



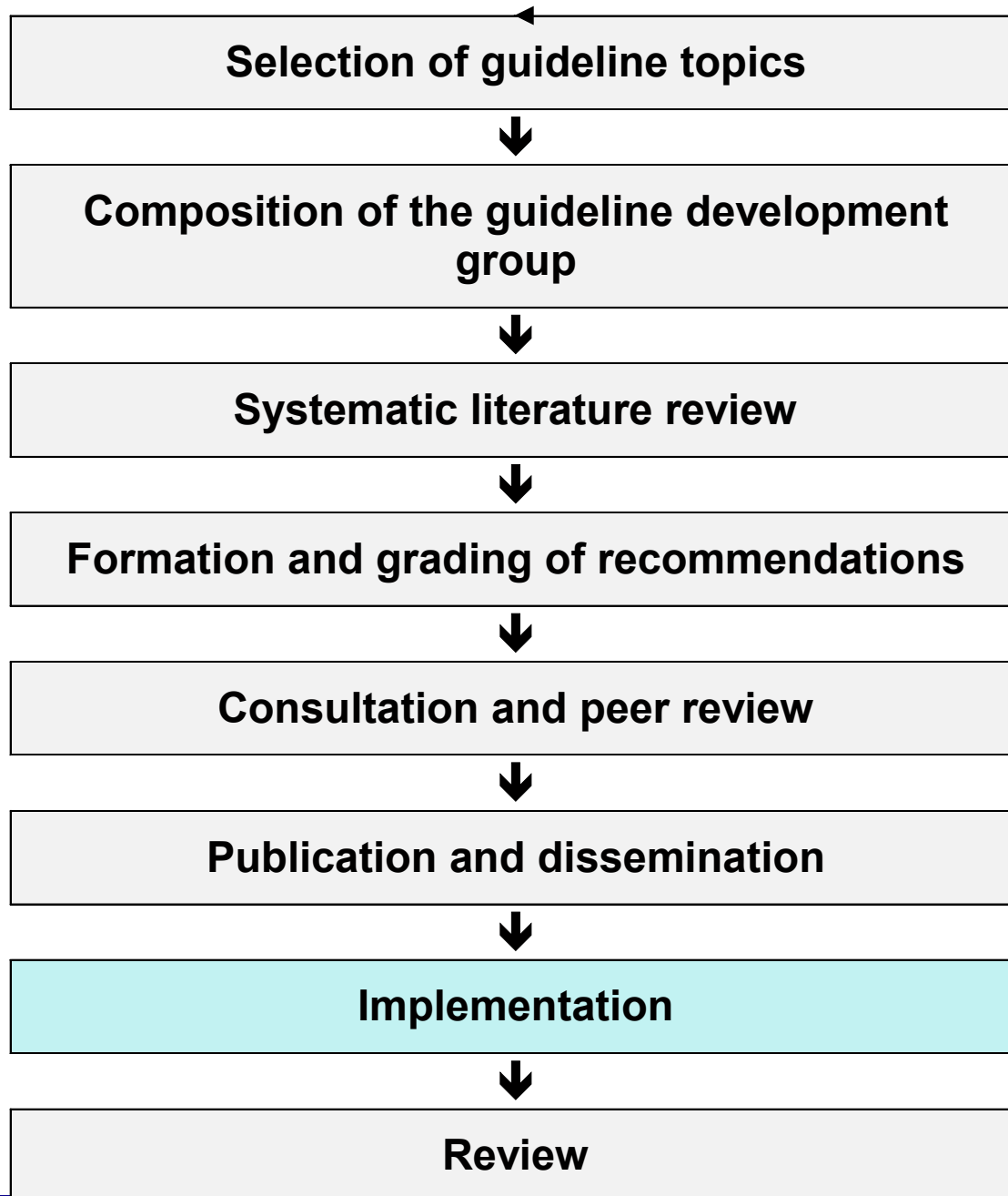
## **Implementation of Guidelines**

Bringing guidelines closer to daily practice

G. Ollenschläger

Workshop „Developing Therapeutic Guidelines“

Sinaia, Romania, 28-29 August 2003



Slovenian Guidelines  
Manual  
*Version 2.1*  
November 2002

# Factors for Success of CPG Implementation

## Against Organisational Barriers:

### Problem based Topic Selection

- Select CPG topics for **important issues in health care**.
- Base prioritisation on **epidemiology** of health problems, health **inequalities**, **variations in the provision and quality of care**, **emergence of new technologies**, need for high quality, updated information.

# Factors for Success of CPGs

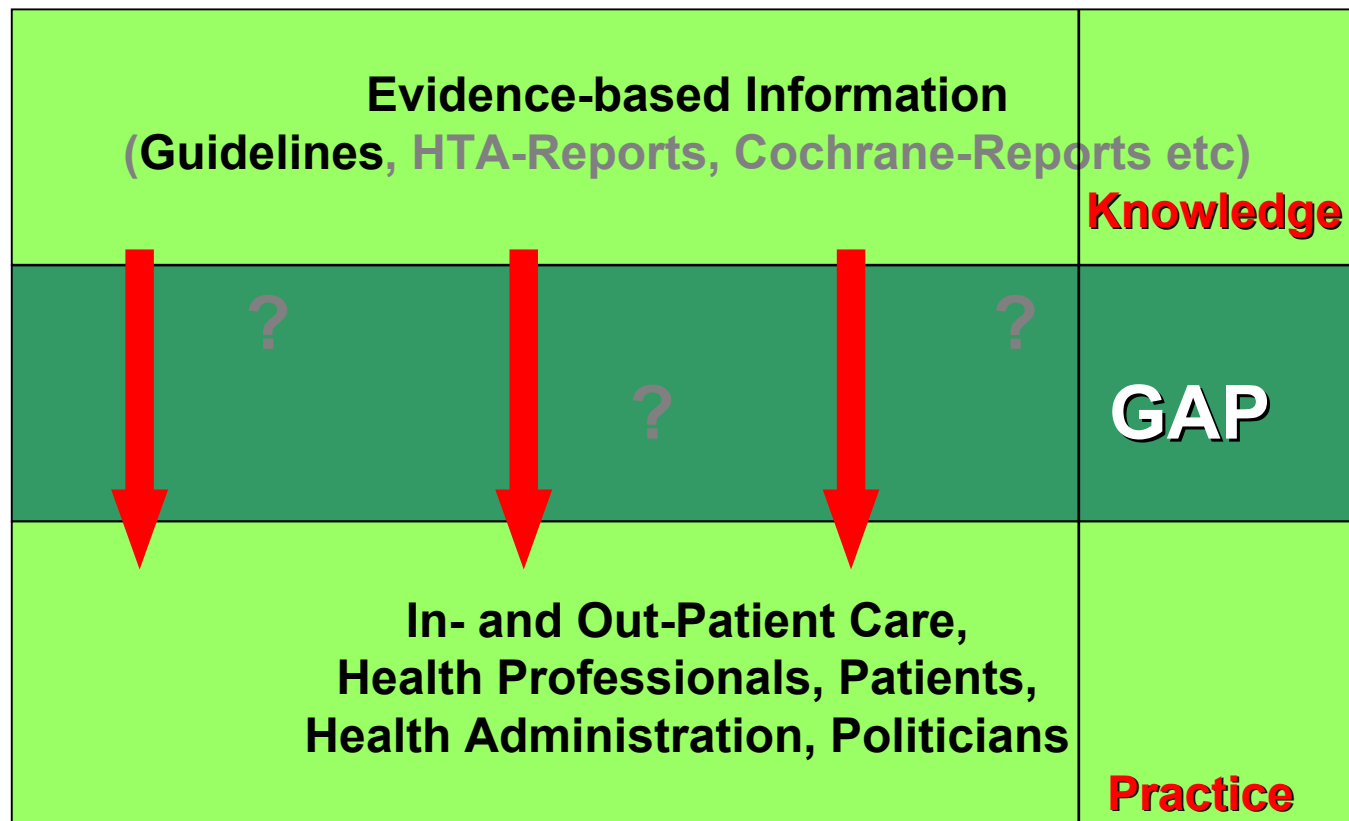
## Need Assessment and Topic Prioritisation

*Example: Slovene national CPG on colorectal cancer:*

- *Epidemiology* Slovenia: one of the highest incidenc of colorect.ca.  
Increase in mortality rates among males.  
5-year survival shorter than in peer countries.
- *Quality of Health Care* Low detection rate:  
local 11%, regional 60%, advanced 24%

# Implementation of Evidence-based Information

## How to Overcome Barriers ?



# Barriers against use of guidelines

## 1. Mandatory top-down implement.

- CPGs should ...not simply be imposed on professionals by hospital management or third party payers.
- That would result in a standardisation of care that leaves insufficient room to do justice to the needs of each individual patient.
- Neither are guidelines a simple tool for allocating scarce resources at the population level.

## To overcome barriers against use of guidelines:

### 1. Participation of target groups in CPG develop.

*People involved in guideline development*

- credible organisation responsible for guideline development
- target users involved in guideline development ('ownership')
- balanced multidisciplinary guideline development group
- patient involvement

## Barriers against use of guidelines

### 2. Uncertainties regarding legal status of CPGs

- Since CPGs are not issued by legislative bodies, they are not legal rules.
- However, they may have or acquire legal significance, for instance when they are incorporated into binding rules.
- The courts will not automatically equate compliance with CPGs with good medical practice.
- Mere deviation from a guideline is unlikely to be considered as negligent.

## To overcome barriers against use of guidelines:

### 2. Clarify legal conditions of guidelines

- Both health professionals and patients need to be aware of the legal implications of adhering to or not following guidelines.
- As the role of guidelines in legal proceedings differs from country to country, it is essential that guideline programmes clarify the legal conditions of implementing CPGs in general to their potential users.

## Barriers against use of guidelines

### 3. Lack of dissemination / implement. strategy

- Results from many controlled trials and systematic reviews show that efforts to implement guidelines are often not very successful.
- At best, small to moderate improvements in the care process have been found, whereas the impact on patient outcomes has often not been studied or proved to be absent.
- Issues of implementation are seldom addressed in the development of guidelines.

## To overcome barriers against use of guidelines:

### 3. User-oriented, effective implementation

- production of different formats of the guideline, including patient versions, and tools for applications
- use of Internet
- multiple implementation strategies
- review criteria, indicators for assessing the use of guidelines

# Guideline Implementation

## Key Elements (1)

- Guidelines must become an essential element in the undergraduate and clinical training of health care professionals as well as in the continuing professional development of health care teams.

## Guideline Implementation

### Key Elements (2)

- **Systematic approach** to managing the quality of health care based upon CPGs is essential.
- Use **various** dissemination and implementation **strategies** in combinations.
- Consider professional, organisational, financial, regulatory **incentives and disincentives**.
- Consider **barriers and facilitators** of CPG use at both national and local levels (**tailored implementation**).

# Effectiveness of Implem. Interventions

Effectiveness	Type
<b>Little or No</b>	<ul style="list-style-type: none"><li>• Educational materials only</li><li>• Educational lectures</li></ul>
<b>Variable</b>	<ul style="list-style-type: none"><li>• Audit and feedback</li><li>• Local opinion leaders</li><li>• Local consensus process</li><li>• Patient-mediated interventions</li></ul>
<b>Effective</b>	<ul style="list-style-type: none"><li>• Educational outreach visits</li><li>• Reminders</li><li>• Interactive educat. meetings</li><li>• <b>Multifaceted interventions</b></li></ul>

# Factors for Success of CPGs

## Effective Dissemination and Implementation

- Funding must be considered. The source of support must be transparent.
- CPGs should **target multiple audiences** (professionals, patients, and policy makers) and be available in suitable **formats for different groups**.
- CPG clearinghouses facilitate the accessibility of CPGs.

# **"Modules" for CPG Implement. in Primary Care (Germ. Ass. PC Phys.)**

- **Long version**
- **Short version (leaflet / vademecum)**
- **Doctor's Aid version**
- **Patient version**
- **Electronic decision support system**

# Implementation Aid : *Electronic –CPG-based Decision Support – f.e. PRODIGY –*

[www.prodigy.nhs.uk](http://www.prodigy.nhs.uk) -

The screenshot displays the Prodigy 3 software interface, which is used for clinical decision support. It is divided into two main windows: 'Prodigy 3' on the left and 'Prodigy 3 - Reference' on the right.

**Prodigy 3 (Left Panel):**

- Menu:** File, Edit, View, Help
- Toolbar:** Includes icons for undo, redo, search, and other standard functions.
- Patient Name:** Mollie Jackson
- Action:** (Empty field)
- Guideline/Scenario:** (Hypertension) Patient on mo
- Scenario (Selected):** (Empty field)
- Suggested Actions:**
  - Medication problem: stop treatment (nil)
  - BP acceptable: standard review
  - BP >= 140/85: increase therapy (nil), add 2nd agent (nil), monitor for now (nil)
- Prescribable Items (None Available):** (Empty list)
- Consultation Actions (Click to Hide):**
  - Accelerated hypertension - admit (nil)
  - Hypertension investigations >>
  - Patient Information Leaflets >>
  - Refer to physician (nil)

**Prodigy 3 - Reference (Right Panel):**

- Menu:** File, Help
- Supporting Texts:**
  - Reference: Hypertension Prodigy
  - Reference: Hypertension Confirmation
  - Reference: Hypertension Who to treat
  - Reference: Hypertension Treatment goals
  - Reference: Hypertension BHS guidelines (Selected)
- Toolbar:** Includes icons for print, save, and navigation.
- Article Content:**

Journal of Human Hypertension (1999) 13, 503-507  
© 1999 Stockton Press. All rights reserved 0950-0240/99 \$15.00  
<http://www.stocktonpress.co.uk/jhh>

## BHS GUIDELINES

### Guidelines for management of hypertension: report of the third working party of the British Hypertension Society

LE Ramsay, B Williams, GD Johnston, GA MacGregor, L Poston, JF Potter, NR Poulter and G Russell  
*for the British Hypertension Society*

  - Use non-pharmacological measures in all hypertensive and borderline hypertensive people.
  - Initiate antihypertensive drug therapy in people with sustained systolic blood pressures (BP) >160 mm Hg or sustained diastolic BP >100 mm Hg.
  - Decide on treatment in people with sustained systolic BP between 140 and 159 mm Hg or sustained diastolic BP between 90 and 99 mm Hg according to the pres-

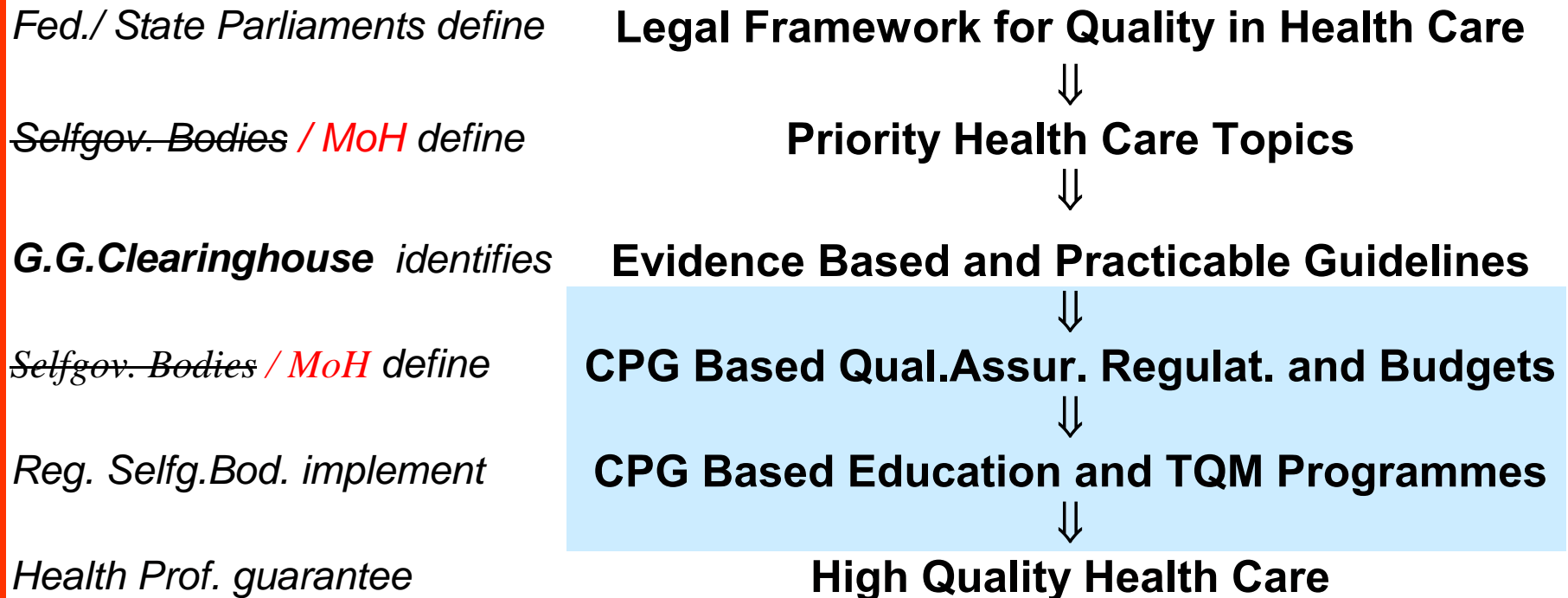
as first-line therapy for the majority of hypertensive people. In the absence of compelling indications for beta-blockade, diuretics or long acting dihydropyridine calcium antagonists are preferred to beta-blockers in older subjects. Compelling indications and contra-indications for all antihypertensive drug classes are specified.

  - For most hypertensives, a combination of antihyper-

# Implem. of evid. based health care:

**National level (out- and in-hospital care ) Tool:**

## **Disease Management Programmes**



# Disease Management in Germany

## Goal: Effective Chronic Illness Care

(Diabetes, CHD, Asthma, COLD, Breast Cancer)

**Self-management support:** to help patients / families cope with the challenges of living with and managing chronic illness.

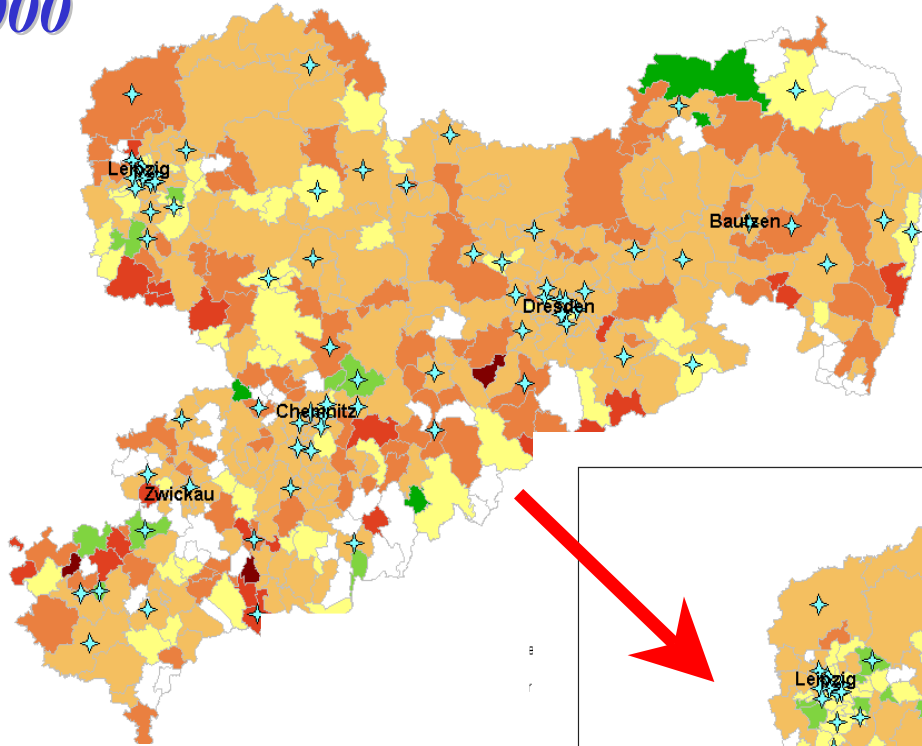
**Patient support:** goes beyond patient education and information; it equips patients with skills in managing their conditions

**Decision support to practitioners:** includes the **effective implementation of evidence-based guidelines**

**Delivery system:** includes well-prepared teams able to efficiently coordinate tasks and utilize key clinical data

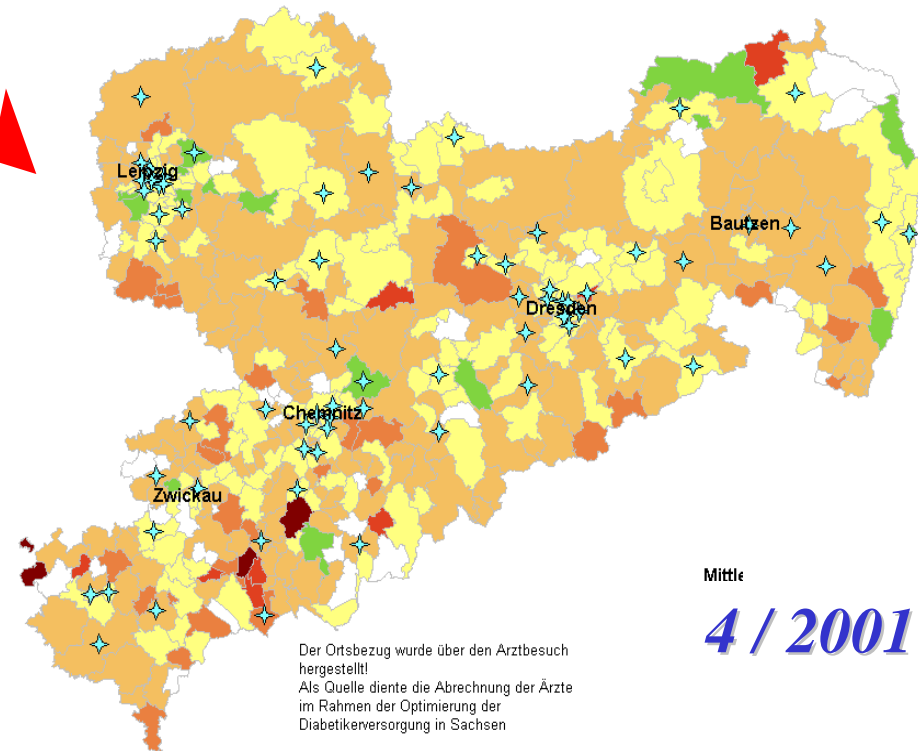
**Clinical information system:** collects information about important elements of care and makes that information available to health care team members.

1 / 2000



## Quality Improvement: Example Diabetes

*Median  
RR-Levels  
Typ 2 Diabetes  
2000-2001  
(Saxony)*



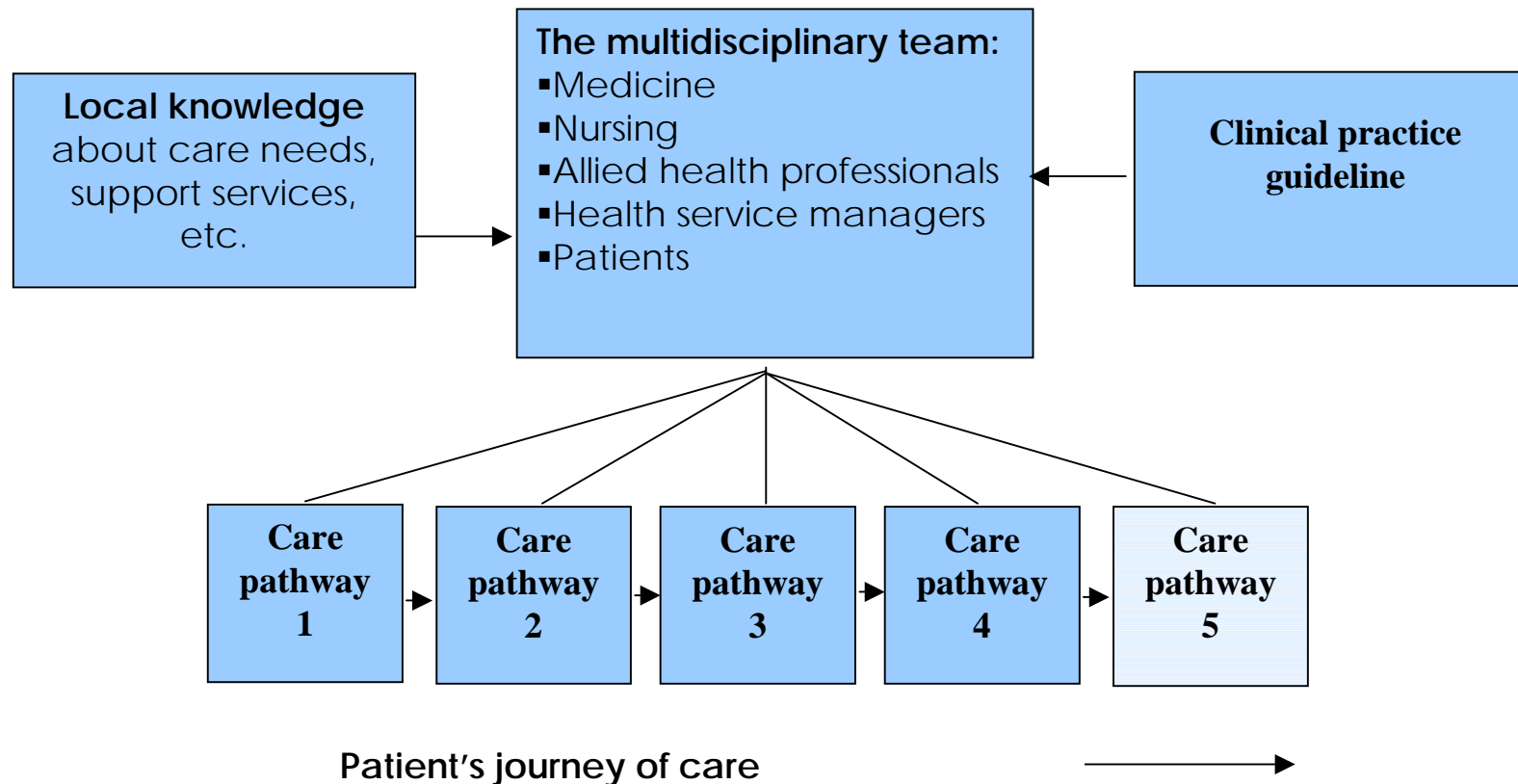
Mittle

4 / 2001

Der Ortsbezug wurde über den Arztbesuch hergestellt!  
Als Quelle diente die Abrechnung der Ärzte im Rahmen der Optimierung der Diabetikerversorgung in Sachsen

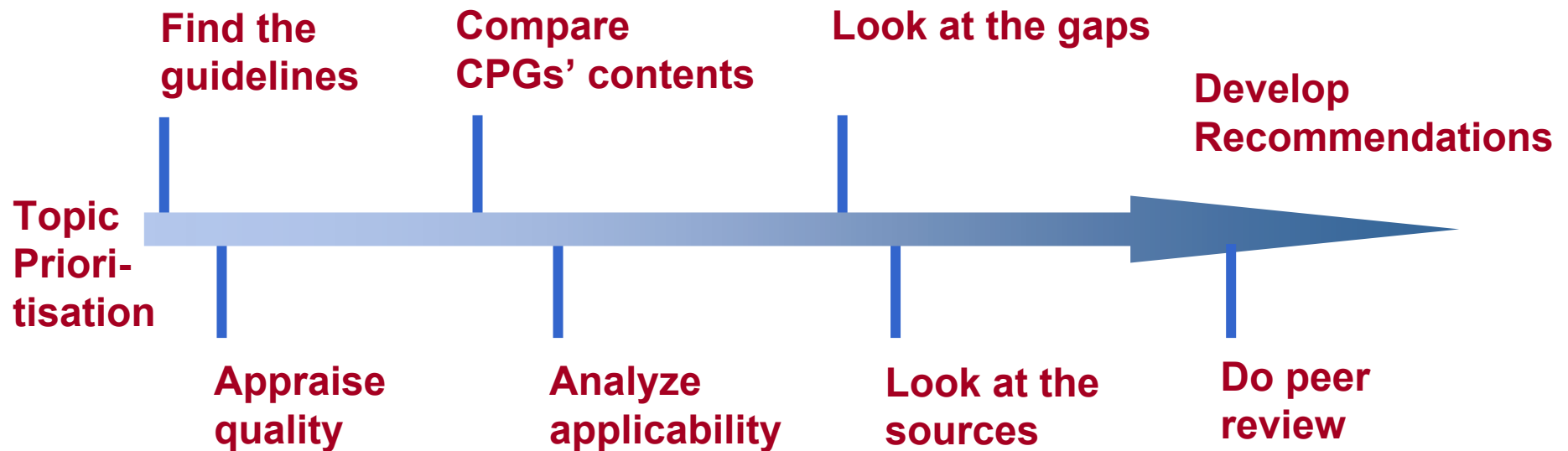
## Implem. of evid. based health care:

### Local level (hospital) Tool: Guideline based care pathways



## Implem. of evid. based health care:

### Regional level (outpatient care) - Tools:

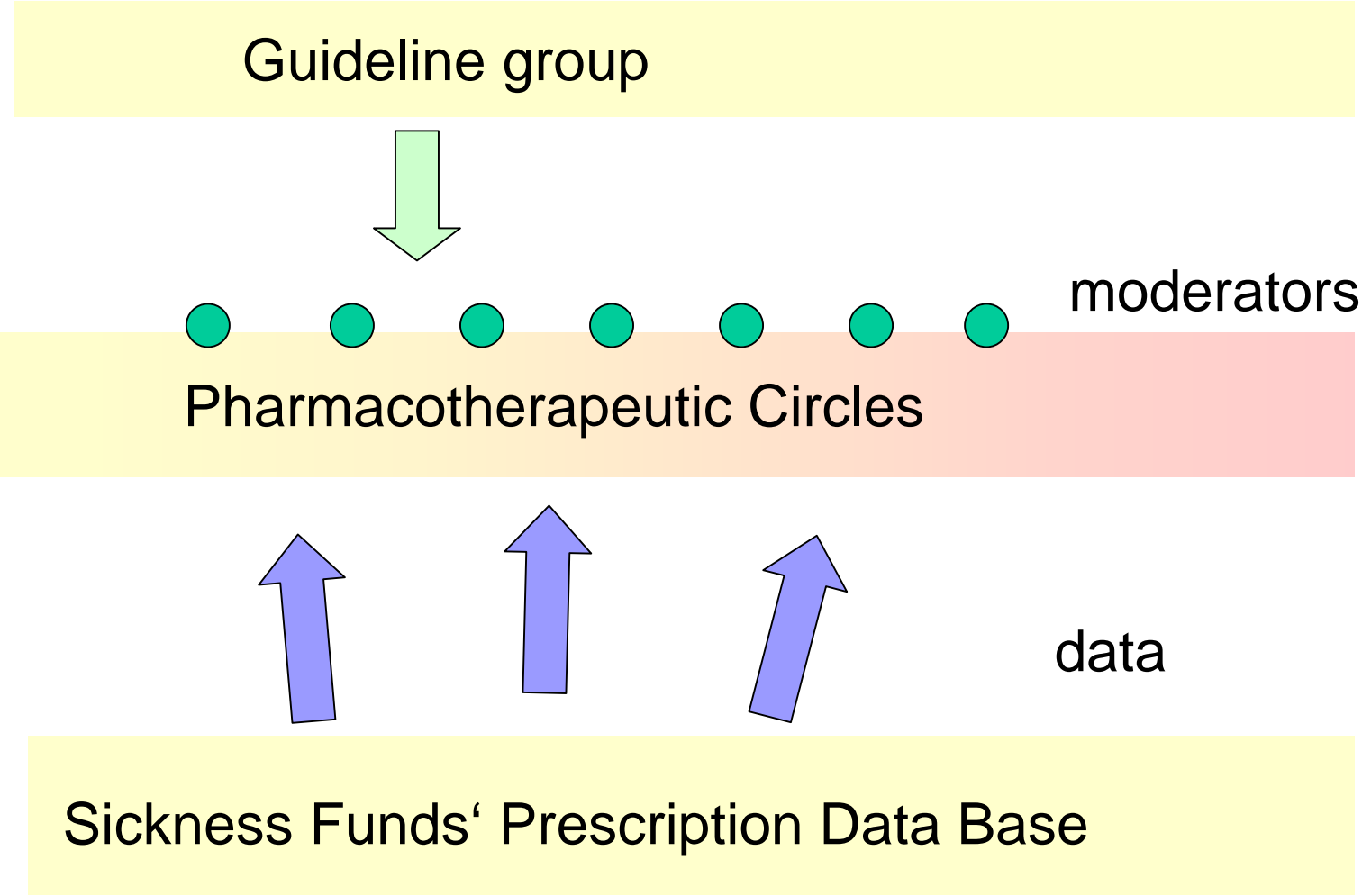


**Regional guidelines based on national CPGs**

**+**

**CPD in „Quality Circles“**

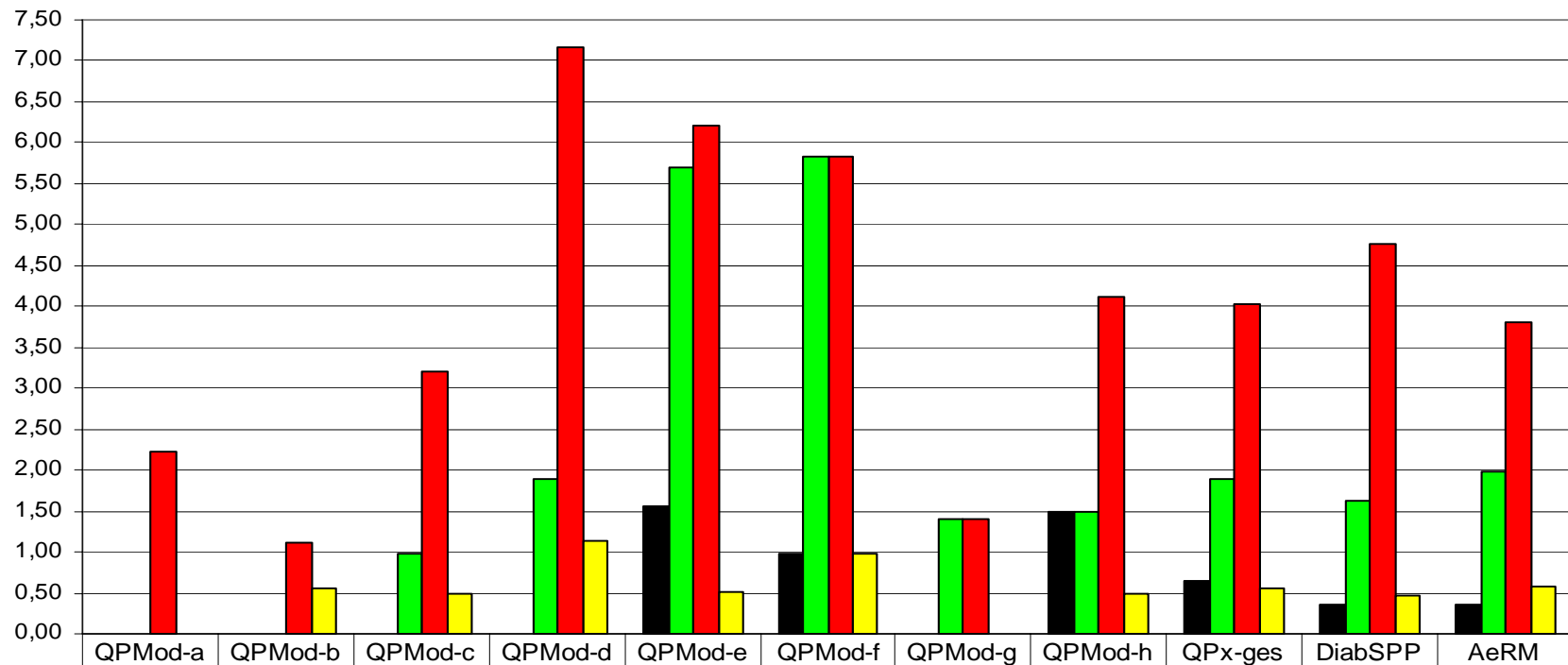
# Pharmaco-therapeutic Circles



# Pharmacotherapeutic circles

## Feedback of prescribing patterns

**%Anteil der Patienten mit verschiedenen oralen Antidiabetika-Gruppen (OAD) bei Patienten, die nur mit OAD behandelt wurden in III-2000 an allen AMP**



	QPMoD-a	QPMoD-b	QPMoD-c	QPMoD-d	QPMoD-e	QPMoD-f	QPMoD-g	QPMoD-h	QPx-ges	DiabSPP	AeRM
■ Ant Pat mit aGluHe	0,00	0,00	0,00	0,00	1,55	0,97	0,00	1,48	0,65	0,35	0,36
■ Ant Pat mit BiGu	0,00	0,00	0,99	1,89	5,70	5,83	1,40	1,48	1,89	1,62	1,99
■ Ant Pat mit SuHS	2,22	1,10	3,21	7,17	6,22	5,83	1,40	4,11	4,02	4,76	3,81
■ Ant Pat mit ueOAD	0,00	0,55	0,49	1,13	0,52	0,97	0,00	0,49	0,55	0,46	0,58

Diagramm 25.A

## **Implem. of regional guidelines via quality circles:**

### **Results – State of Hesse**

- **PTC GPs decreased their costs by 2%, whereas drug costs for all physicians in Hessen rose about 10 %**
- **Combination of education, current feedback mechanisms and printed media seems to be an effective method to optimise quality of care**
- **easy adoption of the guidelines**

#### **Topics:**

**Diabetes, CHD, Hypertension, Astma, COLD, Dyspepsia / Ulcus**

# Factors for Success of CPG Implementation

## Evaluation of Guidelines' Impact

- Well-planned **monitoring of guideline effects** is essential, and especially the impact of guidelines on health outcomes needs further development and evaluation.
- Guidelines can include a list of **essential indicators** that can be used for evaluating the results of guideline implementation.

## **Development of Quality Measures: Many Challenges**

- **Difficult to develop rigorous quality measures**
- **Appropriate and available data sources**
- **Reliability and validity testing is difficult and expensive**
- **Quality measures must be current with CPGs**

[www.qualitymeasures.gov](http://www.qualitymeasures.gov)

[www.ahrq.gov](http://www.ahrq.gov)

# Systematic Develop. of Quality Measures

## Planning + Development Phases

### Identify

- objectives of quality assessment
- relevant guidelines and procedures
- patient target groups
- relevant CPG recommendations from which quality / outcome measures may be derived

5. – 11. Defin. of measures, tools, procedures, pilot test

# CPG based Quality Measures

## Example: Scottish Standards „Colorectal Carcinoma“

*Standard No.*

4. **Communication and Information Sharing:** Informed decision making
5. **Audit:** Continuous collection of SIGN Colorectal Carcinoma Core Data Set, Participation in national data quality assurance programme
6. **Clinical trials:** Recording of patients, informed consent, ethical committee
7. **Assessment and care planning:** Individual, documented care plan
8. **Waiting times:** diagnosis/ treatment; radiother.booking/start, surgery/chemotherapy

# CPG based Quality Measures

Example: Scottish Standards „Colorectal Carcinoma“

<u>Standard:</u>	<u>met</u>	<u>not met</u>	<u>not accessible</u>
Referral	11 / 28	17 / 28	-
Preoperative care	majority	rare	too often
Pathology Report	20 / 28	8 / 28	-
Adj. Chem. (> 15% Pat.)	14 / 28	7 / 28	7 / 28
Radiotherapy	12 / 28	-	16 / 28
Nursing	21 / 28	7 / 28	-
Patient Information	28 / 28	-	-

Reviews of 28 Hospitals

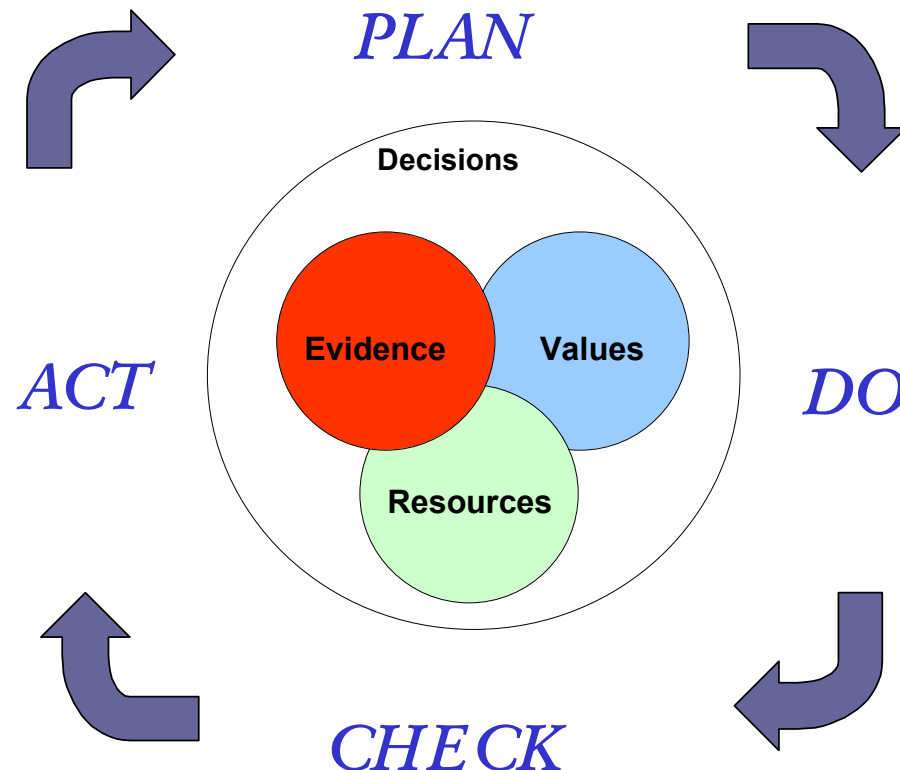
## National guideline programs:

### Cost-benefit calculation for implementation

- The development and introduction of guidelines are not themselves without costs.
- In some circumstances, the costs of development, introduction and evaluation are likely to outweigh their potential benefits.
- The funding for guideline development, dissemination, implementation, evaluation, and updating must be carefully considered at the same time as the decision is made to develop the guideline.

# Indicators and Guidelines – Companions on the Quality Circle

- Identify quality problems
- Collect data on care provision
- Use evidence-based guidelines
- Implement necessary changes
- Measure the impact of changes
- Exploit best practices





**International Symposium  
on Clinical Practice Guidelines**

“Networking for  
Evidence-Based Healthcare”

**November 14-16 2003**  
**Edinburgh, Scotland**