Primary Health Care Informatics (Updated May 2012)

Website: http://www.imia-medinfo.org/new2/node/149

Chair (2013-2016)
Prof. Simon de Lusignan
Professor of Primary Care & Clinical Informatics
Chair in Health Care Management
Department of Health Care Management & Policy
University of Surrey
GUILDFORD GU2 7XH
United Kingdom
Tel: +44 (0)1483 683089
Fax: +44 (0)1483 301132
Email: S.Lusignan@surrey.ac.uk

Goal
The aim of the group remains to promote and develop primary care informatics as a specialism within health informatics.

Objectives
Our current objectives are: (1) How to model research studies based on routinely collected data; (2) Ontologically rich approached to case finding in routine data; (3) The use of IT at the point of care – in the primary care clinical consultation; (4) Focus on diabetes – and the completeness and accuracy of recording in primary care records.

Recent Activities

MEDINFO 2010 South Africa
The working group put on two workshops at this event – one on the use of the computer in the consultation and the second on the barriers to using routine data for international research (http://www.clininf.eu/news/photos/69-medinfo-photo.html). The outputs from this informed our submission to the IMIA Yearbook of Medical Informatics, see later in the report.

EFMI STC 2011 Slovenia
From these and the discussions post conference emerged a submission to the EFMI STC (Special Topic Conference) in Slovenia in 2011, and a further workshop at MIE in Oslo at the end of August 2011. We have begun to recognise that part of the standard approach to research studies using routine data should be to develop and model use cases for the study; (we have used Unified Modelling Language (UML) to do this and also constructed data flow diagrams (DFD). We have created generic reference models for some types of study. The first versions of these can be found at: http://www.clininf.eu/refmodel/

EFMI MIE 2011 Norway
We extended this work at our workshop at MIE in Oslo August 2011. This involved international collaboration including a guest presenter (Dr. Chris Pearce) from Australia.
The presentation from this workshop can be downloaded from the Clinical Informatics website at: http://www.clininf.eu/news/presentations/116-mie2011oslo-presentation.html

**EFMI STC 2012 Moscow**

Two papers emanating from working group were presented at the conference. The working group vice-chair has co-authored a paper with Prof Matthew Swindells who was previously head of the English National Programme for IT. Olga Dmitrieva presents work on how the English NHS Hospital Episode Statistics (HES) data can be used to explore variation in the quality of care.

**Publications in the Yearbook of Medical Informatics 2011**

We have achieved two publications in the IMIA Yearbook developed from our MEDINFO workshops. We hope that these will help standardise the way that we report observational studies of the computer in the consultation and help model the barriers to linking routine data in research.

**Yearbook of Medical Informatics 2012**

We have a paper accepted for the 2012 yearbook on how to requirements analyses using routine data. This builds on our modelling work within the working group. With more and more research being carried out using routine data, often primary care data but more and more often linked data – research protocols need to be adapted and move with the times.

We suggest how generic reference models for research projects should exist at four levels and be part of standard research protocols:

- Rich pictures /schema to give an overview
- Data flow diagrams (DFD) to document where data used in a research project originate and to describe the data flows during a research project
- Unified Modelling Language (UML) use-case diagrams to capture the processes within a research project
- Business process models modelled using business process modelling notation (BPMN) to capture the barriers to project participation.

**Journal**

Informatics in Primary Care remains the journal of choice for the working group. The publishers offer working group members a discount on subscriptions.

(http://www.radcliffe-oxford.com/journals/J12_Informatics_in_Primary_Care/default.htm)

**Future Activities**

**Summer School – SISS 2012 – How to measure quality and outcomes using routine data:**

We are holding a summer school 9th to 14th July. Further details and enrolment at: http://clininf.eu/siss2012

Or contact Natalie Berge N.Berge@surrey.ac.uk Special discount for IMIA working group members.
**MIE 2012 Italy**

We have had a workshop accepted at MIE2012 in Italy. This explores how we could improve the design of research and quality improvement studies using routine data by using ontologically rich approaches to identifying variables. The workshop objective is to develop consensus methods of consistent extraction and processing of data. Guest speaker at the workshop will be Professor Teng Liaw, from Australia. The workshop will include brief presentations on: (1) Capturing context by defining the domain ontology; and definition of a reference terminology; (2) Modelling data and metadata mechanisms; (3) Formalisation and ontolgy development tools; (4) Validation of data quality ontology; and (5) Governance framework. There will be a post workshop modified Delphi exercise to define and model these components into a usable toolkit that can be made available through the working group.

**MEDINFO 2013**

14th World Congress on Medical and Health Informatics - Conducting medical informatics by Converging technologies, Conveying sciences and Connecting people. Copenhagen, Denmark, August 20-23, 2013. Please contact the working group vice-chair if you would like to be part of PHCI contributions.

**References**

5. de Lusignan S, Liaw ST, Rahimi AR, Poh H, Jones S, on behalf of the working group. Improving the design of research and quality improvement using routine data in chronic disease: ontology driven approach. Accepted as a workshop MIE 2012 Italy.
9. Sullivan F, van Rooyan P, Agreus L, Desombre T, Taweel A, Delaney B. Business process modelling is an essential part of a requirements analysis for studies linking heterogeneous clinical databases. Accepted for the IMIA Yearbook of Medical Informatics, 07/05/2012 Ref: YB1207