



**DR NELI
SLAVOVA-AZMANOVA**
Associate Investigator

**PROFESSOR
CHRISTOBEL M SAUNDERS**
Project Chief Investigator

**DR
NILOUFER J JOHANSEN**
Research Officer

DR ANGELA IVES
Associate Investigator

Patients first

The Continuous Improvement in Care Cancer Project in Western Australia.

THE GLASS CEILING, AND BENEFITS FOREGONE

Globally, both a growing and ageing population contributes to the prevalence of cancer. A report by the Australian Institute of Health and Welfare in 2016 has highlighted that despite improved survival and prevalence rates, cancer is a leading cause of death and disease burden in Australia¹. Between 2001 and 2014, there has been a 44% increase in the number of cancer-related hospitalisations, and expenditure on hospital-based cancer care has increased from around \$2.2 billion in 2004-2005 to around \$3 billion in 2012-2013¹.

While current national registries collect important data relating to cancer diagnoses, survival and overall healthcare costs, there is very little information on short- and long-term patient outcomes for cancer types or treatments delivered^{1,2}.

Several factors contribute to rising cancer-care-related costs. For example, the delivery of effective treatment is primarily dictated by short-term cost-saving cycles focused on the clinical absence of disease rather than bettering long-term patient outcomes^{1,3}. Also, because cancer care requires a multi-disciplinary approach, the use of proprietary data-capturing platforms by different service

providers in both public and private settings makes it difficult to access patient data and deliver effective treatment strategies in a timely manner². Finally, the lack of a standardised dataset measuring long-term patient outcomes has made it difficult to compare and promote treatments in an evidence-based manner².

VALUE-BASED HEALTHCARE (VBH)

Comprehensive cancer care requires the coordination of multi-disciplinary specialties that is affordable, accessible and able to continually improve patient outcomes¹. The goal of value-based healthcare (VBH) is to improve patient health outcomes while reducing the overall cost of healthcare³. It is therefore necessary to collect clinical outcome measures in conjunction with outcome measures important to patients, in order to monitor and improve both individual and system outcomes^{2,3}.

MEASURING PATIENT OUTCOMES

While many patient outcome measures exist, these are usually assessed independently from routinely-collected clinical outcome measures, and are not disease-specific, nor are they universally-applicable.

The International Consortium for Health

Outcomes Measurement (ICHOM) has developed standardised datasets to measure clinical and patient-oriented VBH outcomes in cancers of the lung, breast, prostate and colon⁴. ICHOM is non-profit organisation comprised of leading health experts and patient stakeholders worldwide.

Each medical-condition-specific dataset consists of previously validated clinical- and patient-based quality-of-life questionnaires, and measures of co-morbidity, survival and treatment-related complications. These data are intended to be collected routinely during clinical management and follow-up. Additionally, using a standardised dataset can provide a benchmark for patient outcomes that new treatments can be compared against for effectiveness and cost-benefit⁴.

CONTINUALLY IMPROVING CANCER CARE IN WESTERN AUSTRALIA

We have recently been awarded funding to pursue an innovative program of research aimed at bringing VBH into cancer care in public and private settings in Western Australia. This project implements a co-design strategy involving consumers, clinicians, health services and researchers to measure outcomes important to patients. It identifies key deficits in care pathways, generates and trials new



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interventions, and will implement findings rapidly.


We will use ICHOM datasets for breast, prostate, colorectal and lung cancer (and develop similar datasets for two rare, poor-outlook cancers).

The project has five overlapping stages:

- **Stage 1** will focus on engaging key stakeholders (including consumers) to participate, and establishing champions in each tumour stream at each site.
- **Stage 2** will involve the identification and development of data-capturing tools to collect clinical data efficiently from different service providers. This clinical information will be combined with patient-reported outcomes data. Data will be made available to researchers to create hypotheses that evaluate new interventions aimed at improving care.
- **Stage 3** will pilot the implementation of the electronic platform developed in stage 2 to automatically capture and export relevant data required to determine patient outcomes for a given diagnosis and treatment. Automated reports assessing quality outcome measures relating to care will also be trialled during this stage to allow for quality assurance and

performance-related analysis.

- **Stage 4** will involve incorporating feedback, and revision and review of the data captured and evaluated in stage 3. Based on feedback and subsequent refinement of electronic data capture and automated analysis, further integration with local and national programs and initiatives will be explored.
- **Stage 5** will involve developing a state/national initiative for benchmarking cancer outcome measures. Protocols for rolling out collection of both clinical and patient outcome measures will be shared with healthcare providers in metropolitan and regional areas to enable standardisation of collected data and rapid adoption of evidence-based treatments promoting best patient outcomes.

By identifying and promoting interventions that improve patient outcomes in a cancer setting, we hope to demonstrate a proof-of-principle in which good healthcare is affordable, accessible, continually-improving and evidence-based. This program also can provide a template for better long-term monitoring and treatment of other chronic medical conditions such as cardiovascular disease, asthma and diabetes. 

Dr Neli Slavova-Azmanova, Associate Investigator, Cancer and Palliative Care Research and Evaluation Unit, University of Western Australia

Dr Niloufer J Johansen, Research Officer, St John of God Subiaco Hospital

Professor Christobel M Saunders, Project Chief Investigator, Consultant Surgeon (Royal Perth Hospital, Fiona Stanley Hospital, St John of God Subiaco Hospital), Professor of Surgical Oncology at the University of Western Australia

Dr Angela Ives, Associate Investigator, Cancer and Palliative Care Research and Evaluation Unit, University of Western Australia

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