

Procedure Classifications

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Some issues in procedure classifications

Difference in purpose (mostly reimbursement)
Developed for and by coders
Quality of care demands clinically sensible terms
Clinicians make ill-designed local (specialty) lists
Separation in diagnostic/therapeutic procedures
Continuous need for safe (local) updates
Hard to track changes between versions
Diverting developments in e.g. ICPM
Costly development/maintenance

So,
Some examples.....



- 5-760...5-859 OPERATIEVE VERRICHTINGEN AAN BOTSPIERSTELSEL
 - + 5-76 REPOSITIE VAN AANGEZICHTSFRACTUREN
 - + 5-77 OVERIGE OPERATIES VAN BEENDEREN VAN AANGEZICHT
 - + 5-78 OPERATIEVE VERRICHTINGEN AAN OVERIGE BEENDEREN ←
 - + 5-79 REPOSITIE VAN FRACTUUR, EPIFYSIOLYSE EN LUXATIE
 - + 5-80 INCISIE EN EXCISIE VAN GEWRICHTSSTRUCTUREN
 - + 5-81 HERSTELOPERATIES EN PLASTISCHE OPERATIES VAN GEWRICHTSSTRUCTUREN
 - + 5-82 OPERATIEVE VERRICHTINGEN AAN WEKE DELEN EN BURSA VAN HAND EN POLS
 - + 5-83 OPERATIEVE VERRICHTINGEN AAN OVERIGE WEKE DELEN EN BURSA
 - + 5-84 AMPUTATIE EN EXARTICULATIE VAN LEDEMATEN
 - + 5-85 OVERIGE OPERATIEVE VERRICHTINGEN AAN BOTSPIERSTELSEL

Exclusie:

- operatieve verrichtingen aan schedel (5-01 en 5-02)

- 5-76...5-77 Operationen an Kiefer- und Gesichtsschädelknochen
 - + 5-76 Operationen bei Gesichtsschädelfrakturen
 - + 5-77 Andere Operationen an Gesichtsschädelknochen
- 5-78...5-86 Operationen an den Bewegungsorganen
 - + 5-78 Operationen an anderen Knochen ←
 - + 5-79 Reposition von Fraktur und Luxation
 - + 5-80 Offen chirurgische Gelenkoperationen
 - + 5-81 Arthroskopische Gelenkoperationen
 - + 5-82 Endoprothetischer Gelenk- und Knochenersatz
 - + 5-83 Operationen an der Wirbelsäule
 - + 5-84 Operationen an der Hand
 - + 5-85 Operationen an Muskeln, Sehnen, Faszien und Schleimbeuteln
 - + 5-86 Replantation, Exartikulation und Amputation von Extremitäten und an



And the same section in the new ICHI

- XV Procedures on Musculoskeletal System
 - XV.A HEAD
 - x 1360 Application, insertion or removal procedures of head
 - x 1361 External fixation of mandible
 - x 1362 Exploration of temporomandibular joint
 - x 1363 Other incision procedures on maxilla or mandible
 - x 1364 Excision procedures on maxilla, mandible or temporomandibular joint
 - x 1365 Reduction of fracture of nasal bone
 - x 1366 Reduction of fracture of mandible or maxilla
 - x 1367 Reduction of fracture of mandibular or maxillary alveolar ridge
 - x 1368 Reduction of fracture of zygomatic bone
 - x 1369 Reduction of temporomandibular joint
 - x 1370 Reduction of fracture or dislocation of other facial bone
 - x 1371 Repair procedures on maxilla or mandible or temporomandibular joint
 - x 1372 ~~Procedures for osteomyelitis of maxilla or mandible~~
 - XV.B NECK AND THORAX
 - x 1373 Application, insertion or removal procedures of neck or thorax



How to cope

Intermediate representation, that makes definition explicit
Change consensus on terms to consensus on definitions
Transform definition in (any?) formal representation
Classify
Assess result



Example of a 'Dissection' in the Intermediate Representation

"Open fixation of a fracture of the neck of the left femur"

MAIN fixing

ACTS_ON fracture

HAS_LOCATION neck of long bone

IS_PART_OF femur

HAS_LATERALITY left

HAS_APPROACH open



Classification Management Economics

Update of ICPM-DE version 2.4 20 new rubrics in Musculo-Skeletal Surgery

Consensus Method

- 6 full day meetings, 10 specialists
- Ad hoc, scattered update
- > 5 manmonth effort
- 5 Rubrics need revision
- Turnaround 8 months
- Invisible costs
- Constant high cost of maintenance

GALEN Method

- 2 half day meetings, 5 specialists
- One time dissection, 1720 Rubrics
- = 2.5 manmonth effort
- 20% Rubrics need revision
- Turnaround 2 months
- Clear defined cost
- Decreasing cost of maintenance
- Initial cost much lower than expected



How to move on

Need for sound categorial structures

Need for 'recepies'

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Prove 'application independence' of IR

Does it work for other domains?

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