



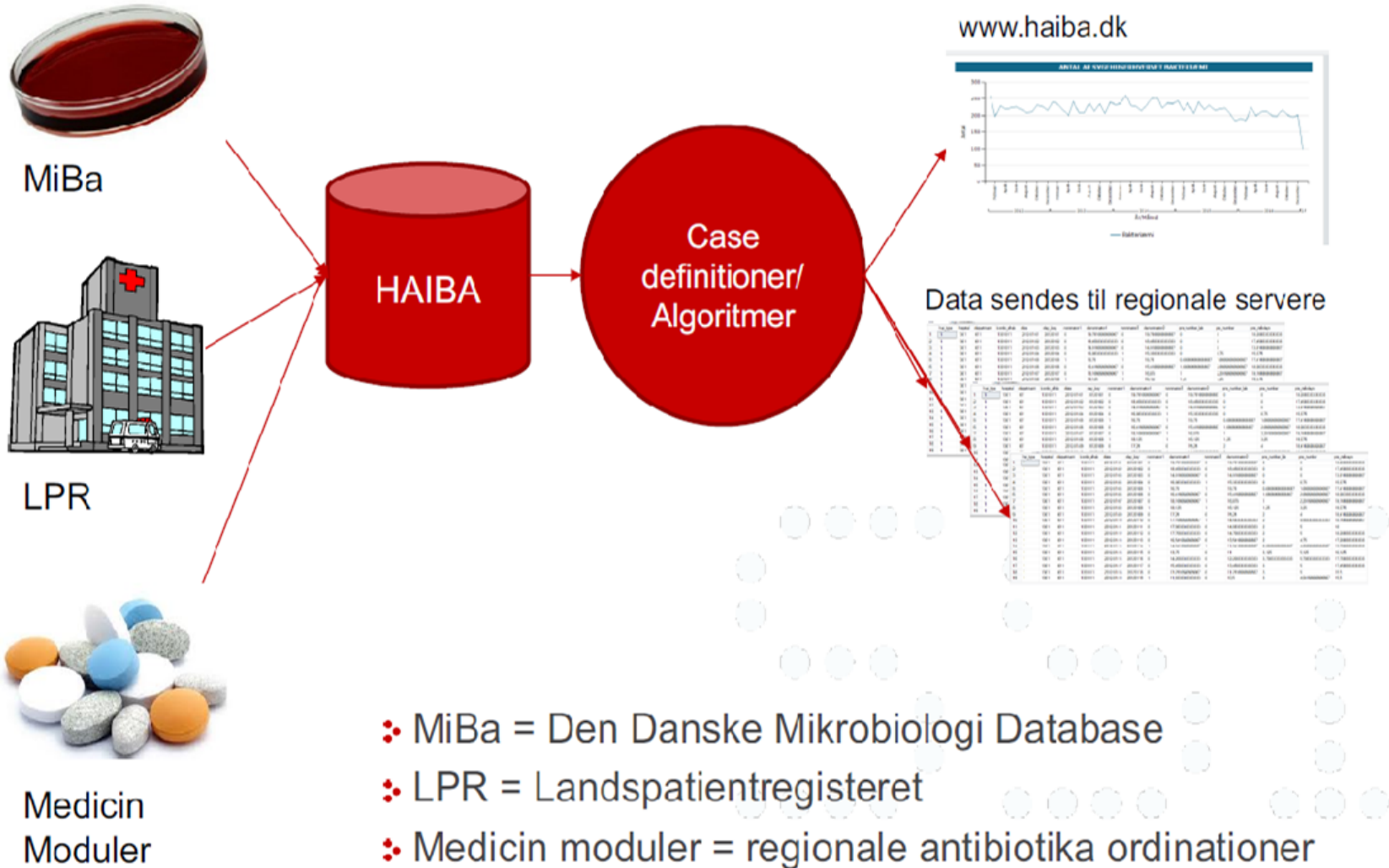
DOING THINGS WITH NUMBERS

AN ANALYTICAL COVERAGE OF THE MONITORING SYSTEM HAIBAS DISCURSIVE READING

Jette Holt, specialuddannet hygiejnesygeplejerske,
cand.pæd.pæd, PhD
Central Enhed for infektionshygiejne

Statens Serum Institut and
Department of culture and learning, Aalborg University
Jho@ssi.dk





- ❖ MiBa = Den Danske Mikrobiologi Database
- ❖ LPR = Landspatientregisteret
- ❖ Medicin moduler = regionale antibiotika ordinationer

Movements in the IPC practice



Great focus on

Datadriven healthcare;
Surveillance-system's validity,
sensitivity and technical design



Less focus on

reading, feedback and effect of
feedback



Technology's march into the
clinical praxis influences the
clinical assesment

New important questions

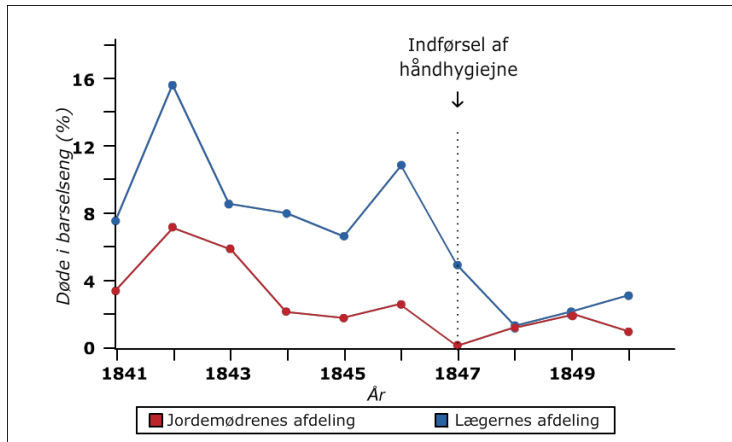
*From manuel to automatic collection
of surveillance data – consequences?*

*How is the automated obtained
number/data remote from the patient
– interpreted and **meaningful**
reported by the Infection Prevention
and Control Units (IPCU)?*

*Can one see the patient behind the
number?*

Do data drive action?

- Semmelweis – had good data...but **no** support from colleagues
- Nightingale – had good data...and political support
- Panum had good data...but **no** field and **no** support....
- Haley showed that feedback of data gave reduction in SSI



Kilde: Pittet, 2001

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JOURNAL ARTICLE

THE EFFICACY OF INFECTION SURVEILLANCE AND CONTROL PROGRAMS IN PREVENTING NOSOCOMIAL INFECTIONS IN US HOSPITALS [Get access >](#)

ROBERT W. HALEY ✉, DAVID H. CULVER, JOHN W. WHITE, W. MEADE MORGAN, T. GRACE EMORI, VAN P. MUNN, THOMAS M. HOOTON

American Journal of Epidemiology, Volume 121, Issue 2, February 1985, Pages

- *How to Do Things with Words* (J. Austin) – speech acts
- **How to do things with numbers**
 - How does the reader make meaning of the data?
 - Knowledge on and attitude to HAI
 - How does meaning making influence the recommended guidance/action?
 - When and where?
 - Analysis of the discourses that
 - create, form and sustain the understanding and the practice

Time period: August 2017 – December 15.2019



5 regions - 14 (16)
Infection/prevention
units
(10 microbiologist, 1
doctor and 23 infection
prevention nurses)



Infection prevention and
control praxis
(surveillance,
prevention, reading and
feedback)

Questionnaire (15/16, 73
questions), semi structured
interview & "Speak out loud at the
computer" (25 t), ethnografic
observation studies (meetings,
scientific days, "at the office", 43
contacts), litterature studie, home
pages og official policy documents



Letter of consent, audio
recording, notes,
transkription

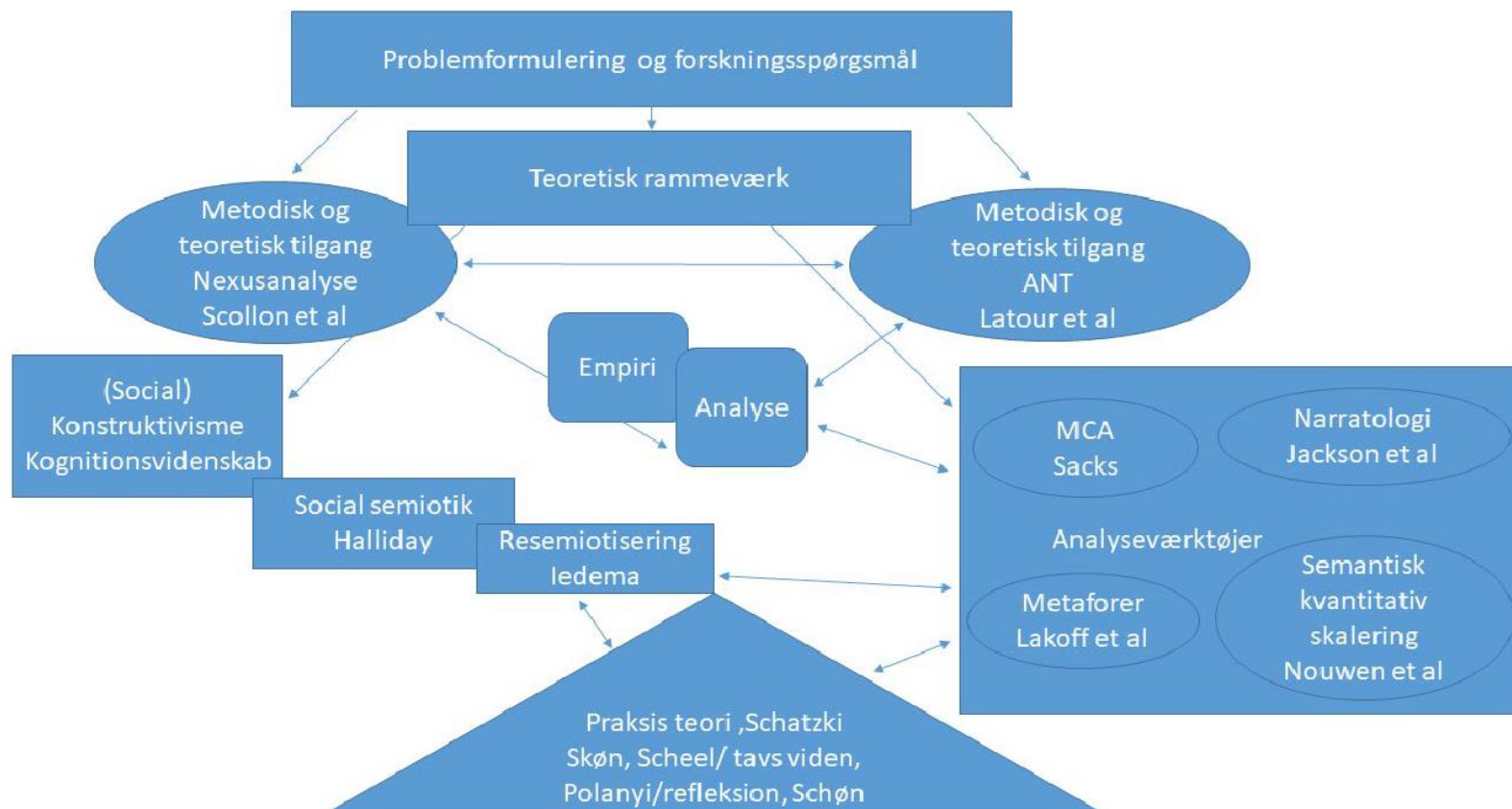
Zone of identification –
how to get in interaction
with your own practice

TO READ A NUMBER IS TO DO A CLINICAL ASSESSMENT

- Professional knowledge of...
- Experience with...
 - Tacit knowledge
 - Language- AND number knowledge
 - Insight into the current situation (context)
- Is constructed, negotiated and developed through dialogue
- To choose the best action
 - ethic, profession and....economic (*M. Scheel, 2005/2013*)
- Novices and experts (*Benner 1984*)

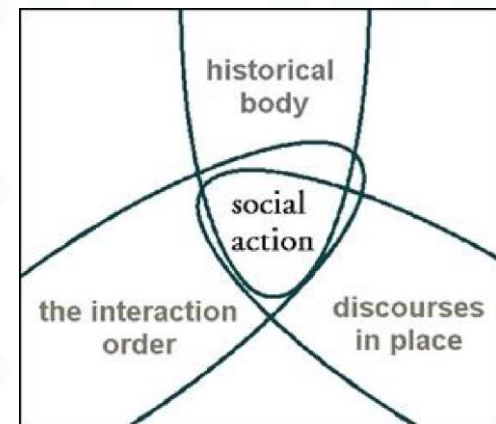
SO TO ANALYZE THIS ...I NEEDED AN ECLECTIC ACCESS TO A MULTIPLE WORLD

What a clinician says, does, and expresses in his reading and feedback is conditioned and limited by the history, expertise, and experience he possesses.



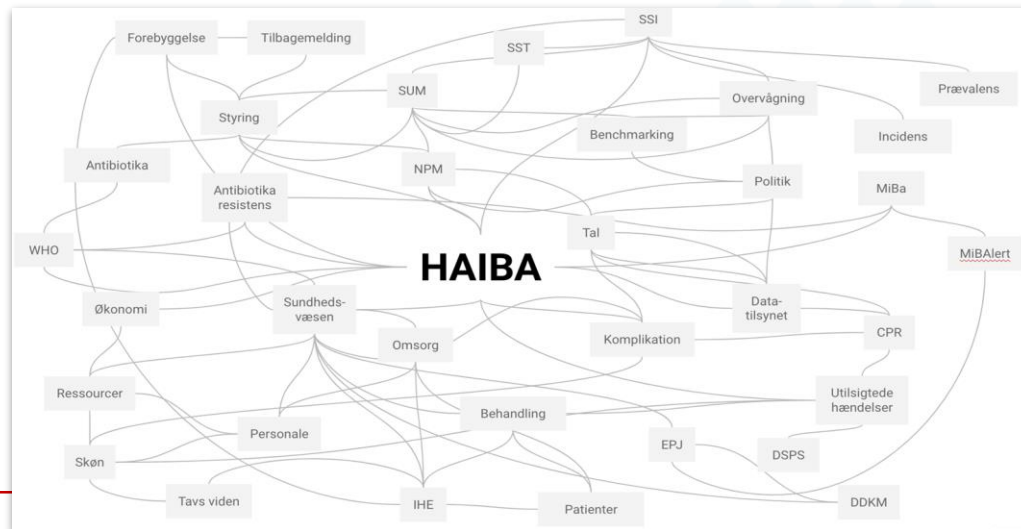
- Methodologic and theoretical framework
- Mediated Discourse Analyses
 - Discourse analysis and ethnography
- Focus on human actors` social interactions, and mediated means including language
- Nexus of Practice

What is going on?



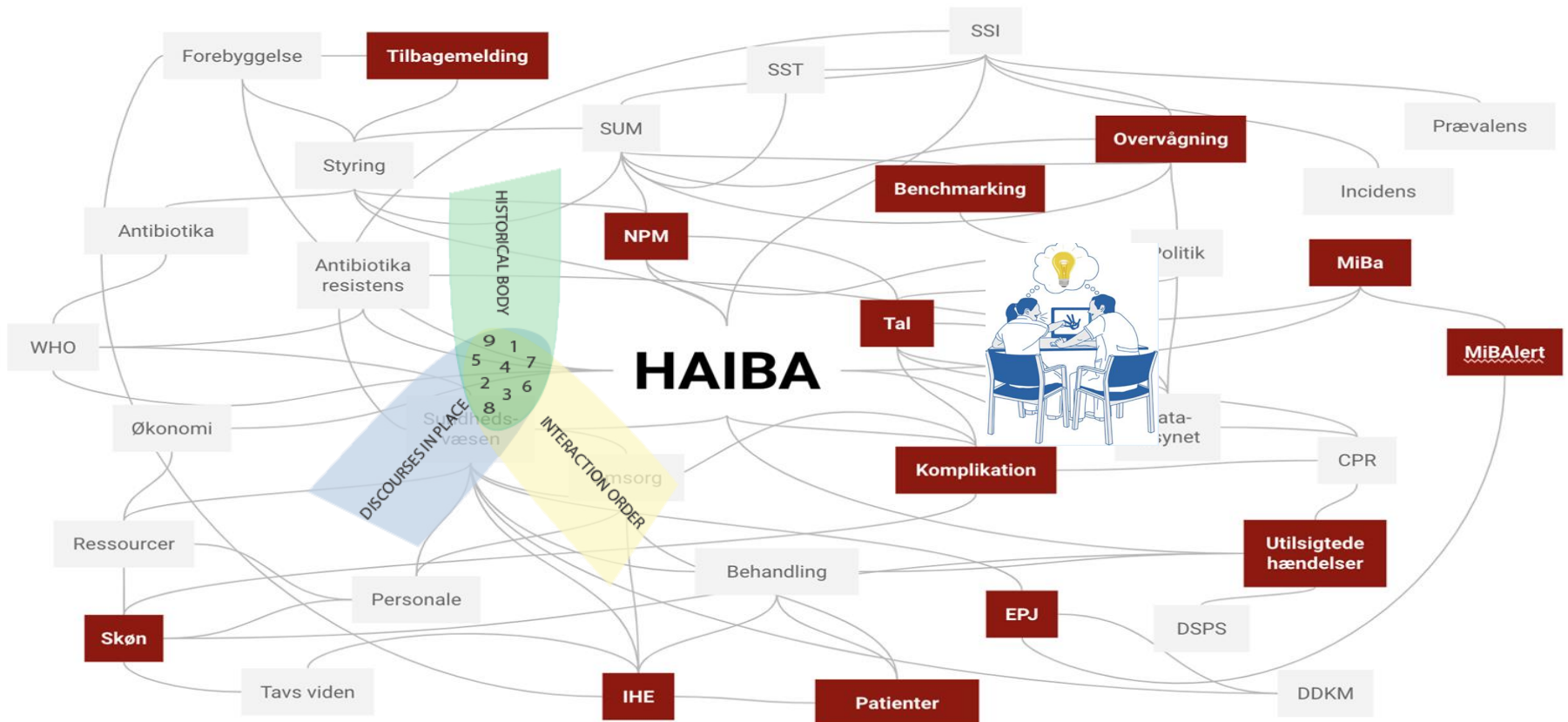
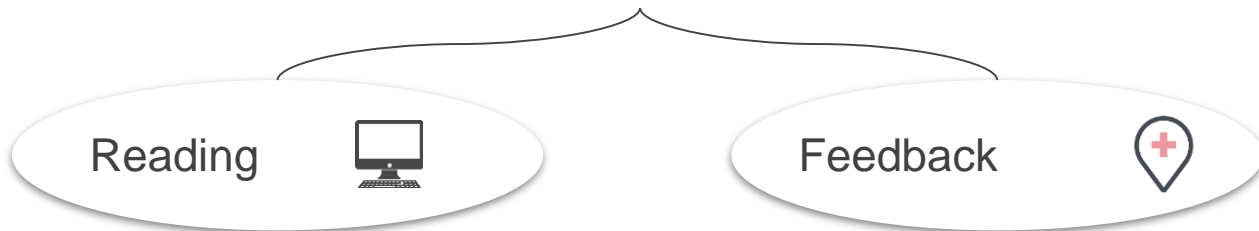
- Human AND non-human actants have/are given agency and gets agency
- Symmetrical doctrine
 - Actants are all that attributes to things happening.
 - Actants maintain and sustain the network
 - Vocabulary (actants, net work, Black box, negotiating, disentangling, inscription, immutable mobiles...)

How is it going on?



THE CONSTRUCTION, THE READING AND FEEDBACK OF THE NUMBER IS AN EXPRESSION OF A CLINICAL ASSESSMENT IMBEDDED IN

Sites of engagement



1. Membership

- Two superior memberships with their own specific associated actions
- Adverse patient safety event or complication?

2. Data as an actant

- Benchmarking and priority of resources
- Entry ticket, weapon - affects the interaction order

3. Resemiotization

- Praxis experience and tacit knowledge – narrativ, metaphor, multimodal social semiotic meaning making, mental numberline, distributed cognition

4. Ekskurs

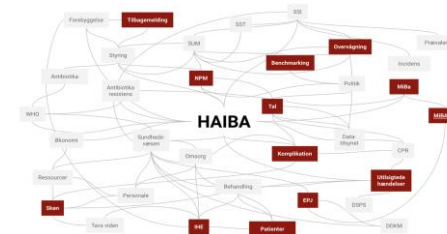
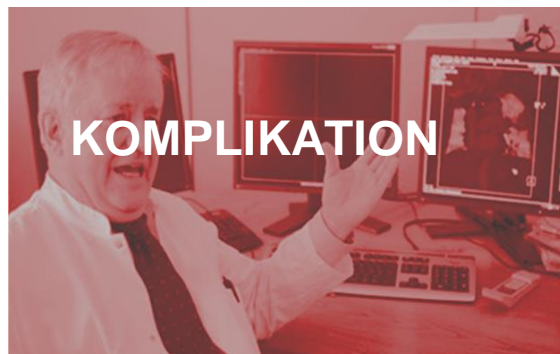
- *Teknologi som medierende og stigmatiserende aktant*
- *Stigmatiserende diskurs og flagging*

”Det kan man simpelthen ikke være bekendt, det er moralsk jo helt forkasteligt”

(Informant nr. 1, klip nr.1a) . S. 201

” Altså hvis du ikke gjorde noget, altså hospitalerne i dag er farlige steder, fordi der bliver gjort en hel masse ved patienterne. Altså, vi udsætter faktisk patienterne for en ganske betragtelig risiko, det ligger jo faktisk i også at behandle” (Informant nr. 17, klip nr. 1b) s. 226

Two groupings – two different approaches to action

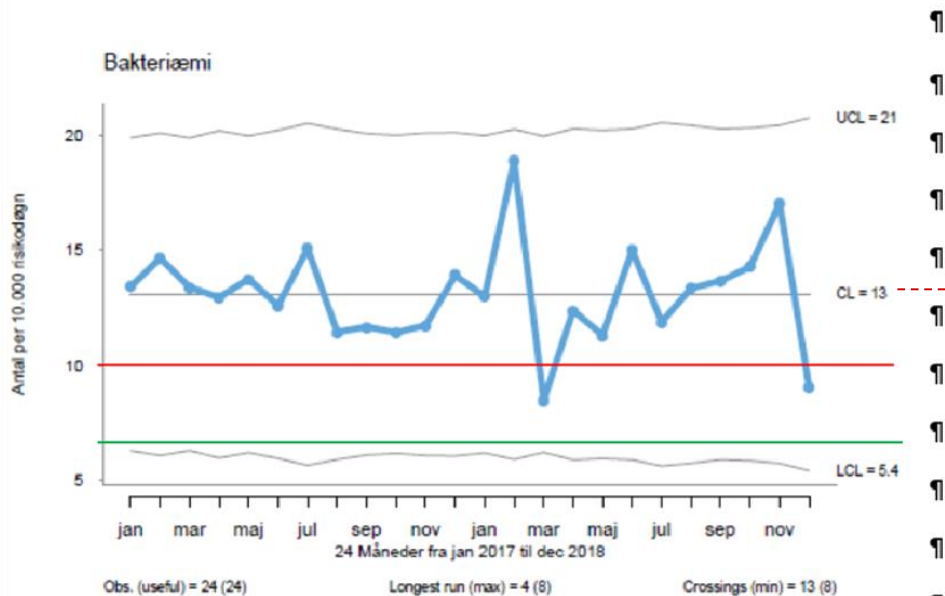


... disturbs the interaction order and the risk assessment (Sacks 1989)

The interaction between the different semiotic resources – graph, numbers, colours, lines and language – creating meaning

Hospitalserhvervet bakterieæmi OUH ¶

Trend: uændret niveau opgjort fra HAIBA-data til og med december 2018 ved statistisk proceskontrol ¶



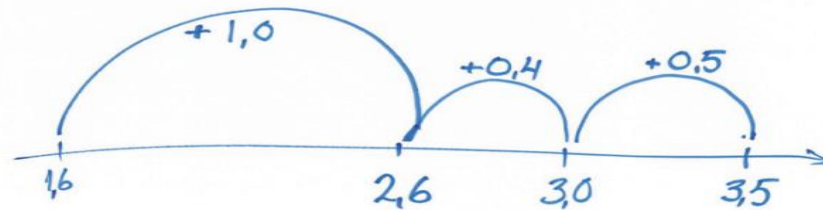
Aktuelt: 13 ¶
Delmål: 10 ¶
Mål: 7 ¶

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- Mental sensation of **big** and small numbers
 - Mental number line.... *a spatial representation of numerical values, which are applied to the cognitive action that gives us our senses of numbers*



- Experience – pictorial memories, risk experiences (complication/adverse patient safety events/UTH)
- Numeracy AND Sense of Language
 - A BIG mouse is still smaller than a small elephant

So! Is everybody able to read numbers and give feedback?

- IPC teams are Competent readers
 - Committed and creative expert narrators
 - Construct the patient from two overarching groupings
 - and several subordinates.
- Reading and feedback is a complex practice
 - The linguistic translation of the number - affects the scaling of the reading
 - Reading the number is a mental competence, but
 - constructing the meaning of the number is a social act translated into language.
 - WE NEED TO TALK ABOUT THE NUMBERS - TOGETHER

