

Regionernes kliniske kvalitetsprogram

- Ambitiøse mål for udviklingen af de kliniske databaser
- Grundlag for forbedringsarbejdet
- Inddragelse af patient rapporterede outcomes
- "Patient like me" muligheder
- Ny IT understøttelse af databaserne og RKKP
- Ny RKKP organisation



databasernes
fællessekretariat
regionernes kliniske kvalitetsudviklingsprogram

RKKP enhedsorganisation

- RKKP samles i én organisation med linjeledelse
 - bedre intern kommunikation
 - intern vidensdeling
 - prioritere organisationens ressourcer
 - bedre muligheder for at udarbejde ad hoc opgaver og analyser
- Opmærksomhed på geografisk spredning
- Ny, midlertidig styregruppe for RKKP
 - Formålet er at styre overgangsperioden indtil at en ny organisation kan overtage driften af de kliniske kvalitetsdatabaser

RKKP enhedsorganisation

- Drift
 - Ensartede driftsvilkår, faglige krav til driften imødekommes, eksisterende data udnyttes bedre, reduktion af inddateringsopgaven
- Ledelse
 - Prioritering af ad hoc opgaver, kompetenceprofil, robusthed, ressourceforbrug
- Databasejuridisk, HR og adm. kompetencer
- Indførelse af fællesværktøjer og IT
- Samarbejde
- Forskning og udvikling
 - robust og tilgængelig forskningsinfrastruktur omkring databaserne

Collaborative Improvement Networks (CIN's)

- CIN's use quality improvement (QI) methods to translate evidence into practice and support teams to test and implement strategies that will change outcomes in a highly reliable way.
- In addition, these networks provide a strong foundation for research by developing a robust data infrastructure and standardizing care processes that lead to a stable baseline for experimentation.
- CIN's also provide a mechanism to engage all the key stakeholders: patients, families, clinicians, and researchers.
- Collaborative improvement networks can serve as powerful laboratories for discovery and new knowledge.

Carolyn M. Clancy, Peter A. Margolis and Marlene Miller, *Collaborative Networks for Both Improvement and Research*, *Pediatrics* 2013;131;S210

API - 2015

4



2010-2015 Cincinnati Children's Hospital Strategic Plan

- Recognizes importance of networks for improving child health outcomes
- Supports development of effective Learning Networks
- Build on successful quality improvement
- For 20 high priority diseases and disorders:
 - Integrate research, improvement science and information systems
 - Initiate multi-site improvement/research networks

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API - 2015

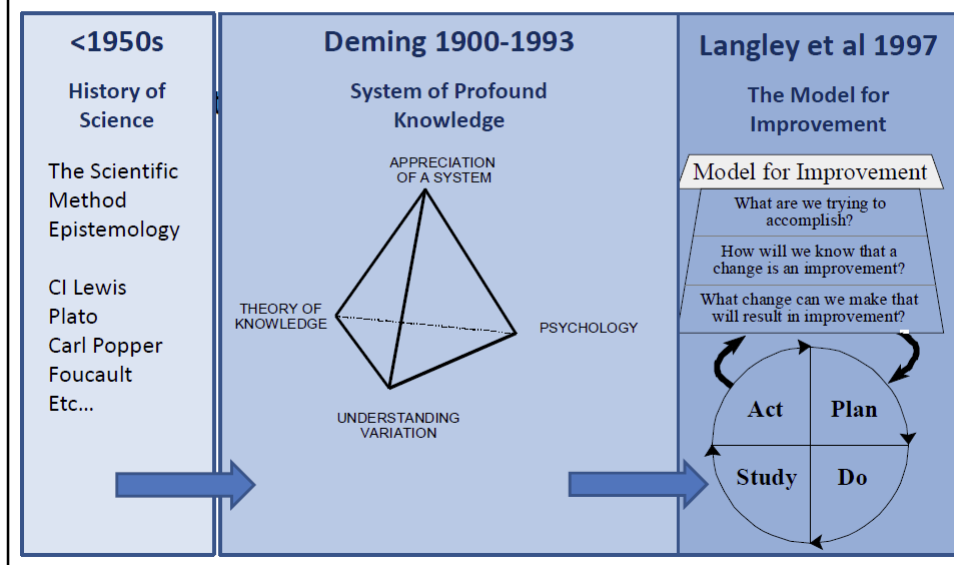
Netværksrejsen DK

- Den kliniske databaser
- DMCG'erne
- Sandbjerg møderne for obstetrikere og andre
- Patientsikkert Sygehus
- Sikre fødsler, Patientsikkert flow og Sikker Psykiatri

Netværksrejsen DK

- Tidsbegrænsende → vedvarende
- Sundhedsprofessionelle → alle deltager
- QI → QI + Forskning
- **Forskning → Forskning + QI**

Science of improvement



Hvis målet er læring og forbedringer

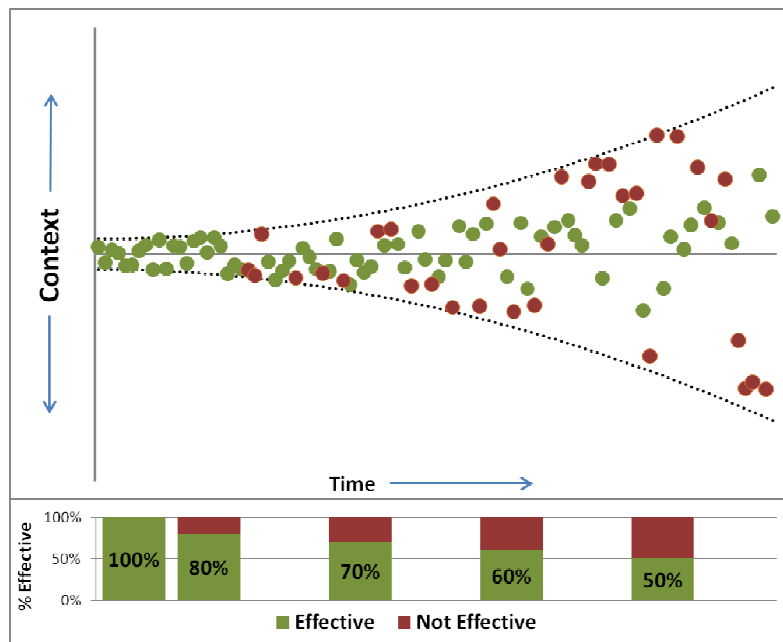
Bedre at teste flere ting på en gang fordi det øger læringen – man kan altid gå tilbage og tænke over den causale sammenhæng

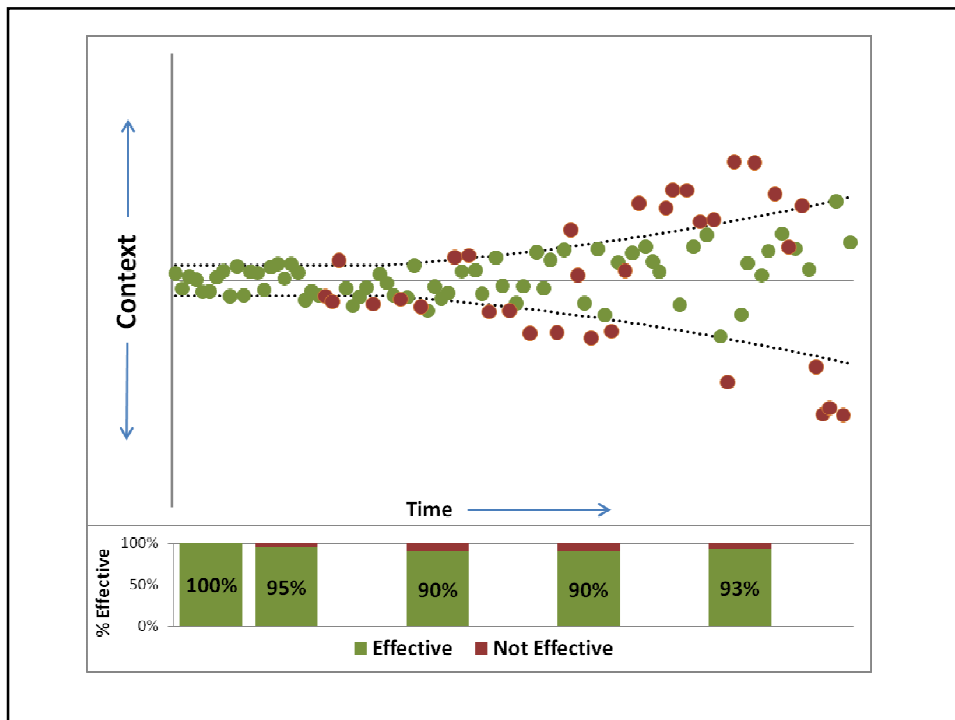
RCT

- En given intervention
- En standardiseret virkelighed
- Variabelt mål

Improvement Science

- Givet mål
- Kontekst afhængig virkelighed
- Variable indsatser





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An Intervention to Decrease Catheter-Related Bloodstream Infections in the ICU

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Table 1. Characteristics of 103 Participating ICUs, According to the Period of Implementation of the Intervention to Reduce the Rate of Catheter-Related Bloodstream Infections.

| Period | No. of ICUs | No. of Catheter-Days per Month | Teaching Hospital % | No. of Beds |
|----------------------------|-------------|---|------------------------|---|
| | | <i>median</i> (<i>interquartile range</i>) | | <i>median</i> (<i>interquartile range</i>) |
| March to May 2004* | 40 | 154 (94–258) | 83 | 404 (268–609) |
| June to August 2004 | 35 | 146 (72–228) | 57 | 336 (218–610) |
| September to November 2004 | 17 | 181 (80–275) | 59 | 299 (190–393) |
| After November 2004 | 11 | 172 (48–279) | 73 | 288 (181–917) |

* Baseline data were not collected by ICUs implementing the study intervention during the baseline (preimplementation) period.

Table 2. Baseline Data.

| Characteristic | No. of ICUs | Baseline Period | | |
|-----------------|-------------|-------------------|--|--|
| | | No. of Infections | Catheter-Days <i>median (interquartile range)</i> | No. of Infections per 1000 Catheter-Days |
| All hospitals | 55* | 2 (1–3) | 511 (220–1091) | 2.7 (0.6–4.8) |
| Teaching status | | | | |
| Teaching | 33 | 2 (1–4) | 744 (377–1134) | 2.7 (1.3–4.7) |
| Nonteaching | 22 | 1 (0–2) | 306 (194–608) | 2.6 (0–4.9) |
| No. of beds | | | | |
| <200 | 13 | 1 (0–1) | 247 (75–377) | 2.1 (0–3.0) |
| 200–299 | 12 | 2 (1–6) | 595 (338–1670) | 3.2 (0.3–4.3) |
| 300–399 | 12 | 2 (1–3) | 902 (184–1376) | 2.7 (1.7–5.8) |
| ≥400 | 18 | 2 (1–3) | 616 (424–1102) | 2.0 (1.3–4.7) |

* Of the 103 participating ICUs, 48 did not contribute baseline data — 40 because they implemented the intervention at the initiation of the study and 8 because they did not report baseline data.

Table 3. Rates of Catheter-Related Bloodstream Infection from Baseline (before Implementation of the Study Intervention) to 18 Months of Follow-up.*

| Study Period | No. of ICUs | No. of Bloodstream Infections per 1000 Catheter-Days | | | | |
|-----------------------|-------------|--|-------------------|----------------------|-------------|---------------|
| | | Overall | Teaching Hospital | Nonteaching Hospital | <200 Beds | ≥200 Beds |
| Baseline | 55 | 2.7 (0.6–4.8) | 2.7 (1.3–4.7) | 2.6 (0–4.9) | 2.1 (0–3.0) | 2.7 (1.3–4.8) |
| During implementation | 96 | 1.6 (0–4.4)† | 1.7 (0–4.5) | 0 (0–3.5) | 0 (0–5.8) | 1.7 (0–4.3)† |
| After implementation | | | | | | |
| 0–3 mo | 96 | 0 (0–3.0)‡ | 1.3 (0–3.1)† | 0 (0–1.6)† | 0 (0–2.7) | 1.1 (0–3.1)‡ |
| 4–6 mo | 96 | 0 (0–2.7)‡ | 1.1 (0–3.6)† | 0 (0–0)‡ | 0 (0–0)† | 0 (0–3.2)‡ |
| 7–9 mo | 95 | 0 (0–2.1)‡ | 0.8 (0–2.4)‡ | 0 (0–0)‡ | 0 (0–0)† | 0 (0–2.2)‡ |
| 10–12 mo | 90 | 0 (0–1.9)‡ | 0 (0–2.3)‡ | 0 (0–1.5)‡ | 0 (0–0)† | 0.2 (0–2.3)‡ |
| 13–15 mo | 85 | 0 (0–1.6)‡ | 0 (0–2.2)‡ | 0 (0–0)‡ | 0 (0–0)† | 0 (0–2.0)‡ |
| 16–18 mo | 70 | 0 (0–2.4)‡ | 0 (0–2.7)‡ | 0 (0–1.2)† | 0 (0–0)† | 0 (0–2.6)‡ |

* Because the ICUs implemented the study intervention at different times, the total number of ICUs contributing data for each period varies. Of the 103 participating ICUs, 48 did not contribute baseline data. P values were calculated by the two-sample Wilcoxon rank-sum test.

† P≤0.05 for the comparison with the baseline (preimplementation) period.

‡ P≤0.002 for the comparison with the baseline (preimplementation) period.

Så...hvad skete der så?

Hvordan kan jeg få disse gode resultater på min intensiv afdeling?



Reality Check for Checklists

Bosk et al., *Lancet*, 374, Aug 8, 2009

- The Keystone study story was oversimplified
- Reasons that checklists have not penetrated medicine are cultural and social
 - A technical solution (checklist) is used to solve an adaptive (sociocultural) problem
 - “checklists” obscures the complex labor necessary to create local faith in the checklist
- Some interventions not highlighted in the NEJM article
 - Local leadership from administration
 - Safety and improvement training for staff
 - Valid and sound measurement of infections
 - Regular feedback from all frontline health professionals
 - More than 100 “Keystone checklist”...ability to modify for local use

Explaining Michigan: Developing an Ex Post Theory of a Quality Improvement Program

Dixon-Woods, Bosk, et al., *Milbank Quart*, 89(2), 2011

- Develop an approach to evaluate interventional programs
- QI studies are “remarkably poor at describing exactly what a program comprises”
- Michigan achieved widespread success by...
 - Generating pressure to join
 - Establishing a densely networked community
 - Reframed BSI as a social problem within the ICU
 - Used several interventions that shaped a culture of commitment to improving in practice
 - Harnessed data as a disciplinary force
 - Used “hard edges” such as the checklist itself, activist tactics, and the data

Kliniske databaser er en hjørnesten i Regionernes nye kvalitetsprogram

”Læger skal vi være i førersædet ... og vi skal gribe denne chance for at tage ejerskab til programmet og drive det frem”

Formand for Lægeforeningen Andreas Rudkjøbing



databasernes
fællessekretariat
regionernes kliniske kvalitetsudviklingsprogram



Kliniske databaser er en hjørnesten i Regionernes nye kvalitetsprogram

- Hvilke indikatorer er patientsikkerhedskritiske?
- Hvordan understøttes et forbedringsnetværk, der forpligter sig på at tage fat hvor skoen trykker?
- Hvor meget variation er acceptabelt?
- Hvordan kan data leveres hurtigt tilbage til klinikken?
- Er I parate til at påtage jer ledelsen?



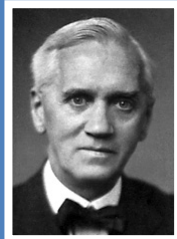
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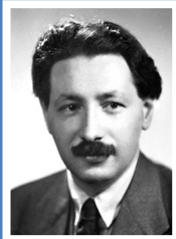


Penicillin

Nobelprisen i medicin, 1945



Sir Alexander
Fleming



Ernst B. Chain



Sir Howard Florey

Penicillin

1928

- Fra en enkelt petriskål han havde kasseret, identificerede [Alexander Fleming](#) en svamp og kaldte det Penicillum.

1930'erne

- Fleming forsøgte med begrænset succes at producere og afprøve virkningerne af Penicillin som en overflade antiseptik.

1939

- [Ernst Chain](#) blev interesseret i Flemings arbejde og identificerede med [Howard Florey](#) en teknik til fremstilling af større mængder.
- Testede det ved at injicere Penicillin i to inficerede mus - der er blev raske.

Penicillin

1940s

- [Norman Heatley](#), producerede tilstrækkelige mængder til at teste penicillin i 50 mus.
- Testede det i tre personer, der var døende af bakterielle infektioner.
- Efterfølgende succesfulde kliniske forsøg førte til finansiering af en masseproduktion af Penicillin.

1945

- Sir Alexander Fleming, Ernst Chain & Sir Howard Florey awarded Nobel Prize for Medicine

Penicillin

*Uden Fleming, ingen Chain; uden Chain, ingen Florey;
uden Florey, ingen Heatley; uden Heatley, ingen
penicillin*

*Uden Fleming, ingen **innovation**; uden Chain og
Florey, ingen **testning**; uden Heatley, ingen **stor
skala** anvendelse af penicillin*

Kontinuum fra forskning til behandling

