

Guidelines in context

Principles of successful guideline implementation

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**Le Nozze di Figaro: revolutionary opera ,
musically and thematically, at the end
of the 18th century**



Mozarts Le Nozze: “ most perfect piece of art ever created by a human being” (Leo Riemens, Groot Operaboek)

- Revolutionary opera composed just before French revolution, at time the Habsburg monarchy (Joseph II) opened doors for more influence by ordinary citizens a little, opera links to those changes and new atmosphere
- Story: Duke Almaviva has officially announced the end of the “Droit du Seigneur” (right of the landlord to sleep with the bride of his servants in the night before the wedding) under pressure of the emancipation of citizens, but in fact behaves in a resistant way and shows problems with following this new guideline
- So, he aims to seduce Suzanne, the bride of his servant Figaro; only under great pressure of his wife he accepts the new order of things and asks forgiveness (“Contessa perdono”)

Le Nozze di Figaro

Resistance and problems with adopting new guideline need to be seen from different perspectives, eg :

- Individual: difficulty with losing personal privileges and pleasures, problems with changing fixed habits and routines,
- Social context: difficulties with loss of power and disturbance of the normal hierarchy within his household (staff becomes assertive); change of relation with his wife (she protests and does not accept his behaviour anymore, makes him jealous)
- Societal context: his problems fit into existing culture, in the problems of elite with losing power, resistance to change of the feudal system and the emancipation of ordinary citizens

The implementation problem

- Many patients (estimated 30-45%) do not receive recommended (evidence based) care
- 20-25% of tests ordered or medications prescribed are not evidence based, unnecessary and potentially harmful
- Many patients harmed because of adverse events, partly caused by not using evidence based guidelines
- Large, unexplained differences in the use of guidelines between sites and providers

Implementation of guidelines: the evidence

- Overviews of systematic reviews show (Grol/Grimshaw 2003, Grimshaw 2004): no evidence that one of many, many approaches to change is superior in all situations; most are useful in some settings for some guidelines
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- Change even after well-planned interventions usually moderate (8-10%); however such a change may be (clinically) relevant
- Not clear why some strategies and change interventions are effective for some guidelines in some settings and not for others
- We lack research on many new, interesting approaches: enormous challenge for HSR

***Some pearls of understanding
related to effective
implementation of guidelines
and (sustainable) change
derived from studies,
projects and experts around
the world***

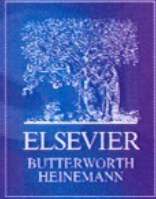


(A boring list of) 12 + one lessons learnt from studies, projects, programs in many countries

- Create structures and context for implementation (policies, leadership, programs, support structures, monitoring systems)
- Substantial and sustained change takes time and is mostly achieved by consistent approach: continuous monitoring , adapting implementation plan on basis of evaluation results
- Optimal preparation: good plan, schedule, division of tasks, enthusiastic team, sufficient budget, materials
- Optimal marketing of guideline recommendations: proposal for change should create interest and enthusiasm (“something need to be done”); attractive and effective tools needed

- Define targets for change: limited number of relevant and concrete quality measures, valid data and understandable feedback needed to create “sense of urgency” in target group (they must see it as their problem, feel responsible for acting)
- Comprehensive programs integrating guidelines, monitoring adherence and improvement actions at different levels (educational, organizational, financial, regulatory) needed
- Local support: external experts/trained visitors come and help teams and practices to set up change projects or programs and teach improvement skills to target audience
- Learning through peers, modelling best practices, using experienced colleagues to demonstrate new behaviour often effective in implementing guidelines
- Use consumers as allies in demanding use of guidelines

- Assure necessary structural, economic and political support; organizational changes and ICT development often critical in achieving implementation of guidelines or best practices
- Receptive environment, culture of learning and exchanging experiences at level of ward and organization crucial ; target group actively involved at all stages of program/project
- Embed quality improvement plan or project within regular and familiar (local), (educational or other) activities of target group and take care that this is also “fun”
- Invest in young professionals: teach the necessary competencies for using clinical practice guidelines, monitoring quality and improving practice in undergraduate and postgraduate education



Improving Patient Care

The Implementation
of Change in
Clinical Practice

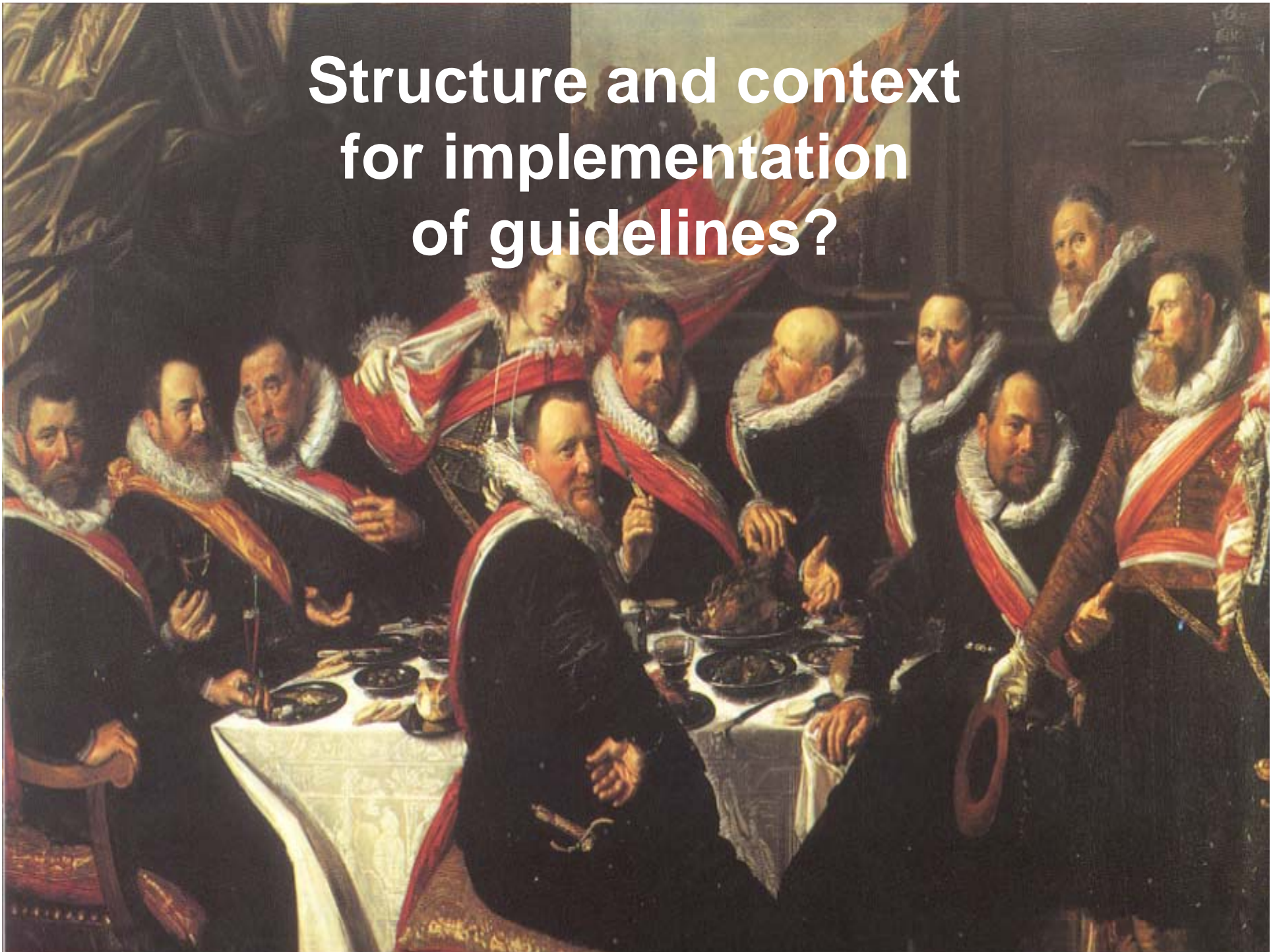
GROL, WENSING & ECCLES

**Comprehensive
handbook on
implementation
of guidelines
and improvements
in health care
(Elsevier 2005)**

Two issues

- Creating a structure and context for implementation of guidelines and changes in patient care
- Engaging professionals in using guidelines and improving practice

Structure and context for implementation of guidelines?



**Structure and context
for guideline
Implementation?**



A structure for implementation: the Quality and Outcomes Framework and GP contract in UK

- New contract for GPs (April 2004): about 25-30% of income related to quality of care (credit points linked to set of (partly evidence based) indicators (for clinical performance, patient experiences, practice management)
- Evaluations of impact showed very high indicator scores and most practices meeting quality criteria; also improved ICT use and chronic care management
- Substantial increase in income for practices (23%)
- Unclear what caused the large effect: the financial incentive, the measurement initiative and standards set, or the many other quality improvement initiatives in the last 20 years?

Consistent policies: quality of primary care in UK (Campbell et al, New Engl J Med 2007)

Quality of care for chronic patients in 42 practices before and after introduction of pay for performance (in 2004)

	<u>1998</u>	<u>2003</u>	<u>2005</u>
● Coronary heart disease	59%	76%	85%
● Diabetes	62%	70%	81%
● Asthma	60%	70%	84%

Culture of change built over time: improvement of quality before QoF as result of (20 years of) policies, but acceleration by bonus?

A structure for implementation: guideline development and implementation in primary care in the Netherlands

- Before 1987: local consensus based guideline development
- 1989: first guideline published by Dutch College of GPs, in “90s more and more evidence based
- In “90s large guideline implementation and quality improvement programs by GP bodies
- Now integrated program for guideline development, evidence based indicators, assessment of practices, improvement plans and programs, accreditation of practices

Adherence to clinical guidelines in primary care in the Netherlands

Different studies measuring adherence to clinical guidelines, (average % adherence over many specific recommendations):

- 1980 (24 regional guidelines, 57 GPs) 44%
- 1987 (24 regional guidelines, 75 GPs) 55%
- 1991 (12 national guidelines, 62 GPs) 66%
- 2000 (35 national guidelines, 200 GPs) 69%
- 2002 (57 indicators derived from national guidelines, 190 GPs) 74%

>20 years of guideline implementation in primary care : building a culture of change

- Improvement in patiënt care gradual process demanding continuous efforts, consistent policies and well prepared programs running over long period of time
- Leadership and support structures offered by professional organizations crucial for acceptance
- Local collaboratives (or peer review groups) to discuss guidelines and prepare change were important (since 1980)
- Expert support to practices to change the organization of care and practice culture very important
- Infrastructures: ICT development, practice nurses, etc
- QI embedded in familiar activities for family physicians

Engaging professionals in process of change



Engaging professionals in process of change

Take yourself as an example: what would motivate you most to implement (important) changes in your work ?

- Evidence on optimal care
- Money, financial incentive for improved performance
 - Support and help from experts
- Information of peers on how to change, good examples
 - Seeing that it is possible to change
 - Increased status, fame, good name
 - Risk of a bad image in eyes of others
- Litigation, sanctions, pressure from authorities
 - ???

The rational professional?

- EBM and guideline development have the assumption that professionals in health care (doctors, nurses, managers, et al) are particularly sensitive to convincing information about pros and cons of specific treatment;
- Some sometimes are!
- Most are very human and more influenced by social influences (opinions of peers), status in the eye of others, compliments and attention, money or incentives, desire to please others (patients), avoidance of conflict, unrest and chaos, need of predictability, external pressure, risk avoidance, having fun, getting help, etc, etc

Engaging professionals: is bottom-up involvement the answer?

- **Top-down: clear directions, change proposals and interventions developed, implemented and supported by external, well organized expertise teams**
- **Or**
- **Bottom up: change proposals and interventions developed, and implemented by target group at local level**

Bottom-up versus top-down approaches in quality improvement

- Interactive education with active involvement and participation more effective than passive education (Davis, Oxman)
- Problem-based learning, self-directed learning, port-folio learning: evidence for effectiveness of bottom-up learning not convincing (Norman BMJ)
- Review on interventions to improve hospital quality (81 comparisons): use of externally developed guidelines and change interventions more effective than internally developed guidelines and interventions (Dijkstra et 2005)
- Active involvement is okay; leave them on their own to find out the solutions themselves is not okay!!

How to engage professionals: “if you have the first 20% the rest will follow” (?)

- Segmentation: people and organizations react differently on change proposals, they experience different barriers to change
- It is easy to get the first 20%: they are eager and prepared to change or curious and innovative anyway
- The other 80% are driven by other motivations: social pressure, money, external pressure from authorities, social contact, peer influence, etc
- Adapt plans for change to motivations of different groups

Engaging professionals: the power of peers

- 10-15% of doctors: self-initiated change; another 10-15% will only change by 'using the stick'; rest is particularly sensitive to opinions, models and examples of colleagues in their social network
- very good experiences with quality improvement in interactive small groups of professionals (quality circles, peer review groups, local collaboratives):
- many experiments showed effectiveness; now most used method for QI in primary care in Europe

Engaging teams: the importance of external support and outreach visitor as supporter of change

- trained person (nurse, colleague) comes to ward or team:
 - assessment and feedback
 - education and information
 - introduction of best practices
 - support on practice development (e.g. organisation, prevention, record system)
 - teaching improvement methods and skills
 - helping to change the team and organizational culture
 - Proved to be effective in many prevention and chronic care projects and programs and in introducing QI-systems
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A culture of change: a holy grail?

Many authors on implementation of change in clinical practice speak about need for receptive environment and culture of change :

- Build and sustain a receptive context for putting evidence into practice (Dopson 2002)
- Culture that emphasizes learning, team work and customer focus is crucial (Ferlie 2001)
- Supportive organizational culture needed (Bate 2002, Newton 2003)
- Receptive environment with readiness to change needed (Ovretveit 2004, Greenhalgh 2004)

Framework for types of organizational culture

(Quin 1984, Scott 2003, Shortell 2004)

- Group culture: focus on teamwork, cohesiveness, participation
- Developmental culture: promotion of innovation, risk-taking, orientation towards growth
- Hierarchical culture: focus on stability, rules, regulations, coordination
- Rational culture: focus on achievement, meeting targets, rewards for achieving goals or efficient working

Organizational culture at wards/practices in the Netherlands (score on scale of 1-100)

<u>type of culture</u>	<u>general hospital</u>	<u>nursing hospital</u>	<u>primary care</u>
● <i>Group</i>	26	27	52
●			
● <i>Developmental</i>	20	21	17
● <i>Hierarchical</i>	31	29	20
● <i>Rational</i>	24	23	12

“Health care for the future needs doctors and nurses who understand that cooperation, not heroism, is a primary professional value, and people committed to new norms of transparency, measurement and continual improvement.”

(Don Berwick 2005)

Professional education



Much more attention to guidelines and improving quality in professional education



Conclusions

- Evidence based guidelines are not followed well in practice; many people have naive ideas about effective implementation
- Creating the structures and context for implementation crucial: consistent long term policies and comprehensive programs, both bottom-up and top-down, needed
- Engaging professionals in implementation of change is a challenge: a variety of measures needed to motivate professionals, particularly educating our future health care professionals