

The Implementation and Benefits of Classification in Primary Care

International Classification of Primary Care
ICPC-2-DK

Marianne Rosendal, GP, PhD

Research Unit for General Practice, Aarhus



The Research Unit for General Practice

Aarhus University

m.rosendal@alm.au.dk

Outline

- Introduction to the Danish ICPC-2
- Benefits
- Implementation
- Conclusion and perspectives



Introduction

The Danish Health Care System

- 5,5.000.000 citizens
- Tax financed
- GPs have gatekeeper function and patients are listed
- Civil registration system with personal ID numbers
- Patients can be tracked throughout the health care system registers
- All GPs use EMR



Introduction

The Danish General Practice Database (DAMD)

- Activity registration since 2007
- 370 GPs (10%) report data to DAMD
- Automatically and prospectively collection of data from GPs' patient files by a software program (Data Capture)
- Data collected:
 - Diagnosis (ICPC codes)
 - Prescriptions
 - Lab tests
 - Reimbursement



ICPC-2-DK

- Translated from ICPC-2-R in 2008
- ICPC-2-DK includes supplementary electronic facilities
 - Episodes of care
 - Alphabetic index
 - ICD-mapping
- Implementation depends on the integration into practice IT-systems (standards necessary)



Benefits 1

- In general
 - Diagnoses and classification provide a basis for communication and knowledge
- In daily practice
 - ICPC provides a structure for the EMR
 - Ensures overview and a dynamic record
 - Facilitates information retrieval
 - Much information in few words



Episodes	Date	Contact diagnosis
<i>D28</i> Cholecystectomy facta 1998	18-09-04	K86 Uncomplicated hypertension
P75 Depression 1999	09-10-04	K86
L95 Osteoporosis 2000	12-01-06	K86
K86 Uncompl hypertension 2004	03-03-06	K86
	02-05-07	K86
	18-07-07	K86
	12-01-08	K86
	20-12-08	K86
	15-03-09	K86
	01-02-10	K86

Blood pressure fine. Exercises x 2 a week (runs 5 kilometers)

Objective: Blood pressure 130/80

Treatment: no change

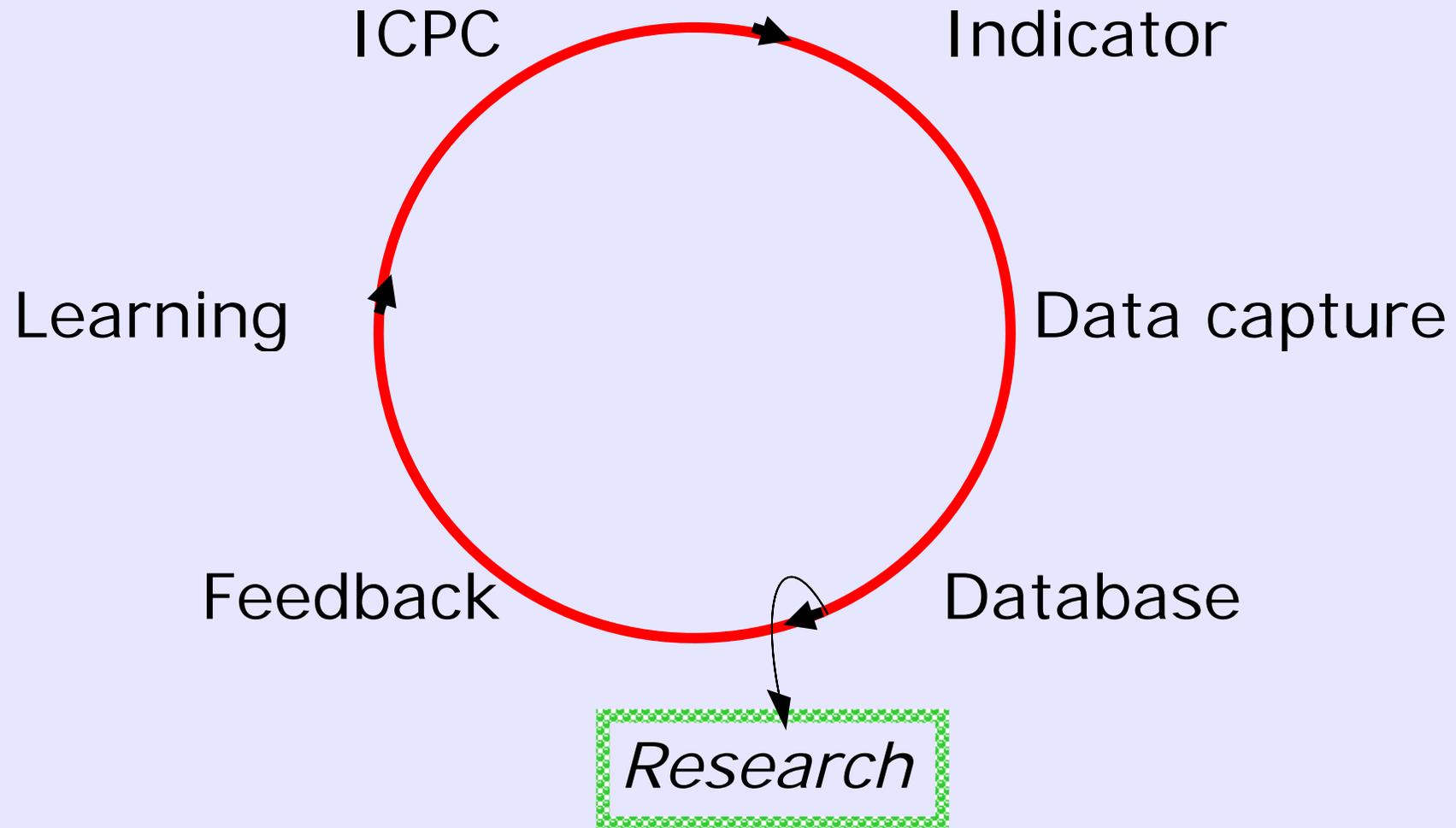


Benefits 2

- Retrieval of data for quality analyses in the practice it-system
- Quality reports prepared for practices – at the patient level
 - http://www.dak-e.dk/flx/english/dak_e_it/demos_of_data_capture/



Quality improvement



Benefits 3

- Facilitates information retrieval in
 - Web based books and national guidelines
<http://www.laegehaandbogen.dk/>
 - Web based regional guidelines
<http://visinfosyd.dk/wm264570>
- Electronic surveys
 - Quality improvement projects (audits)
 - Research



Implementation of ICPC in DK

- ICPC-coding is voluntary
- No reimbursement
- All GPs have EMRs
- Numerous practice IT-systems (~10)
- The functionality of ICPC coding depends on the practice IT-system

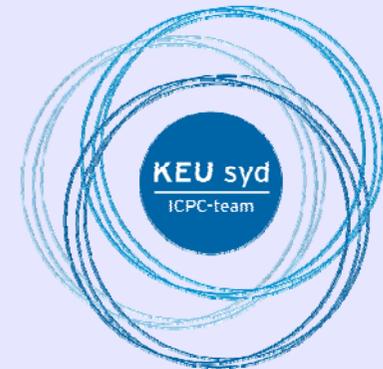


Survey of GPs' use of the ICPC

The Region of Southern Denmark
2008, 755 GPs

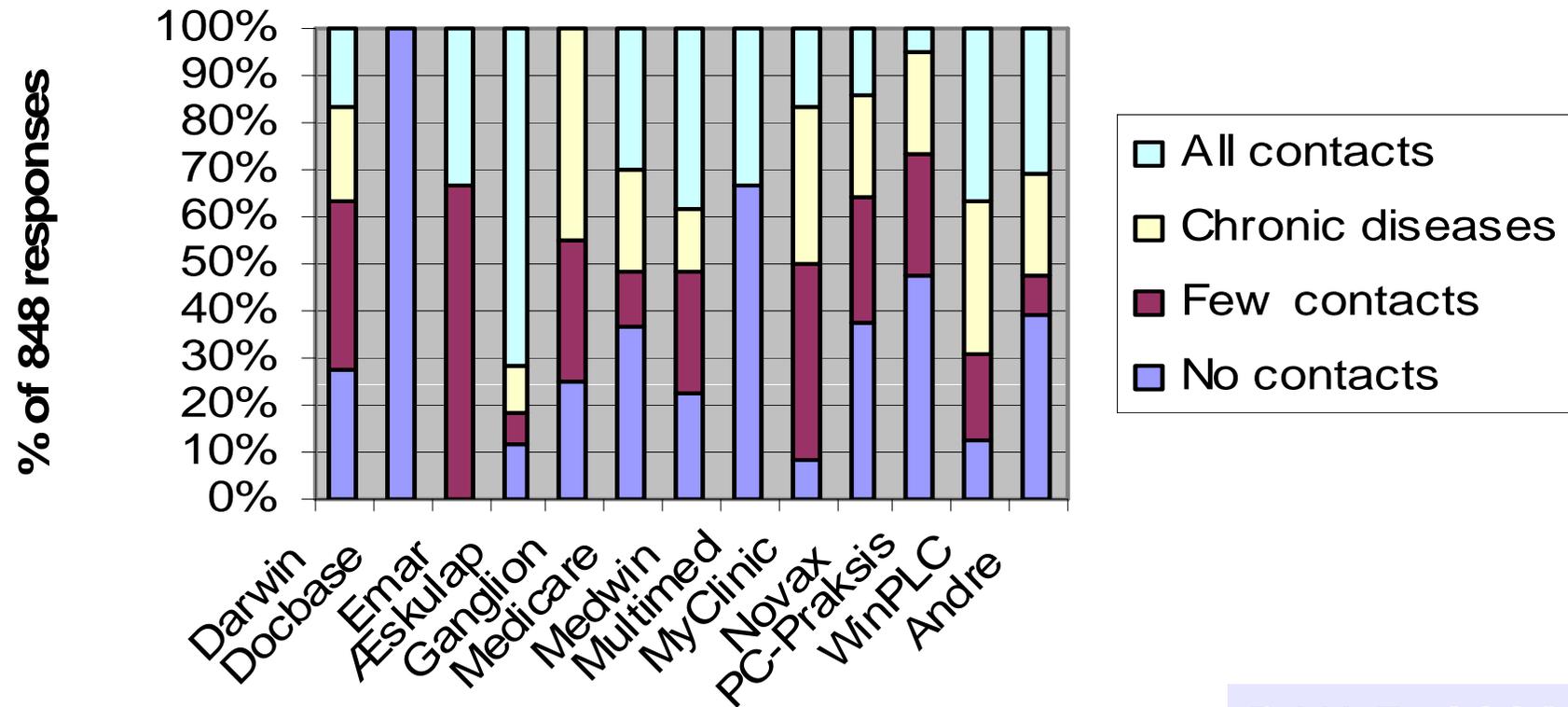
Response rate 63%

- 51% classify all consultations
- 27% classify few consultations or chronic diseases only
- 22 % do not classify anything
 - 61% for staff



ICPC-coding in Denmark

ICPC-coding depends on practice IT-system



DAK-E, 2008

New initiatives

- Seminars – including staff
- Practice visits by facilitators
- E-learning
 - <http://www.icpc-kodning.dadl.cursum.net/client/CursumClientViewer.aspx?CAID=251318&ChangedCourse=true>



Conclusion

- ICPC provides many benefits
 - Structures the EMR
 - Easy information retrieval
 - Feedback for quality improvement
 - Data based on diagnoses in primary care available for research



The future

- Implementation depends on
 - Usefulness in clinical practice
 - Standards for EMR/practice IT-systems
 - The inclusion of staff in implementation strategies
 - Training and facilitation
- There is a need for
 - Continuous development and adaptation
 - Does the ICPC reflect the spectrum of problems and disorders encountered in primary care?
 - Research in validity/reliability



