



Amsterdam Public Health research institute

Learning more from audit & feedback in multicenter studies

Martine de Bruijne, Cordula Wagner, Jeremy Grimshaw





Program

- Feedback in the national patient safety study in Dutch hospitals (Cordula Wagner)
- 2. Visualisation of quality information (Martine de Bruijne)
- 3. Principles of audit and feedback. Top down (Jeremy Grimshaw)
- 4. Apply theory to your own situation (small groups)
- 5. Plenary discussion group findings (Jeremy Grimshaw)



Multicenter studies on patient safety

Aim: to improve patient safety in Dutch hospitals

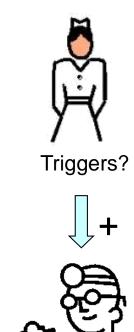
Method: measurement/audit & feedback

- 1. Record review study on adverse events in 21 hospitals
- 2. Medication review in 15 hospitals
- 3. Quality improvement: care for frail elderly in 10 hospitals



Measuring adverse events







- Adverse event?
- Harm to patient?
- Caused by careprofessional / organization?
- Preventable?

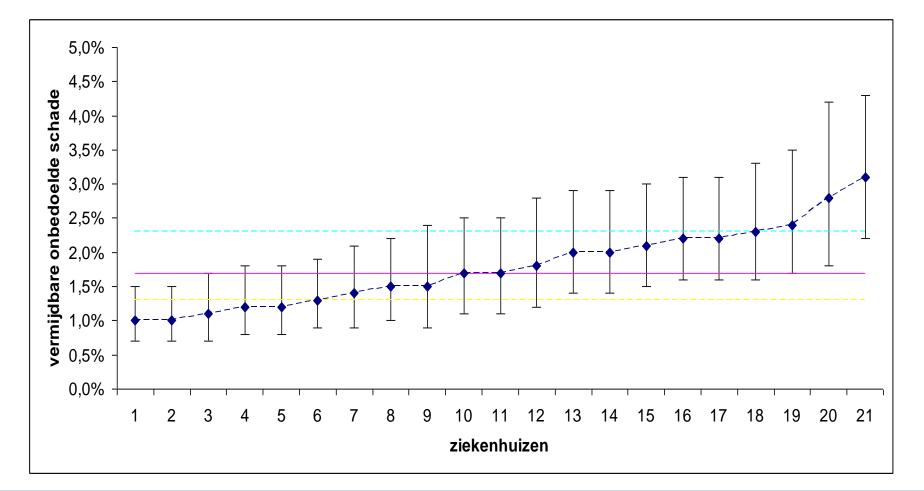


Results of adverse events studies of deseased hospital patients





Preventable adverse events in 21 hospitals



Participating hospitals receive their number for comparison



Quality improvement cycle

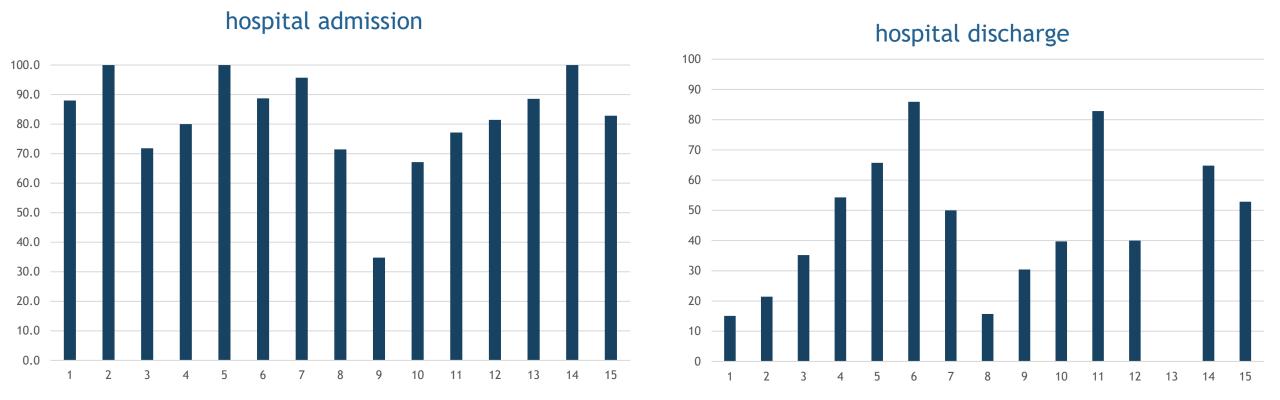




Patient safety improvement program



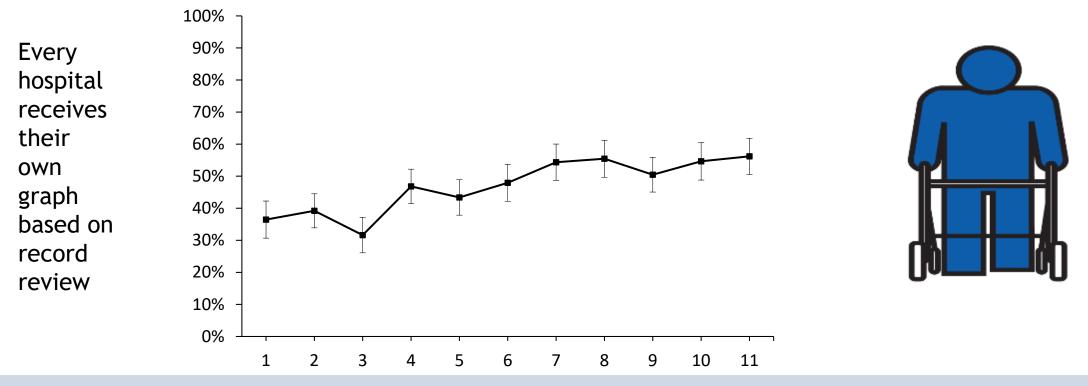
Medication review in 15 hospitals: bundle compliance



Comparison of hospitals who know their number. Exchange of knowledge for learning purposes.



<u>Indicator:</u> application bundle screening (risk on delier, falls, malnutrition, fysical constraints)



Measurement



Questions

How to improve patient safety in Dutch hospitals by audit & feedback of outcomes?

Hospitals were very interested in their results. External pressure and ambition.

Improvement projects were coordinated at a national level.

Advice and support were available via continuous education and expert meetings

Principles of actionable visualisation of quality information

https://www.sturenopkwaliteit.nl/uploads/
pdf/Handleiding_grafische_vormgeving_van_
dashboards_NFU_Sturen_op_Kwaliteit.pdf





HANDLEIDING VORMGEVING van DASHBOARDS met kwaliteitsinformatie



Mildred Visser Msc, Petra Jeliema PhD, Nadiyah de la Rambelje Msc, prof. Martine de Bruijne MD PhD, Anne Marle Weggelaar PhD MCM

Versie 3 – 29 november 2018



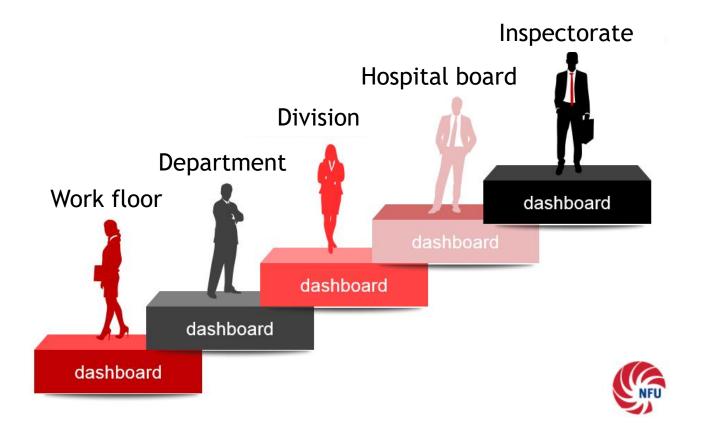
Design steps

Central purpose User group Functionality Data colletion Scratch design Test Optimise





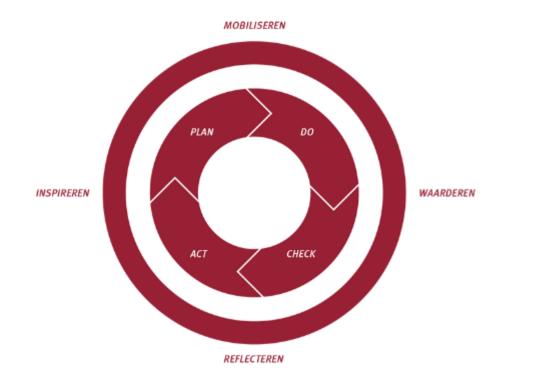
Who do you want to inform? Who should act?



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Quality improvement



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B

Hard signals



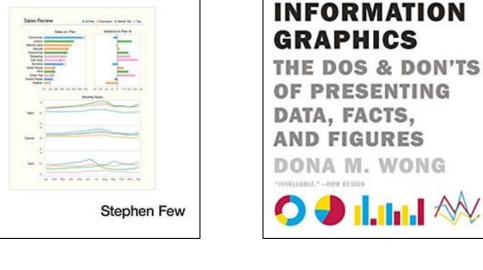
soft signals

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Design rules in literature

'Less is more' Flexibility Clear and surveyable Comprehensive Use of colours

!! What you like ≠ what you understand !!





THE WALL STREET JOURNAL

GUIDE TO

DONA M. WONG

"INVALUABLE." -- HOW DESIGN



Second Edition

Show Me the Numbers

Designing Tables and Graphs to Enlighten



Design rules from focus groups

Max 8 to10 indicators Benchmark: internal targets Increase/decrease at first sight Flexible ordering of information Show trends Keep track of dashboard search



Meaningfull & actionable

Explanation Increase/decrease Colours and symbols



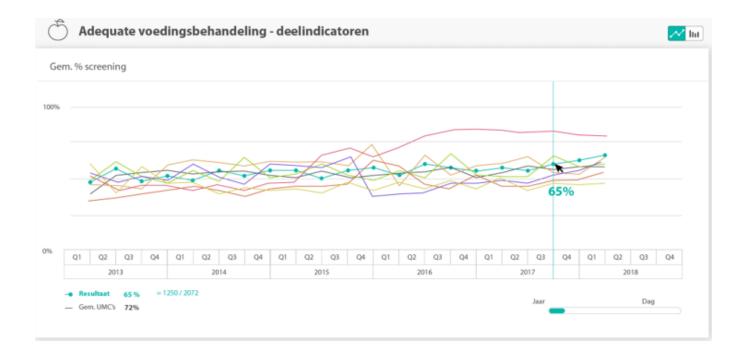
Report improvement initiative





Graphs

Bars Lines Pie chart Scatterplot KPI meter Population graphs Symbols, pictograms





Tables

	Januari	Februari	Maart	April
Pat. 1	268	357	587	268
Pat. 2	365	401	401	421
Pat. 3	554	582	561	583
Totaal	1.186	1.326	1.549	1.272

×

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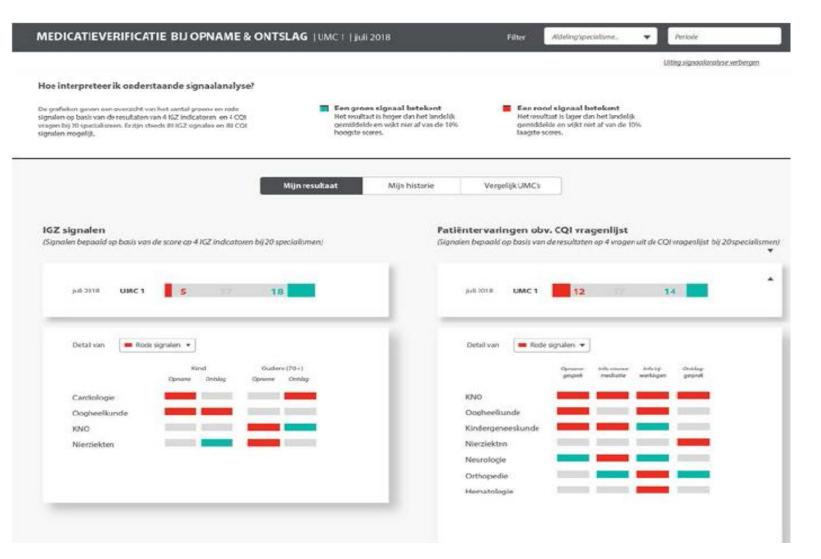
Alignment

Correct uitgelijnd	Incorrect uitgelijnd	Incorrect uitgelijnd
Dienst A	Dienst A	Dienst A
Categorie B	Categorie B	Categorie B
235-65-5432	235-65-5432	235-65-5432
UMC Stad	UMC Stad	UMC Stad
Figuurstraat 125	Figuurstraat 125	Figuurstraat 125

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Visualisation is not always helpfull





Questions?



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