International Conference on Clinical Practice Guidelines

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Evaluation of Clinical Practice Guidelines
- A View of a Methodologist -

Slide **1**

Definition of Guidelines

Guidelines are systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances.

(IOM 1992)

Slide **2**

Primary Objectives of Guidelines

- Codifying good quality of health care based on scientificevidence and broad consensus
- Helping patients and professionals to make decisions about health care
- Assessing the quality of the health care process
- Improving process and outcome of health care

(mod. Thomson et al. 1995)

Slide **3**

Five Phases of the Life Cycle of Guidelines

Phase	Function	Objectives / Techniques
1	Design / Draft	Systematic Review Process, Consensus Techniques, Presentation, Guideline Report
2a	Critical Appraisal	Assessment of Internal Validity (Strength of Evidence), Feasibility, Assumed Cost-Effectiveness
2b	Decision on Adoption	Strength of Requested Adherence, Resonsibilities, Financing
3	Dissemination	Concerted Action of Media, Integration in Basic and Continuing Medical Education
4	Implementation	Change Management (Incentives, etc.), Monitoring of Utilisation, Quality Management, Assessment of Effectiveness and Efficiency (External Validity)
5	Updating	Controlling the Hecessity of Revision or Withdrawal

(Selbmann 1998)

Slide **4**

Checklist for a Guideline Report

I. Development of Guidelines (21 Aspects)
Responsibility (incl. Sponsoring), Identification of Authors, Gathering, Selecting and Synthesising of Evidence, Consensus

Techniques, Peer Reviewing and Pilot Studies, Revision Plan, Transparency of Developing Process

II. Contents and Lay-out of Guidelines (16 Aspects)

Objectives, Areas of Concern, Specification of Evidence, Flexibility, Comprehensive-ness, Expected Benefit, Possible Harms, Costs

III. Application of Guideline in Routine Care (4 Aspects)

Dissemination Plans, Support of Implementation, Proposals for Quality Indicators for Process and Outcome (Review Criteria)

(Ärztliche Zenralstelle Qualitätssicherung 1998,
mod. Scottish Intercollegiate Guidelines Network 1995)

Slide **5**

Strength of Evidence of Effectiveness of a Guideline or Parts of it

I-1	Evidence obtained from meta-analysis of randomised controlled trials
I-2	Evidence obtained from at least 1 properly designed randomised controlled trial
II-1	Evidence obtained from well-designed controlled trials without randomisation
II-2	Evidence obtained from well-designed cohort or case-control analytic studies, preferably from more than one centre or research group
II-3	Evidence obtained from comparisons between times or places with or without intervention; dramatic results in uncontrolled experiments could also be included in this category
III	Evidence obtained from opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees.

(mod. Woolf 1992)

Slide **6**

Dissemination and Implementation of Guidelines in General Practice Care

		Effect
Facilitating, Educational Methods	mailed educational materials, journals, mass media	**-**
	continuing medical education, courses, tutorials	**+ / -**
	face to face education, individual instruction	**+**
	audit and feedback (by computer)	**+ / -**
	reminders (by computer)	**+**
	peer reviews, quality circles, practise visiting	**+**
	patient influence	**?**
	structural arrangements	**?**
	barriers to performance	**+ / -**
	incentives or sanctions	**+ / -**
Coercive, Controlling Methods	rules, law, obligations, certification, contracts	**?**

(Grol 1992)

Slide **7**

Do Guidelines Influence Clinical Practice?

Areas of medical care

Studies published between 1976 and June 1994	91
- clinical care	35
- preventive care	34
- prescription or use of radiological or laboratory invest.	22

Effects

Stud. observing process quality	(96%)	87 of 91
Stud. showing process quality improvem.	(93%)	81 of 87
Stud. observing outcome quality	(19%)	17 of 91
Stud. showing outcome quality improvem.	(70%)	12 of 17

Study designs

Randomised controlled trials or cross-over trials (doctors)	44 of 91
- Stud. showing process quality improvem.	43 of 44
- Stud. showing outcome quality improvem.	8 of 11
Simple before and after studies	not included

(Grimshaw et al. 1995)

Slide **8**

Awareness, Knowlwdge, Usage, Benefit of Guidelines

Example:
Recommendation of the Joint National Committee on Mangement of Hypertension (Hill et al 1988)

Physicians: family physicians, general practitioners, internists, cardiologists, nephrologists

Data: self report questionnaires

Results:

one year after publication:

high level of awareness	62 %
familiarity with the guideline	81 %
change in practice behaviour	18 %
usage in every day practice	17 %

six weeks before publication:

congruent with 9 out of 10 recommendations	66 %

Slide **9**

Chalmers J. (1996):

„The evidence available suggest that the main value obtained from guidelines and consensus statements lies in their capacity to codify good or 'best practice', at times of rapid change in a particular field.

Guidelines are not effective in producing rapid change in clinical practice.

If a change in practice is sought a more comprehensive program of action is necessary, with guidelines as one useful element."

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Conclusions:

Evaluation is an essential part of the developing process of guidelines.

Basic requirements of an evaluation of an activity are the definition of its objective and the derivation of criteria for goal attainment.

Every activity in one of the five life cycle phases of a guideline can be evaluated.

Guidelines for the evaluation of guidelines should be included in a guideline developing program.

The evaluation of a guideline should include an ex-ante evaluation (before dissemination) as well as an ex-post evaluation (after dissemination).

Pure actionism without an appropriate evaluation should be avoided.

Perfect evaluation of all guidelines may not be cost-effective and payable.

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