

WONCA Europe Paris 2007

ICPC step by step

Conflict of interest :
unfortunately none

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International
Classification of Primary
Care is a tool for GP/FM

What is ICPC meant for ?

- **Individually** ; it provides a representation of
 - patient doctor interaction
 - doctor's decision process
 - Along the time line
- **Collectively**; Allows Statistical & epidemiological studies

Why a code ?

Lowering of redundancy

Redundancy / Redndancy / Redndncy / Redndnc / Rdndnc / Rdnc

From pencil to machine

Source : Claude Elwood Shannon (1916-2001)

Why a specific GP/FM classification?

- **ICPC (WONCA)**

- Conceptual construct
- About health problems
- Patient centered
- Structural basement

- **ICD (WHO)**

- **Historical construct**
- **About diseases**
- **Provider centered**
- **Linear basement**

ICPC : facts

WICC

- Since the 70'
- 41 members
- 25 countries
- 5 continents
- Preparing ICPC-3

ICPC-2

- 18 languages
- Various licences
- Universal
- Endorsed by WHO
- Terminologies



Heidelberg 2006

ICPC story

3 components coming from 3 gathered classifications

Symptoms and complaints	Process	Diagnoses
<p>R F E C Reason for Encounter Classification</p> <p>1981</p>	<p>IC-Proces-PC International Classification of Process in Primary Care</p> <p>1985</p>	<p>ICHPPC 1974 ICHPPC-2-d International Classification of Health Problem in Primary Care 1 & 2 edition, defined & 1983</p>

17 chapters

- 15 somatic
- 1 Psychologic
- 1 Social

1987 ICPC

1998 ICPC 2

Revision and inclusion of criteria and definitions

2005 ICPC 2 R

Revised transcoding to ICD-10

ICPC

orders the domain
of primary care
(family medicine)...

.. and allows the coding of
encounters in an episode of
care structure

ICPC-2 Bi-Axial structure

- 17 alpha-coded chapters based on body systems
- 7 identical components, with rubrics bearing a two-digit numeric code

ICPC CHAPTERS

- A General and unspecified**
- B Blood/bloodforming organs, lymphatics (spleen, bone marrow)**
- D Digestive**
- F Eye (Focal)**
- H Ear (Hearing)**
- K Circulatory**
- L Musculoskeletal (Locomotion)**
- N Neurological**
- P Psychological**
- R Respiratory**
- S Skin**
- T Endocrine, metabolic and nutritional (Thyroid)**
- U Urological**
- W Pregnancy, child bearing, family planning (Women)**
- X Female genital (X-chromosome)**
- Y Male genital (Y-chromosome)**
- Z Social problems**

ICPC COMPONENTS

(standard, if possible, for all chapters)

- | | |
|---|-------|
| 1. Symptoms and complaints | 1-29 |
| 2. Diagnostic and preventive procedures | 30-49 |
| 3. Treatment procedures, medication | 50-59 |
| 4. Test results | 60-61 |
| 5. Administrative | 62 |
| 6. Referral and other reasons for encounter | 63-69 |
| 7. Diseases: | 70-99 |
| - infectious diseases | |
| - neoplasms | |
| - injuries | |
| - congenital anomalies | |
| - other specific diseases | |

Chapters and components
together form a 'chessboard'..

ICPC-2 Structure : Chapters

- A - general
- B - blood , immune system
- D - digestive
- F - eye
- H - ear (hearing)
- K - circulatory
- L - musculoskeletal
- N - neurological
- P - psychological
- R - respiratory
- S - skin
- T - metabolic, endocrine
- U - urological
- W - women's health, pregnancy, family plan
- X - female genital
- Y - male genital
- Z - social problems



Structure of ICPC: chapters and components

Components \ Chapters	A	B	D	F	H	K	L	N	P	R	S	T	U	W	X	Y	Z
1.Symptoms and complaints																	
2.Diagnostic, screening prevention																	
3.Treatment procedures, medication																	
4.Test results																	
5.Administration																	
6.Other																	
7.Diagnoses, diseases																	

Chapter List:

- A. General
- B. Blood, blood formi
- D. Digestive
- F. Eye
- H. Ear
- K. Circulatory
- L. Musculoskel
- N. Neurologica
- P. Psychologic
- R. Respiratory
- S. Skin
- T. Metabolic, endocrine nutritional
- U. Urinary
- W. Pregnancy, child beari
- X. Female geni
- Y. Male genita
- Z. Social

- Implies opening of the rubrics of ICPC

Z25 ASSAULT & HARMFUL EVENT

- bewitchment
- bewitchment with pig's liver
- damage from malediction
- desecration of grave by witches
- dupa spells
- evil influence ns
- harm from fighting
- harm from troublesome spirits
- harm from war
- harm from witchcraft
- harm from witches' familiars
- makgoba bewitchment
- negative condition ns
- possession by spirits
- possession by bad spirits
- possession by evil spirits
-

**Example of
opening of
an ICPC
rubric**

Cridland JS,.Koonin S.
Use of traditional medicines
towards a classification.
S.Afr.Med J 2001;**91**:489-91

ICPC adaptability

- Paper & Pencil

1987

Mnemotechnic
Central coding

- Electronic

2007

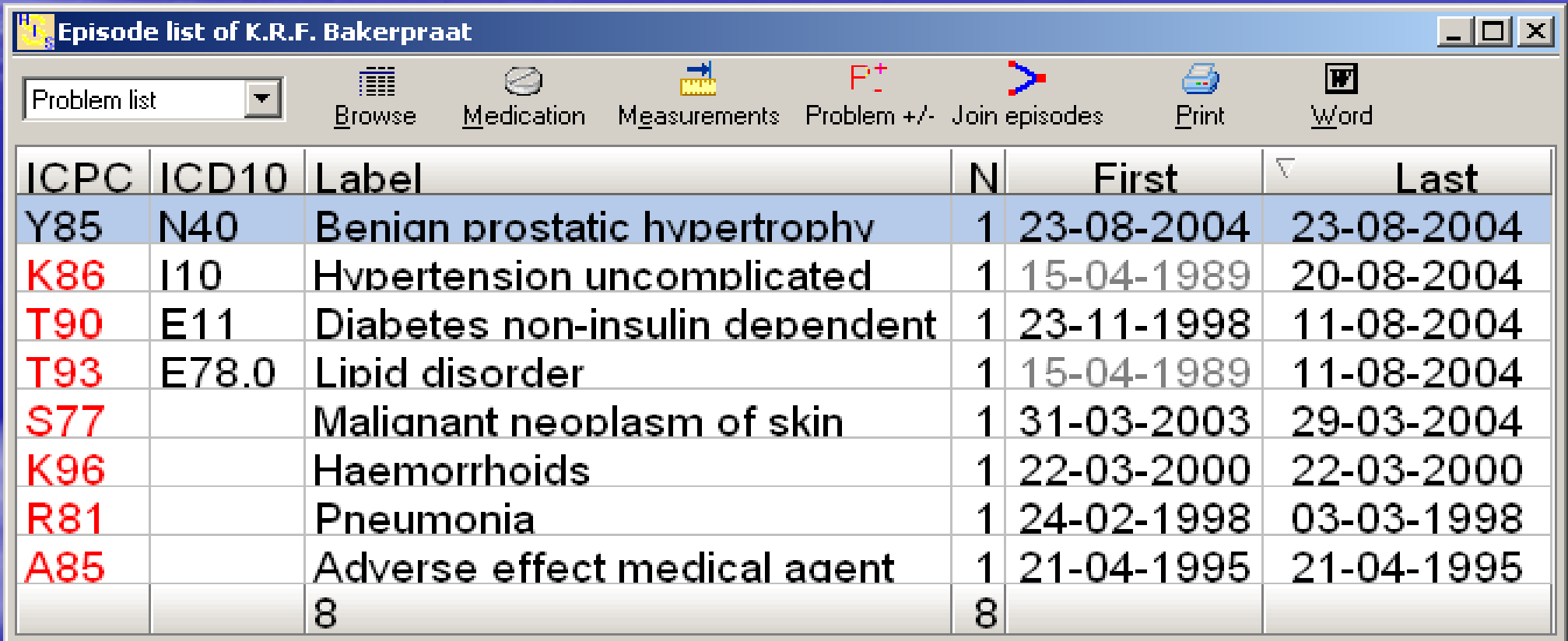
Terminologies
Automatic
coding

Studies

- Clinical : transversal or longitudinal
- Electronic patient record
- Huge database or personal one
- Quality assurance
- Documents indexing

..THE PATIENT'S PROBLEM LIST

(8 episodes of care that are considered important; see Glossary: problem list)

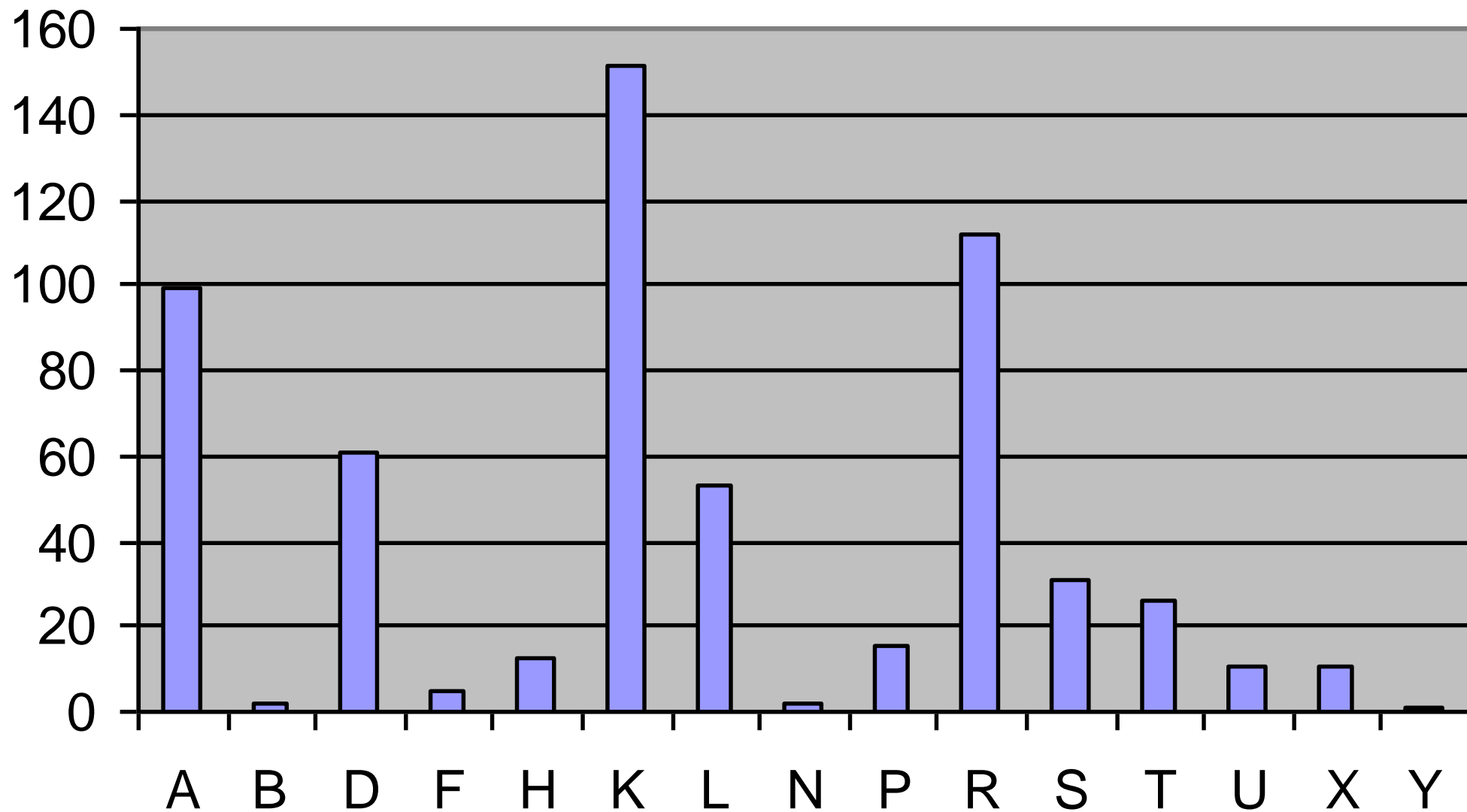


The screenshot shows a software window titled "Episode list of K.R.F. Bakerpraat". The window has a menu bar with "Problem list" and a toolbar with icons for "Browse", "Medication", "Measurements", "Problem +/-", "Join episodes", "Print", and "Word". Below the toolbar is a table with the following data:

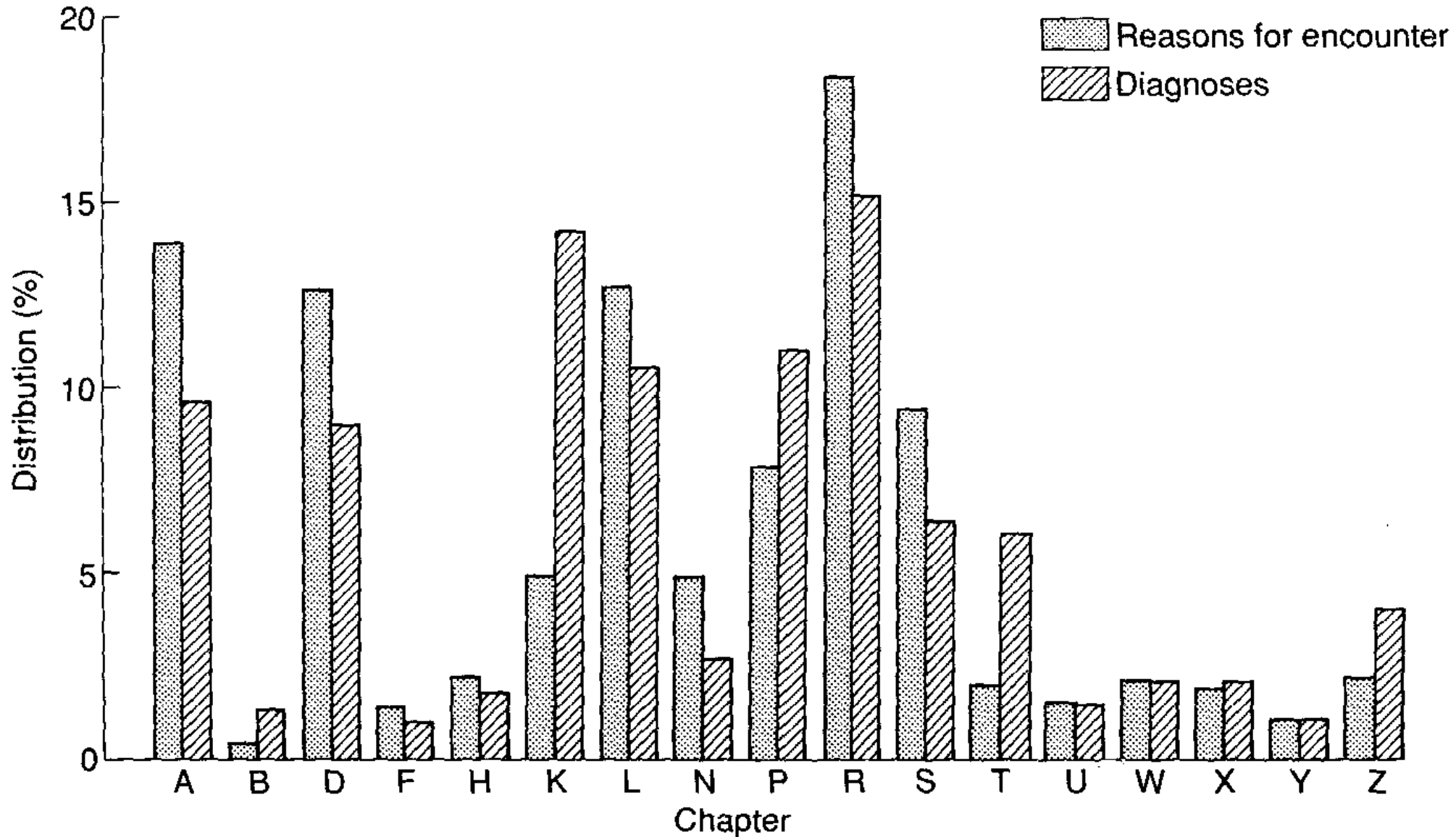
ICPC	ICD10	Label	N	First	Last
Y85	N40	Benian prostatic hypertrophy	1	23-08-2004	23-08-2004
K86	I10	Hypertension uncomplicated	1	15-04-1989	20-08-2004
T90	E11	Diabetes non-insulin dependent	1	23-11-1998	11-08-2004
T93	E78.0	Lipid disorder	1	15-04-1989	11-08-2004
S77		Malignant neoplasm of skin	1	31-03-2003	29-03-2004
K96		Haemorrhoids	1	22-03-2000	22-03-2000
R81		Pneumonia	1	24-02-1998	03-03-1998
A85		Adverse effect medical agent	1	21-04-1995	21-04-1995
		8	8		

From Transhis, Amsterdam

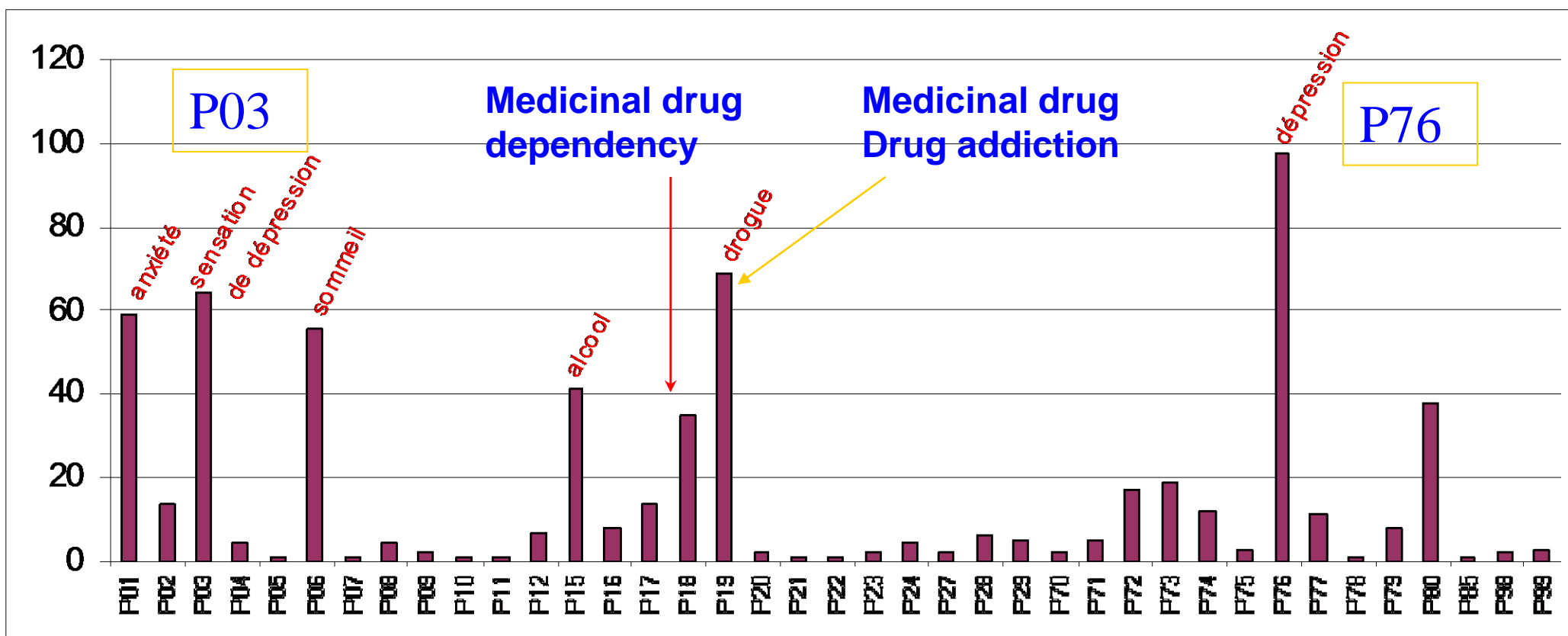
JKS 593 CONSECUTIVE PATIENTS



11 doctors in Belgium 1991, Distribution of 4.000 contacts

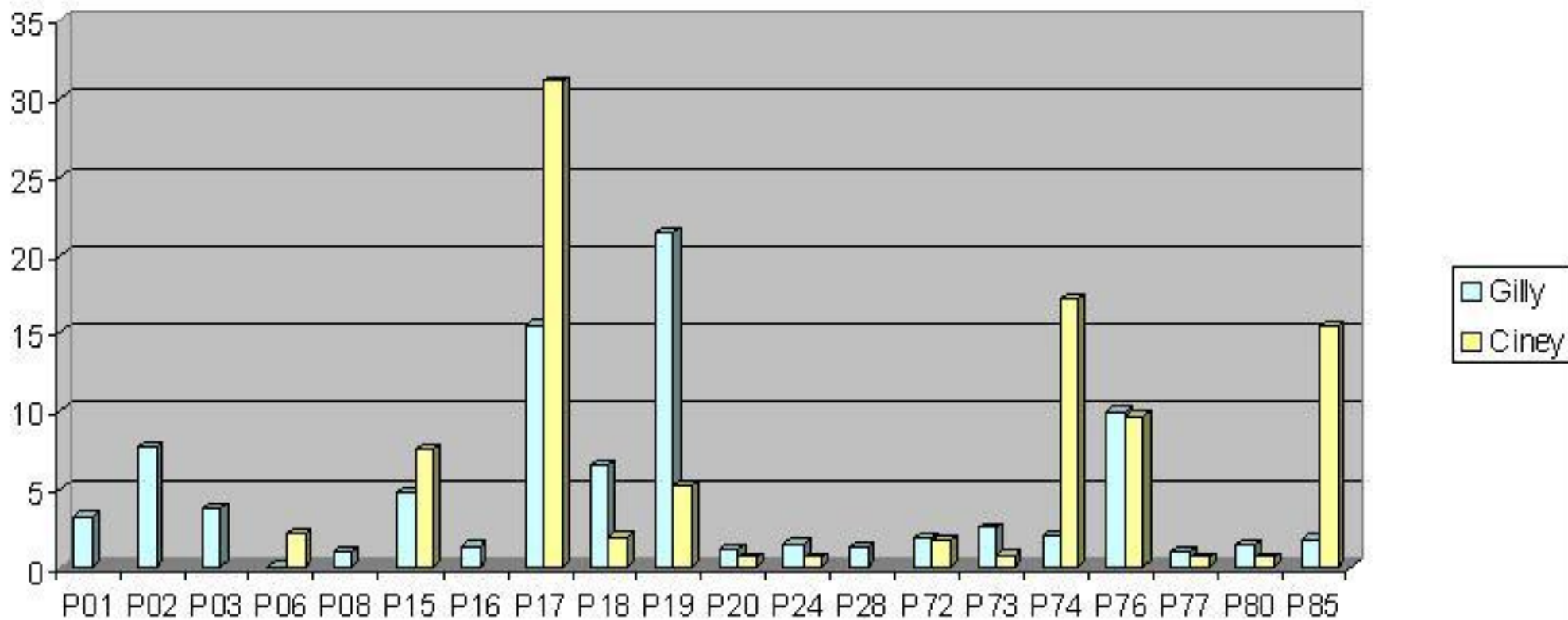


Distribution of the 624 P diagnosis, same health centre



The workload in mental health in GP/FM

Liege, Belgium, on 10440 episodes, 1999

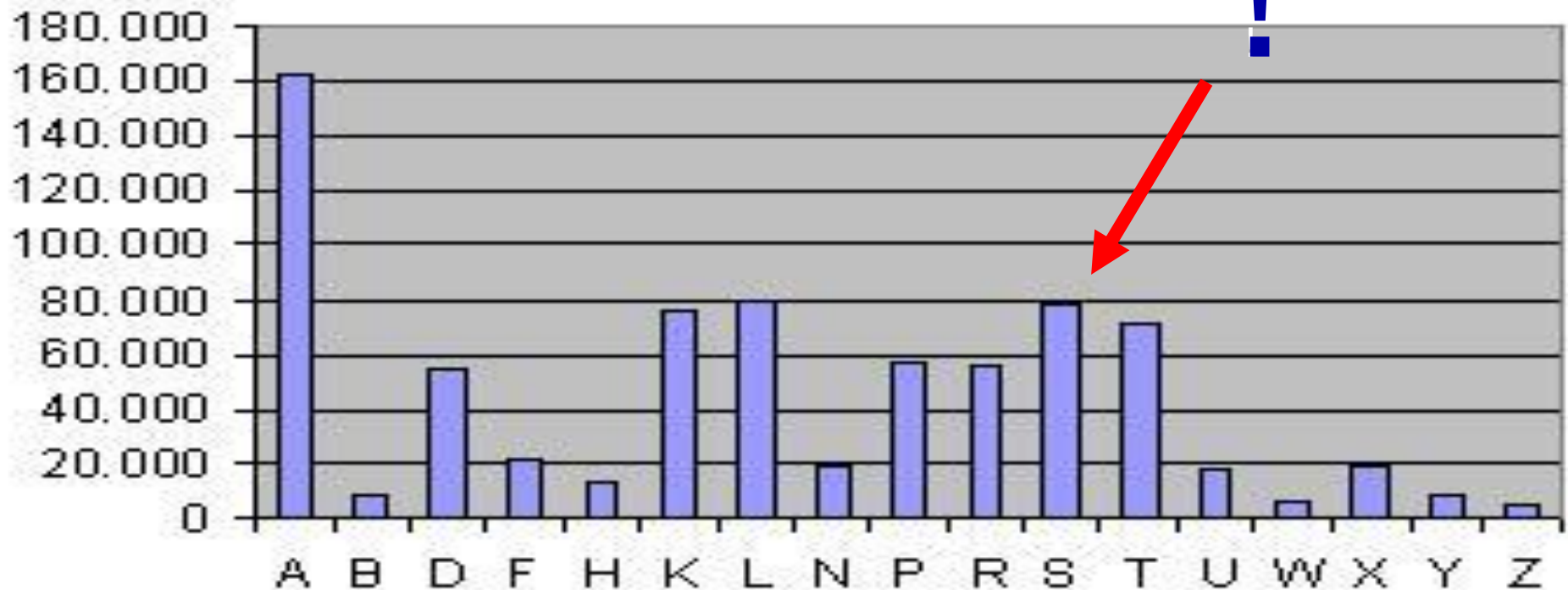


Comparison of chapter P diagnosis of two family doctors each in solo practice

A new insight in GP practice allowing quality assessment and alternative teaching process

Courtesy of Dr Joseph Huberty, Ciney, Belgium

Distribution Buenos aires 1998-2003 755.000 diagnosis

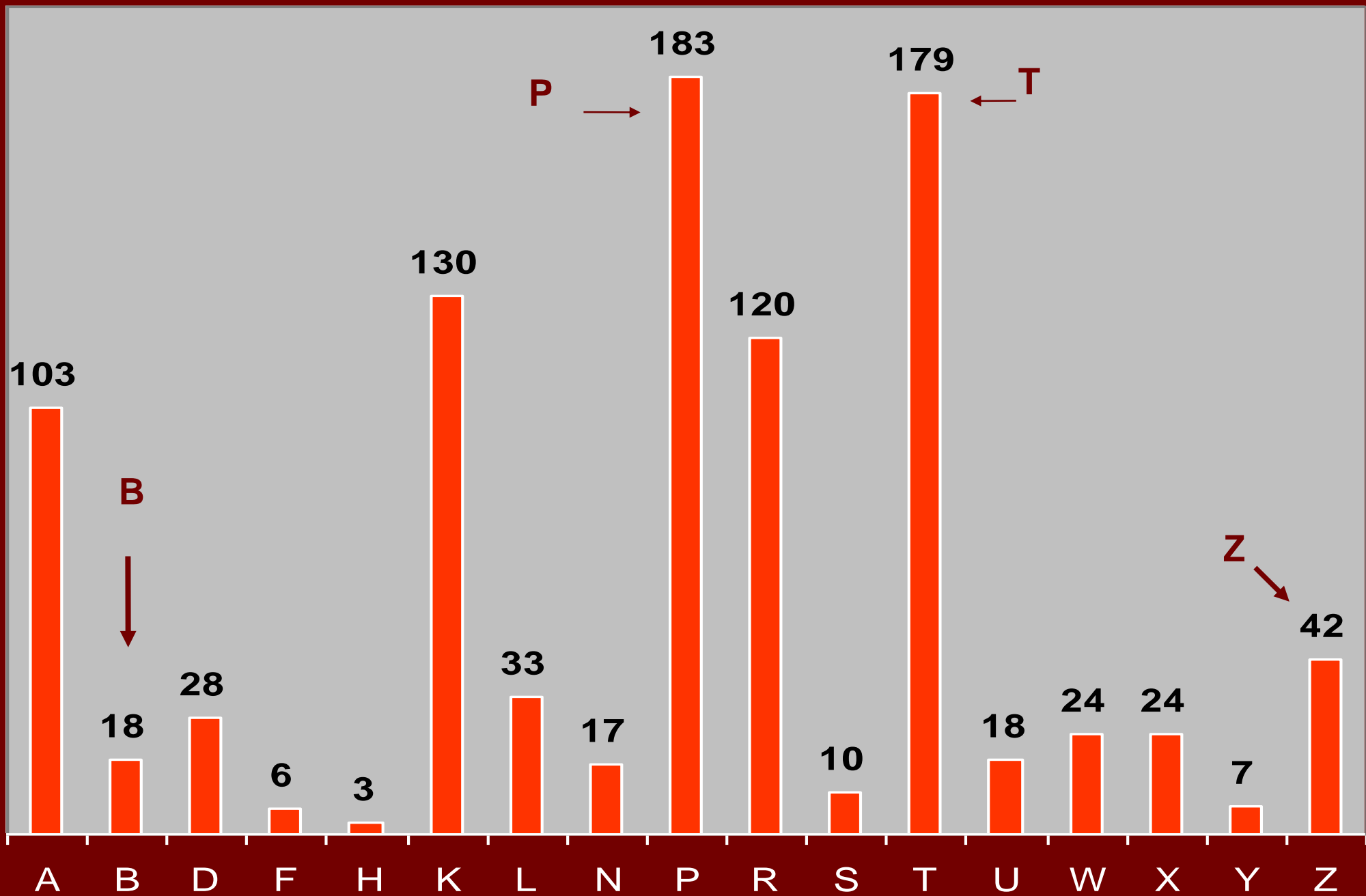


200 Primary care practitioners in 5 years

Courtesy of Dr Alejandro Lopez, Buenos aires

Wonca
2007

998 abstracts, ICPC chapters distribution



EPISODES on the time line

Life and death of one patient

Conception-Réalisation

Dr Jacques Humbert

Dr Jacques Hidier

Dr Marc Jamouille

Dr Michel Roland

Adapted from Lamberts

CISP-Club

June 2000

Life story

K 73

R71

R82

S87

P76

P15 P17

Z11

P77

R82

Z11

D97

T90

P70

This day

Life conditions

FECUNDATION

Death

 Episode initiated or closed by the doctor

 Episode initiated or closed by the patient

 Episode initiated or closed by doctor – patient consensus

Conclusions

- ICPC used in an episode oriented registration provides a powerful tool for **clinical** use as well as teaching the **epidemiology** of primary care in undergraduate and post-graduate training
- ICPC helps to define the **content** of family medicine
- ICPC contributes to **research**