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Multi-Fund Data Analytics targets enhanced value-for-money in healthcare services

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Dr Srinivasan is a Senior Research Scientist in the health sector. Her experience in designing software solutions for hospitals and health departments has shaped her research focus on information solutions that enable efficient and high quality health care.

Governments as well as health and accident compensation insurers are grappling to improve health outcomes while keeping spiralling costs under control. These seemingly irreconcilable goals require a careful balance of policy to help stem the tide of ever increasing costs in the health industry.

A study by CMC Insurance Solutions' Lead Scientist, Dr Uma Srinivasan, finds that multi-fund analytics offers the opportunity for a wide spectrum of stake holders in the health sector to make informed decisions relating to the efficient management of high cost health interventions, resource allocation and the performance monitoring of health systems.

Multi-fund analytics allows health organisations the opportunity to view claims and claiming patterns in a very broad way. Srinivasan proposes that data driven research of claims data from multiple Australian health insurers be combined with clinical data already provided in hospital discharge summaries. Uma predicts that the results would provide the capability to determine a range of indicators relating to health economics as well as health outcomes and clinical performance. These indicators line up with national priority areas identified by the National Health and Hospitals Reform Commission.

The research derives from the interpolation of single-fund analytic results from the CMCRC Group's leakage detection and predictive modelling solutions which are deployed across large numbers of private health insurers. This brings together the factors of cost and quality of care (factors like length of stay in hospital, infection rates and re-admission rates) in a way that supports new cost effective and quality of care indicators. These start to pave the way for making "value for money" judgements about hospitals and possibly even for individuals to make informed decisions about surgery options.

The research has also led to the creation of a new software solution, CMC I+ Plus. This provides advanced performance analytics based upon claims-scoring and predictive modelling. The solution predicts trends and patterns in areas of cost, efficiency and quality of care and has been designed to apply to public and private health and accident compensation insurance as well as publically funded health areas such as hospitals and state and federal funding bodies. Privacy and confidentiality considerations mean that analytics are currently only performed within each insurer's silo. Srinivasan's research promises to provide new insights that will assist insurers, funders and policy agencies to help stem the tide of ever increasing costs in the health industry.

The Capital Markets Cooperative Research Centre is a world-leading research organisation that provides thought leadership and break-through technology solutions for capital and insurance markets (www.cmcrc.com).