



**PATIENT CLASSIFICATION SYSTEMS INTERNATIONAL**

## **THE 2010 INTERNATIONAL CASEMIX SUMMER SCHOOL**

**Evora, Portugal  
14<sup>th</sup> – 18<sup>th</sup> June 2010**



It is amazing to think that such beauty was not there to start with. The actual place was there, with its hill, its headland, its open elevation from where the eye sweeps over a horizon so vast it seems it is being pushed to infinity by the very plain itself. [José Saramago](#), *Evora World Heritage*

## **INTRODUCTION**

All over the world five continents, PATIENT CLASSIFICATION SYSTEMS are used for financing, clinical management, planning, evaluation, quality control and epidemiology in hospitals and in other health care services. In a growing number of countries reforms based on PATIENT CLASSIFICATION SYSTEMS/CASE MIX have been implemented. In others, governments and health research institutions are still evaluating and experimenting on their possible use.

The 2010 INTERNATIONAL CASEMIX SUMMER SCHOOL uses a group dynamic to support active participation by: getting together on Day 0 (Sunday, June 13), half-day social event on Day 3 (Wednesday, June 16) and Gala Dinner on Day 4 (Thursday, June 17). Introduction to the Faculty and Participants (needs, expectations, relating to case mix in the country) takes place on Day 1 and faculty is available during the week to deepen specific issues, included in the courses or presenting a particular interest to a group of participants. Specific tutorials or team work will take place based on participants' preferences.

The SUMMER SCHOOL introduces the science of case mix by addressing progressively four parts. First the basics of case-mix: DRG-based case-mix systems, from definition to implementation, health economics issues and new concepts and innovations in the field. In the second part DRG-base case-mix systems in acute care together with the grouping technology and the principles of costing by case are presented. In the third part the use of case-mix in different settings such as outpatient care, rehabilitation, mental health, integrated care and chronic disease are approached. Finally, quality of care and case-mix funding, disease management based funding, data quality issues and system monitoring based on DRG data are presented. The sessions will be based on examples from the real world.

The faculty of the School includes some of the most recognised experts on the field in the world. The program has been set taking into account the experiences of different summer schools and executive programs in USA, Australia, Spain and UK, Italy and PCSI Avignon Case-mix Summer School.

The School is organised by PATIENT CLASSIFICATION SYSTEM INTERNATIONAL (PCSI), a scientific society which offers a forum for networking and discussing achievements and developments in case-mix evaluation. In the previous years, people who have attended came from Japan, Australia, Singapore, Mexico, South Africa, US and from as many as 25 different European Countries within and outside EU. One of the strengths of the School is the opportunity it provides for networking with those involved in the implementation of case-mix systems and its links with the annual working conference of PATIENT CLASSIFICATION SYSTEM INTERNATIONAL (PCSI) last year in Fukuoka, Japan and this year in Munich, Germany.

## COURSE TIMETABLE

### MONDAY 14<sup>TH</sup> JUNE

- 09.00 **Overview of the Course and Introduction to the Faculty and Participants**  
*All faculty*
- 10.30 *Break*
- 11.00 **DRG-based case-mix systems: looking back to move forward.**  
*Miriam Wiley (Ireland)*
- The factors considered critical to the development and application of case mix systems since the mid-80's will be reviewed, together with an assessment of the challenges for future development of these techniques.
- 12.30 *Lunch*
- 14.00 **Health economics issues and casemix**  
*Ceu Mateus (Portugal)*
- What are the main health economics issues challenging health care systems present and future. From equity to efficiency what are the rationale, advantages and drawbacks for using Case mix systems.
- 15.30 *Break*
- 16.00 **New concepts and innovations in the field**  
*Jugna Shah (USA) and Jean-Marie Rodrigues (France)*
- Starting with what was expected with DRGs in the early years and what happened in the different countries we will analyse where we are today, and what are some of the new concepts and innovations that are occurring.

## COURSE TIMETABLE

### TUESDAY 15<sup>TH</sup> JUNE

- 09.00 **DRG-based casemix systems in acute care**  
*Terri Jackson (Australia) and Dana Burduja (Romania)*
- This session will focus on presentation of DRG systems use and technical components applications in English speaking countries and in non-Commonwealth countries.
- 10.30 *Break*
- 11.00 **Grouping technology**  
*Stephen Sutch (UK)*
- This session will focus on the statistical and health services research methods which have been used in the world to develop case mix groups. It will also provide an insight into the most recent developments in case mix grouping technology.
- 12.30 *Lunch: grouping students by country case studies:*
- 14.00 **Tutorials – Team work**  
*All faculty*
- The Faculty will be available during the sessions to deepen specific issues, included in the courses or in countries case studies and where participants have a specific interest.
- 15.30 *Break*
- 16.00 **Principles of costing by case**  
*Ceu Mateus (Portugal) and Jean-Marie Rodrigues (France)*
- This session will provide participants with an introduction to the information needs for comprehensive case mix costing by case for hospitals and to the different ways in which case mix can be applied to foster greater efficiency in health service provision.

## COURSE TIMETABLE

### WEDNESDAY 16<sup>TH</sup> JUNE

09.00 **Casemix in Outpatient Care**  
*Jugna Shah (USA)*

Research is still going on in the development of Casemix tools for hospital outpatient care and other non-acute care settings. This session addresses a review of different systems/methods used in developing classification systems that can be used in this health care settings and a discussion of the problems related to their use.

10.30 *Break*

11.00 **Data quality issues**  
*Olafr Steinum (Sweden)*

This session will focus on the data required to allocate cases to a DRG, the importance of the quality of disease and procedure coding, the problem of up-coding and the data quality techniques available.

12.30 *Lunch*

14.00 **Social Event**

## COURSE TIMETABLE

### THURSDAY 17<sup>TH</sup> JUNE

09.00 **Quality of Care and Case Mix funding**  
*Terri Jackson (Australia)*

This session will use a combination of lectures and case studies to focus on evaluation of health care quality using the case-mix funding information system. Advanced information technology experiences will be introduced and socio political challenges will be discussed.

10.30 *Break*

11.00 **Integrated care and chronic disease**  
*Stephen Sutch*

Increasingly health systems worldwide are directing health policy towards disease programs, supporting individuals' health needs, ensuring care is integrated across multiple providers and providing continuous care is to those with lifelong conditions.

12.30 *Lunch*

14.00 **Tutorials – Team work**  
*All faculty*

The Faculty will be available during the sessions to deepen specific issues, included in the courses or in countries case studies and where participants have a specific interest.

15.30 *Break*

16.00 **Casemix for rehabilitation and mental care**  
*Ric Marshal (Australia)*

There are still open discussions regarding non-acute services Case mix. This session will outline the issues and problems concerned with the Case mix developments in the area of Rehabilitation, Post acute and mental care and describe examples of differing solutions and developments world-wide.

17.30 **Disease management based funding**  
*Jacob Hofdijk (The Netherlands)*

After the Dutch health care system adopted Episode Funding to reimburse both hospitals and medical specialist, the next step of the health issue approach was taken in 2006 with a test to fund Diabetes

based on the Care Standard. Since 2010 Diabetes, Cardio Vascular Risk Management and COPD is funded nationally. The first casemix experience of contracting integrated primary and secondary care based on price and outcome. The first results will be presented!

## COURSE TIMETABLE

### FRIDAY 18<sup>TH</sup> JUNE

09.00 **The use of DRG data for monitoring**

**Karl Pfeiffer (Austria)**

This session will use a combination of case studies to focus on uses for epidemiology and economy studies. Types of hospitals, health geography and analysis of time series of specific disease prevalence and incidence estimations with case-mix data will be discussed

10.30 *Break*

11.00 **Tutorials – Team work**

**All faculty**

The Faculty will be available during the sessions to deepen specific issues, included in the courses or in countries case studies and where participants have a specific interest.

12.30 *Lunch*

14.00 **Conclusion and Evaluation**

**All faculty**

## FACULTY

**Miriam Wiley** is Head of the Health Policy and Information Division at the Economic and Social Research Institute, Dublin where she manages a number of health information systems for Ireland on behalf of the Department of Health and Children. She has over 20 years experience of working on case mix related issues and was instrumental in the implementation of a case-mix adjustment for funding hospital services in Ireland. In addition she has worked on a wide range of projects for many national and international organisations, including the European Commission, the Council of Europe, the Organisation for Economic Cooperation and Development, the World Bank, the World Health Organisation and the US Office of Technology Assessment.

**Jean Marie Rodrigues** is Professor of Public Health and Medical Informatics in Saint Etienne Medical School. He has worked extensively on the health information system. He was during five years (1982-1986) DRG project director and later on (1988-1994) strategic adviser of the Smart Card Department within the French department of health. He is presently member of scientific committees on DRGs, ICD 10 and surgical procedures in France. He has been involved in several European projects on Case mix, Health services research and Clinical terminology. He is presently the editor in charge of maintaining 3 European standards including one on surgical procedures coding systems within the European standardisation body CEN, member of a EU funded roadmap for semantic interoperability (SemanticHEALTH) and of an emerging WHO network on clinical terminology. He is Emeritus President of PCS International.

**Jugna Shah** is CEO of a research and consulting firm dedicated to the evaluation, development, and implementation of case mix payment systems for inpatient (DRGs) and for outpatient (APCs/APGs) both in the United States and throughout the world since 1996. She has a Masters in Public Health Policy and Administration. She is used to provide training sessions on topics such as the basics of coding, collecting and analyzing data, grouping, creating relative weights, simulating budgets and payments. She has a specific interest in designing country specific implementation plans that take culture, politics, economics, and infrastructure into consideration. Jugna Shah is also the Secretary of PCS International.

**Terri Jackson** is Associate Professor in the Faculty of Medicine at the University of Alberta, and Adjunct Associate Professor at the University of Queensland, Australia. Her major research interests in health economics focus on issues of technical efficiency in the provision of hospital-based care and in funding systems which make use of case-mix adjustment. She is currently undertaking studies of the costs and outcomes of adverse events in hospital care in both Australia and Canada.

**Dana Burduja** is Program Director at the Center for Health Policies and Services (CHPS) in Bucharest since September 2005, an associate lecturer at the National School of Public Health from Bucharest and PhD student in health Economics at St. Etienne University in France. She is also serving at the moment as an International Finance Corporation (World Bank Group) short term consultant for projects related to the development of Public Private Partnerships in health in Eastern Europe and Central Asia countries. Dr. Burduja worked in implementing a DRG based payment system for hospitals in countries as Romania, Turkey, Bulgaria and Republic of Moldova.

**Steve Sutch** has a special interest in worldwide developments in Patient Classification and its application in Health planning, funding and resource allocation. He began working in the English NHS in 1987 as an Operational Research consultant, modeling hospital and NHS systems. In 1991, he moved to Wales to manage the investigation of casemix, its introduction, advising the Welsh Health Department and providing a range of casemix services to hospitals and authorities. In 1994, he moved to the national casemix office in England, managing the Analytical and Statistics department supporting the development of case-mix groupings (Healthcare Resource Groups) in England and Wales until 2004, and as Principal Case-mix Consultant was responsible for leading the design of case-mix groupings for England. Steve lectures and provides consultancy worldwide on case-mix development and health informatics and is currently undertaking research at Johns Hopkins University.

**Olafr Steinum** is a specialist in Infectious Diseases and Internal Medicine, active as a senior physician at the Department of Infectious Diseases, Uddevalla Hospital Sweden. He has been active in the development of case-mix and classifications in Scandinavia since mid-90s. He has created the curriculum and given education for Clinical Coders in Sweden and Norway since 2000, and also participated in several clinical coding auditing projects. From 2002 he is Advisor to the Swedish Board of Health and Welfare on coding and classification matters and from 2004 Nordic delegate to the WHO-FIC network. At present he is co-chair of the Network's Morbidity Reference Group.

**Ric Marshal** is an Australian international consultant in case-mix development. His current projects are with the case-mix development and health reform projects in Turkey and Kosovo. He was formerly Director of DRG Development in Australia and Chair of Australia's Health Statistical Information Management Committee. In addition to his work in Australia, he has worked and advised on case-mix development projects and health reform projects in Mauritius, Slovenia, Germany, UK, Malaysia, Kosovo, Qatar and Turkey.

**Jacob Hofdijk** is a Dutch health economist. He has a wide experience on case mix issues and was one of the founders of PCSI.

**Karl P Pfeiffer** is Univ.-Prof for Biostatistics, Informatics, Health Economics and Documentation at the Innsbruck medical university Austria. He is chairman of the Austrian e-Health initiative and project manager of the Austrian hospital financing system. He is leading researches on biostatistics, classification and non parametric statistical methods. He is Co-editor of Methods of Information in Medicine, Biometrical Journal, eHealthCOM.

**SCHOOL DIRECTOR Céu Mateus** is lecturer of Health Economics at the National School of Public Health at University Nova of Lisbon. She worked for the Institute of Management and IT (Ministry of Health) in the Department of Information Systems Development from 1995 until 2000, where she was the Executive responsible for the Financing System/Classification System in Diagnoses Related Groups. She worked in the development and improvement of the funding model for NHS hospitals in what concerns inpatient care and, at the same time, was a member of the team that was being developing a capitation model for resource allocation in primary health care. She is currently undertaking studies of inequalities in the treatment in hospital care. She was President of PCS International from 2002 until 2009.