

SNOMED-CT in a developing country

Overview of the MDS system

Achievements

Technical aspects

SNOMED file maintenance

Screen shots from MDS

Overview of the MDS system

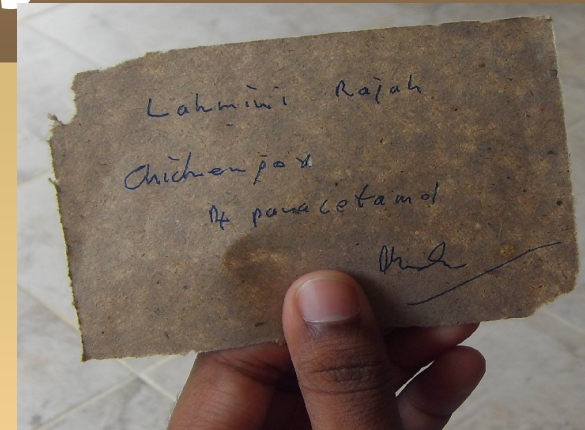
27 small & large rural hospitals

Computerized record-keeping of admissions and out-patients

Server/LAN in each hospital

Workstations: admission desk, wards, out-patients, med. records, laboratory, x-ray etc.

Then



Now

Patient ID: 18 Name: T..RIFAN DOB: 06/07/2002 Age: 7 Sex: Male Civil Status: Single Status:

Visit Hospital:

Onset Date:

Date of Visit:

Time of Visit:

Consultant Name:

*OPD Complaint:

Detailed Complaints (SNOMED):

Drugs/Treatments:

Drugs/Treatments

Benzyl benzoate Application (Two times a day)

Remarks:

Achievements

All 27 hospitals: admission diagnoses entered, quarterly health statistics & notifications done by computer

A few hospitals: computer records have replaced books & paper

3 hospitals: OPD visits computerized

All clinical data entered directly by doctors & nurses

Before



After



Technical aspects

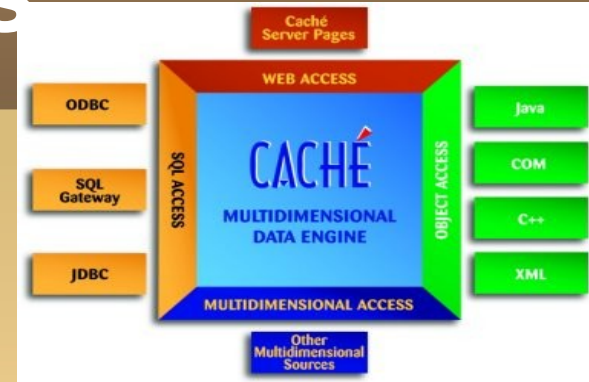
Caché post-relational database from Intersystems Corporation, Boston

Data in classes accessed by Caché Server Pages, OOP programming in Java, Caché Object Script and SQL

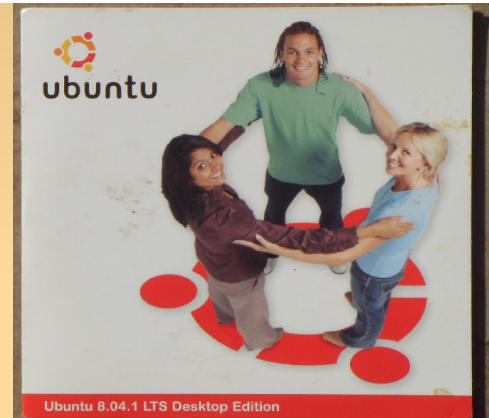
LINUX (Fedora) server in each hosp., workstations with Ubuntu & FireFox

SNOMED-CT used for complaints, diagnoses, surgical procedures, treatment. ICD-10 link for statistics.

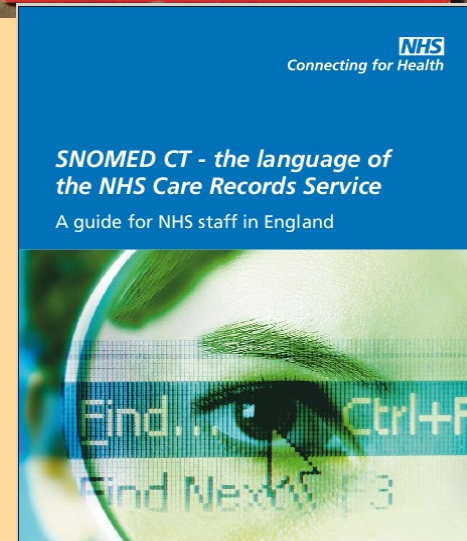
Caché



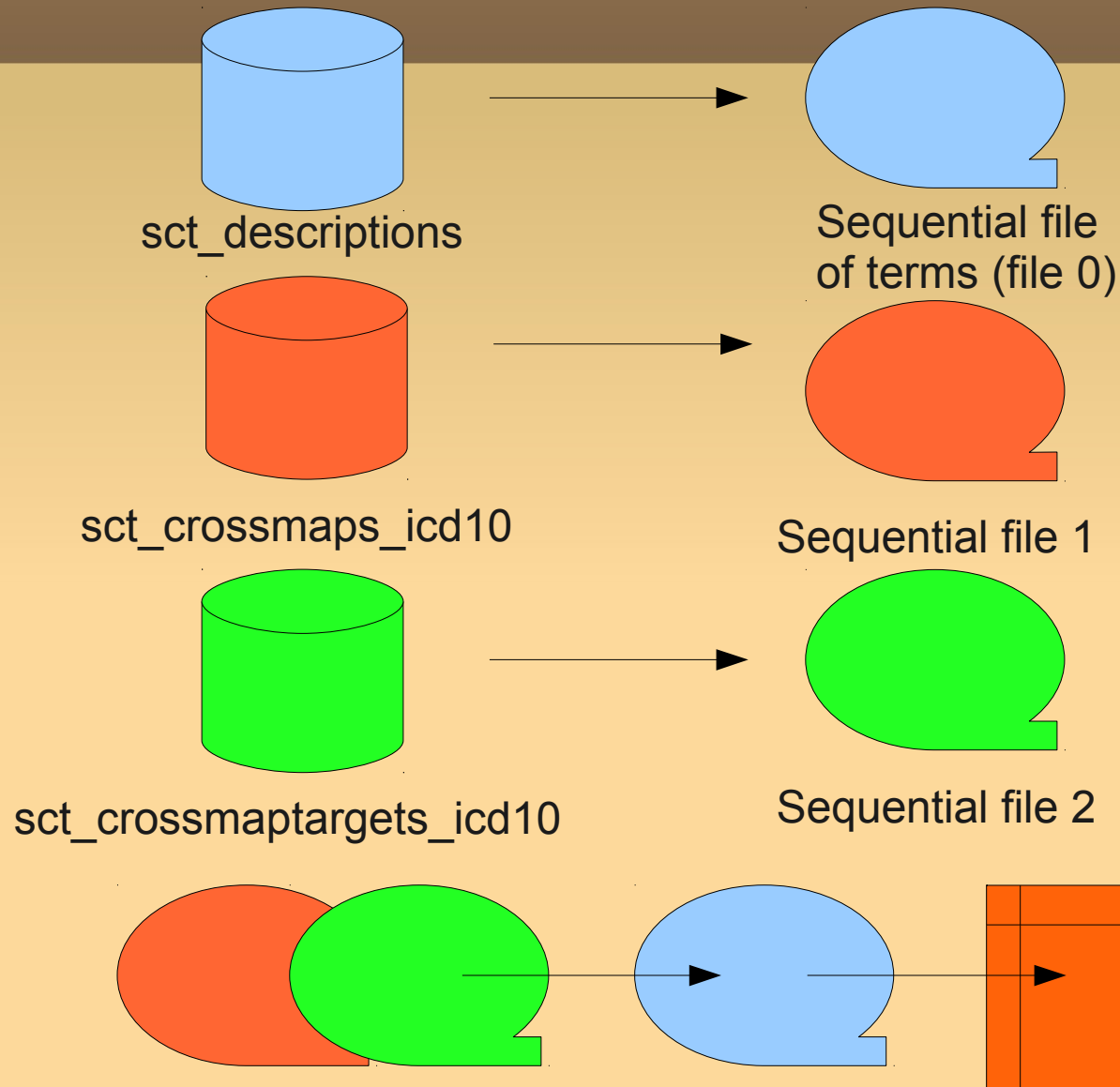
LINUX



SNOMED



SNOMED file maintenance



Merge the ICD crossmaps, add to the descriptions, make the class

SNOMED to ICD-10 – initially

SNOMED: 416163003 = Stuttering (finding)

ICD-10: F95.8 = Other tic disorders

SNOMED: 416176009 = Closed fracture dislocation, distal interphalangeal joint of finger (disorder)

ICD-10: S52.8 = Fracture of other parts of forearm

SNOMED: 416189003 = Exostosis (disorder)

ICD-10: K10.8 = Other specified diseases of jaws

SNOMED: 416237000 = Procedure not done (context-dependent category)

ICD-10: Z53.2 = Procedure not carried out because of patient's decision for other and unspecified reasons

SNOMED: 416273007 = Scleral dellen (disorder)

ICD-10: H44.2 = Degenerative myopia

SNOMED: 416295006 = Focal epithelial hyperplasia of skin (disorder)

ICD-10: L91.9 = Hypertrophic disorder of skin, unspecified

SNOMED: 416340002 = Late onset schizophrenia (disorder)

ICD-10: F20.8 = Other schizophrenia

SNOMED: 416372004 = Infection by Nanophyetus salmincola (disorder)

ICD-10: B66.9 = Fluke infection, unspecified

SNOMED: 416402001 = Gestational trophoblastic disease (disorder)

ICD-10: Z35.1 = Supervision of pregnancy with history of abortive outcome

SNOMED to ICD-10 – recent

SNOMED: 416163003 Stuttering (finding)

ICD-10: F98.5 Stuttering [stammering]

SNOMED: 416176009 Closed fracture dislocation, distal interphalangeal joint of finger (disorder)

ICD-10: S62.6 Fracture of other finger

SNOMED: 416189003 Exostosis (disorder)

ICD-10: M89.9 Disorder of bone, unspecified

SNOMED: 416237000 Procedure not done (context-dependent category)

ICD-10: Z53.9 Procedure not carried out, unspecified reason

SNOMED: 416273007 Scleral dellen (disorder)

ICD-10: H15.8 Other disorders of sclera

SNOMED: 416295006 Focal epithelial hyperplasia of skin (disorder)

ICD-10: L85.8 Other specified epidermal thickening

SNOMED: 416340002 Late onset schizophrenia (disorder)

ICD-10: F20.9 Schizophrenia, unspecified

SNOMED: 416372004 Infection by Nanophyetus salmincola (disorder)

ICD-10: B66.8 Other specified fluke infections

SNOMED: 416402001 Gestational trophoblastic disease (disorder)

ICD-10: O01.9 Hydatidiform mole, unspecified

Screen shots

Demonstration of Trincomalee General Hospital
ePR system showing the use of SNOMED-CT