Application and Advancement of Quality Control Charts in Healthcare Monitoring

Speaker: Dr Hassan Assareh
Venue: Room 305, Samuels building, UNSW upper campus, Randwick
Date: Thursday 8 May 2014
Time: 12-1pm
Enquiries: bayzid@unsw.edu.au
Parking: Level 5 of the parking station; enter via Gate 11 Botany St, Randwick
Map: [Link to map]

SPEAKER BIOGRAPHY

Hassan Assareh is a research fellow in the Simpson Centre for Health Service Research (SCHSR) within Australian Institute of Health Innovation (AIHI) at UNSW. He obtained his PhD in Statistics from Queensland University of Technology in 2012 following his prior qualifications in Industrial Engineering and Management in Iran. He has a particular interest in statistical quality control methods and their applications in industrial and non-industrial sectors. During his PhD, he adopted industrial approaches to a health context and developed several Bayesian statistical models to enrich monitoring schemes for improvement of quality of care within hospitals. He is now involved in studies evaluating effects of systematic interventions and policy changes on quality of care and patient outcomes.

Hassan’s interests include quality engineering, Bayesian analysis, spatiotemporal modelling, optimization and decision making.

ABSTRACT

During recent decades, quality control charts have been developed as the technical core of quality management and continuous improvement philosophy. In recent years, control charts are increasingly being used in healthcare to aid in process understanding, assess process stability, and identify changes that indicate either improvement or deterioration in quality of care. They are used in hospital process improvement projects, by accrediting bodies and governmental agencies, and for public health surveillance. This seminar provides an overview on charting methods and discusses their applications and developments in monitoring healthcare processes outcomes. Control charts are explained through several examples, and differences in monitoring approaches between the healthcare and industrial
applications are addressed. Adoption and direction of advancement of health-specific charting methods are discussed. The current state of control charting’s body of knowledge (application, method and approach) in the healthcare is compared to the industrial context and potential extensions and opportunities for knowledge exchange are addressed. Major resources and references are provided for control chart practitioner and researchers.

Next seminar
12 June, Room 305 of Samuels Building
Speaker: TBA
Topic: TBA