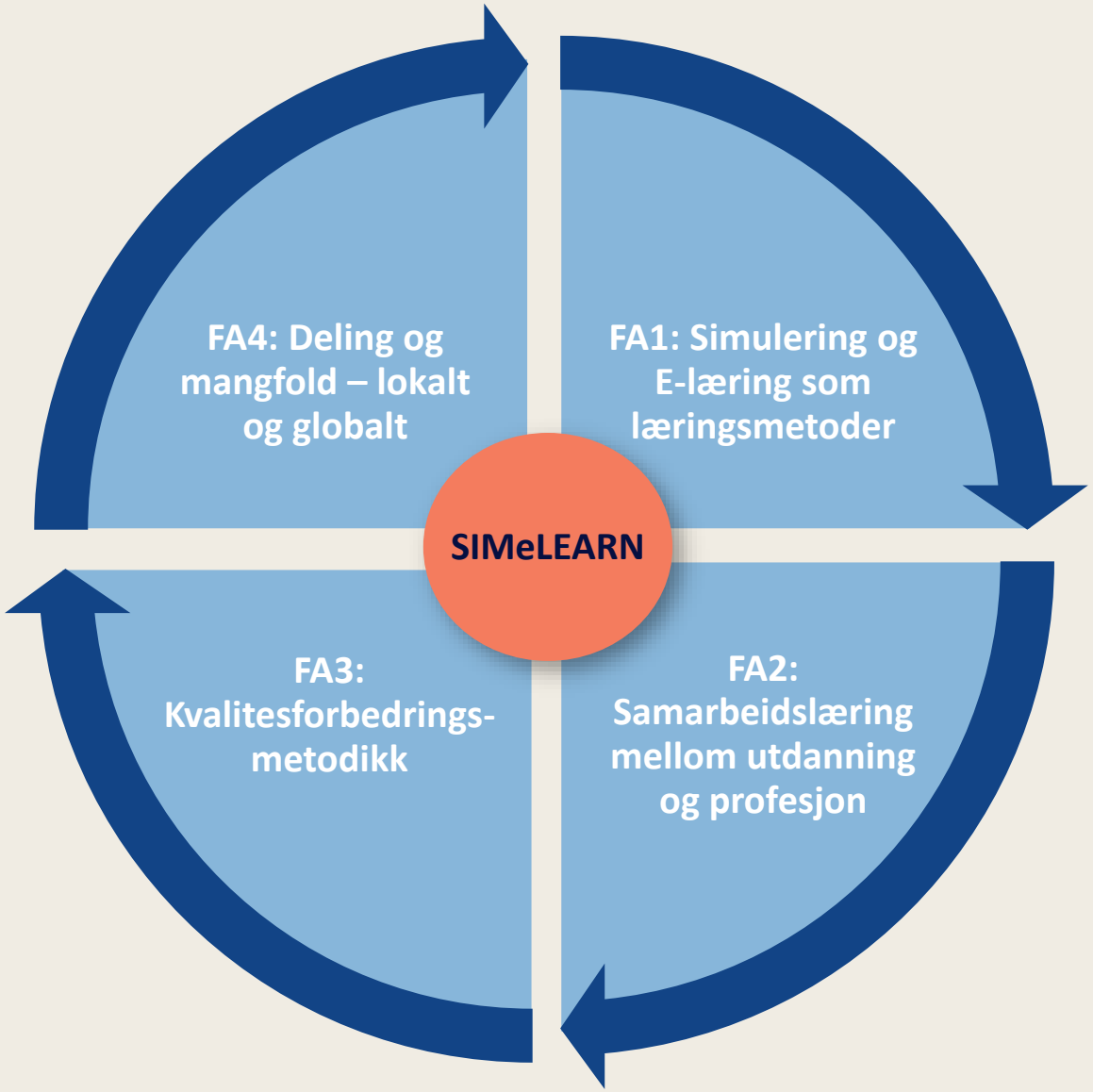


"The application for SIMeLEARN provides a strong rationale for how healthcare services must change to meet the future needs of the sector. The panel finds it laudable that SIMeLEARN aims to formalize a framework to foster for lifelong learning. All the proposed actions in the application seem highly relevant and ambitious."

SIMeLEARN samskapingsmodell for livslang læring – ***innovasjonen:***



- Studentenes egne erfaringer og kompetanse som læringsressurs
- Samskaping av kunnskap gjennom samarbeid
- Etablere en felles forståelse for viktigheten av livslang læring og kvalitetsforbedring
- Tilgang til beste praksis fra andre disipliner



- Innen 5 år skal simuleringsbasert læring og E-læringsmetoder være fullt integrert i studieprogrammene, samt at vi skal tilby tilpassede TTT-kurs til studenter og vitenskapelig ansatte
- Vi skal utdanne studenter som er godt forberedte, trygge og kompetente til å utøve sitt yrke. Vi skal tilby tverrfaglig simuleringstrening til minst to flere studieprogram
- I løpet av studiet skal sykepleierstudentene ha gjennomført en fullstendig Plan-Do-Study-Act (PDSA) syklus
- Via samarbeidslæring skal vi utvikle og dele beste praksis tilpasset et mangfold av faglige og kulturelle kontekster

Det helsevitenskapelige fakultet

Flere enn 1600 studenter i 2025

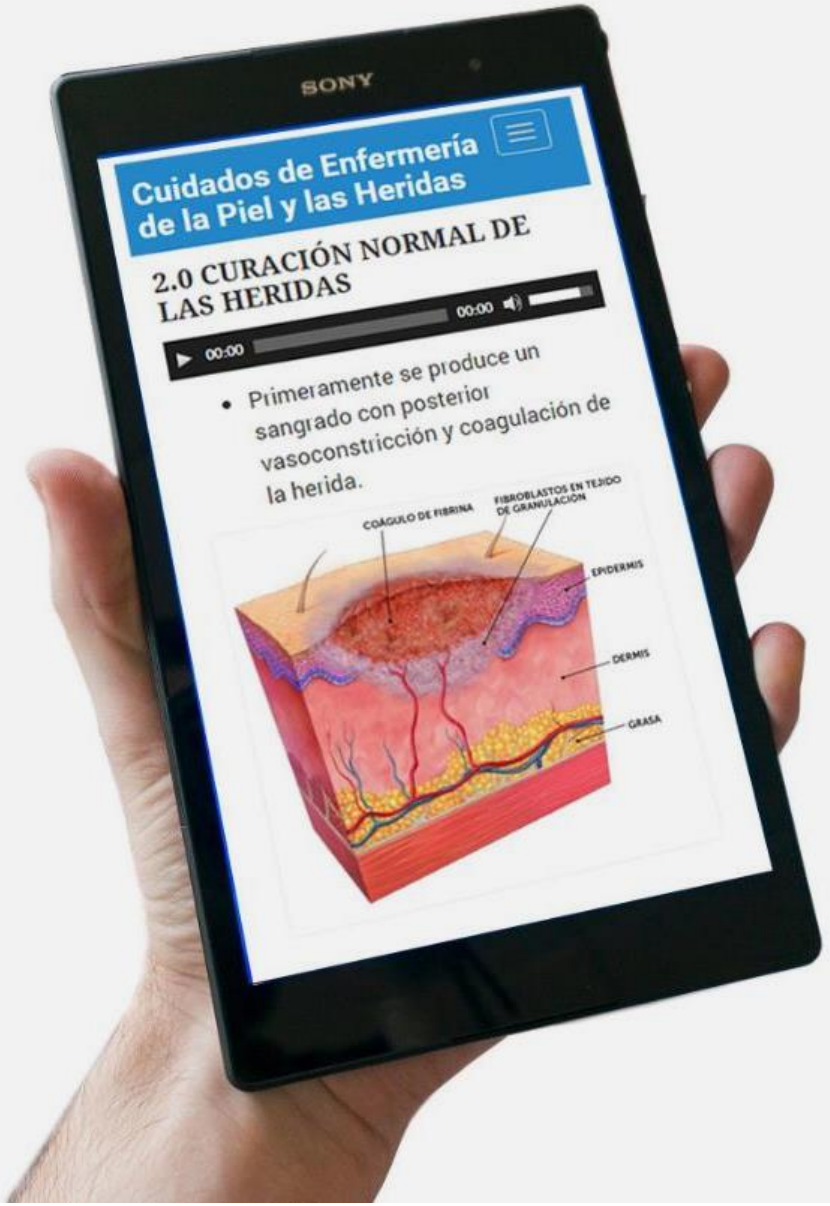
- Bachelor i sykepleie
- Bachelor i paramedisin
- Master i spesialsykepleie
- Master i helsesykepleie (deltid)
- Master i jordmorfag
- Kreftsykepleie (videreutdanning – deltid)
- Master i helsevitenskap
- Master i rus- og psykisk helsearbeid
- Master i pre-hospital critical care (heltid/deltid)
- Doktorgradsprogram i helse og medisin
- Medisinutdanning
- Nye masterprogram

Utfordringer og muligheter

- Simuleringsbasert læring er en effektiv læringsform
- Simuleringsbasert teamtrening har en positiv effekt på behandlingen og resultatet for pasientene
- Må sikre kvalitet på treningen - fasilitatorkompetanse
- Må jobbe målrettet med å implementere simuleringsbasert læring i utdanningen
- Må utnytte mulighetene for tverrfaglig simulering og læringsoverføring mellom studieprogrammene
- Simulering og ferdighetstrening må være relevant i forhold til behovene i klinisk praksis

SIMeLEARN – **Studentene**

- Bygge bro mellom utdanning og klinisk praksis
- Kompetanse for livslang læring
- Påvirke både utdanning og klinisk praksis



SIMeLEARN – **Personale**

- Kontinuerlig utvikling av pedagogisk spesialkompetanse
- Styrke kultur for fremragende utdanning
- Påvirke klinisk praksis i tråd med funn fra utdanningsforskning

SIMeLEARN – **Helsearbeidere**

- Stimulere til kontinuerlig læring og kvalitetsforbedring
- Påvirke utdanningen i tråd med endringer i helsevesenet
- Ha det kjekt på jobb

Takk for oppmerksomheten!

Peer-to-Peer Learning
Helping solve educational challenges?

JULESYMPOSIUM 2019

Brynjar Foss, PhD
Product Manager, Educational Solutions

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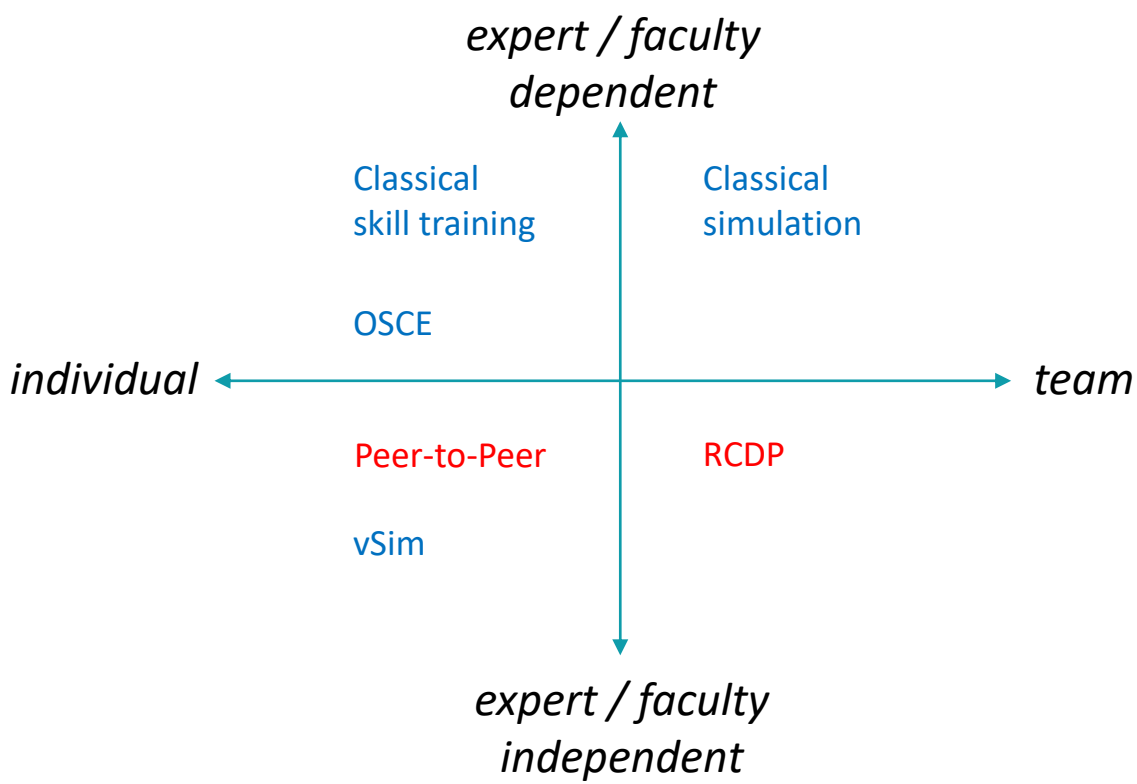
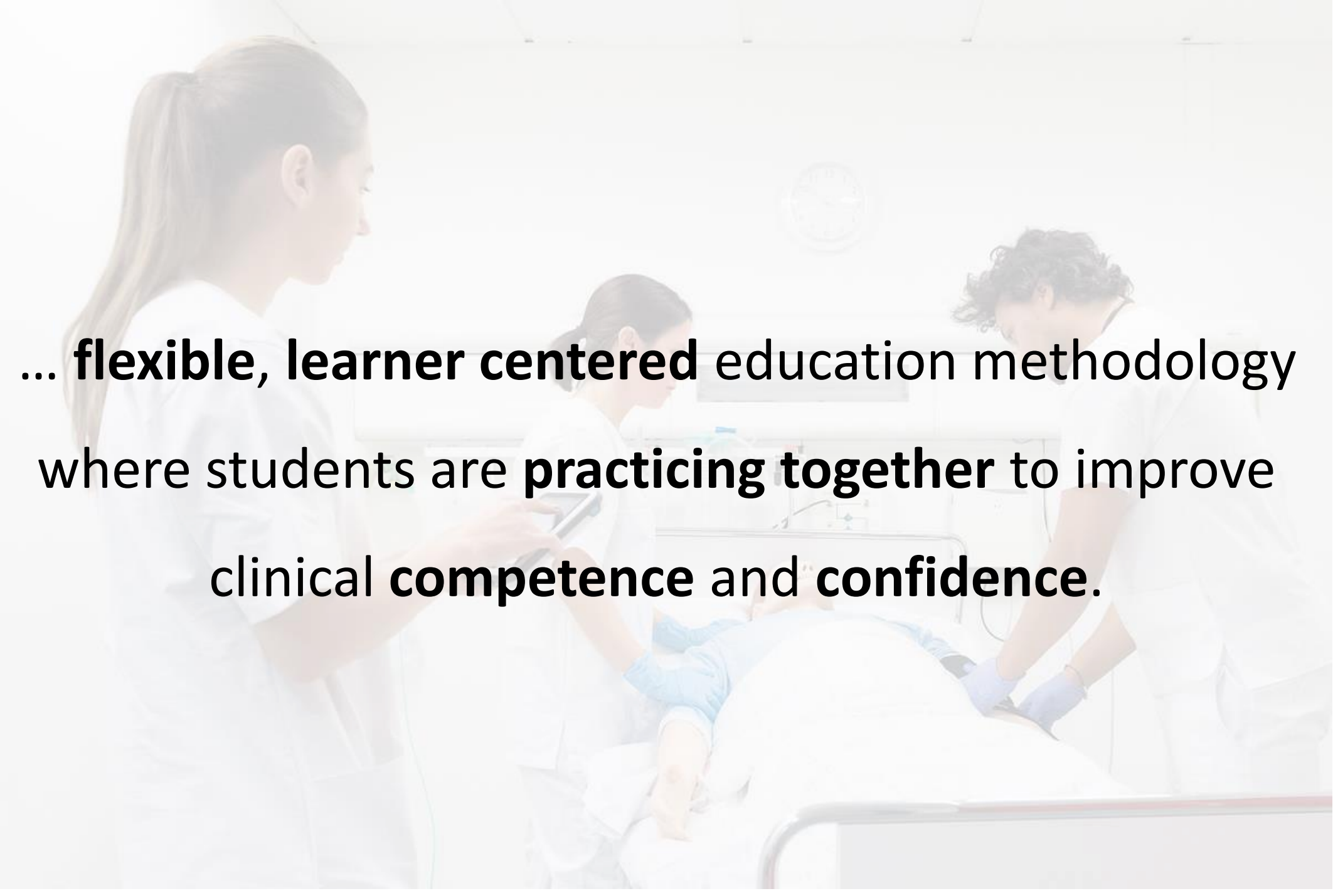

expert / faculty
dependent
Classical
skill training
Classical
simulation
OSCE
individual
team
Peer-to-Peer
RCDP
vSim
expert / faculty
independent

- Need to educate more health care workers
- Transition issues
- Improving practical skills
- Lack of trained sim staff
- Lack of sim time
- More focus on output

Imagine….



… **flexible**, **learner centered** education methodology where students are **practicing together** to improve clinical **competence** and **confidence**.

..again!

Pedagogy

THE PEER-TO-PEER CONCEPT

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Research

THE PEER-TO-PEER CONCEPT

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Hindawi Publishing Corporation
ISRN Nursing
Volume 2013, Article ID 930901, 10 pages
http://dx.doi.org/10.1155/2013/930901

Hindawi

Review Article

The Value of Peer Learning in Undergraduate Nursing Education: A Systematic Review

Robyn Stone, Simon Cooper, and Robyn Cant

Monash University, School of Nursing and Midwifery, Berwick Campus, 100 Clyde Road, Berwick 3806, Australia

Correspondence should be addressed to Robyn Stone; rwsto1@student.monash.edu

Received 23 December 2012; Acce

Academic Editors: L. H. Beebe an

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The study examined various meth
cally developed search strategy, he
peer learning and students in und
studies were published in English
by two researchers using publishe
comprising various research met
designs and assessment measures
objective effect or subjective asses
learning including increased confi
ing aspect of nursing education wl
fidence. Peer learning was shown t
students.

1. Introduction

Nursing education studies have often focused on traditional teaching methods such as classroom lecture learning, a behaviourism-based teaching method based on passive learning [1]. More effective student-centric learning methods are now being utilized to encourage active student participation and creative thinking [2–4]. One of these methods is peer learning, in which peers learn from one another, involving active student participation and where the student takes responsibility for their learning. Despite being used for many years, one of the barriers to advancement of peer learning is a lack of consistency in its definition [5]. It is known by different interchangeable titles such as "cooperative learning," "mentoring," "peer review learning," "peer coaching," "peer mentoring," "problem-based learning," and "team learning."

Peer learning has been used in education to address critical thinking, psychomotor skills, cognitive development, clinical skills, and academic gains [6–9]. One type of peer learning is problem-based learning (PBL) which is characterized by students learning from each other and from independently sourced information [10]. It is student centered, utilizing group work with the analysis of case studies as a means of learning. Alternatively "peer tutoring" involves individuals from similar settings helping others to learn, which may occur one-on-one or as small group sessions [11]. In nursing, high student numbers increase pressures [12] whilst varied and innovative teaching methods are beneficial [13] with peer learning offering a strategy that may be advantageous.

The Oxford Dictionary (2009) defines a "peer" as someone of the same age or someone who was attending the same university. The term "peer" can also refer to people who have equivalent skills or a commonality of experiences [14]. Both these definitions suit the concept of peer learning described here. The current study aimed to address the following research questions: (i) do undergraduate nursing students benefit from peer learning? and (ii) what approaches to peer learning are the most effective?

*"At a time when there is **pressure to train more nurses and minimize costs**, peer learning could utilize resources more effectively with students teaching and supervising more junior students, thus decreasing the*

- *Peer learning encouraged **independent study**, **critical thinking**, and **problem solving skills***
- ***Increased levels of knowledge** in areas as problem solving and communication*
- ***Cognitive and motor skills improvement***
- *Students **gained confidence** and experienced a **decrease in anxiety***
- *Subjective **increase in confidence** levels when completing clinical skills, problem solving, and critical thinking*

Peer-to-Peer Skill-Based Simulation

A LAERDAL MEDICAL PRODUCT

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The Solution

The solution is an easy-to-implement package comprising of:

- Bespoke scenarios / Bundle of 10 scenarios
- Supplemental e-learning resources for faculty
- Supplemental e-learning resources for students

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Ikke sikker | blendedlearning.laerdal.global/preview/57d1820ede9e88a013eeecfc/5c068f86452ca206c8381d10/#/

Apper bf Løping FEC Work Ed Mgmt Magazine Nyheter TED Goalcast SUN

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Peer-to-Peer
Skill-Based Simulation in Nursing

For Faculty

View

For Students

View

References

View

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UMASS BOSTON

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Key Benefits

1. Self-paced learning
2. Increased simulation flexibility
3. Increased simulation capacity without need for more staff
4. Help faculty / staff to implement new simulation programs
5. Standardized scenarios with feedback to guide improvements
6. Allow students to come better prepared for faculty led simulation
7. Increased simulation practice to improve competence and confidence
8. Prepare learners for tests, formal exams and clinical practice

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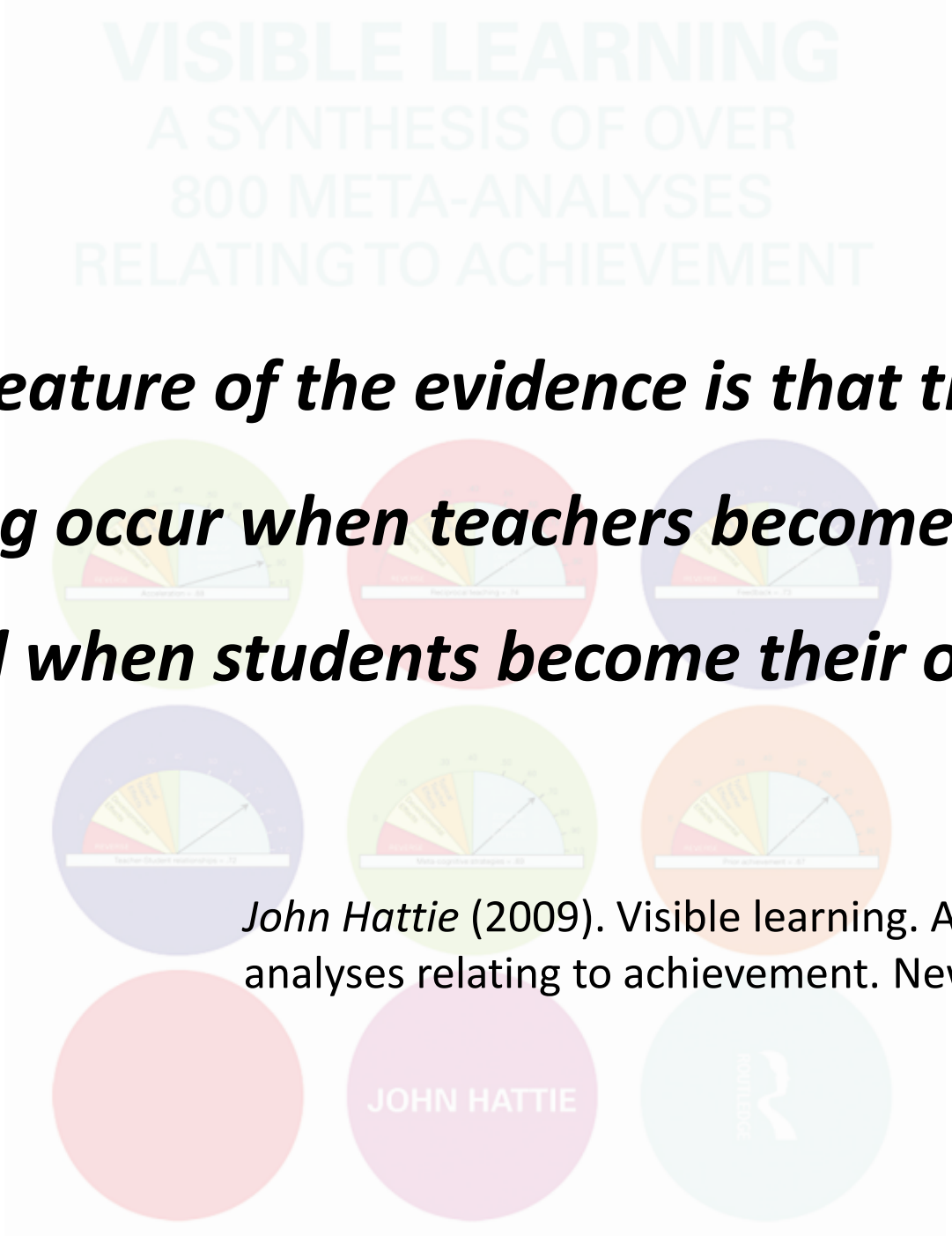

"The remarkable feature of the evidence is that the biggest effects on student learning occur when teachers become learners of their own teaching, and when students become their own teachers"

John Hattie (2009). Visible learning. A synthesis of over 800 meta-analyses relating to achievement. New York, NY: Routledge

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Et samarbeid mellom

HELSE STAVANGER
Stavanger universitetssjukehus

Universitetet i Stavanger

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Why don’t train the really hard stuff?

Patrik Nyström

Human Factors and System Safety MSc, Lund University

Safety Factors Finland

Background Story

I was once in a situation

- nobody had even talked about
- I needed to sort things out in a good way
  - not even available

WHY was I left this alone with the problem?

- with a real patient?

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Background - Facts

- It was a known situation that everybody struggles with
- We are expected to be able to apply theory in real situations without any training
- We have not got the chance to reflect upon how to solve situations like this

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Background - The idea

Where might simulation have the highest impact on learning?

What are we not training?

When does it become abandonment of future experts in health care to NOT train?

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Ethics course - Starting point

- Content:
  - Lectures – a lot of them, many days of lectures
  - Assignments – a lot of them, many pages of text created
  - Exam / Final assignment / seminar – reading, writing, talking

- Learning through deduction
  - from theory to practice (without the practice)

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One way of creating ethical scenario

Make description of a real case, describe the ethical challenge.

1. Why was this situation a challenge?
2. Who where a part of the situation?
3. Which decisions and actions are possible according to: (ethical theories, norms, protocols, rules, regulations, law)
4. What is the most important thing in the situation?
5. Other values involved? Moral – own inner ethical norm?
6. What should be prioriticed according to what?
7. How would you like to act?

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Examples of scenarios

- **Patient refuses the care needed**
  - Otfen verbally aggressiv
  - According to protocolls, care should be given (norms).
  - Integrity - self determination

- **Patient with drug abuse background**
  - No money,
  - Wanting morphine for bad stomach pain
  - Scared for police / authorities
  - Integrity – dignity - responsibility

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Examples of scenarios

- **Patient with cancer, wants to die at home, DNR-desicion**
  - Basic care too heavy for relatives.
  - They demand you take care of this problem.
  - Who is the patient?
  - Dignity - Responsibility

- **Patient found lifeless, dead,**
  - Relatives demands CPR in order to save their loved one
  - Dignity - Responsibility

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Debriefing

- Longer time used than on a “normal” debrief (-> 60 minutes discussion)
- Main objectives:
  - not focusing a long time on actions in simulation
  - rather expanding frames behind the actions and generalize the problem and possible solutions
  - Identify/reveal ethical challenges. What is ethics?
- Discuss challenges and solutions
  - Much time used on this
- Use models for future problem solving

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Simulate instead of lecturing
-> It is worth the effort

- Inductive, from practice to theory
  - Reflective understanding of own action in difficult situations
  - Mirroring different solutions with classmates

- Knowledge of different solutions for challenges
- Theory after practice
  - Deeper reflective thoughts on subject, they understand the articles
- 16 hours taken (2 x 8h) from lecturing to simulation
  - 10 scenarios (20 students)
  - Only one scenario active BUT taking part in all debriefings

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New course
Comments by students

- Able to learn how to choose amongst only bad decisions
- Higher understanding of how own behaviour affects the situation
- Hard to find words in certain situations -> good to train
- See the complexity instead of just routine and norms
- Activity -> Reflection -> Better prepared for meeting difficult situations

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Optimal healthcare needs training

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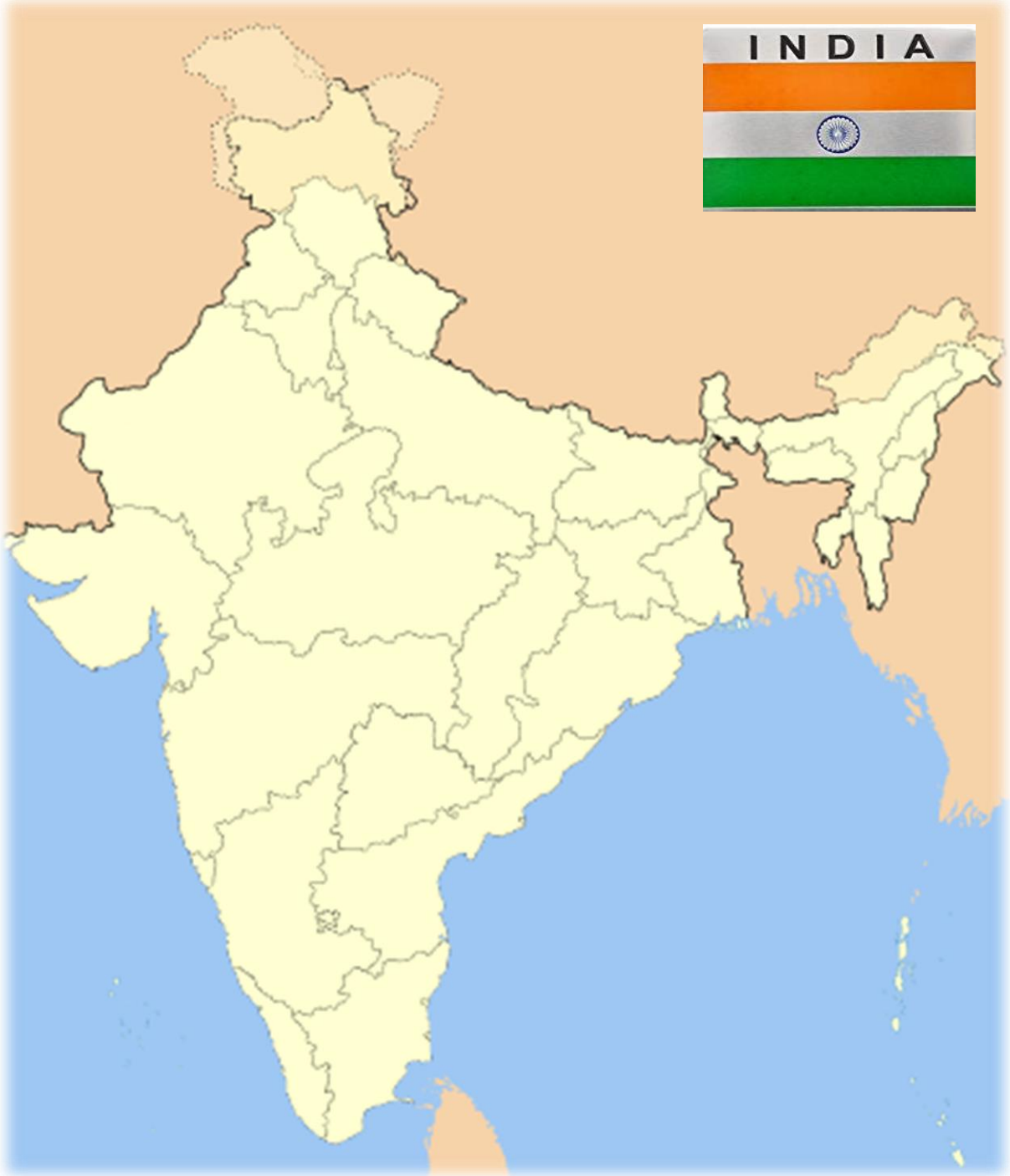
Dr. Rashmi & Dr. Asmita

122 maternal deaths per 100,000 live births

25.4 neonatal deaths per 1000 live births

209 sudden cardiac arrest per 100,000 population

5.2 million medical errors every year



239 maternal deaths per 100,000 live births

19.9 neonatal deaths per 1000 live births

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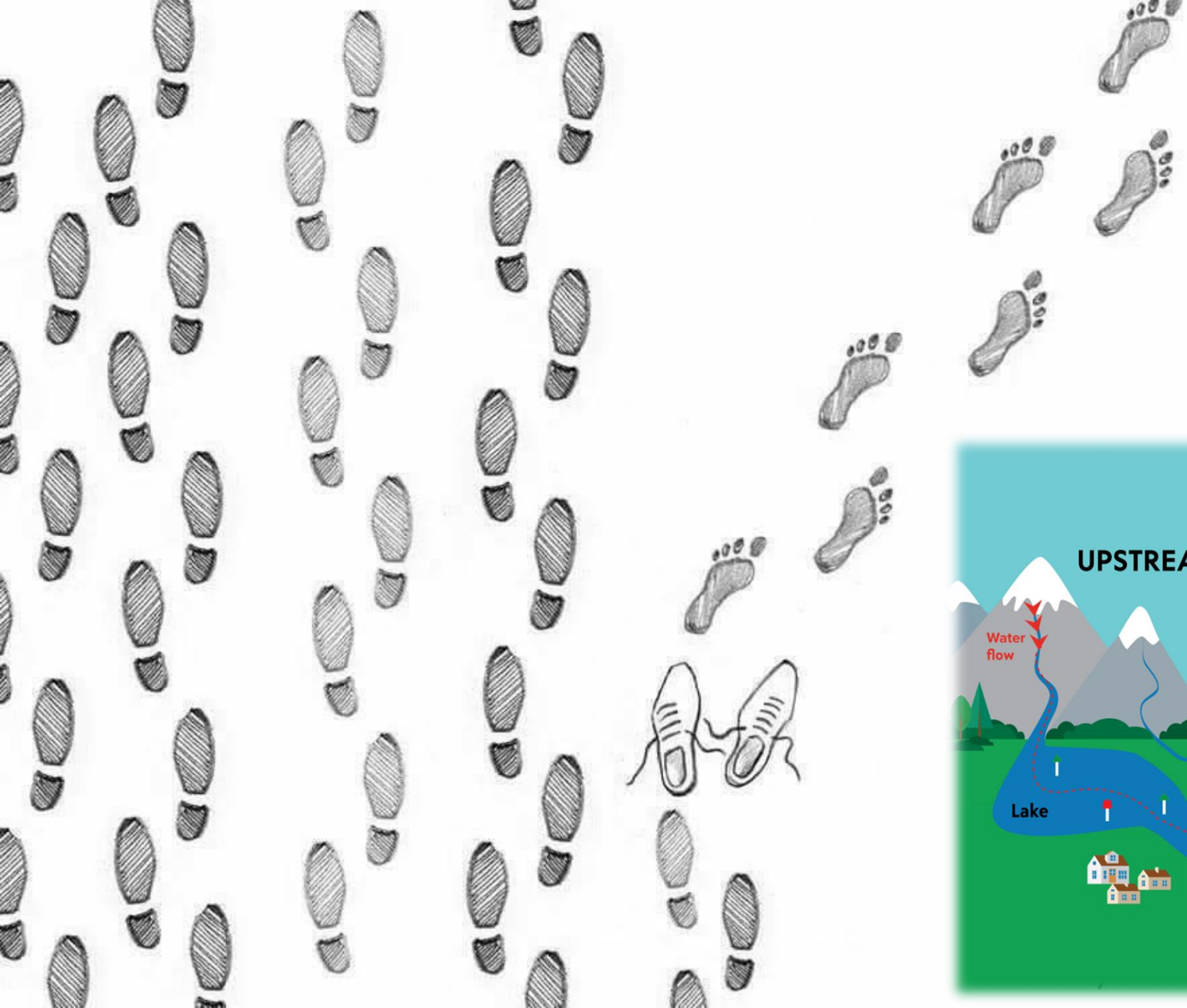
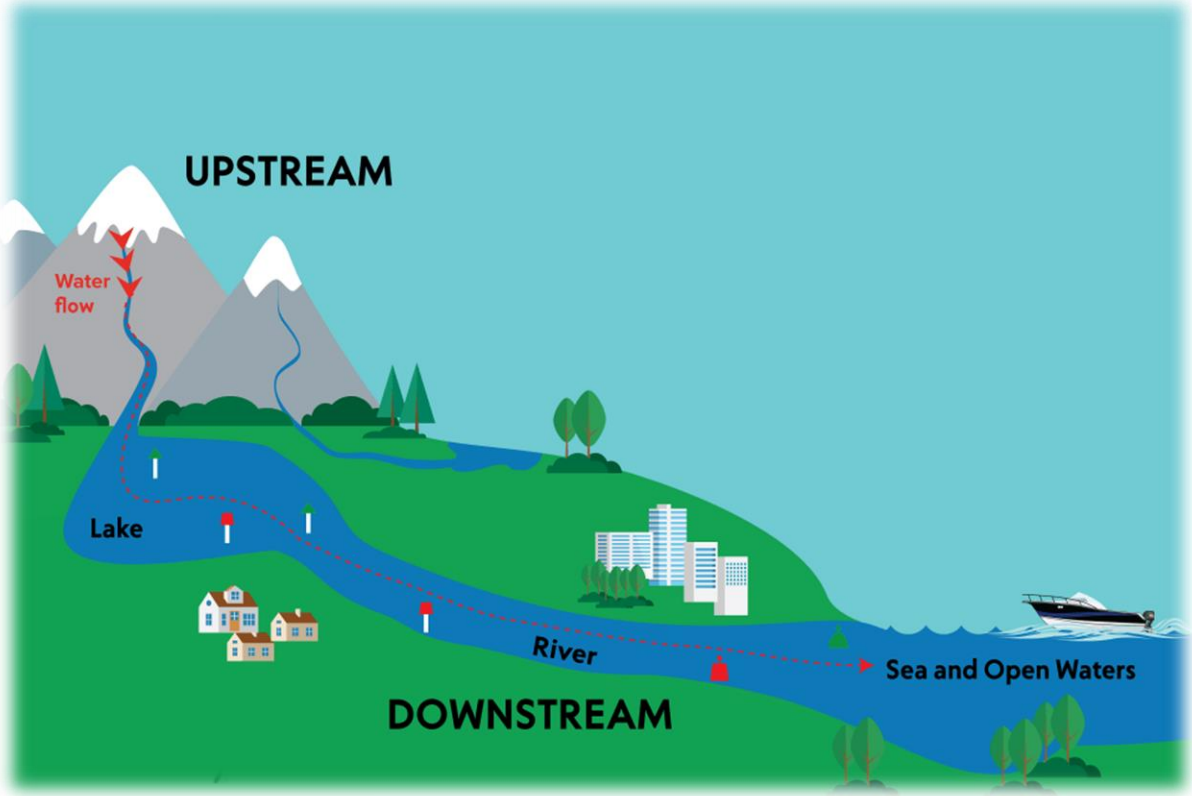
2013




UPSTREAM
Water flow
Lake
River
Sea and Open Waters
DOWNSTREAM

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Learning objective	Skills	Manikin
Midwifery & gynaecologic nursing Assessment of pregnant women	Diagnose pregnancy using UPT kit Antenatal history taking of pregnant women Antenatal physical examination- abdomen; breast Recording weight, BP Haemoglobin estimation; urine testing for sugar & albumin Immunization of pregnant women Assessment of risk status Antenatal counselling Maintaining antenatal records	Standardized simulated patient M1 :: Nursing Anne with SimPad PLUS
Assess and monitor woman in labour	History taking of women in labour Vaginal examination and their interpretation Monitoring women in labour using partograph Care for women in labour- include respectful maternity care	Standardized simulated patient M7 :: Mama Birthie
Conduct normal delivery and essential care for newborn including newborn resuscitation	Setting up the labour room with newborn care corner Conduct normal delivery with active management of third stage of labour IV line, blood transfusion and urinary catheterisation Shock management Management of Pre-Eclampsia/Eclampsia with MGSO4 Provide essential newborn care and assessment Newborn resuscitation Episiotomy and suturing Maintenance of labour room records and case sheets	

2016

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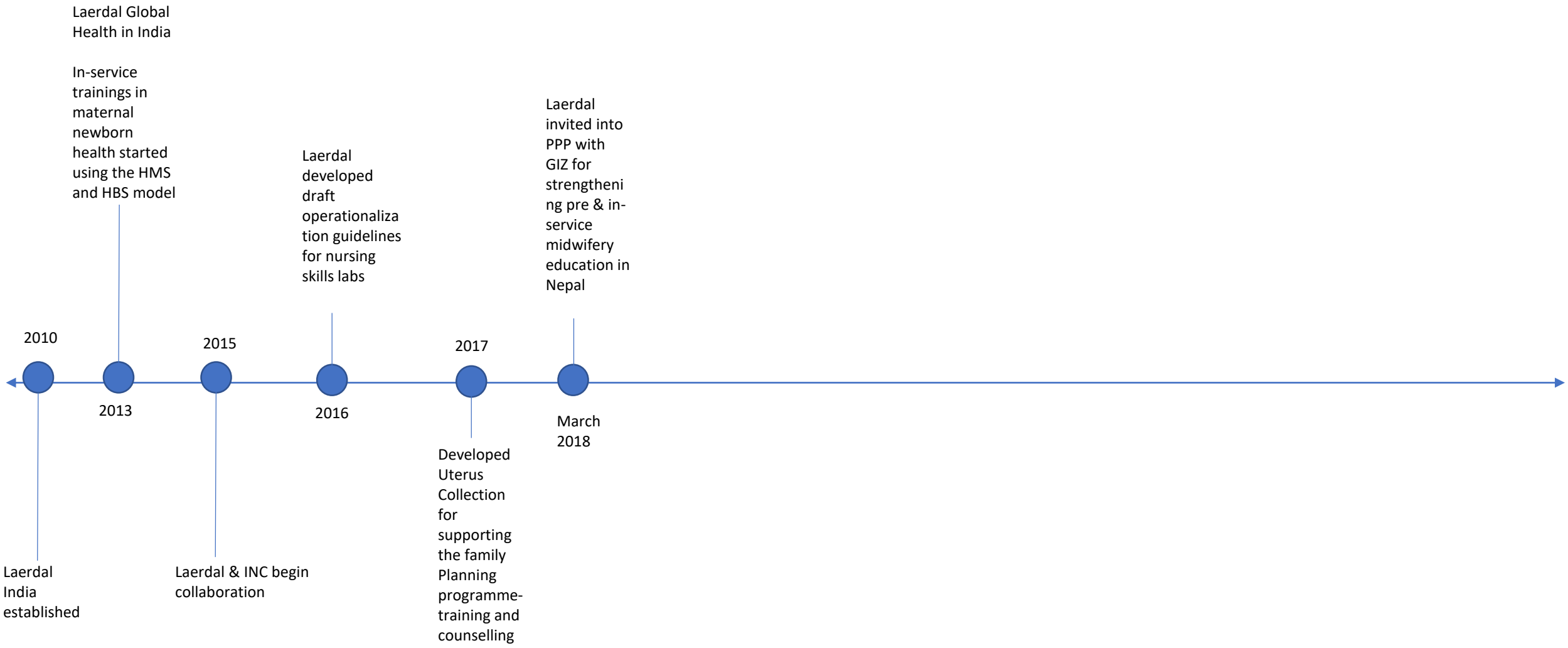
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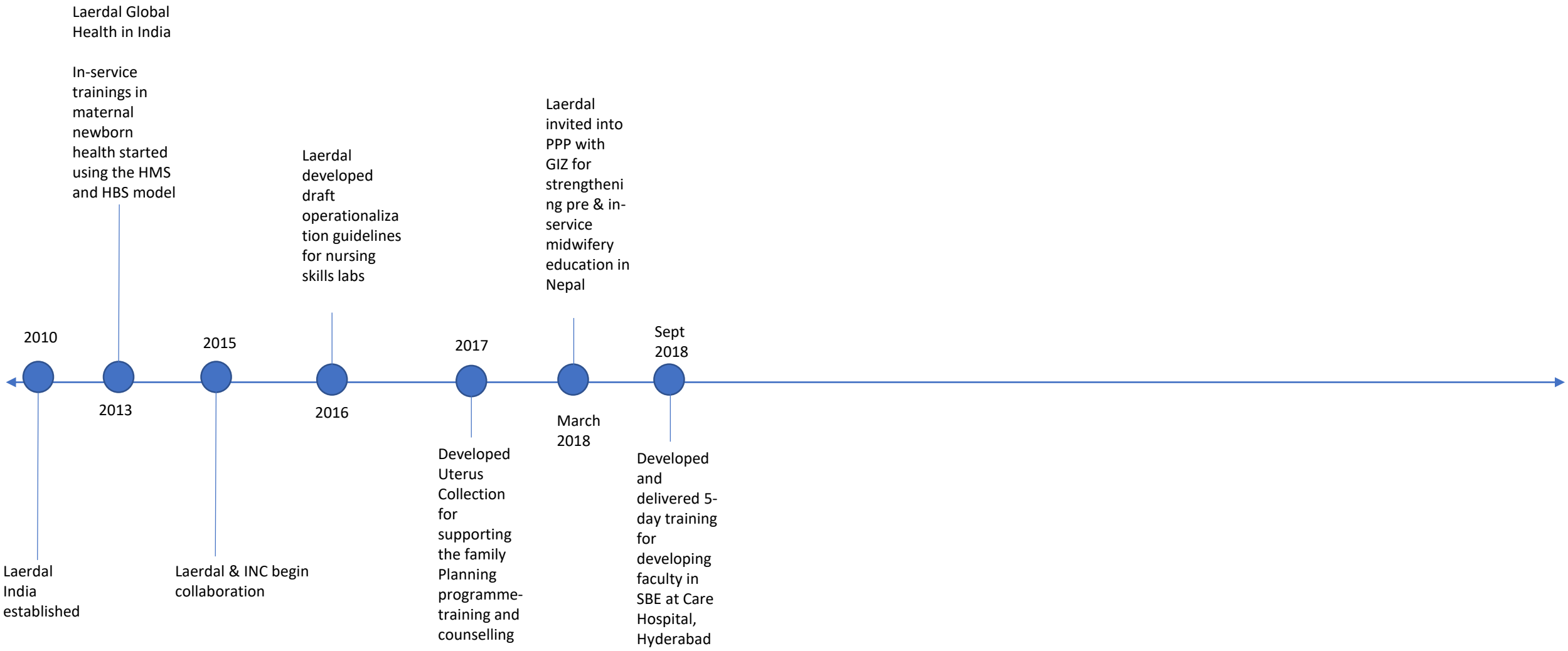
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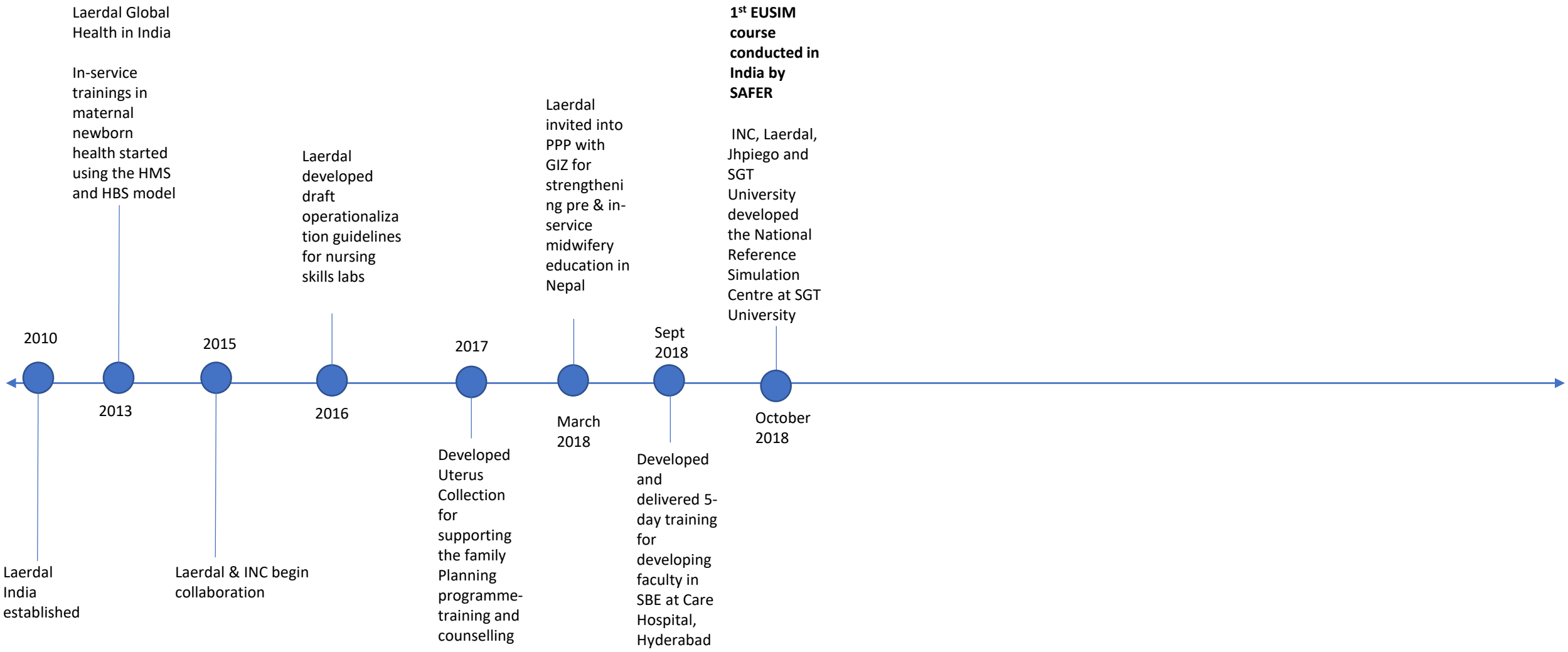
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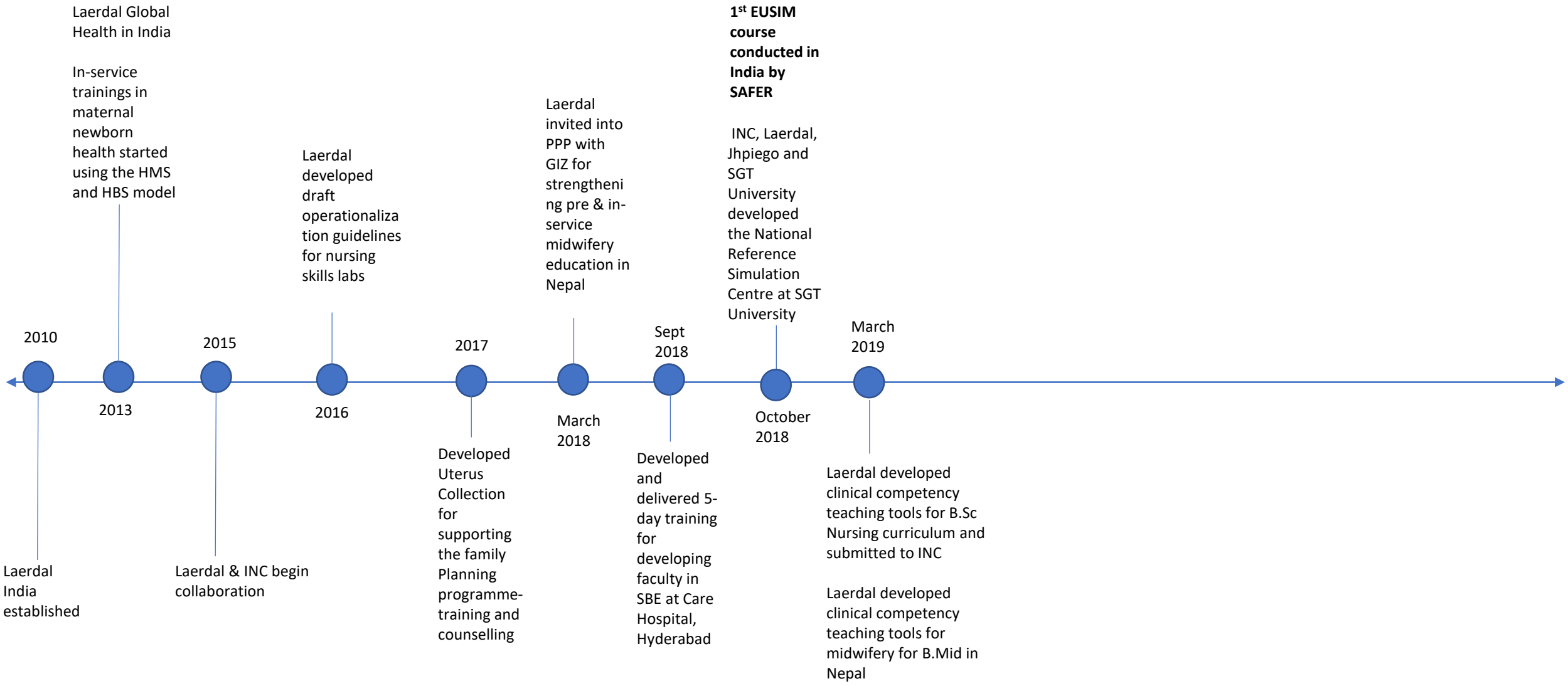
October 2018

FACULTY OF DENTAL SCIENCES
SGT UNIVERSITY
GURGAON, Delhi-NCR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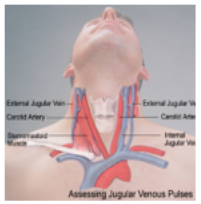
Checklist to measure Jugular Venous Distension

Introduction: The jugular veins are a part of human circulatory system which drains the blood from the head into the lungs. Jugular Venous Pulse (JVP)or Distension, provides an indirect measure of central venous pressure. JVP is defined as the pressure changes transmitted in form of waves from right atrium to veins which are present near heart. Another commonly used definition is the indirectly observed pressure over the venous system by visualizing the internal jugular vein. In heart failure the JVP can be raised so that the external jugular vein is filled up to or above the angle of the jaw.



Purpose:

Any condition which can increase blood volume, or interferes with right atrial filling or the movement of the blood from the right atrium into the right ventricle has the potential to increase central venous pressure and hence cause jugular vein distension. These may be:

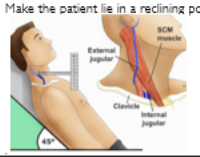
1. Tricuspid valve disease
2. Pericardial diseases
3. Heart failure
4. Pulmonary stenosis
5. Heart block
6. Right heart malfunction
7. Ventricular tachycardia
8. Pulmonary hypertension
9. Chronic Obstructive Pulmonary Disease (COPD)

Equipment/Preparation:

1. Standardized Patient
2. Well-lit room or Pen-torch
3. Examination table
4. Centimeter Ruler

Confidential Draft

Procedure:

#	Action/Step	Rationale	Done/Not Done	Remarks
1.	Introduce yourself to the patient	Self introduction helps the patient to know his/her physician and thereby relaxes the patient		
2.	Wash your hands	This is to maintain asepsis and avoid infection		
3.	Explain the procedure to the patient	Explaining the procedure helps allay any anxieties or fears in the patient's mind and makes him/her amenable to any suggestions you make		
4.	Take an informed consent from the patient	This is to avoid any medicolegal complications		
5.	Expose the patient appropriately	This is to maintain the self dignity of the patient		
6.	Make the patient lie in a reclining position with head elevated at 45° 	This is the standard position for measuring JVP		

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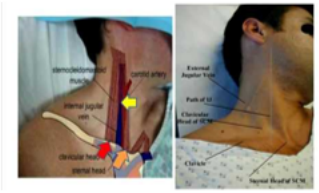
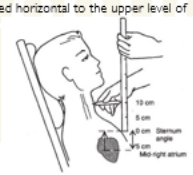
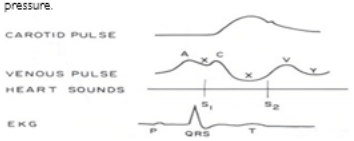
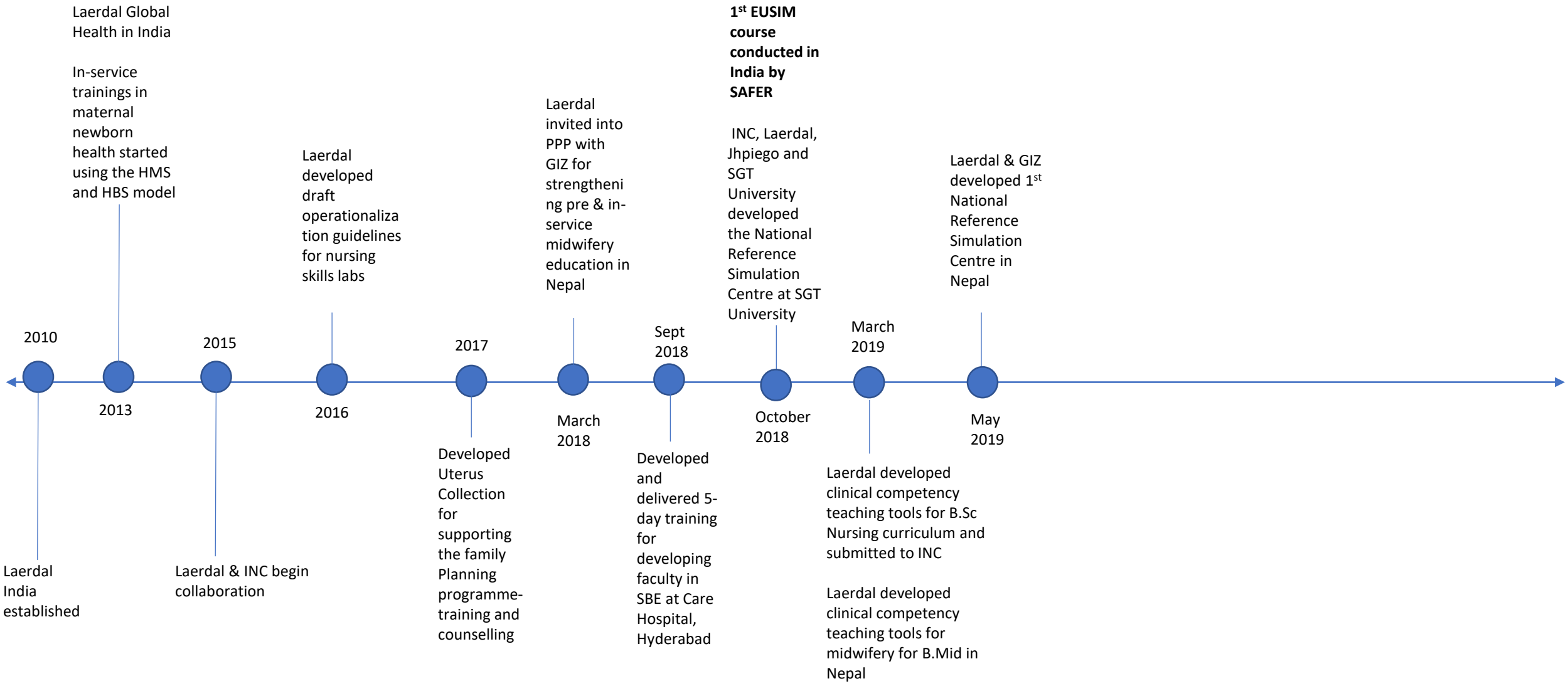
7.	Ensure light is tangential to lighten up the highlights and shadows	A penlight can also be used for the same purpose		
8.	Do not flex the neck sharply			
9.	Locate the surface markings of internal jugular vein which runs from the medial end of the clavicle to the ear lobe under the medial aspect of sternocleidomastoid 	It is important to locate the internal jugular vein, and not confuse it with the carotid artery		
10.	Locate the sternal angle (Angle of louis). It can be felt as a transverse prominence, about 5 cm below the suprasternal notch at the level of 2nd costal cartilage			
11.	Using 2 rulers – one placed horizontal to the upper level of pulsation and another taking the vertical distance of that ruler from the sternal angle, measure the vertical distance (in cm) between the horizontal lines drawn from the upper level of venous pulsation and the sternal angle. 			
12.	Add +5 cm to the above measurement to obtain the right atrial pressure.  Timing of the jugular venous pulse (JVP) is displayed in relation to the carotid arterial tracing, first (S1) and second (S2) heart sounds, and the electrocardiogram (ECG). Source:Clinical Methods: The History, Physical, and Laboratory Examinations. 3rd edition.Walker HK, Hall WD, Hurst JW, editors.	•Normally, the center of right atrium is 5 cm below the sternal angle (as seen in the picture above)		
13.	Wash hands with soap and water	Handwashing prevents infection and cross infection		
14.	Report and document your findings after the procedure is done. Inform senior staff if findings abnormal.	Documentation of the findings is important for record keeping and medicolegal purposes		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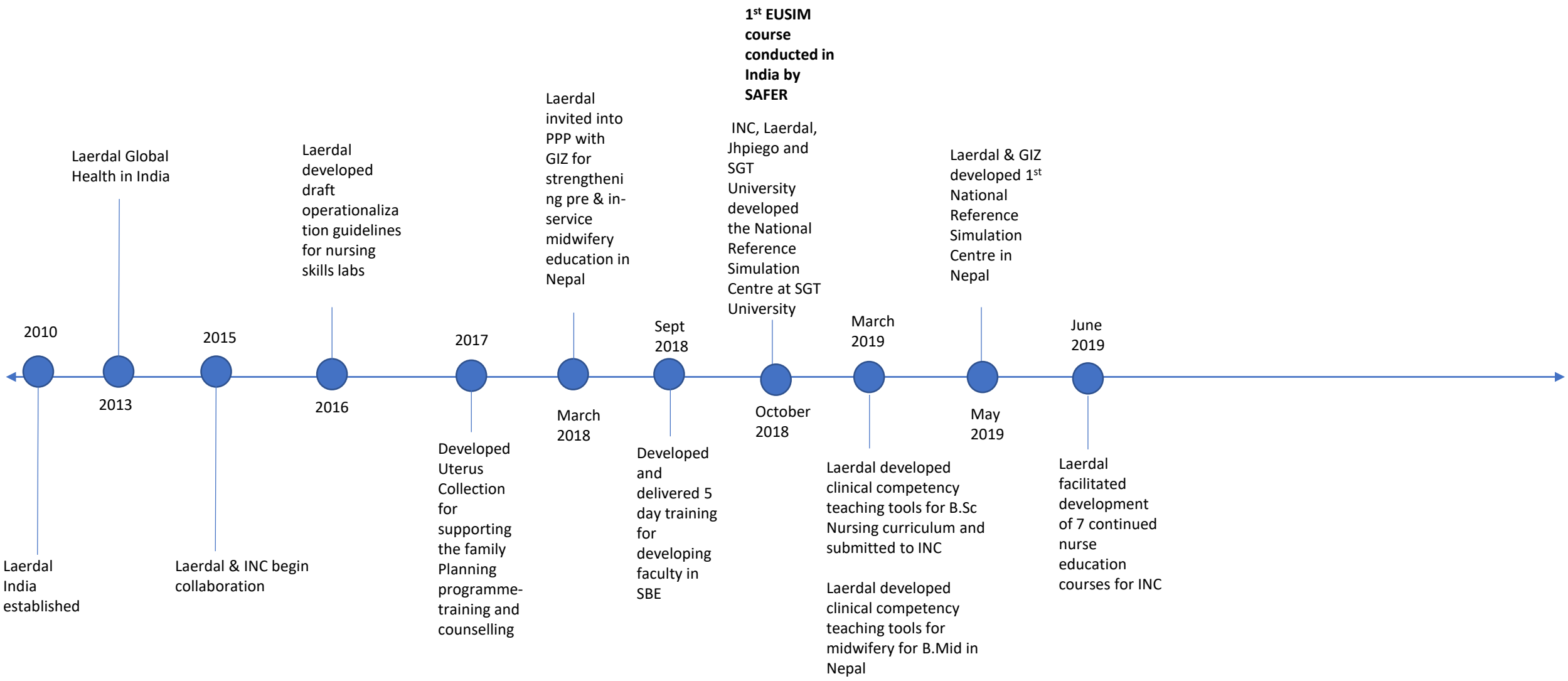
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June 2019

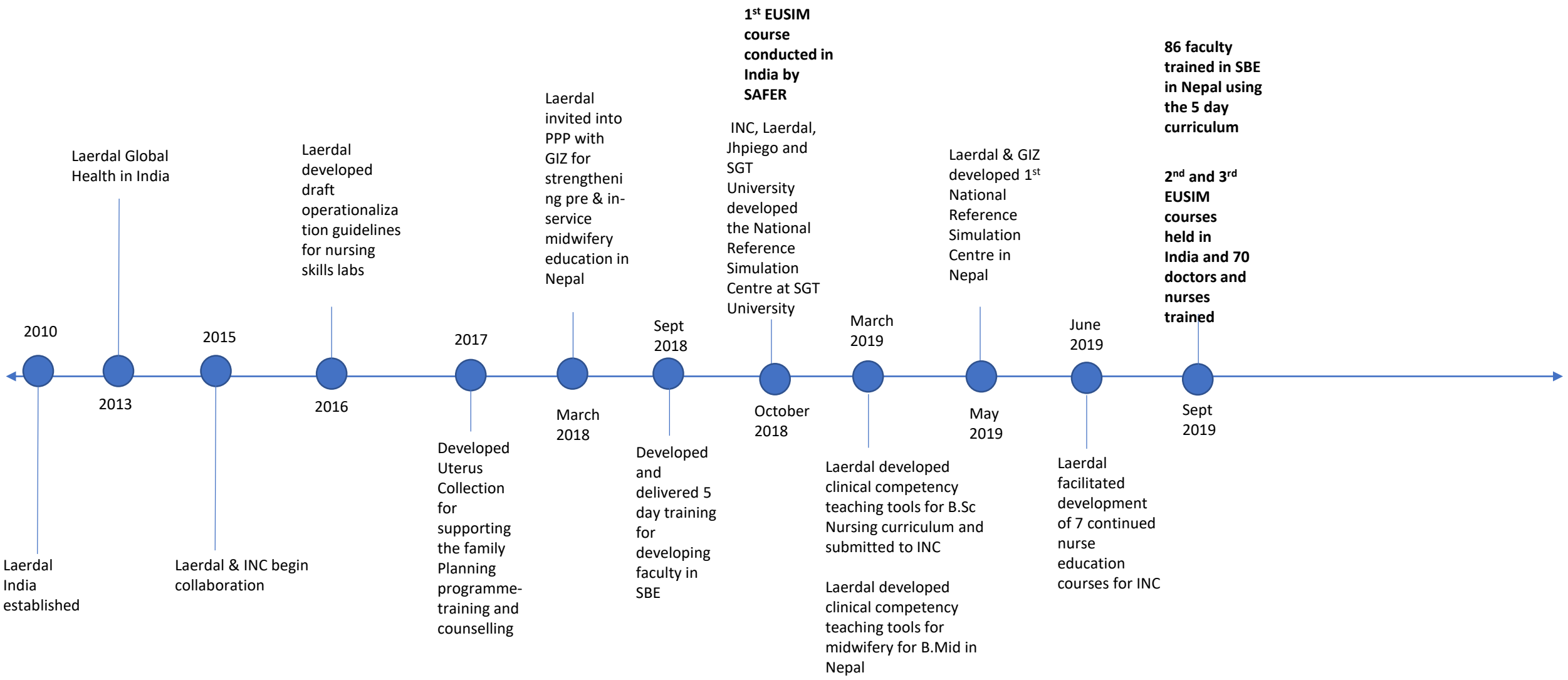
OPERATION THEATRE NURSE

TRAINING MODULE

Nursing in ICU

Training Manual

Training Manual for Emergency Room Nurses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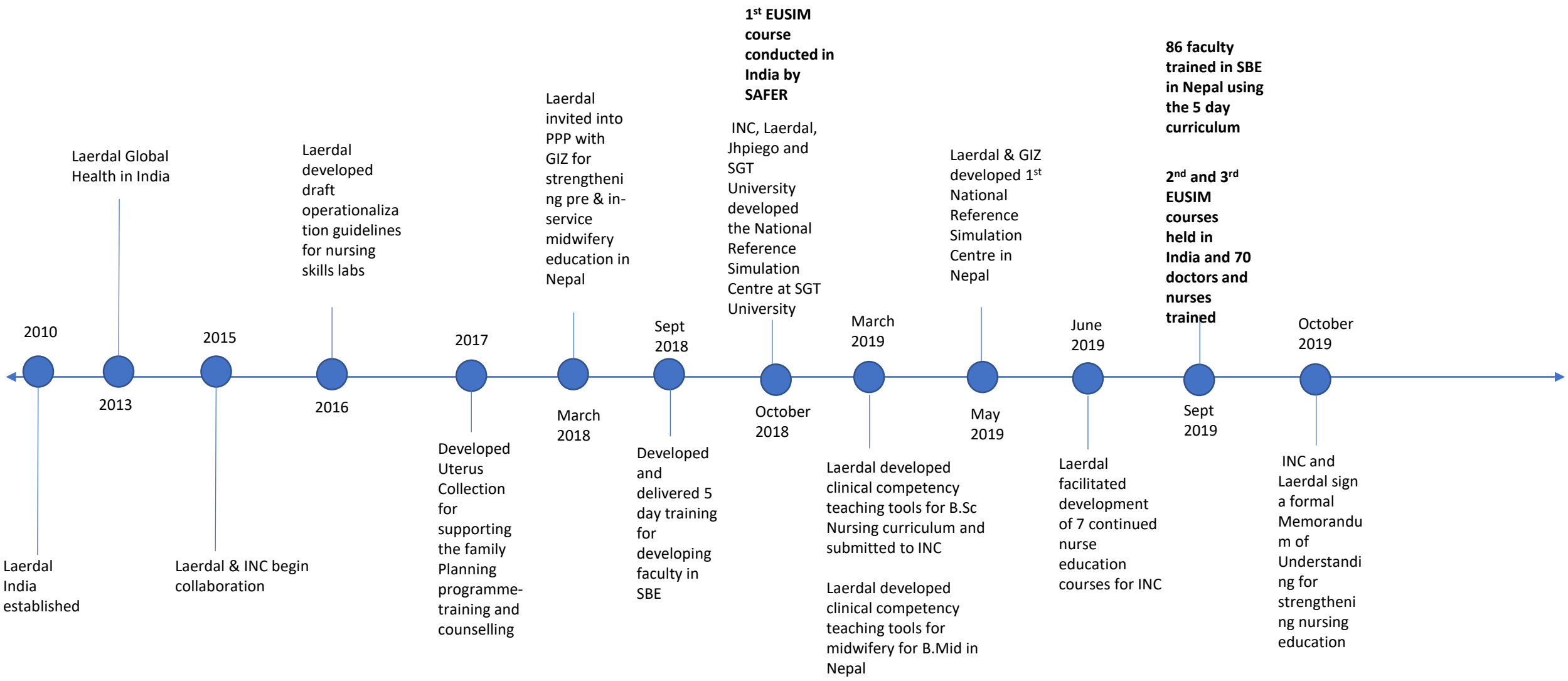
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October 2019

Memorandum of Understanding

between

Indian Nursing Council

and

Laerdal Medical India Pvt. Ltd

This document constitutes an agreement between Indian Nursing Council (INC), headquartered at 8th Floor, NBCC Center, Plot No. 2, Community Center, Okhla Phase 1, New Delhi 110020, the apex statutory body with a mandate to establish uniform standards of training of nurse, midwives and health visitors with the stated objective of regulating nursing education and profession in the country.

And

Laerdal Medical India Pvt Ltd, with registered office at No.10, 1st Street, Dr.Subbarayan Nagar, Kodambakkam, Chennai-600 024, Tamil Nadu. Laerdal Medical India a subsidiary of Laerdal Medical AS headquartered in Norway, the global leader in simulation-based education.

The Nursing Council Act[1] came into existence in 1947 to constitute the Indian Nursing Council to safeguard the quality of nursing education in the country. The mandate was to establish and maintain uniform standards of nursing education. The Indian Nursing Council (INC) is a statutory body that regulates nursing education in the country through prescription, inspection, examination and certification and by maintaining its stand on uniform syllabus at each level of nursing education.

The INC is the regulatory body that overlooks nursing education in the country. Amongst others, it provides expert advice to the Government on nursing education, prescribes national nursing education syllabi, and specifies minimum quality criteria for educational institutions. At State level, the State Nursing Councils (SNCs) inspect and recognize training institutions, conduct examinations, monitor rules of professional conduct and maintain an active register.

Laerdal Medical India Pvt. Ltd. (hereinafter Laerdal) is the Indiansubsidiary of Laerdal Medical AS, headquartered in Norway, and is dedicated to helping save lives with training programs and products. Laerdal Global Health AS is a sister concern of Laerdal Medical AS and develops durable, simple, culturally adaptable, affordable products and programs aimed at helping save lives of newborns and mothers in low-resource countries. Laerdal Medical AS and Laerdal Global Health AS is represented in India by Laerdal Medical India Pvt Ltd.

Activities

#	Activities	Timeline	Responsibility
	INC and Laerdal will together form a steering committee comprising of 2 members from INC and 2 members from Laerdal to implement the activities outlined in this MOU. This committee will meet at regular intervals, for the first year, every month. The steering committee will oversee the activities while the day-to-day implementation of the activities will be the responsibility of the Consultant identified by INC and Laerdal. The consultant will work in close coordination with INC and Laerdal and will apprise INC and Laerdal of developments in activities atleast thrice a week.	July 2019	INC and Laerdal. The consultant fees would be covered by Laerdal.
1. Strengthen pre-service nursing, midwifery education			
1.1	Develop the tools for clinical competency based teaching for B.Sc nursing curriculum		Laerdal has developed and submitted the same to INC for finalization
1.2	After B.Sc nursing curriculum is finalized by INC, develop tools for State Nursing Councils and for nursing colleges to understand the new B.Sc nursing curriculum and how it must be delivered: o Training package for state nursing councils on quality roll-out of the new BSc nursing curriculum o Tools for state nursing councils to evaluate/ assess the quality of roll out of the new curriculum by nursing colleges	After B.Sc syllabus is finalized March 2020	Laerdal to draft INC to finalize Laerdal to draft INC to finalize
1.3	Develop 7-day training package for training nursing faculty in simulation-based education and using the tools developed. Likely to consist of: o Facilitator guide and provider handbook for the 7-day SBE training o Explore development of e-learning modules that could include videos of how to teach skills using checklists, how to use the simulation tools, how to debrief students using EBRIE, simulation videos. This e-learning could be a pre-requisite for the hands-on 7-day training program. o Accreditation of credit hours the trainings above	Sept 2019 Dec 19' Oct 2020 As packages are finalized	Laerdal to draft INC to finalize Laerdal to draft INC to finalize INC
1.4	Develop simulation-based training module to teach all the required skillsets for Mid Level health Provider (MLHP)	August 2019	Laerdal to draft and INC to review & finalize
1.5	Review and integrate the module into B.Sc nursing curriculum	Oct 2019	INC
1.6	Design an assessment format for ensuring selection of highly competent healthcare personnel as MLHP thus ensuring that the MLHP is well trained in providing all the above-mentioned services confidently	Oct 2019	Laerdal to draft INC to finalize
1.7	Develop the tools for clinical competency-based teaching for GNM		Laerdal has developed and submitted the same to INC for finalization
1.8	Explore partnerships with Universities offering courses in professional midwifery, outside of India to help strengthen midwifery faculty training and research in India	2019 to 2022	Laerdal and INC
1.9	Review requirements for teaching the simulation-based B.Sc nursing curriculum and assess the readiness of nursing colleges/ schools for minimum requirements to provide the courses	August 2019	INC
1.10	Develop guidelines for accreditation of skills and simulation labs to start offering faculty development courses against a fee	Dec 2019	INC to lead, Laerdal to assist
2. Strengthen continued nursing education			
2.1	Develop training capsules for the following: 1.1 Induction training 1.2 Training for nurses in Neonatal Intensive Care Unit 1.3 Training for nurses in Operation Theatre 1.4 Training for nurses in Emergency Room 1.5 Training for nurses in Post-operative ward 1.6 Training for nurses in Intensive Care Unit 1.7 Training for nurses in Labour Room 1.8 Training for nurses in Infection Prevention	August-Dec 2019	Laerdal to draft and INC to finalize content
2.2	Review, finalize the training capsules and assign CME credit hours	Oct 2019 to March 2020	INC
2.3	Develop accreditation guidelines for accrediting skills and simulation labs for offering these trainings at a fee with cap decided by INC	Jan 2020	Laerdal and INC
2.4	Business model for offering the CME trainings to be finalized	Oct 2019	Laerdal and INC
3. Innovation to strengthen pre-service and continued nursing education			
3.1	Explore development of digital OSCE solution for use by students, teachers, nursing colleges and schools and state nursing councils to assess competency of students		Laerdal and INC
3.2	Explore adaptation of E-Mirg, a virtual simulation tool to build decision making capacities among nursing students, for India		Laerdal and INC

Inventions and Intellectual Property
Any existing or future rights, interests or other intellectual property which may exist in any work (whether or not in the nature of copyright) which is created as a result of this MOU, will belong to both the parties. Any use outside of this collaboration will require expressed written permission by either party.

If the parties' through research or innovative work creates a patentable invention or any other property which may be of commercial value to the parties, both parties shall without delay notify the other party.

INC acknowledges that they shall not be entitled to use, reproduce, sell or otherwise deal in or exploit in any way anything which belongs to Laerdal without the written consent of the Regional Director South Asia of Laerdal.

Term and Termination
This MOU is in-will and may be modified by mutual consent of authorized representatives from INC and Laerdal. This MOU shall become effective on 7th August 2019 upon signature by the authorized officials from the INC and Laerdal and will remain in effect until 30th July 2022.Either Party may terminate this Agreement with a 30-day prior written notice .

Material breach of the activities and items outlined under Roles and Responsibilities will give the opposing Party the right to immediately terminate this MOU. This MOU will be governed as per Indian Laws and shall be subject to exclusive jurisdiction of courts at Mumbai.

Contact Information INC

Name: **Dr. T Dilleep Kumar**
Title: President
Organization: Indian Nursing Council
Address: 8th Floor, NBCC Centre, Plot No. 2, Community Centre, Okhla Phase-I, New Delhi-110020.

Mobile: 011-66616801
E-mail: president.inc@gov.in

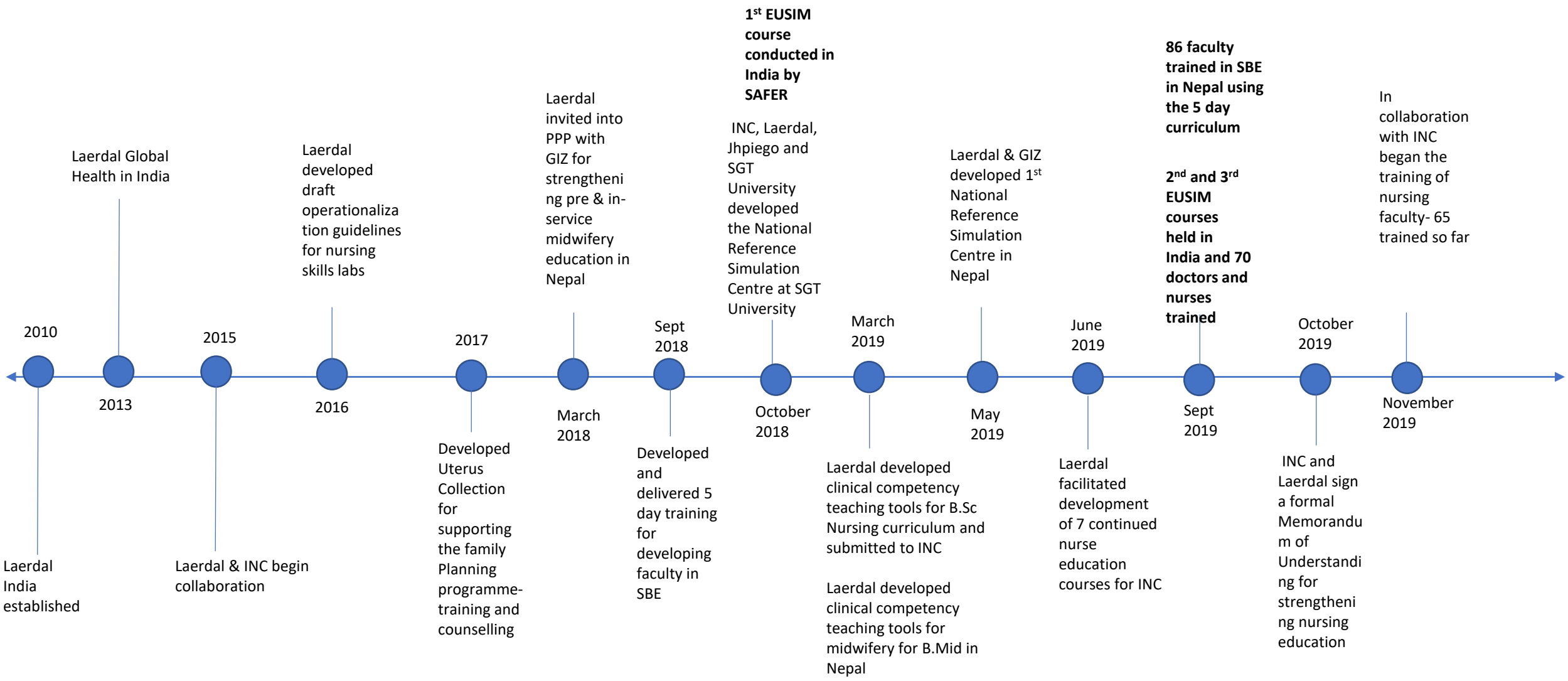
Contact Information Laerdal

Name: **Sivaram Rajagopalan.**
Designation: Regional Director, Asia
Organization: Laerdal Medical India Pvt Ltd
Address: 10, 1st Street, Dr Subbarayan Nagar, Kodambakkam, Chennai 600 024, Tamil Nadu, India
Mobile: +91-9994974482
E-mail: sivaram.rajagopalan@laerdal.com

Authorised signatories

Name : Dr. T Dilleep Kumar
Title: President
Organization: Indian Nursing Council
Date : 7 10 19

Name Sivaram Rajagopalan
Title:Regional Director South Asia
Organization: Laerdal Medical India Pvt Ltd
Date : 7/10/19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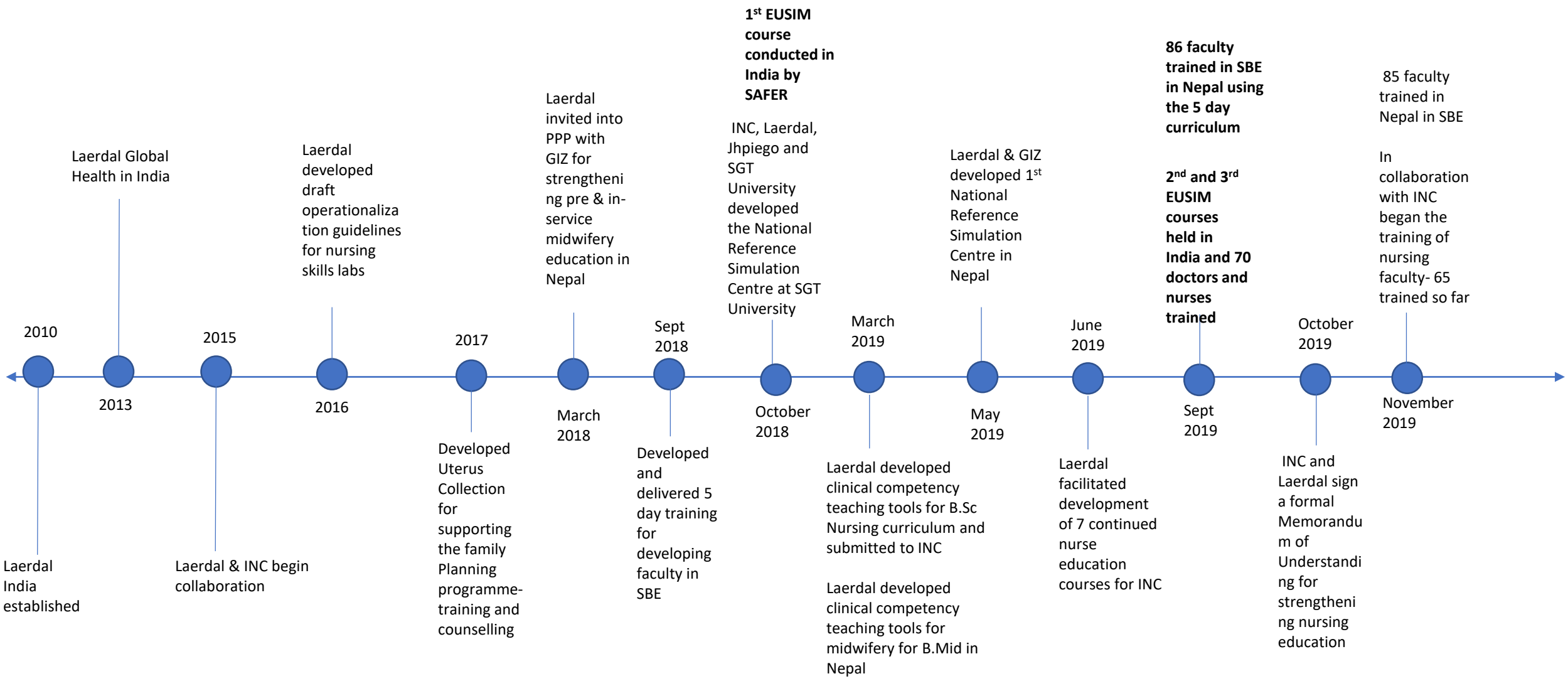
jhpiego
Laerdal
helping save lives
SGT UNIVERSITY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Going glocal, how can SAFER develop simulation in India and vice versa

Unni Silkoset
Business Development Director

Laerdal
helping save lives

Glocal = reflecting or characterized by both local and global considerations (lexico.com)

Human Rights and Sustainable Development Goals

Article 12, ICESCR

1. …recognize the right of everyone to the enjoyment of the highest attainable standard of physical and mental health.

2. The steps to be taken…:

(a) …reduction of stillbirth-rate, infant mortality and for healthy development of the child;

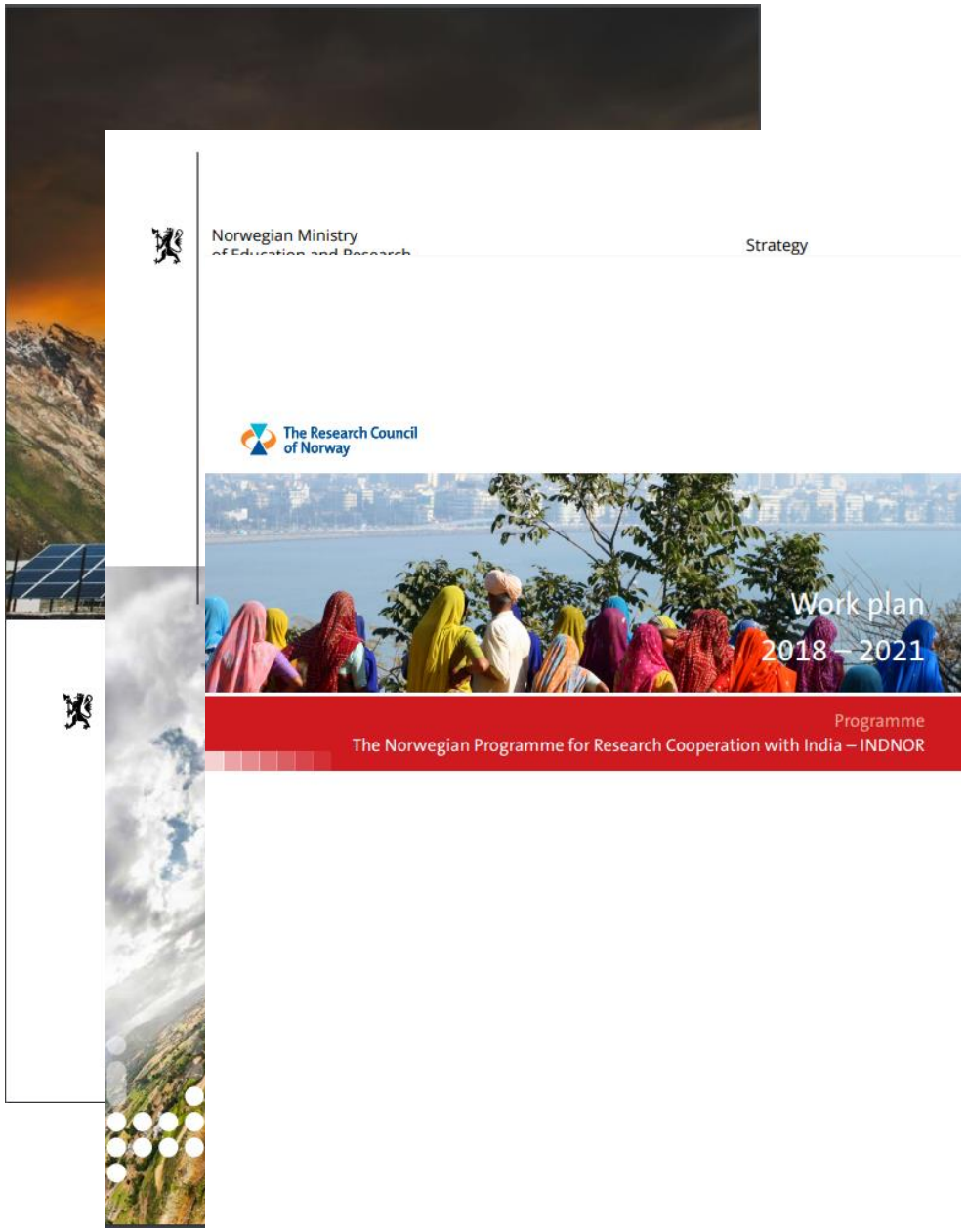
(b) Improvement of all aspects of environmental and industrial hygiene;

(c) Prevention, treatment and control of epidemic, endemic, occupational and other diseases;

(d) Creation of conditions which would assure to all medical service and medical attention in the event of sickness.

SDG 3 Ensure healthy lives and promote well-being for all at all ages

- Reproductive, maternal, newborn and child health
- Infectious diseases
- Non-communicable diseases, mental health and environmental risks
- Health systems and funding



Norway – India 2030 Strategy

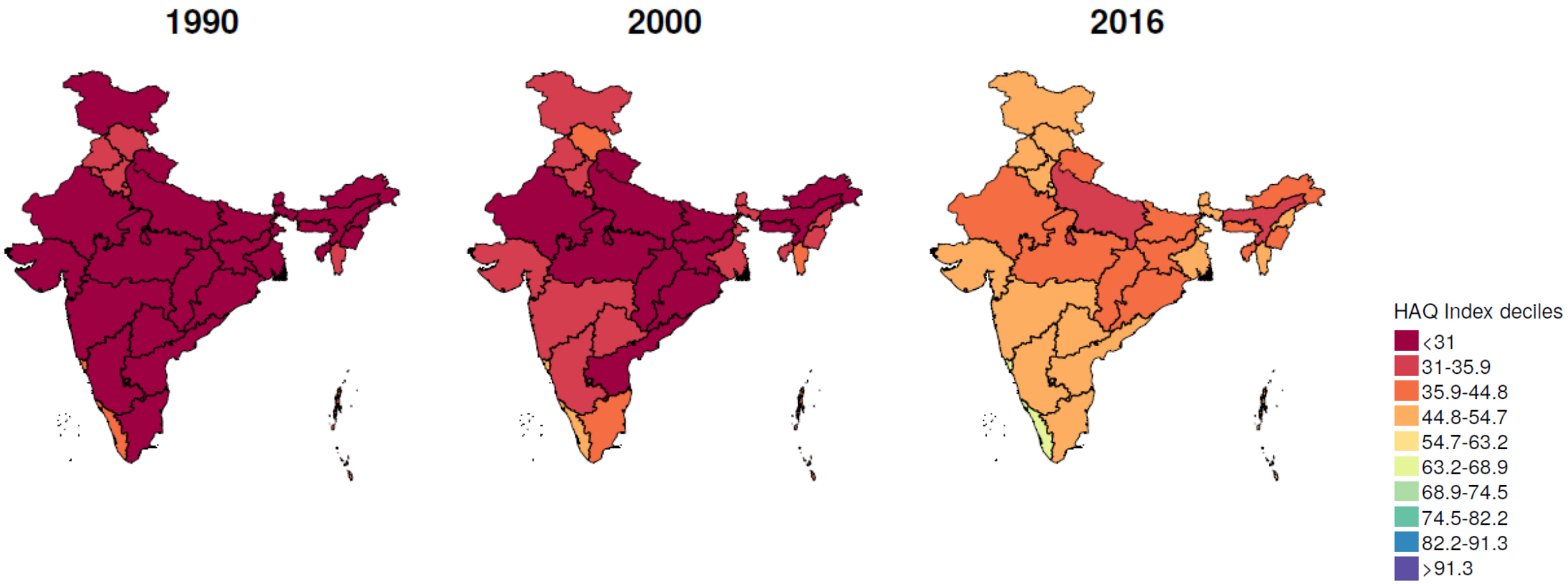
Five priority areas:

1) Democracy and a rule-based world order
2) The oceans
3) Energy
4) Climate and environment
5) **Other important areas:**

   Norway is to be an attractive partner for India in the areas of research, higher education and global health

   → Panorama 2016-2020 (MoER)
   → INDNOR 2018-2021 (RCN)
   → India Program INCP 2015-2018 (Diku), to be renewed?
   → UTFORSK (RCN and Diku)
   → INTPART (RCN and Diku)

Healthcare Access and Quality Index



The Lancet, 2018

Why India?

- 3000 hospitals with >100 beds

- 500 medical universities → 50,000 doctors per year
- 1750 nursing colleges (BSc)
- 2750 schools with diploma in nursing } 150,000 nurses per year
- 1550 schools with diploma nurse assistants

- 15% of maternal deaths globally
- 24% of newborn deaths globally
- 49% of diabetes globally
- 500-700,000 cardiac arrests annually
- 25% of all ICU patients develop sepsis where 34% die
- 5.2 mill medical errors annually

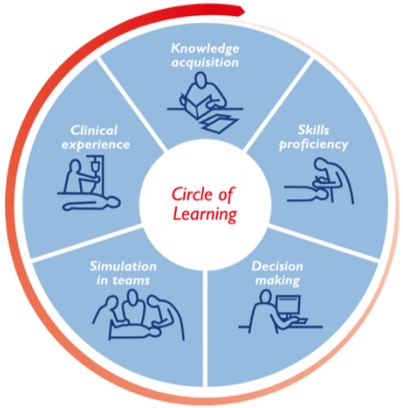
SAFER in India

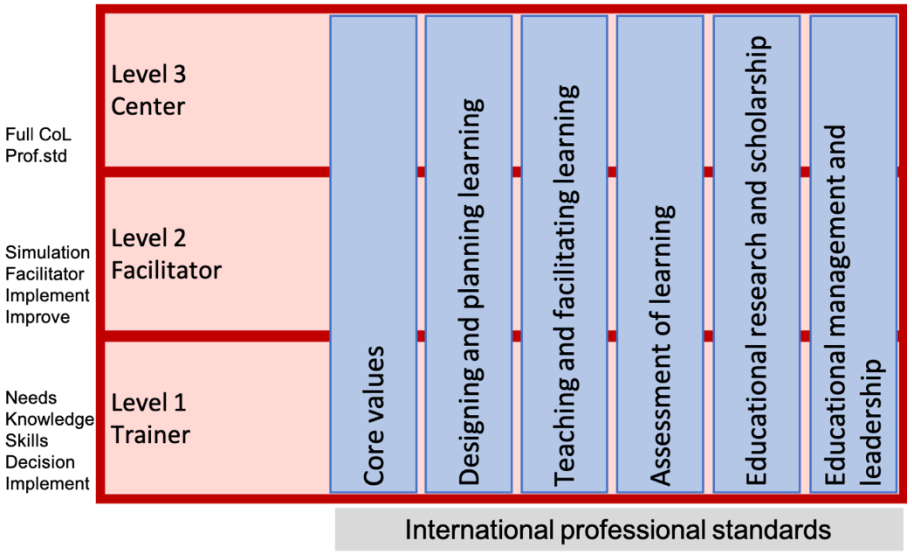
Pilot EuSim ttt-course in Oct 2018

2 EuSim ttt-courses with 68 participants in Sept 2019

5-year plan SAFER – Laerdal India – EuSim

- Develop 15-20 Indian faculty
- Develop 6-8 centres of excellence
- Run 80 courses for 1600 participants
- Develop and roll out
  - Introduction to the Circle of Learning
  - Skills ttt-course
  - Faculty development program





- INTPART application – UiS, SGT University, SAFER and Laerdal Medical

Forskerblikk på
“Act locally - think globally”

Hege Langli Ersdal
Forskningsleder Simulering og Global Helse
Anestesilege, Stavanger Universitets Sykehus
Professor II, Universitetet i Stavanger

HELSE STAVANGER
Stavanger universitetssjukehus

SAFER
Stavanger Acute medicine Foundation for Education and Research

Universitetet i Stavanger

Er resultater fra forskningen generaliserbar? Representativ?

Egen forskning og annen forskning

Locally

Globally

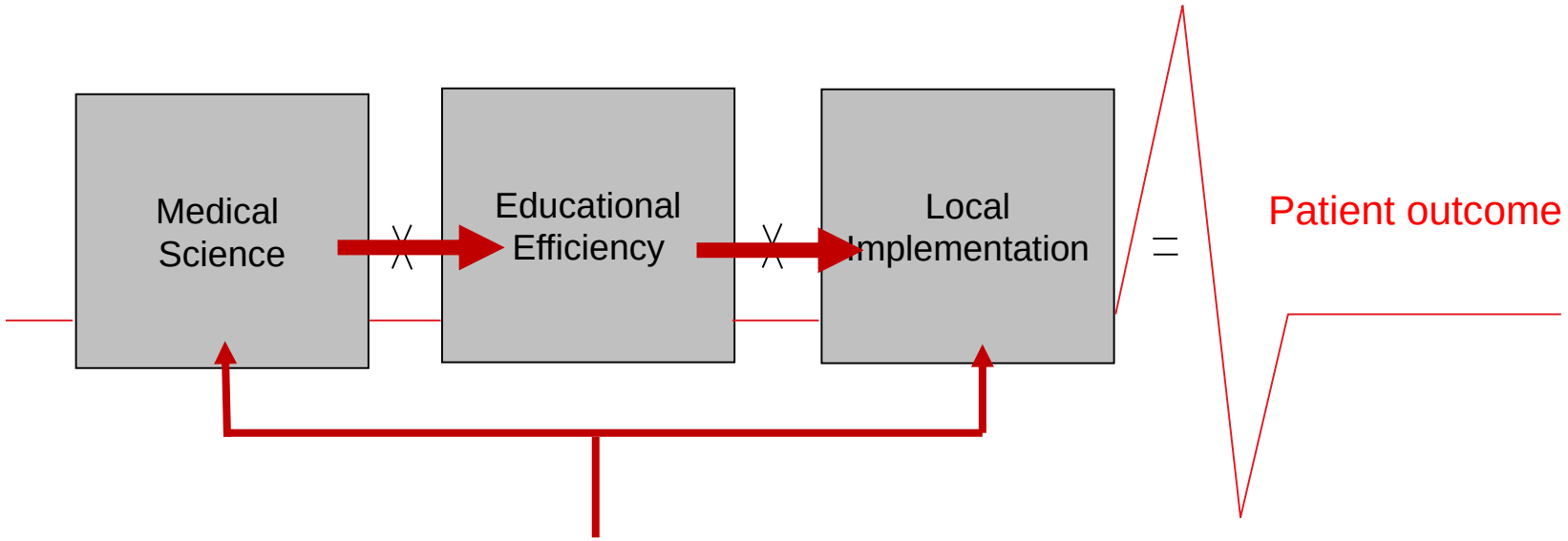
Globally

Locally

The Formula for Survival

Postulerer at pasient utfall er resultat av 3 like viktige faktorer

Locally and Globally

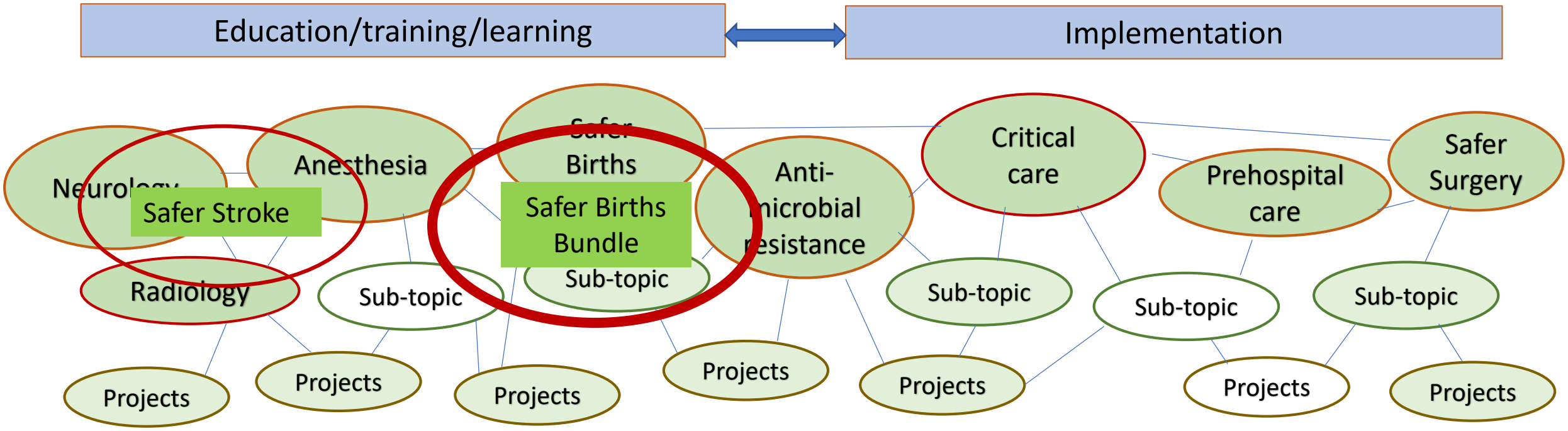


Stort “teori-praksis» gap

Hva skal til for å redusere “teori-praksis» gapet?

Safer Healthcare

A research, innovation, and development network
focusing on **simulation-based** learning/training/education and **clinical implementation**
With local, regional, national, and global perspectives and collaboration
A reserach network affiliated to SUS, UiS and SAFER



Multiple independent topics - sub-topics - projects, leading to masters, PhDs, and Post Docs
Great potential for synergies and interdisciplinary collaboration

Vitenskapen
Pedagogikk

Pasientene
Helsearbeiderne

Teknologi
Systemer

Ett simulerings-basert kurs (en dag) - Evaluering 7 måneder før/etter:

Testing av kunnskap

Video av simuleringer

Klinisk praksis

Observert adferd og outcome

Ingen endring/effekt

Ref. Ersdal HL et al. Resuscitation 2013

Innførte “low-dose/high-frequency” trening: 10 min, hver uke:

På fødeavdelingen

Støttet av lokale ledere, alle trener

Klinisk praksis

Observert adferd og nyfødt outcome

40% nedgang i nyfødt dødelighet

Ref. Mduma et al. Resuscitation 2015

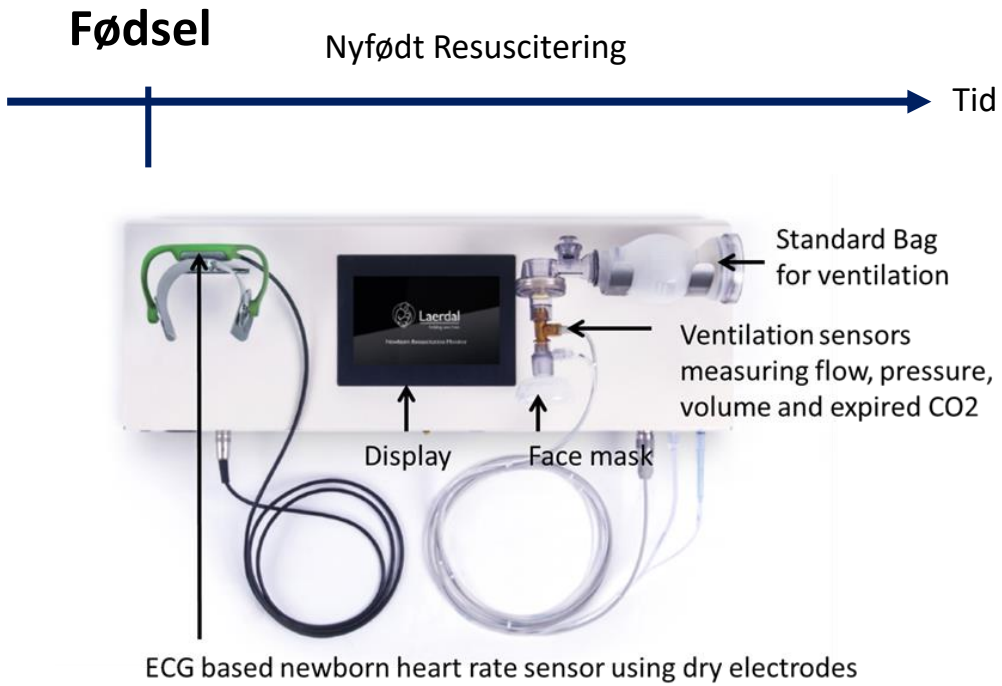
Safer Births

Globalt samarbeidsprosjekt SUS + SAFER + Lærdal Global Health + UiS + sykehus i Tanzania

Hyppig trening → **Praksis** → **Forskning**

Lokale kvalitets- og pasientdata
Tilpasset trening og tilbakemelding

Act Locally – Think Globally



>150 presentasjoner på internasjonale konferanser

>65 artikler publisert

Allerede påvirket internasjonale og norske guidelines

WHO anerkjent trenings-modellen

Utbredt til >80 land

Samarbeid TekNat UiS:

Utvikle statistiske modeller

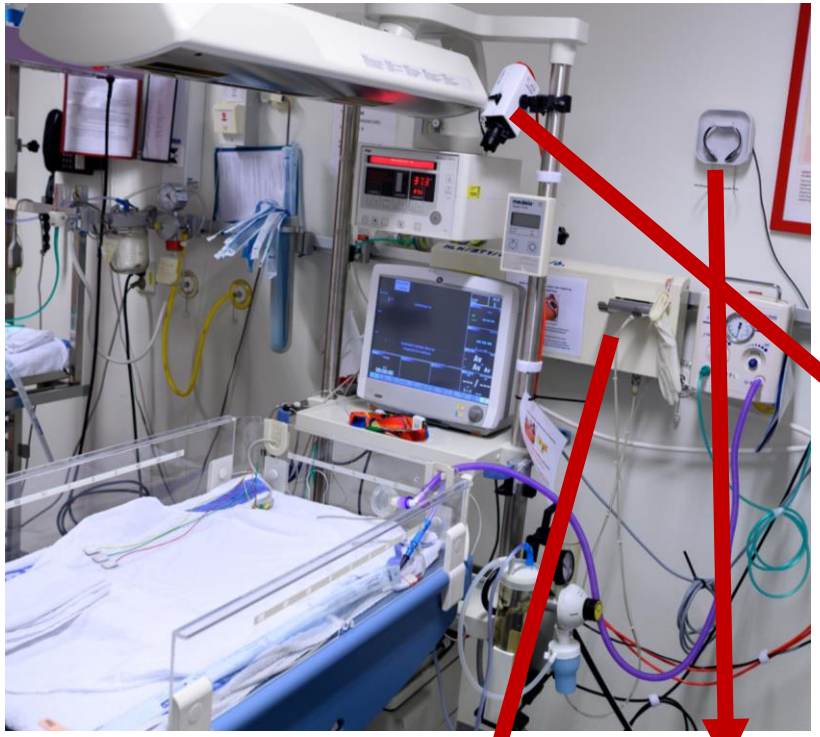
Automatiserte signal og video analyser → sentrale verktøy i fremtidens helsevesen

Locally

Globally

Locally

Safer Births Bundle SUS: Big Data + Video → Maskin læring + Kunstig intelligens (AI) → Tilpasset relevant trening og tilbakemeldinger med basis i klinisk praksis

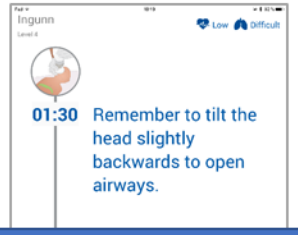


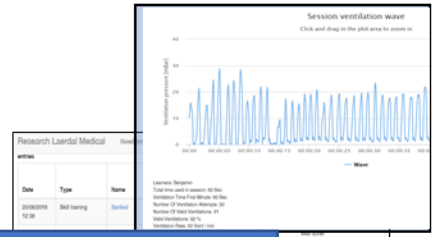
Data plattform
Automatisk data lagring, prosessering og analyse
Tilpassede data uttrekk

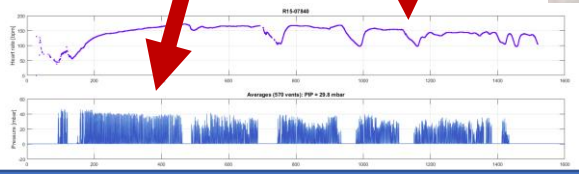
Video opptak

Umiddelbar Tilbakemelding

Lagrer treningsdata





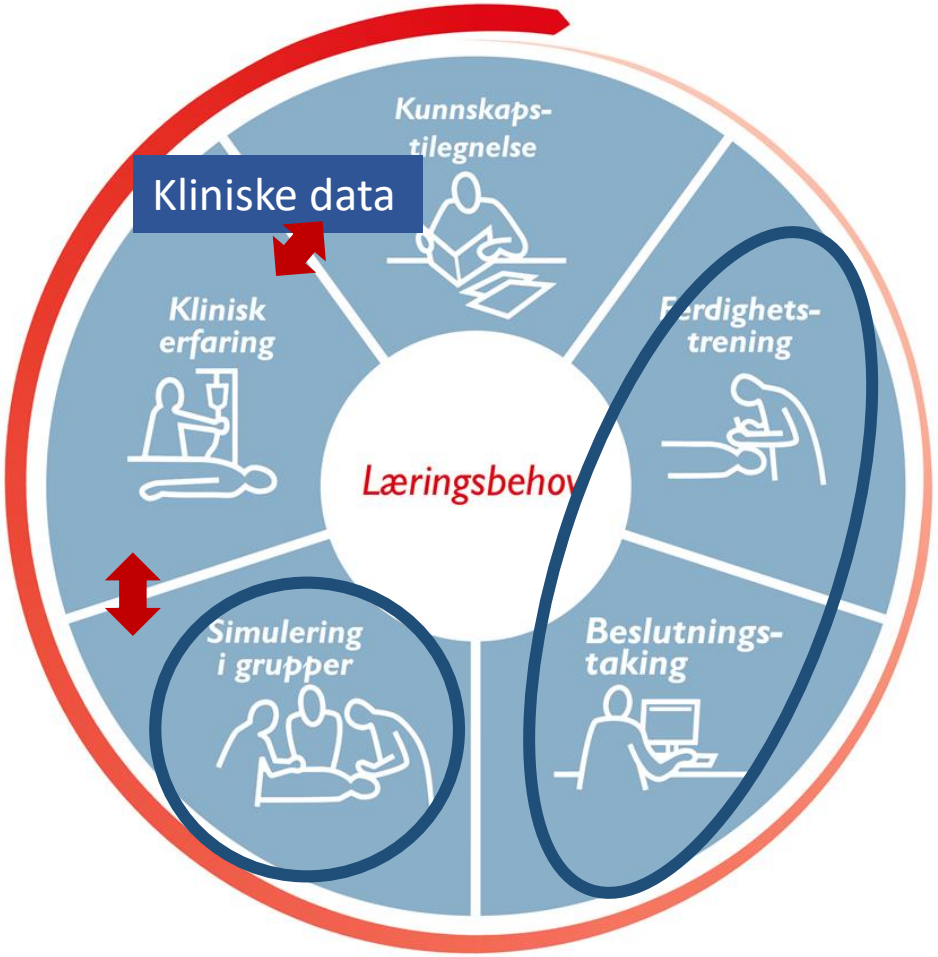


Signal data: EKG og ventilasjon

Plan – do – study – act – plan – do – study – act……..

Kontinuerlig kvalitetsforbedring med simulering

- Målrettet implementeringsarbeid (tar tid)
- Naturlig del av hverdagen
- Obligatorisk regelmessig trening på utvalgte tema med automatiske tilbakemeldinger og tips til neste trening
- Relevant trening med fokus på overføring til klinisk praksis
- Ny teknologi som tilpasser treninger basert på kliniske data og individuelle kliniske prestasjoner → person- og teamtilpasset → øker motivasjon



Locally

Globally

Globally

Locally

Et samarbeid mellom

SAFER
Blowing in the wind

Kjetil Torgeirsen

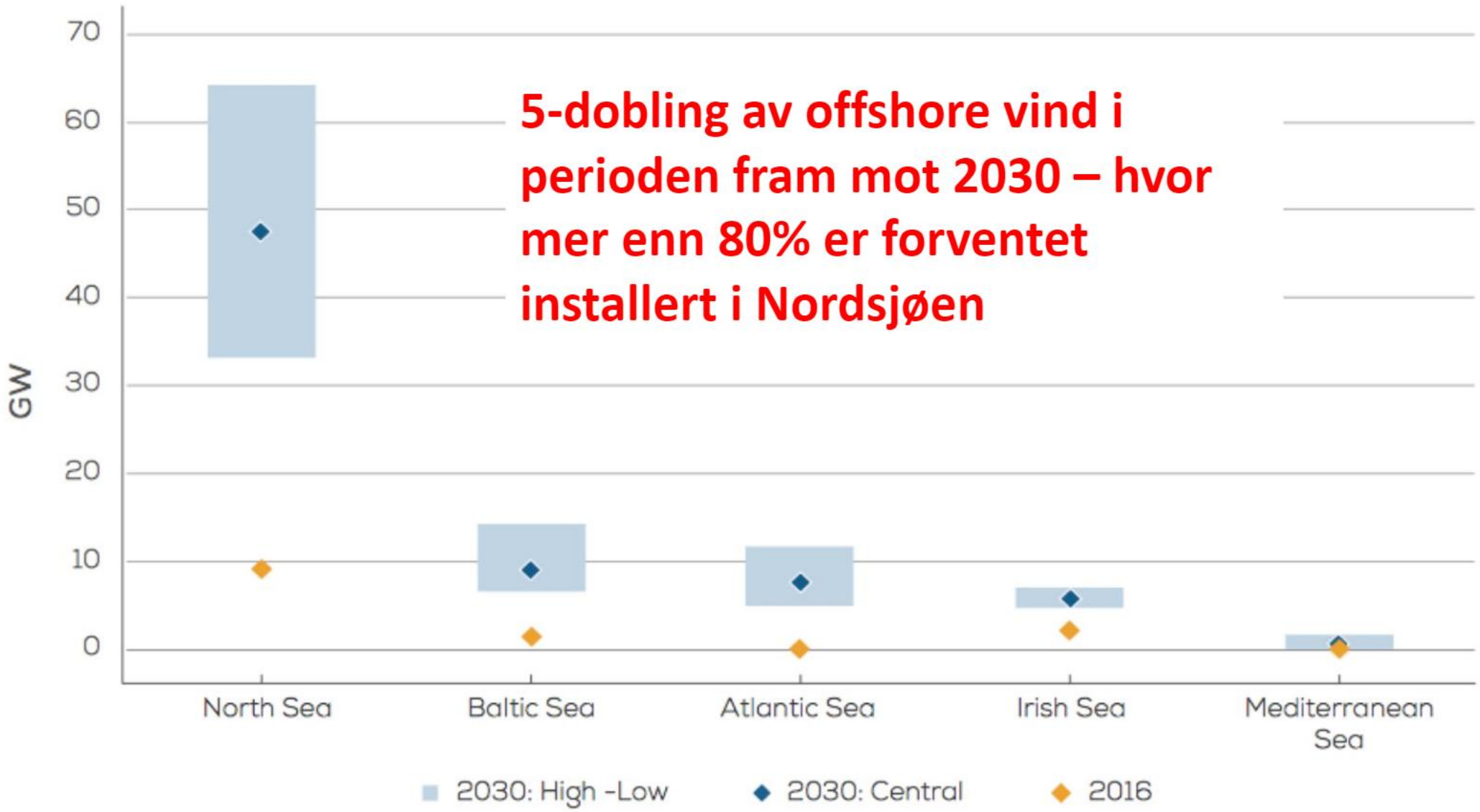
Manager external training programs

How many roads must a man
walk down
Before you call him a man?

How many seas must a white dove sail
Before she sleeps in the sand?

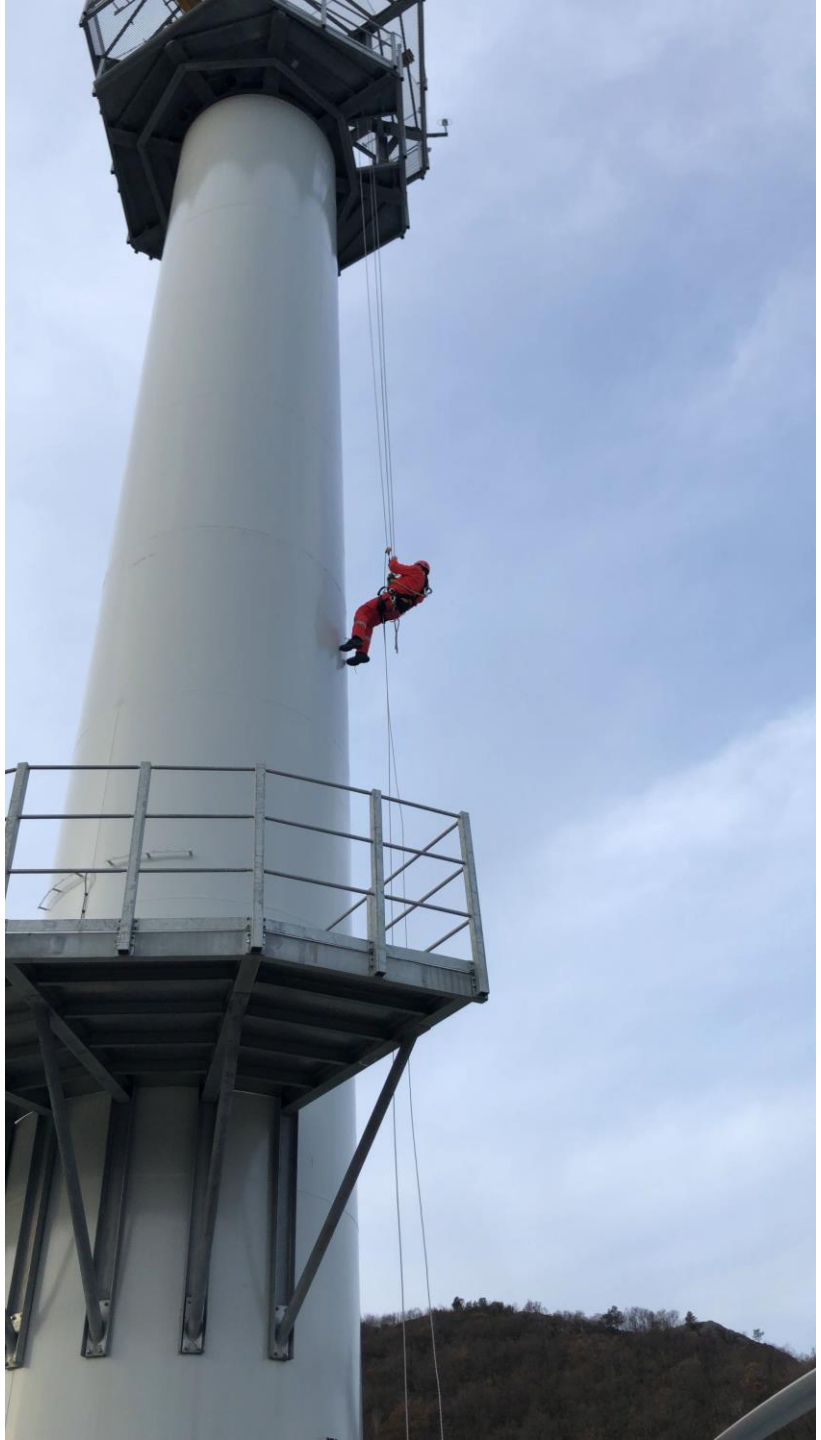
The answer, my friend, is blowin' in the wind

2016 and 2030 offshore wind installations per sea basin



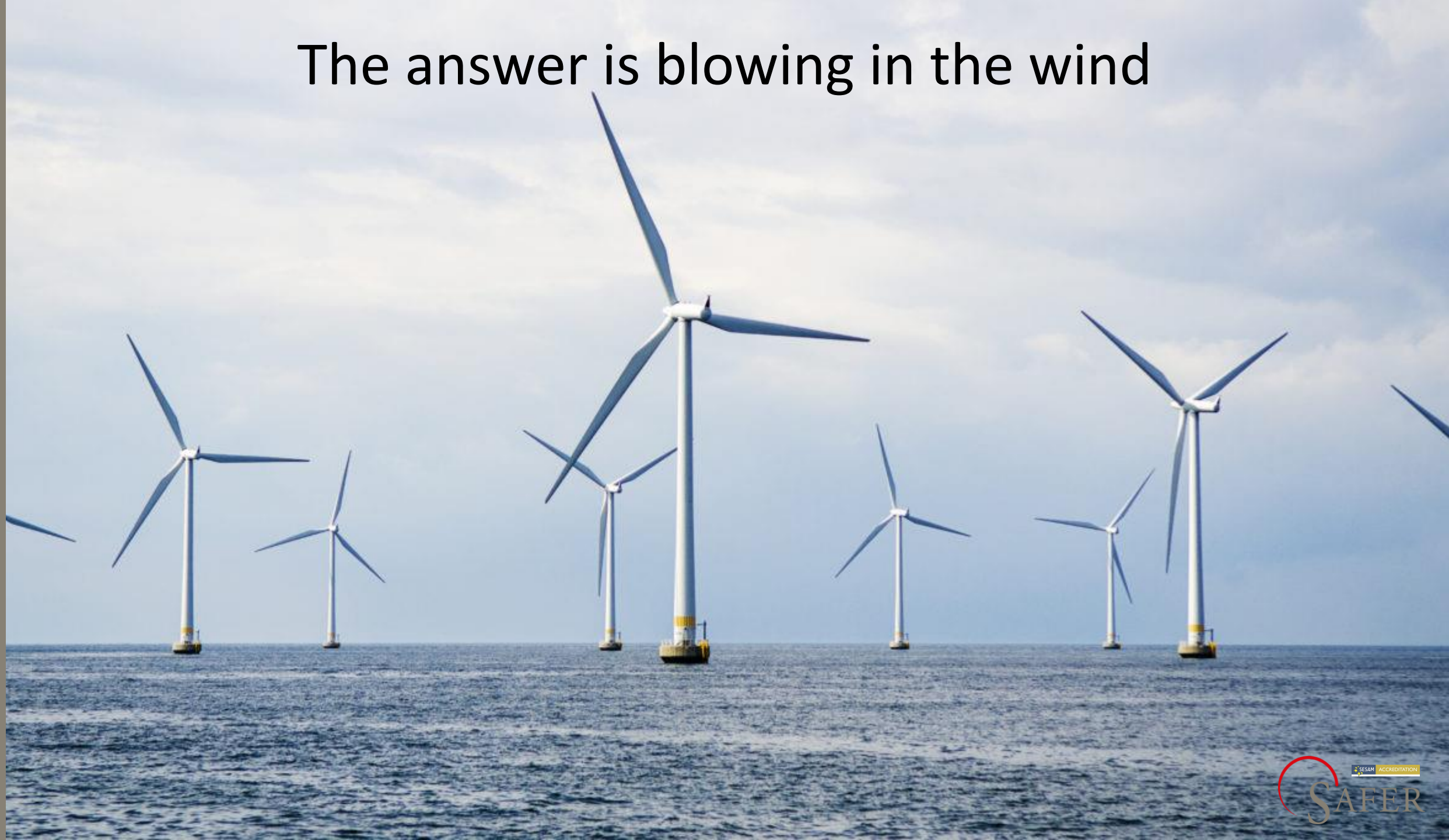
5-dobling av offshore vind i perioden fram mot 2030 – hvor mer enn 80% er forventet installert i Nordsjøen

How far has SAFER blown?



SESAM ACCREDITATION
SAFER

The answer is blowing in the wind



https://www.uis.no/samfunn-og-samarbeid/helsecampus/

Norwegian Smart Care Cluster

Norwegian Innovation Clusters

Arena Pro

Cluster Management Excellence

European Innovation Partnership on Active and Healthy Ageing
REFERENCE SITE

Norwegian Smart Care Cluster
Fra marked til industri!

Hva innebærer status som ArenaPro?

Arild Kristensen, daglig leder
epost: arild@valide.no
Tlf. 90532591

www.smartcarecluster.no

Trygghet og sikkerhet

Behandling og pleie

Sosial kontakt

Hjelpemidler

Livsstil og forebygging

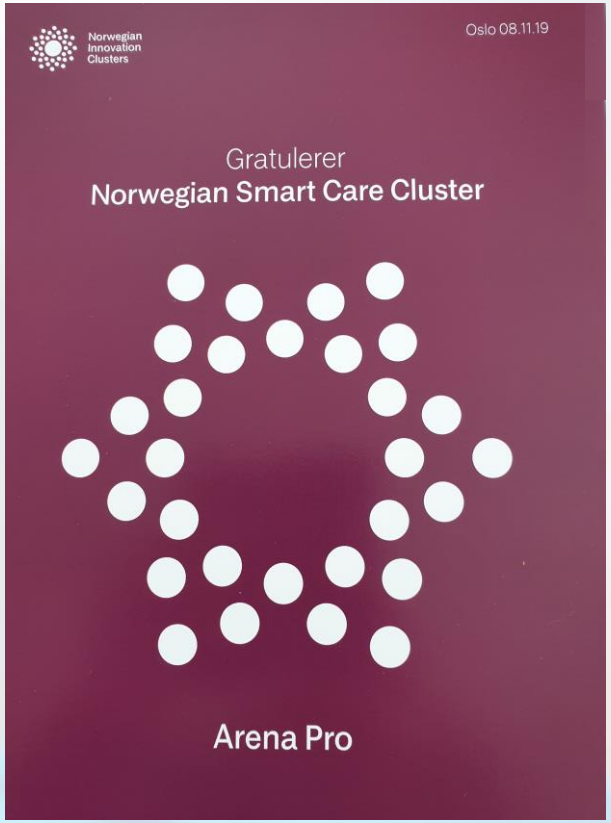
Smarthus

Spesialiserte underleverandører

Norwegian Smart Care Cluster

Norwegian Innovation Clusters

Arena Pro



Arena Pro og NCE bidrar til å målrette, forbedre og akselerere pågående utviklingsprosesser i norske klynger. Norge har i dag 14 NCE-klynger og 4 Arena Pro-klynger med bedrifter som hevder seg innenfor sine felt i det globale markedet.

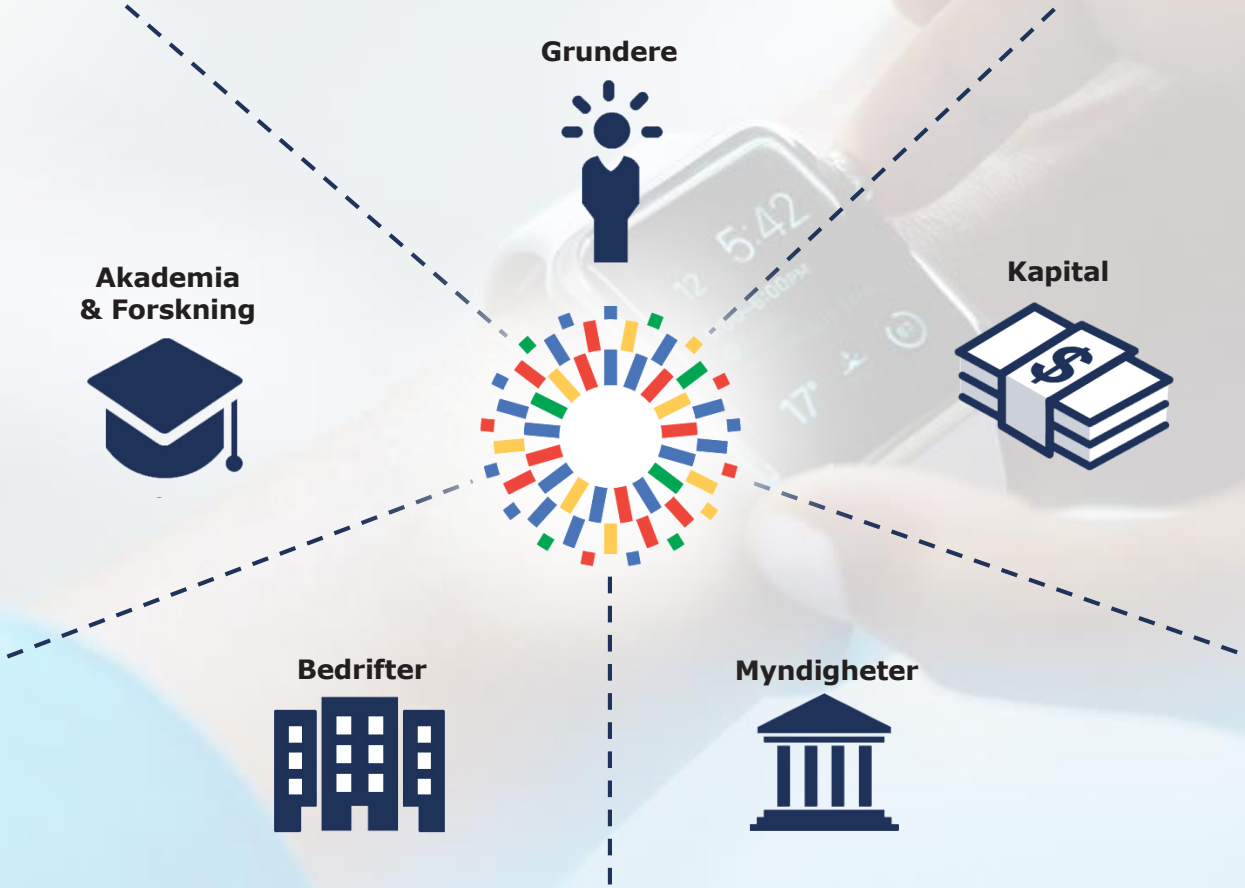
Norwegian Smart Care Cluster – Arena Pro klynge fra 08.11.19 og 5 år fremover

Helseklyngen rykker opp på A-laget

Norwegian Smart Care Cluster får fem nye år i klyngeprogrammet til Innovasjon Norge, SIVA og Norges forskningsråd, og rykker opp i ArenaPro-ligaen

ArenaPro – 2020 tom. 2024

Norwegian Smart Care Cluster



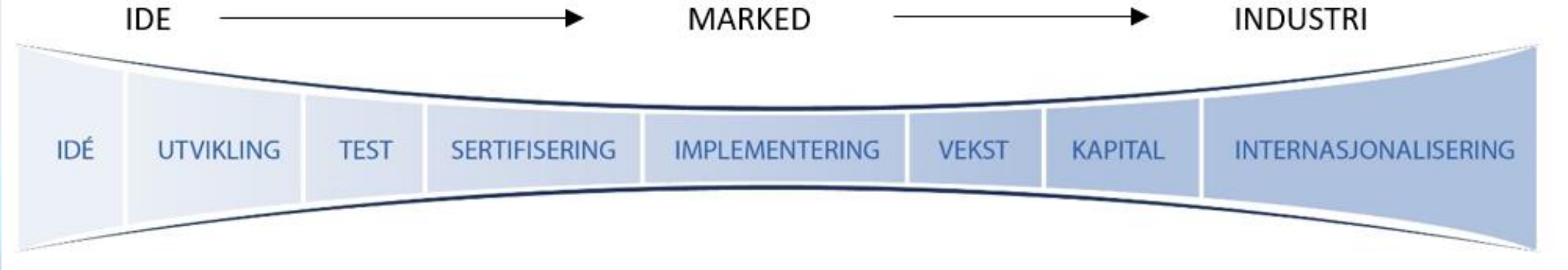
- Kunnskap – innsikt
- Nettverk
- Samhandling

Klynge

Norwegian Smart Care Cluster

VISJON: Generating Impact through Smart Care Solutions

FORMÅL: Vi bygger norsk helseindustri gjennom å fremme bærekraftige løsninger som gir et bedre liv for brukerne samt kostnadseffektive og kvalitetssikrede leveranser av helse & omsorgstjenester



Norwegian Smart Care Cluster

Norwegian
Smart Care
Cluster

SmartCare - digitale helseløsninger for det som skjer mellom bruker-pasient i hjem og kommune/sykehus.

SmartCare

Norwegian Smart Care Cluster

Trygghet og sikkerhet

Trygghetsalarmer, varslings- og lokaliseringsteknologi, medisin dispenser, elektroniske dørlåser og ulike former for sensorer. Datasikkerhet og personvern.

Hjelpemidler

bistår når for eksempel hukommelsen blir dårligere, eller ved fysisk funksjonssvikt. Dette omfatter også teknologi som gjør hverdagslivet enklere, som for eksempel styring av lys og varme og forflytningshjelpemidler og hjelpemidler som kompenserer for fysiske handikap og manglende styrke, som rullestol, hørselshjelpemidler, synshjelpemidler

Behandling og pleie

bidrar til at mennesker gis mulighet til å bedre mestre egen helse ved for eksempel kronisk lidelse. Diabetes, kols. Automatisk måling av blodsukker, blodtrykk mv. er eksempler på slike tekniske hjelpemidler. Avstandsoppfølging.

Sosial kontakt

bistår mennesker med å komme i kontakt med andre, som for eksempel videokommunikasjonsteknologi, webtjenester og robotteknologi

Livstil og forebygging

Løsninger som er med på å forebygge – utsette institusjonsinnleggelse. Trening, kosthold, røykestopp etc.

Smarthus

Design, tilrettelegging, styringssystemer, eks. elektroniske dør låser, sensor systemer - lys, varme, kamera

Spesialiserte underleverandører

Design byråer, platform leverandører, program utvikling, AI, Maskindata, BigData, HW utvikling, programmerbare systemer

Løsningsområder i klyngen

Norwegian Smart Care Cluster

Medlemsbedrifter

Norwegian Smart Care Cluster

GREATER STAVANGER

HAUGALAND VEKST

SANDNES KOMMUNE

STAVANGER KOMMUNE

lister

Time kommune

Randaberg kommune

Gjesdal kommune

Utviklingssenter for sykehjem og hjemmetjenester Rogaland

Utviklingssenter for sykehjem og hjemmetjenester Hordaland

Utviklingssenter for sjukeheimar og heimetenester Sogn og Fjordane

Hå kommune

Klepp kommune

STRAND KOMMUNE

SAMMEN OM TRIVSEL

Eigersund kommune

ROGALAND FYLKESKOMMUNE

Vest-Agder fylkeskommune

AUST-AGDER FYLKESKOMMUNE

Kommunale aktører

Norwegian Smart Care Cluster

Universitetet i Stavanger

Høgskulen på Vestlandet

UNIVERSITETET I AGDER

UNIVERSITETET I BERGEN
Det medisinske fakultet

NTNU

NORCE

SINTEF

HELSE STAVANGER
Stavanger universitetssjukehus

VID

SEARCH
Sandnes Education And Research Center Hoyland

Regionalt kompetansesenter for rusmiddelforskning

BI HANDELSHØYSKOLEN

Utdanning og forskning

Norwegian Smart Care Cluster

SERENDIPITY PARTNERS

LONGSHIP

Norway Health Tech

WelfareTech Collaborative Innovation

OULU HEALTH

HELSECAMPUS STAVANGER

Universitetsfondet

connect NORGE

4D VENTURE capital management

NORDIC EDGE Smart City Innovation Cluster

BUSINESS REGION GÖTEBORG

Creator

PUMPS & PIPES NORWAY

NÆRINGS FORENINGEN Gir kraft til vekst

digin

i4Helse

Alrek helseklynge

nav

Direktoratet for e-helse

Helsedirektoratet

KS

Melanor BRANSJEORGANISASJONEN FOR MEDTEK OG LAB

Innovasjon Norge

siva

Forskningsrådet

Fylkesmannen i Rogaland

IKT NORGE

abelia

Samarbeidspartnere

Norwegian Smart Care Cluster

Utfordringer:
Omstilling av norsk økonomi og behov for flere lønnsomme arbeidsplasser.

Aldrene befolkning og flere personer med sammensatte sykdommer.

Mål:

Økt konkurransekraft i den norske helsenæringen

Økt bærekraft i helse- og omsorgstjenesten, i form av mer effektiv forebygging, behandling og omsorg.

Helsenæringen - Sammen om verdiskaping og bedre tjenester

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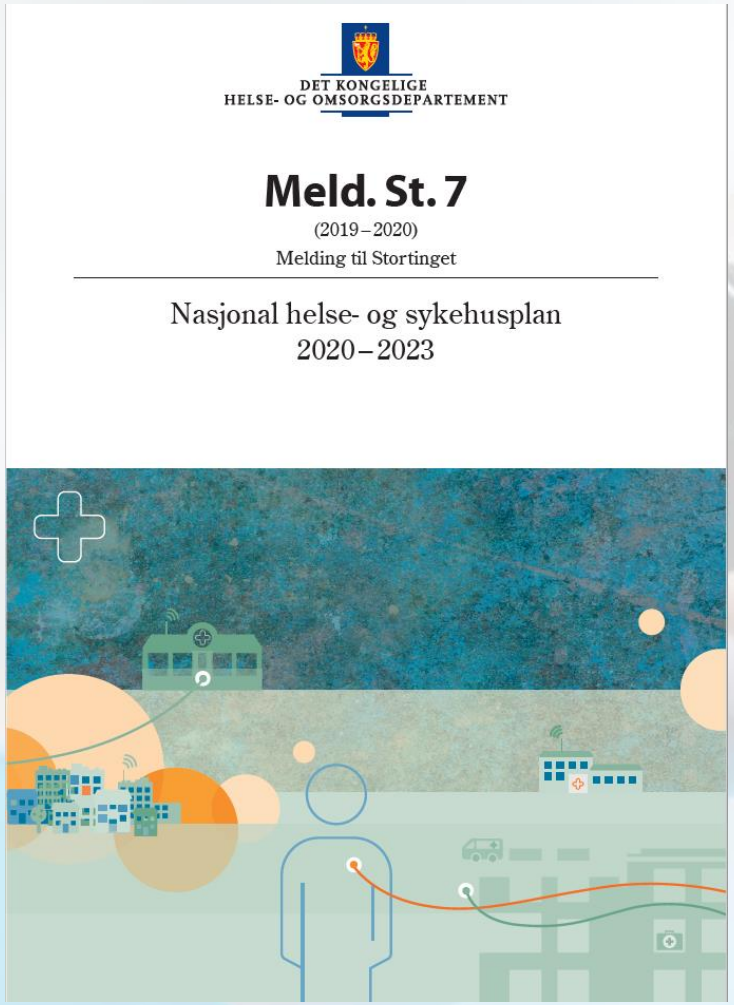
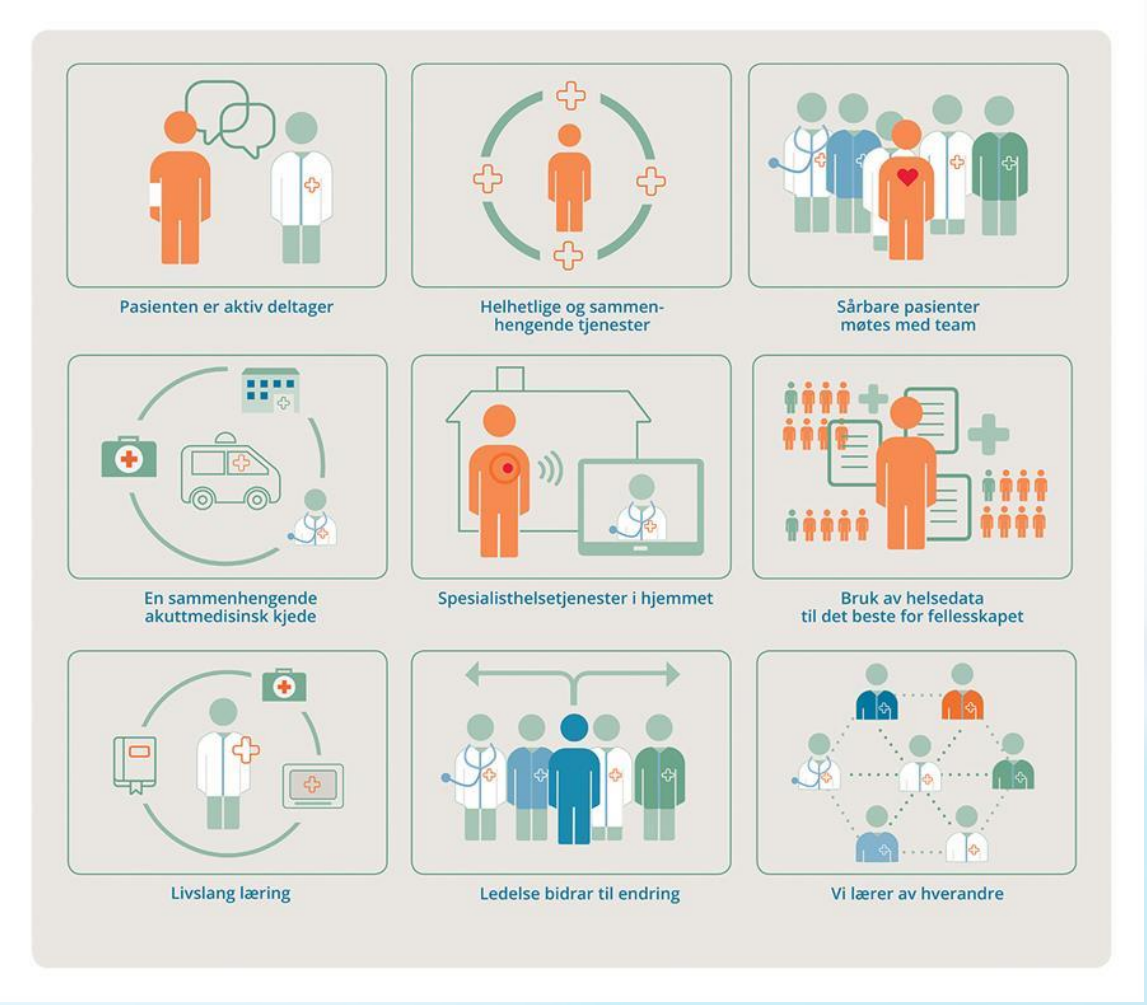
- Liten kultur for samarbeid
- Uklar rolledeling
- Lite profesjonelle offentlige anskaffelser
- Antall kliniske studier går ned
- Liten tilgang på testfasiliteter
- Utfordrene tilgang til kapital
- Krevende å få innpass internasjonalt
- Vanskelig tilgang til helse og registerdata

Vanskelig hjemmemarked!

Barrierer

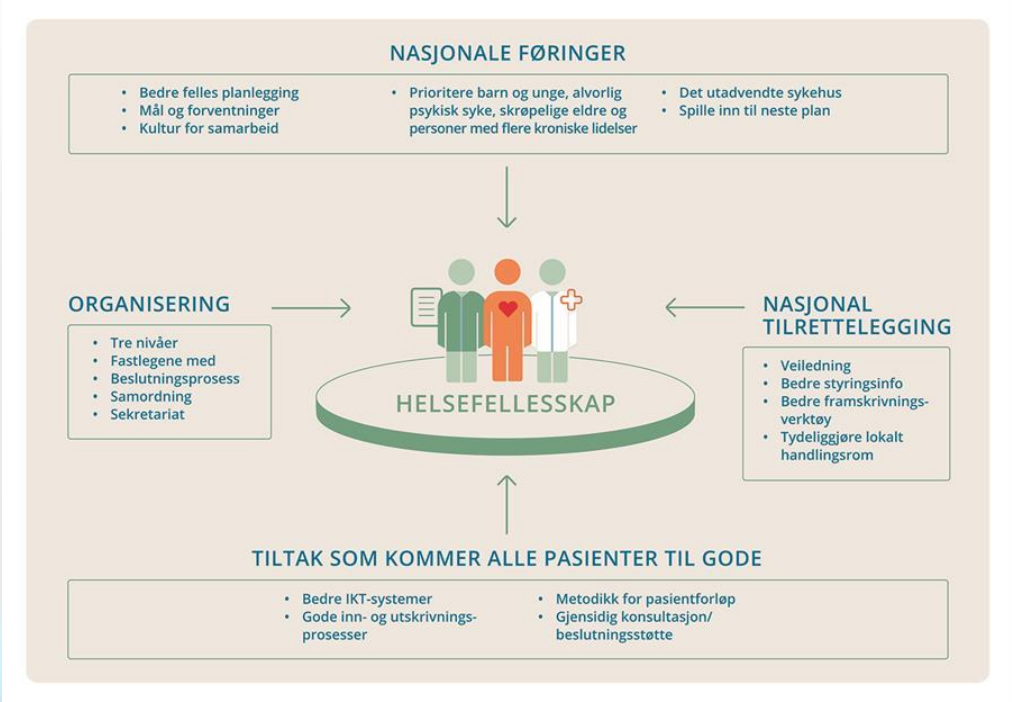
Norwegian Smart Care Cluster





Nasjonal helse og sykehus plan 2020-2023

Norwegian Smart Care Cluster



Etablere 19 helsefellesskap hvor kommuner og helseforetak utvikler og planlegger tjenestene sammen som likeverdige partnere.

Helsefellesskapene bør prioritere utvikling av tjenester til barn og unge, personer med flere kroniske lidelser, personer med alvorlige psykiske lidelser og rusproblemer og skrøpelige eldre.

Helsefelleskapene skal finne løsninger som passer til lokale behov og forutsetninger, og vil spille inn til neste Nasjonal helse- og sykehusplan..

Helsefellesskap

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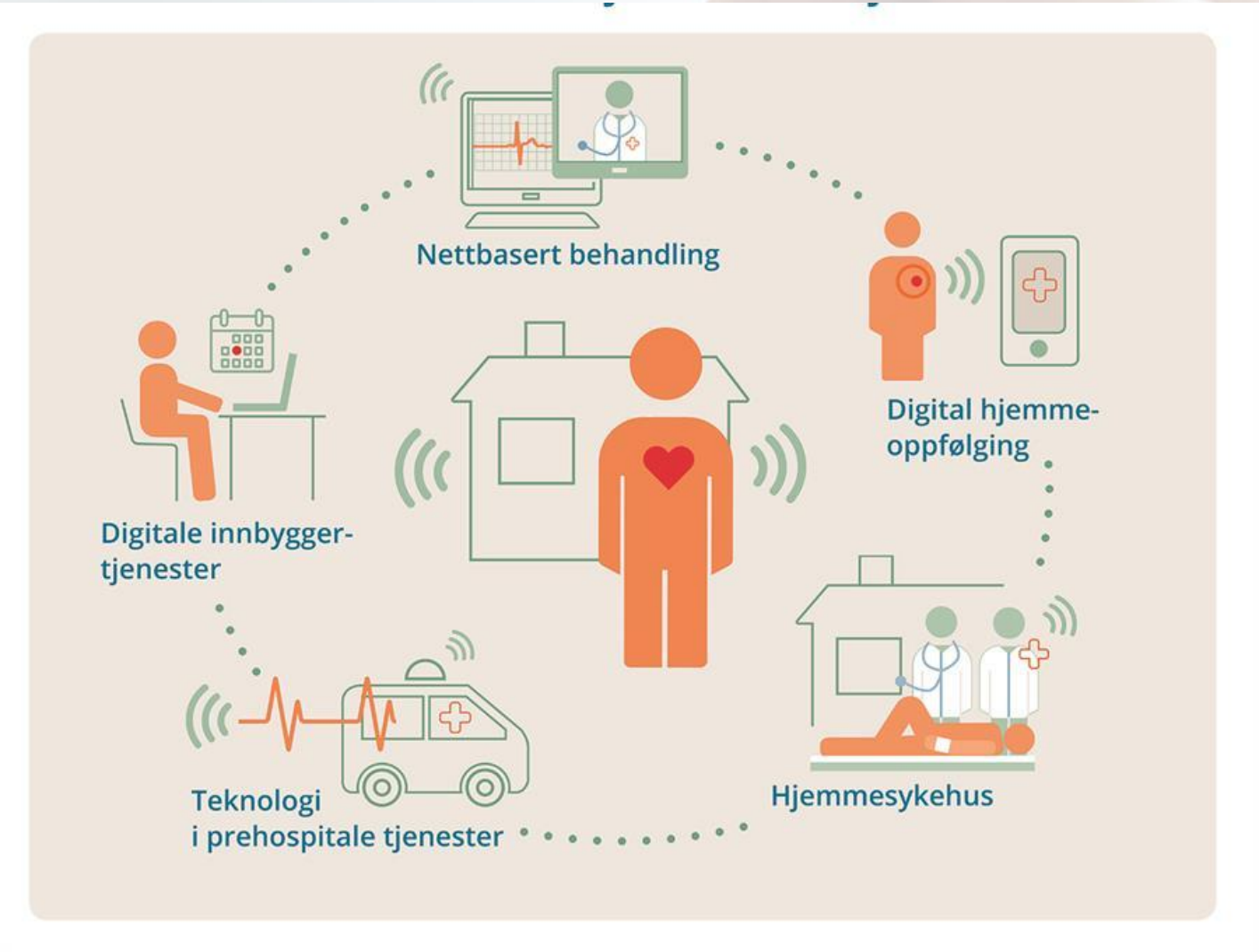
Cluster



Spesialisthelsetjenester i hjemmet

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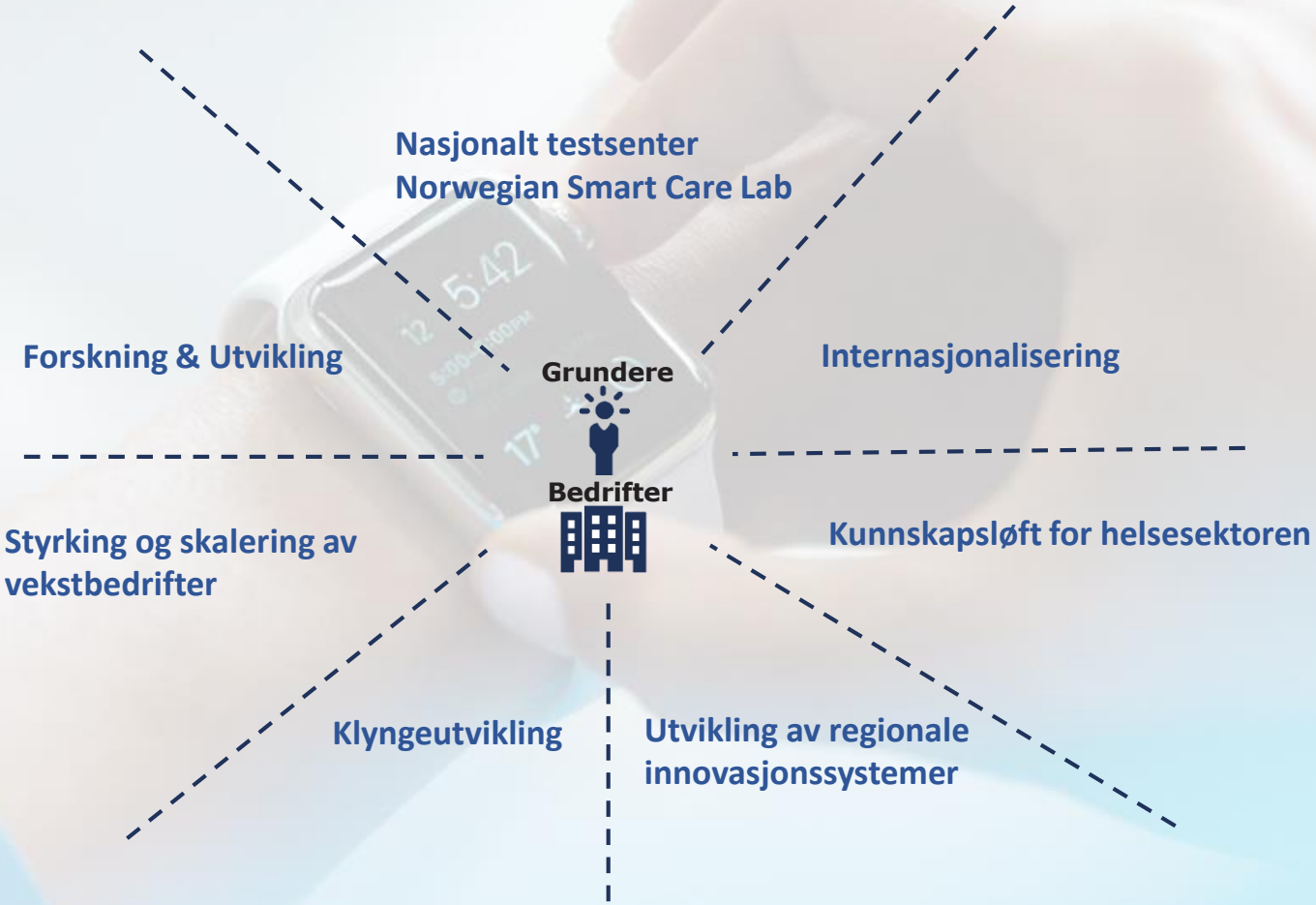

Hovedområder

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www.smartcarecluster.no

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