Value-Based Health Care Conference 2021
a patient-first approach
practical strategies for implementation

Value-Based Health Care Conference
May 27-28th 2021

Abstracts Report

Continuous Improvement in Care *cancer*

ahha
australian healthcare & hospitals association

Contents

Executive Summary

In May 2021, the inaugural Value-Based Health Care (VBHC) Conference was held in Perth, Western Australia. The conference demonstrated how VBHC is transforming healthcare nationally and internationally, with a 'patient first' approach lying at the heart of all initiatives presented. This event was hosted by the Continuous Improvement in Care – Cancer (CIC Cancer) Project in partnership with the Australian Healthcare and Hospitals Association (AHHA). Sponsorship for the conference was provided by 14 organisations from State health departments and primary care agencies, the university and research funding sector, corporate sector, health insurance sector, and private hospital sector.

The conference program was developed with the aim of providing an opportunity for attendees to increase their understanding of all aspects of a patient-centred approach to VBHC and to encourage further innovation and capacity building. The program incorporated plenary sessions presented by six expert keynote speakers and 55 concurrent sessions across two days. Concurrent sessions were delineated into topic-related streams and had multiple speakers presenting, with special sessions included in this part of the program to facilitate greater discussion, sharing of ideas, and collaboration on key issues. This sought to provide delegates with an opportunity to hear from others, both across Australia and internationally, about the practical strategies they had used to progress VBHC across a broad range of areas within healthcare systems through innovation, project initiatives, implementation, research, and training.

Introduction

Value-based health care is becoming a major movement in the health care sector, both in Australia and internationally. Health services and systems are exploring opportunities to move from a focus on the volume of services delivered to the value of outcomes achieved through a range of transformative projects and initiatives. In doing so, these organisations are seeking to invest in a range of new products, services, and skills to assist them meet their patient/consumer needs.

The inaugural Value-Based Healthcare (VBHC) Conference 2021 took place in Perth on May 27-28th 2021. This event was part of a 5-year research-driven program developed by CIC Cancer Project and was hosted in partnership with the AHHA.

The VBHC Conference aimed to showcase value-based healthcare (VBHC) innovation, initiatives, implementation, research, and training from all areas of the health care system. Additionally, it aimed to facilitate the sharing of research project findings and cement WA as a key player in this area. This report provides an outline for each of the accepted abstracts which were presented at the conference, either as a part of the program or as posters.

Conference Themes

Overarching theme

A patient-first approach, practical strategies for implementation

Sub-themes

Three sub-themes articulated aspects of this overarching theme, as listed below:

- **Innovation:** novel projects or approaches that have developed, or may be capable of developing, skills and strategies for improving outcomes and driving quality improvement.
- **Collaboration:** ways in which health care sectors, professions, and consumers can be engaged, integrated, and productively work together towards implementation of VBHC and the clinical benefits of such collaboration.
- **Enablers:** tools, techniques, governance, and strategies that support successful outcomes – such as technology/digital solutions, effective use of data, project techniques, funding and procurement opportunities, team structures, communication techniques – and how to overcome potential barriers.

Potential topics to be discussed under these themes were:

- Informatics/digital opportunities
- VBHC in procurement/contracting
- Funding options and potential funding/payment models
- VBHC in primary care and integration outside the hospital setting
- Consumer access to outcomes information
- IT infrastructure issues and concerns, and implementation possibilities
- Ways in which to engage the clinical workforce
- Australian State updates to allow for shared learning experiences

Program Development

Abstract selection

Authors who wished to present their paper at the conference were required to register and submit their abstracts online for peer review by 4 December 2020. A template was developed and provided to all prospective authors to follow. The document outlined the requirements for qualified abstracts, specifically in regard to abstract title, alignment to conference topic, context, aims, impact, learning for others, and lastly, an indication of whether the paper has been previously presented.

A request to evaluate submitted abstracts was sent to potential reviewers – including research, medical and healthcare professionals with experience in critiquing health projects, of which, 20 accepted to undertake the abstract review process. A reviewer could submit an abstract for their own project or initiative; however, they were not able to review this submission.

Based on review criteria provided by the conference organiser, each abstract was independently assessed and marked by two reviewers, with a maximum score of 200 (100 points from each reviewer). Selected abstracts were those that obtained a score of 100 or above. See Appendix 1 for details of the abstract reviewers and review criteria.

A total of 55 abstracts were selected for oral presentations, of these, 53 discussed work being undertaken in Australia, 2 in the United Kingdom (UK), and 1 in New Zealand (NZ). A summary of accepted abstracts from within Australia is provided in Figure 1.

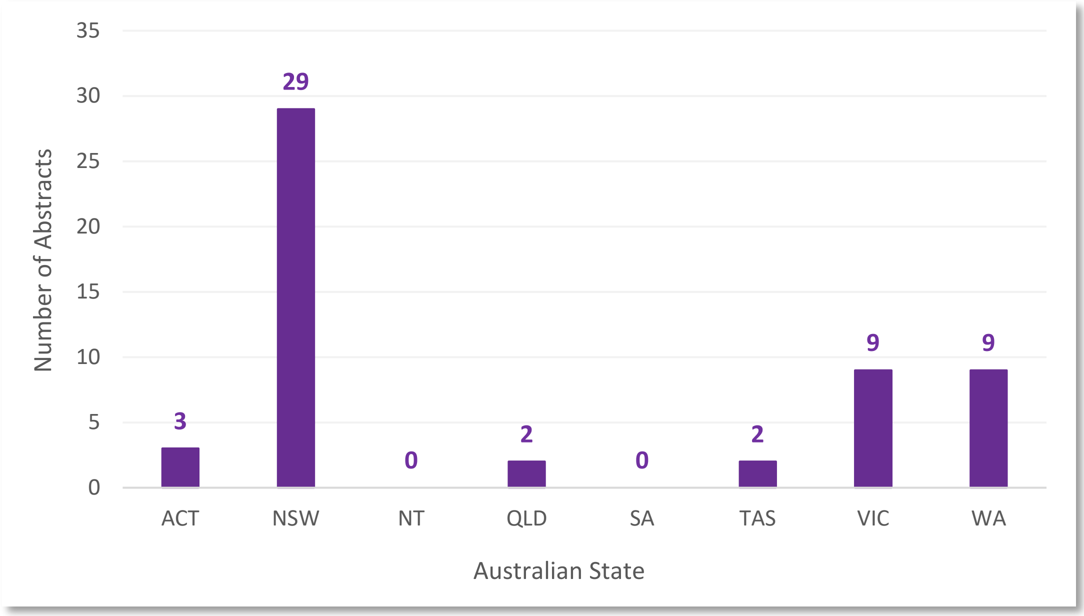

Figure 1. Accepted abstracts by state

A total of 12 abstracts were selected for Poster presentation. These abstracts have not been included in this report. Instead, each presented poster is contained in Appendix 2

Accepted Abstracts

Concurrent Session 1.1 – Digital Consumer Engagement

1.1A: Internet Parent-Child Interaction Therapy: Innovating to address geographical disparities, Jane Kohlhoff

Parent-Child Interaction Therapy (PCIT) is a well-known, evidence-based parent-training program for treating childhood disruptive behaviours. PCIT uses live parent 'coaching' during clinic-based sessions which has meant that access has been restricted to families who can attend treatment clinics, to the disadvantage of families living outside metropolitan areas.

To make treatment for disruptive behaviours available for all children, irrespective of geographical location, Karitane established and pilot-tested Australia's first community-based Internet-PCIT (I-PCIT) service. Delivered via video-conferencing from the Sydney-based clinic, the service opened in November 2017. During the 14-month pilot phase, 56 referrals were received from across rural and remote NSW. Consumer feedback suggested that I-PCIT led to range of positive health outcomes including improved child behaviour, parenting confidence and parent-child relationships. Consumers also spoke positively about their experiences of receiving care, reporting appreciation of the therapeutic relationship and mode of intervention delivery. Clinicians enjoyed delivering the intervention, commenting that despite various logistical and technological challenges, their overall experience of providing I-PCIT was positive. Program effectiveness was demonstrated in statistically significant reductions in the intensity of disruptive child behaviours, and increased child compliance and parenting skills. Return-on-investment for PCIT delivered in face-to-face format has been demonstrated, and future research will evaluate this for I-PCIT.

Following the Karitane I-PCIT pilot, state government funding was awarded to expand the service, and I-PCIT was integrated as a permanent part of the service delivery model at Karitane (>200 sessions delivered per month). The program was recommended by the NSW Government in response to the 2018 NSW Legislative Assembly Committee on Community Services Report, and included as an example of 'best-practice' in the 2019 Health Information Society of Australia position statement. Significantly, the pilot also provided Karitane with the necessary groundwork to swiftly transform to a 100% internet-based service delivery model in response to the COVID-19 pandemic.

1.1B: Implementing electronic-PRO measures in clinics: meta-review of barriers and enablers, Claudia Rutherford

Alignment to conference themes:

This meta-review identifies strategies to support the successful implementation of electronic patient-reported outcome measures in clinical settings.

Context, aims and support:

Background

Electronic patient-reported outcome measures (ePROMs) are used within clinical practice for individual patient care, service evaluation, and policy decisions. However, practical, methodological, and attitudinal barriers may hamper their implementation within clinical practice.

Objectives

We aimed to determine how best to implement ePROMs for patient, clinician, and service benefit, focusing on barriers and enablers to implementation.

Method:

Following methods for umbrella reviews, we searched five electronic databases for reviews on the use or implementation of ePROMs in any health condition and setting. Two reviewers independently applied inclusion criteria and extracted data. Key results were qualitatively synthesised.

Results:

From 48 reviews, we found ePROMs can effectively: improve communication between patients and clinicians; screen/monitor patient needs, mental health issues, and treatment-related toxicity; and evaluate benefit of healthcare and services. However, barriers to their implementation limit their effectiveness: 1) pre-existing clinical practice, culture and behaviours; 2) lack of knowledge/understanding of ePROMs (e.g. how to use and interpret ePROM data); 3) difficulty choosing appropriate and informative ePROMs for patient management and service improvement within and across health conditions and contexts; and 4) lack of infrastructure and understanding how to design effective and feasible IT solutions.

Impact:

Conclusive evidence supports ePROM use for care planning and decision-making to provide timely person-centred care, improve communication, and ensure appropriate referrals based on identified patient need. However, barriers to ePROM implementation limit their usefulness.

Learnings for others:

Implementation enablers such as; engaging stakeholders during development, delivery, and evaluation (bottom up), integration of ePROMs in clinical guidelines (top down), and automatic flagging of clinically important scores, may be the key to achieving the full potential of ePROM use in clinics.

1.1C: First steps in patient-reported outcomes data visualisation for breast cancer, Angela Ives

BACKGROUND:

The Continuous Improvement in Care – Cancer (CIC-Cancer) Project seeks to enable Value-Based healthcare (VBHC) in public and private hospitals in WA through measuring and acting on variations in outcomes important to cancer patients. This includes the electronic collection of patient reported outcomes (PROMs). Clinical champions discussed their desire to use PROMS during patient consultations to highlight issues and understand how well a patient is coping. Anecdotally, we found that when the patient completes PROMs, prior to an appointment, these questions start a discussion with their clinician. The number of questionnaires and questions in the Breast Cancer International Consortium for Health Outcome Measures (ICHOM) standard dataset, which is being used in CIC-Cancer, is significant (>60) and there are similar questions found across several questionnaires.

AIM:

The need for advanced analytics combined with enhanced visualisation tools is pivotal to successful integration in routine practice, rapid adoption by clinicians, and movement to evidence-based patient-focused models of care. Implementation of the necessary informatics systems takes time and so a 'small-steps' approach is required to maintain momentum and engagement. A pilot project was undertaken to determine if grouping the PROMs questions by themes could assist clinicians in assessing signs and symptoms more effectively.

METHODS:

Changes were made to the clinician's view of the breast cancer PROMs within the CIC-Cancer bespoke informatics system. Patients still complete each questionnaire in its copyrighted format; the clinician, however, views the questions and responses grouped within themes.

IMPACT:

By reviewing each patient's responses by theme, the clinician can quickly and effectively identify issues a person might have and the aspects of a person's life that are impacted by these problems.

LEARNINGS:

This small, initial step towards VBHC data analytics, reporting, and visualisation has provided clinicians with early tools to more efficiently and effectively discuss symptoms/signs with their patients.

1.1D: THISWAYUP: Evidence-based online programs for mental health and wellbeing, Mike Millard

THIS WAY UP (TWU), developed by the Clinical Research Unit for Anxiety and Depression (CRUfAD) (joint initiative between UNSW and SVHNS), is a suite of evidence-based online programs that provide stand-alone and adjunctive mental health treatment. Each module can be prescribed by a clinician or self-enrolled by the patient, ensuring efficient and appropriate use of the limited resources within the mental health sector. TWU uses educational comics to teach Cognitive Behaviour Therapy through innovative patient journeys. A specific wellness program to support patients through the pandemic was used as part of the SVHNS Virtual Care Unit to support COVID positive patients in home isolation.

The programs are evaluated in Randomised Controlled Trials (N=38) which include robust consumer consultation. The service has standardised the collection of patient reported measures to enable iterative improvement. Experience surveys are captured throughout, enabling clients and clinicians to provide input into the ongoing improvement of the service. Validated patient reported outcome measures such as the Kessler Psychological Distress Scale (K10) and other disease-specific outcomes measures, are utilised at both a clinician-patient level indicating iCBT is as effective as face to face care. 80% of people who complete a course will benefit substantially, 50% to the point of no longer being troubled by anxiety or depression. Only 20% will not respond and should be reassessed or referred for an alternative intervention.

During the COVID-19 pandemic, TWU supported 24,000 new registrations as the service was made freely available to the public. The scalability of the digital platform demonstrated that TWU is an effective, accessible care service, delivering value to the healthcare system as a whole by meeting the quadruple aim. TWU enhances the experience of patient and clinicians in managing mental health issues, delivers cost effective care, demonstrating a scalable model that improves the outcomes that matter.

Concurrent Session 1.2 – Changing Culture

1.2A: Using communications, insights and experiences to enable change in NSW, Michelle Maxwell

Embedding sustainable value based healthcare across NSW requires significant cultural change. A clear vision, executive sponsorship and strong clinical leadership and engagement are central to this process. Effective communications also play a key role in enabling the NSW public health system to design and deliver health services that align with what matters most to our patients, clinicians and community. Stakeholder feedback from NSW local health districts and partners revealed a need to align communications with an overarching strategy and local action.

The NSW Health communications approach for value based healthcare was developed by the Ministry of Health in collaboration with local communications teams, partner agencies and other key stakeholders. It aims to unify language, culture and behaviour and:

- Improve the consistency of key messages across communications channels
- Develop tailored communications for different audiences promoting the benefits of value based healthcare
- Engage sponsors, influencers and champions to enable discussion and drive system change
- Position NSW Health as a thought leader for value based healthcare
- Build a better understanding of the vision and principles of value based healthcare across the health system.

This presentation provides practical insights into the importance of effective communications to support the implementation of value based healthcare. It describes the roles of stakeholders and ways of engaging with them to enable the long-term move to value.

- Key milestones and achievements have included:
- Delivering the first statewide forum for value based healthcare in August 2019 and the first virtual forum in November 2020
- Introducing a value based category to the annual NSW Health Awards as the Secretary’s award
- Using patient and clinician videos, case studies and new digital channels to highlight what value means for patients, NSW Health staff and the health system
- Providing thought leadership through articles in journals and peer reviewed publications.

1.2B: Value-Based Research in Healthcare, Bruce Shadbolt/Nidhi Menon

Value-Based healthcare requires a significant shift in thinking - a shift to re-shaping competition to focus on generating value for patients and the community by improving outcomes, reducing costs and enabling access across a greater degree of geographical reach. Healthcare is complex and not just about "best buys", but also about "best bets". Research provides our scientific approach to identifying interventions that work best, don't work as well or not at all. In healthcare, we grapple with supporting research and identifying research priorities, especially in a resource competitive environment - competitive for dollars but also attracting the best clinicians to provide cost-effective treatments. It is proposed that research in healthcare should be values based. Organisations should see research as an integral part of the health system and, like care being assessed for value, research should be prioritised and supported based on its value to the health system. This project has developed a Value-Based research framework for assessing and prioritising research within the Australian Capital Territory (ACT) Health System. The resulting framework was used to support developing a research strategic plan involving our ACT Health & Well-being Partnership Board. The framework provided a critical lens for this collaborative group to drive strategy using a Value-Based perspective. Quite often deciding on research priorities is determined by the "loudest voice" or defined by popular rhetoric with no clear relationship with what is our best bets adding value to care delivery. By objectively creating a Value-Based research framework the expectation is that high value research is supported and resourced by government, universities and consumers, while low value research is discouraged. In this study, we present the components of the framework and how they were used in a collaboration to achieve a health system-wide solution to research strategic planning and implementation.

1.2C: Leading Value Based Health Care Transformation in Public Dental Sector, Sue McKee

Dental Health Services Victoria (DHSV), the lead public dental agency in Victoria, implemented a novel patient-centered Value Based Health Care (VBHC) framework for the public dental sector in Australia. Consistent with the conference theme of patient's first, and sub-themes innovation, transformation and collaboration, DHSV's VBHC framework is co-designed with consumers, and implemented to drive patient-centered care, measure outcomes that mattered to patients and transform service delivery.

People accessing public dental system are more disadvantaged and have poorer oral health outcomes compared to the general population. In 2018, DHSV implemented the VBHC framework to address inequities in access to care and improve health outcomes for people disproportionately impacted by poor health. To improve service efficiency and effectiveness, we developed a comprehensive VBHC implementation strategy. This involved implementation of discrete projects to identify variation, measure costs and outcomes, improve consumer experience, improve culture and capability, harness information technology and communication, and investigate blended funding models that supported VBHC. We used the ICHOM oral health standard set to measure, monitor and track long-term health outcomes including the development of performance measures within our costing model.

A mixed-method evaluation examined service delivery, clinical and experiential outcomes from a patient, staff and stakeholder perspective. Findings showed 44% lower failure to attend rate, 36% higher preventive service utilisation, higher proportion of clinicians working to their top scope of practice in a multi-disciplinary team, improved patient reported experience and outcome measures. Recommendations from evaluation has improved scalability and the principles of VBHC has become embedded within DHSV's standard operating procedures.

Our VBHC journey required fundamental reform to the way we operated within a fee-for-service-model. It required an organisation-wide cultural shift, good change management, clinical leadership and support for staff. Strong collaboration with consumers, workforce, government and non-government stakeholders, significantly enabled the adoption and scale-up of VBHC.

1. Hegde, S. and Haddock, R., (2019). Re-orienting funding from volume to value in public dental health services. Deeble Issues Brief No. 32 Deeble Institute, Australian Healthcare & Hospitals Association. DOI 10.25916/5d00873e056ae https://apo.org.au/node/241086
2. Raymond, K, Hegde, S., (2020) Dental Health Services Victoria: Journey to Value Based Healthcare. Deeble Perspectives Brief No 7. Deeble Institute, Australian Healthcare & Hospitals Association. https://ahha.asn.au/sites/default/files/docs/policy-issue/perspectives_brief_no._7_dhsv_journey_to_value_based_health_care_3_0.pdf

3. Dental Health Services Victoria., (2019) Value Based Health Care Framework Explained Published by DHSV
4. Ni Riordain R, Glick M, Al Mashhadani SS, Aravamudhan K, Barrow J, Cole D, Crall JJ, Gallagher JE, Gibson J, Hegde S, Kaberry R. (2020) Developing a standard set of patient-centred outcomes for adult oral health–an international, cross-disciplinary consensus. International Dental Journal. https://pubmed.ncbi.nlm.nih.gov/32623725/

1.2D: Transforming a System to Deliver Value-Based Care: What have we Learned? Lea Kirkwood/Margaret Kelly

The Leading Better Value Care (LBVC) program is a NSW strategic program that is part of the value-based healthcare movement. LBVC is focused on moving the system to:

- deliver on evidence-based models and patient preferences, in a way that values clinicians and the broader public health system
- improve the health of individuals and communities safely, efficiently and optimising the use of existing health resources.

The Agency for Clinical Innovation (ACI) is a NSW health organisation, supporting 43 clinical networks, institutes and taskforces. It plays a key role in developing and driving the implementation of 10 clinical initiatives ranging from paediatric illness and chronic disease to complex acute conditions, to scale best practice standards. This presentation will use multimedia mechanisms to focus on approaches taken by ACI in collaborating with local health districts (LHDs), specialty health networks (SHNs), patients and communities to support system transformation through application of a variety of change management processes.

Consumer experiences will demonstrate how patient reported measures and co-design of improvement efforts can achieve Value-Based care delivery. Staff experience data and formal evaluations will reflect on the application of change management tools such as audit and feedback, self-assessment and redesign to support local implementation. Approaches such as peer mentorship, communities of practice and clinical taskforces will be explored as mechanisms for building capability and establishing environments for networking and scaling across health services, and clinical specialties.

The successes achieved and challenges faced leading ACI to kick-start new approaches to system transformation will be highlighted. The approaches include:

- reworking internal governance structures
- activating strategic system wide Executive Sponsor engagement
- collaborating with LHDs and SHNs on their key priorities to tailor support offerings
- increasing focus on consumers as partners in program design.

The story of LBVC reflects the importance of a learning approach to complex system transformation.

Concurrent Session 2.1 – Measuring What Matters to Patients

2.1A: Measuring what matters to patients: co-designing and driving system transformation, Melissa Tinsley

After this session, participants will be able to:

1. Identify the importance of collecting and using PRMs
2. Have an understanding of how correctly co-designing and implementing PRMs can be used to drive improved outcome, experiences for people
3. Better understand the pathway to successfully co-designing and implementing digitally enabled technologies to drive value based healthcare

Since the 1990s there has been exponential growth in the development and application of patient-reported measures (PRMs) of health. PRMs can be grouped into Patient Reported Outcome Measures (PROMs) and Patient Reported Experience Measures (PREMs)[1]

ACI is leading the co-design and implementation of PRMs across NSW. The PRM program aims to enable patients to provide direct, timely feedback about their health-related outcomes and experiences. This will drive improvement and integration of healthcare across NSW[2].

PRMs are used at the individual, service and system level across NSW. When used as part of routine clinical practice, conclusive evidence supports the use of PRMs for care planning and decision-making to provide timely person-centered care. Their use improves communication between individuals and care providers1.

The design of the PRMs program was iterative, utilizing a co-design approach between the ACI and managers, clinicians and people who may access health care services (since the program began in 2014). Co-design is a way of improving healthcare services for people accessing and using care services by bringing together all stakeholders and consumers in partnership, to develop health services that best meet the needs of consumers and carers in the most effective way possible1, [3]

Implementation of the PRMs program inclusive of the technology platform was through the Accelerated Implementation Methodology, the formative evaluation completed in 2017[4] cited appropriate information communication technology infrastructure is considered crucial for future success.

1. https://link.springer.com/epdf/10.1007/s11482-020-09817-2?author_access_token=W4DMU3XwkY2UAJuvsEcftve4RwlQNchNBYi7wbcMAY5NFiUFL81Q_wZQ1udT2OXExS1s_8R2_kIQH9_YODe3tN28fG2hv9CE2edG5uwZJSOVO9a1IdkLgOZof5K3vNSHy7KkcBEwqJA3YqHMABigjw%3D%3D
2. https://www.aci.health.nsw.gov.au/make-it-happen/prms
3. https://onlinelibrary.wiley.com/doi/10.1111/1468-0009.12197
4. https://www.aci.health.nsw.gov.au/__data/assets/pdf_file/0005/405446/Patient-Reported-Measures-Program-Formative-Evaluation-Report_2017.pdf

2.1B: Parenting in a Pandemic - Karitane's new Virtual Residential Unit, Grainne O'Loughlin

The Virtual Residential Unit (VRU) is an innovative telehealth adaptation of Karitane's longstanding inpatient residential unit model of care rapidly developed to maintain intensive parenting support during COVID-19.

The residential unit is a best-practice tertiary child and family health service delivering specialist parenting support, assessment of child development, infant and perinatal mental health. Families work in partnership with a multidisciplinary team. Traditionally this occurs during in-person residential stays in metro Sydney for NSW families. Since April 2020, the VRU delivered intensive parenting support via multiple long video-call consultations over 3-4 days directly to clients' homes, maintaining high levels of care and support equivalent to a "virtual admission."

Karitane's centralised intake team triages referrals to determine urgency of response based on risk, distress, dysfunction, disability and protective factors including child safety protocols. Clinicians were intensively trained to deliver VRU.

VRU is aligned to Value Based Health Care principles, the First 2000 Days & the NSW Premier's Priorities 'enhancing community care with preventable hospital visits, protecting our most vulnerable children and providing services to more remote Aboriginal families'. The VRU also enables partner participation. Nurses maintain direct contact with the family to develop a therapeutic relationship, provide emotional support, exploring family functioning and psycho-social stressors and identifying areas of strengths and vulnerability for tailored support. The model is client-driven and also supports health promotion and identification of in-home risk factors, such as SIDS.

Between April-September 2020, the VRU saw 168 different families, with 75% demonstrating clinically significant gains on the Me As A Parent and Wellbeing clinical outcomes frameworks, similar to in-person services.

VRU is accessible to families in NSW and does not require travel. The NSW government announced a $10.2M commitment to VRU in the October 2020 budget over a 4-year period including an academic evaluation. It is scalable across Australia.

2.1C: Application of Value-Based principles in Orthopaedic Surgery, Sidney Chandrasiri

This presentation will highlight Victoria's largest private healthcare group's experience of the practical application of VBHC principles in redesigning our service delivery of orthopaedic surgery. We will demonstrate how the use of clinical analytics, business intelligence and frontline clinician experience and expertise was leveraged to achieve a number of improvements across operational and financial outcomes in hip and knee arthroplasties. Particular focus will be given to the governance, tools and techniques that were used to achieve best practice in orthopaedic joint surgery across theatre utilisation, ICU and rehab referral practices and length of stay improvements. We will outline a step by step approach to how VBHC elements can be successfully adapted to the Australian healthcare industry through existing technology platforms, data reporting methodologies and change management techniques.

2.1D: Quality Mental Healthcare for everyone … everywhere … every time, Sue Murray

Alignment to Conference theme:

A mental health crisis can be devastating for individuals and families. While a crisis cannot be planned, we can plan services to meet the needs of individuals experiencing a mental health crisis. An innovative approach has been demonstrated to provide consumers with care that is conducive to healing and recovery while simultaneously reducing health system costs.

Context aims and support:

Inadequate crisis care, increases costs due to unnecessary referrals to hospital emergency departments, extended inpatient treatment, hospital re-admissions or a lack of access to any services, all exacerbating symptoms. The current approach to crisis care is patchwork, delivering minimal care for some people while others fall through the cracks, resulting in multiple re-admissions, life in the criminal justice system or death by suicide.

A comprehensive, integrated crisis network is the first line of defence in preventing tragedies of public and patient safety, human rights, unacceptable loss of lives and waste of resources. Effective crisis care that saves lives and dollars requires a systemic approach. Demonstration projects in the US have shown up to a 48% decrease in costs to the healthcare system can be achieved by applying four core elements that deliver systemic quality crisis care:

- High tech crisis call centres with skilled professionals
- 24/7 non-law enforcement mobile crisis team meeting people at a place of their choosing

- Crisis stabilisation centres designed in a more homelike, non-medical environment
- Essential principles and practices governing care pathways.

Impact:
This approach is an illustration of care addressing the needs and interests of consumers as well as aligning with recommendations presented in recent reports for mental healthcare reform.

Learnings for others:
This presentation will describe this integrated system of crisis care and use financial modelling to demonstrate the value delivered, for individuals and healthcare systems.

Concurrent Session 2.2 – Cost Models

2.2A: Unintended Impacts of Insurance Benefit Removal on Physician Behaviour, Olukorede Abiona

Background:
In 2010, Australian government removed MBS items from the public insurance benefit scheme. This benefit payment reform aims to improve resource utilization by shifting attention away from low value care thereby enhancing Value-Based healthcare within Australia. We focus on the removal of the joint injection services from the benefit scheme for homogenous group of physicians whose income stream is affected.

Aim:
In this paper, we examine the unintended impacts of the removal of an item from insurance benefit scheme on provider behaviour, using general practitioners (GPs) as a case study.

Data & Methods:
We use the Sax Institute's 45 and Up study of 260,000 residents living in New South Wales, Australia. This study is linked to administrative data that provides us with an accurate picture of charging patterns by providers before and after the policy. We employ a difference-in-difference model to compare the change in billing practices, out-of-pocket costs, fees charged and benefits paid for affected GPs with those charged by other GPs who were not affected by the policy change. We benchmark the unaffected GPs by comparable MBS items to the joint injection services. This includes diagnostic biopsy, abscess removal and haematoma removal.

Results & conclusion:
The results show that compared to unaffected GPs, affected GPs substantially increased claims for medium and long consultations. There is also some evidence that they increased their fees for services and benefits claimed. GPs with larger proportion of joint injections exhibited a higher fee increase response than low-proportion GPs. Responsive increase in benefits claimed is an important policy highlight for the counteracting impact of the policy on government health expenditure. Importantly, simultaneous increase in benefits and lack of changes in patient out-of-pocket costs demonstrate the dual nature of GPs, representing both selfish and altruistic aspects. Our result has important implications on the unintended consequences of reforms.

2.2B: Reducing out-of-pocket expenses and optimising cancer care through bundled packages, Antonia Dalton

Background
In the current landscape of high out-of-pocket expenses experienced by some people undergoing cancer diagnosis and treatment, particularly those with private health insurance (PHI) there is a growing need for novel approaches to PHI packages of care.

Objectives
This innovative pilot project aims to develop and test a new bundle of care/payment business model for women diagnosed with non-metastatic breast cancer undergoing treatment with curative intent during the first year of primary cancer treatment.

Methods
Clinicians, consumers, service providers, researchers, health economists, public health experts, health finance experts, and private health insurers are collaborating to define care pathways and care/treatment decision points; map the disease process; categorise and cost clinical/treatment procedures and processes; and develop appropriate bundles of care. Clarification of treatment decision points has been undertaken and the basic bundles of care costed with a known out-of-pocket expense for implementation. Clinical and patient-reported outcomes data will be captured via the CIC Cancer informatics system. Additionally, patient experience will be measured using the All.Can questionnaire.

The implementation of the bundled care packages will be evaluated using the Continuous Improvement in Care – Cancer (CIC Cancer) Project data platform. CIC Cancer is a multi-institutional program of research that seeks to bring Value-Based health care (VBHC) to public and private healthcare settings in Western Australia (WA).

Impact
This bundle of care/payment model offers known out-of-pocket expenses for a care pathway for women who hold private health insurance and are treated within the Perth Specialist Breast Care service. The impact of transparency and certainty of out-of-pocket costs on clinical and patient reported outcomes and patient experience will be measured.

Learnings
This modelling brings together PHI industry, health care providers, women diagnosed with breast cancer, and researchers and will provide an exemplar of Value-Based health care delivery within Australia.

2.2C: VBHC and digitisation of healthcare: Dealing with outdated accounting models, Gillian Vesty

Purpose – Activity-based funding and the ‘average’ hospital of the 1990’s new public management practices are limited when non-standard patients are the norm and individualised, technologically enhanced value-added care is being called for. We call for accounting to participate in supporting innovative performance evaluation and improved business models that are aligned with shifts toward patient-centric and value driven healthcare.

Methods – Field interviews are held with clinicians, accountants and administrators across several large public hospitals in Australia on their experiences with evaluating digital innovations for investment decisions. Interviews are supported with secondary data provided by a further large teaching hospital in Australia on patient mix choices. The field research and narratives offer insights and issues relating to value and valuing and managing reforms for the post-COVID-19 future of accounting in the hospital setting.

Findings – Our research indicates that the complex diagnosis-related group hospital funding models operate as a black box, with limited clinician understanding and accounting expertise. We explored the impact of medical (stroke rehabilitation) interventions on performance evaluation, funding and investment model designs and provide insights that support clinician calls for accounting change. We found a dearth of suitable performance measures linking to Value-Based healthcare initiatives and outcomes. Without adequate performance measurement and cost-benefit analysis of digital health innovations, dealing with disruptions, such as COVID-19, is challenging.

Implications – Accounting’s role in supporting digital health innovations and Value-Based healthcare calls will enhance the flexibility of an outdated healthcare system. Without adequate performance measurement systems and cost-benefit analysis, the digital health initiatives will remain outside the operational funding and investment models. This study explores public healthcare transition toward VBHC and contributes to government policy changes. New approaches that incentivise population health and wellbeing while freeing up the hospital infrastructure is essential for the new normal that COVID-19 brings to this setting.

2.2D: Multi-perspective considerations when choosing an optimal VBHC cost/benefit model, Matt Hickey

Inconsistencies in the design, delivery and payment are inherent in cancer care, resulting in the current care ‘ecosystem’ becoming unviable. The concept of ‘Value-Based healthcare’ has existed for decades and is commonly referred to as a balance between health outcomes and financial inputs. However, there is still no common multiple-stakeholder applicable model defining the components which make-up VBHC.

The Health Value Alliance aims to develop a new VBHC model - an Outcomes, Cost, Risk, Value (OCRV) Matrix, to:

1. define the core multi-stakeholder components which make-up VBHC
2. support the evaluation of outcome and value erosion
3. highlight the effect an optimal VBHC outcome by one stakeholder as has on others.

Intacare used AI to analyse six-years of clinical and PROMs data (92 questions) from a cohort of men (n=138) receiving prostate brachytherapy. Analysis identified three clinical features and eight symptoms as being associated with individuals who needed additional clinical care, with needs peaking at one-year post treatment.

Multi-source cancer care data was then analysed with AI-based pre-processing enabling categorisation and correlation. This resulted in identification of four core categories with 443,000 sub-measures (including timing and importance) and identification of over 42-million relationships between the data fields.

The development of an OCRV matrix ultimately requires critical mass of high quality, standardised data from each stakeholder across sufficient time (5-years minimum, in line with 5-year survival curves) to enable robust correlation models to be developed and validated.

The HVA has access to multi-source data covering the majority of the defined data across the cancer care continuum. Multiple models utilising advance pre-processing and machine-learning will be applied, with the dataset becoming more structured and robust over time. Presentation models will present core outcomes and value components across the categories, their relationships and highlighting where an optimal OCRV balance is struck between stakeholders

Concurrent Session 2.3 – Learning Together

2.3A: Learning together: Engaging healthcare providers and students in quality improvement, Donna Mak

Over 90% of final year medical students at the University of Notre Dame, Fremantle, Australia (Notre Dame) undertake a clinical audit capstone project. Completion of the audit demonstrates their understanding of ‘a systems approach to improving the quality and safety of health care’ which is one of the Australian Medical Council’s accreditation standards for primary medical education programs.

Participating health services identify the clinical audit topics that they want students to work on under the supervision of a clinician. This ensures that students contribute to the health service’s quality improvement priorities. Students complete all steps of the audit process including identifying an evidence-based SMART standard and designing a data collection tool and analysis plan. The proposal's scientific validity is assessed by a university academic, and its practical feasibility approved by the clinical supervisor and the health service's Clinical Quality and Safety Committee before implementation. Students then collect and analyse data, report findings and work with the health service to formulate an action plan.

Since its establishment in 2008, health service participation in the program has grown from a handful of metropolitan teaching hospitals to more than 20 public and private hospitals, and primary health care services in rural and metropolitan WA. Many student audits relate to responsible stewardship of health resources and align closely with *Choosing Wisely* topics, e.g. appropriate use of antibiotic prophylaxis, ordering of blood cultures, blood management, opiate prescribing.

Health services value the students' scientifically rigorous audits and use them to drive health service improvement; medical graduates report the program makes them work-ready to undertake and lead quality and safety activities. Audits are presented at peer-reviewed conferences, enabling students and their supervisors to advocate for quality improvement.

The program could be implemented in other under- and post-graduate medical, nursing and allied health education courses.

2.3B: COVID-19 Recovery: Implications for retaining high-value changes to cancer care, Carolyn Der Vartanian

Alignment to conference themes
The COVID-19 pandemic has presented an accelerated opportunity to enhance healthcare practices. Cancer care during the pandemic required changes to balance the risk of exposure to, and harm from, SARS-Cov-2 infection for patients and clinicians, against the benefits of treatment and the optimal use of health system resources, while maximising patient outcomes. In the recovery phases of the pandemic, it is important to retain and enhance new or modified Value-Based healthcare practices adopted during the pandemic.

Context, aims and support
Cancer Australia undertook a desktop evidence review of published peer-reviewed and grey literature, and sought input from cancer control experts and consumers, with the aim of understanding changes to cancer care prompted by the pandemic. Twelve core elements of cancer care which changed during the pandemic were identified, many reflecting more efficient or appropriate modifications to patient care, within the context of pandemic-related restrictions.

Strategies to embed high-value changes into practice which leverage the efficiencies or improvements gained during the pandemic to potentially improve the quality of patient care were also identified. Efforts across the cancer control sector to implement strategies at the system-, service-, practitioner-, and patient-level will be critical to driving quality and Value-Based improvements in cancer care.

Impact
The health system demonstrated its ability to rapidly adapt or modify care delivery to meet the needs of cancer patients during the pandemic. Strategies have been identified to build upon or further enable high-value changes during the recovery phase.

Learnings for others
The pandemic has prompted adoption of new or modified healthcare practices of long-term value in improving quality and resilience in cancer care. Cancer Australia's *COVID-19 Recovery: Implications for cancer care* report includes various targeted strategies to prompt considerations and future approaches to support high-value cancer care in the Recovery phases of the pandemic.

2.3C: Collaborative Commissioning: Delivering 'One Western Sydney Health System', Ray Messom

Background & Aims

Collaborative Commissioning is a whole-of-system approach designed to enable and support delivery of Value-Based health care in the community. It aims to incentivise locally developed integration of care across the entire continuum of care, embed local accountability for delivering value-driven, outcome-focused and patient-centred health care.

Methodology

Joint commissioning is not new to Western Sydney. WentWest (Western Sydney PHN), Western Sydney Local Health District (WSLHD) and Sydney Children Hospital Network have jointly commissioned services into areas of need for the last 5+ years. Programs such as Integrated Care, Service Delivery Reform, Patient Centred Medical Homes and Western Sydney Diabetes have fostered local collaboration and piloted reform initiatives.

Regional led collaborative commissioning with ongoing appropriate government support and flexibility to enable relentless pursuit of outcomes for patients, enables local joint commissioning to be scaled system wide. WSPHN and WSLHD have established a Patient Centered Collaborative Commissioning (PCCG) governance structure – clinicians, GPs, consumers and administrators working together across primary, community and acute care sectors to reimagine what value-based healthcare could look like with patients at the centre and NGOs, public and private providers working together towards a common aim.

WSPHN & WSLHD are now leading a full system wide implementation of 2 new innovative models - Value Based Urgent Care and Cardiology in Community. These models build on past program successes and more recently a collaboratively commissioned COVID-19 response including co-funded, delivered COVID-19 assessment, testing clinics and commissioning General Practice to manage low to moderate risk COVID-19 positive patients in community. Integrated data sets enable transparency in co-delivery and reporting on outcomes in real time to continually inform implementation.

Conclusion

The presentation will overview the journey to establish the PCCG in Western Sydney, completed service design, cost benefit analysis and sustainability model as well as implementation learnings to date.

2.3D: Understanding clinical variation: your roadmap to improving care, Helen Francombe

For decades Australia has had a strong focus on safe and high quality health care. The National Safety and Quality Health Service (NSQHS) Standards provide a framework to ensure systems are in place to meet minimum requirements for safety and quality. But how do we ensure that the care provided is appropriate? The Australian Atlas of Healthcare Variation series demonstrates that some people are missing out on the care they need or are not receiving appropriate care. The Clinical Governance Standard in the NSQHS Standards creates an organisational imperative to improve the appropriateness of care. Action 1.28 requires health service organisations to review performance in comparison to other health service organisations and to evidence-based guidelines. By collecting and reviewing data on clinical care processes and outcomes, health services can identify potentially unwarranted variation, and improve the appropriateness of care and outcomes for patients.

Health service organisations that need to meet the requirements of NSQHS Standards as part of their accreditation now need to focus on examining healthcare variation. This means that there are checks and balances at an organisational level to ensure that patients are receiving the right care, and the right amount of care according to their needs and preferences, at the right time. As health service organisations become more sophisticated in establishing systems and processes to examine clinical variation, improvements in evidence-based care and appropriateness of care will follow.

Case studies will be presented demonstrating how health service organisations can: select priority areas to investigate; determine how clinical variation will be assessed; measure variation and review performance; explore reasons for variation; and ultimately act to improve care. These will include lessons learned within the context of continuous quality improvement.

Concurrent Session 3.1 – Transformation of Care

3.1A: Value in action: case-studies from Victoria's largest community-health service, Matthew Teran, Em Taylor & Firdos Saleh

cohealth, a community health organisation operating across north-west Melbourne, is building the future of healthcare. Two years into a radical transformation journey, we're improving patient health outcomes whilst reforming internally for financial sustainability. Two practical case studies highlight what we've learnt so far.

First, cohealth's innovative model of care for people who are COVID-19 positive has been central to Victoria's pandemic response. Cohealth provided primary care to the residents of the high-rise public housing towers under hard lockdown – more than 90% of patients were managed in the community with only a small proportion being admitted to 'virtual wards' of Melbourne's hospitals. We continue to deliver infection control supports and primary care services in 25+ towers, as well as COVID-19 prevention and preparedness activities at hundreds of high-risk accommodation facilities.

Second, cohealth has reorganised care around our patients' diverse needs by investing in bicultural workforces. Bicultural workers use their cultural knowledge, language skills, lived experience and community connections to elevate community voices, co-design and deliver programs, share information and facilitate cultural safety. They provide a vital 'cultural bridge' between mainstream services and their communities, thereby supporting better health outcomes for clients and improving the delivery of services.

The lessons these case-studies offer to others implementing VBHC initiatives will be explored, along with the ongoing challenge of integrating and scaling insights within cohealth's operations. The role of deep connections with at-risk populations will be highlighted as a critical factor to realising the promises of VBHC.

3.1B: Measuring value in maternity care: Feasibility of a Standard Set, Valerie Slavin

ALIGNMENT TO CONFERENCE THEMES

We implemented, tested and refined the International Consortium for Health Outcomes Measurement Standard Set for Pregnancy and Childbirth (ICHOM - Pregnancy and Childbirth) designed to measure value in maternity care. This research aligns with the "enablers" theme by providing evidence about implementation tools.

CONTEXT, AIMS AND SUPPORT

Unwarranted variation in clinical practice contributes to inconsistent perinatal outcomes and poor quality maternity care. Value-based healthcare can address unwarranted variation and drive quality improvement but requires systematic and rigorous measurement of outcomes and costs. Traditional maternity measures are insufficient. The ICHOM - Pregnancy and Childbirth bridges this gap however the quality and feasibility of this Standard Set was untested presenting a potential barrier to implementation.

We evaluated the validity, reliability and feasibility of the ICHOM - Pregnancy and Childbirth. Two systematic reviews were conducted to: (1) evaluate the quality of ICHOM – Pregnancy and Childbirth1, and (2) evaluate the psychometric performance of the included patient-reported outcome measures (PROMs). Evidence regarding five PROMs were lacking.

A prospective study was conducted in one Australian hospital (N=309). Pregnant women completed five online surveys at prescribed times from booking to six-months postnatal. Five studies were conducted to evaluate the psychometric performance and refine the tools 2,3,4,5,6. A 6th study evaluated the feasibility of ICHOM – Pregnancy and Childbirth. Findings supported the inclusion of all but one of the included PROMs, with some refinements and recommendations. High response rates, survey completion and retention rates supported feasibility of the Set.

IMPACT

Universal embedding of the ICHOM – Pregnancy and Childbirth into routine clinical practice will inform Value-Based healthcare and drive quality improvement.

LEARNINGS FOR OTHERS

The revised ICHOM Pregnancy and Childbirth is a robust Set, developed using reasonable methods and is acceptable to women. Further research is needed about optimal implementation in the real-world setting.

1. Slavin, V., Creedy, D. K., & Gamble, J. Core outcome sets relevant to maternity service users: a scoping review. Journal of Midwifery and Women's Health. Accepted 22nd October 2020.
2. Slavin, V., Gamble, J., Creedy, DK. & Fenwick, J. (2019). Perinatal incontinence: Psychometric evaluation of the International Consultation on Incontinence Questionnaire-Urinary Incontinence Short Form and Wexner Scale. Neurourology and Urodynamics. 38(8), 2209-2223.
3. Slavin, V., Gamble, J., Creedy, DK. & Fenwick, J. (2019). Measuring physical and mental health during pregnancy and postpartum in an Australian childbearing population. Validation of the PROMIS Global Short Form. BMC Pregnancy and Childbirth. 19 (1), 1-19.
4. Slavin, V., Creedy, DK. & Gamble, J. (2020). Benchmarking outcomes in maternity care: perinatal incontinence - A framework for standardised reporting. Midwifery. 102628, 1-11.
5. Slavin, V., Creedy, D. K., & Gamble, J. (2020). Comparison of screening accuracy of the Patient Health Questionnaire–2 using two case-identification methods during pregnancy and childbirth. BMC Pregnancy and Childbirth, 20: 211.
6. Slavin, V., Creedy, D. K., & Gamble, J. (2020). Single Item Measure of Social Supports: Evaluation of construct validity during pregnancy. Journal of Affective Disorders, 272, 91-97.

3.1C High Risk Foot Services from pilot to NSW systemwide scale, Gary Disher/Liz Hay

Foot ulceration is a leading cause of hospitalisation for people with diabetes, accounting for more than 35,000 inpatient episodes annually in NSW. A portion of these are preventable. Between 2012 and 2015, Average Length of Stay for diabetic foot hospitalisations was 9 days. Cost growth was 44% per annum.

Building on work of clinicians at Sydney Local Health District, NSW Health Diabetes and Endocrine Network developed Diabetic Foot Advanced Wound Care Core Competencies (2012), and Standards for High Risk Foot Services (HRFS) NSW (2014).

A pilot implementation of the Standards showed over 80% of diabetes foot admissions were for low acuity ulcers and infections that could more readily be treated in multidisciplinary out-patient HRFS.

With the introduction of statewide priority Leading Better Value Care program, number of HRFS across NSW increased from 15 in 2017 to 37 in 2019. There were just under 10,000 visits to out-patient HRFS in 2015-16 and more than 35,500 in 2018-19.

HRFS likely to have contributed to reduction in admissions for ulcers and infections:

- 78% out-patients rated the HRFS care they received as very good (64% admitted patients)

- 85% out-patients speak highly of their HRFS experience to friends and family (75% admitted patients).

Shifting care to out-patient settings, over two years HRFS generated $60M capacity system-wide. This capacity can be used to fund other key priorities or address other fiscal issues.

Four elements have been critical to implementation:

1. Collaboration across three levels of NSW Health – System Manager, Implementation Support and Local Implementation
2. Strong case for change and local data identifying the scale of the problem
3. Economic appraisal to understand potential benefits and support the 'invest to save' approach to funding support
4. A 'Tight–Loose–Tight' approach to implementation

Future work: understand what is required to scale, embed and sustain to reach greatest proportion of patients?

3.1D: Mental Health Shared Care for Sydney Local Health District Consumers, Petrina Rimmer/Laura Garcelon

People living with severe mental illness have poorer physical health and receive less and lower quality health care than the rest of the population1. They experience a significant premature mortality rate, largely from preventable chronic physical health conditions2. Immense personal and social costs are incurred. With regards to economic impact, "the cost of comorbidities associated with premature death in those with serious mental illness is estimated to have been (AUD) $15.0 billion (0.9% of GDP)"3.

Sydney Local Health District in partnership with the Central and Eastern Primary Health Network has developed an integrated care strategy to address this; Mental Health Shared Care (MHSC).

MHSC improves communication and care integration between the consumer, GP, and mental health service (MHS), setting clear lines of responsibility. With mutual consent, the consumer, care coordinator and GP meet and use a checklist to review care and goals. MHSC prompts a GP annual physical health review, informed with relevant clinical information from the MHS. Peer support workers underpin this process and have actively contributed to the model of care from inception.

Over 700 consumers from 10 mental health teams have a formalised MHSC agreement, involving over 315 GPs. To date, 71% of these consumers have received their annual physical health check. To develop the model of care baseline data (mixed) was gathered from all stakeholders, with further evaluation in development.

Enablers include a standardised checklist which can be embedded into GP practice software, three funding streams (Integrated Care, PHN & LHD) and two dedicated shared care clinicians. A steering committee with wide representation, chaired by the MHS Clinical Director, meets monthly to provide clinical governance, review performance and plan for growth. Future program directions include virtual appointments and a secure accessible shared care plan. We will outline challenges, successes, scalability and future focus.

1. National Mental Health Commission. Equally Well Consensus Statement: Improving the physical health and wellbeing of people living with mental illness in Australia. Sydney NMHC, 2016.
2. 2 World Health Organisation. (n.d.) Information sheet: Premature death among people with severe mental disorders. https://www.who.int/mental_health/management/info_sheet.pdf

3. 3 RANZCP. 2016. The economic cost of serious mental illness and comorbidities in Australia and New Zealand. https://www.ranzcp.org/files/resources/reports/ranzcp-serious-mental-illness.aspx

3.1E: Minimally Invasive Dentistry improves the oral health of young children, Peter Arrow

The innovative approach to treat dental caries in young children has the potential to reduce the need for its management by specialists under dental general anaesthesia and improve access to dental care.

Western Australia (WA) leads the rate of hospital admission for dental treatment and the rate is increasing. Admissions for dental treatment are considered potentially preventable hospitalisations. We undertook clinical trials that tested the minimally invasive approach to dental care for young children in WA. The traditional approach to treat dental decay in children's baby teeth of removing decay through the use of the dental drill after administration of a local anaesthetic is now being increasingly questioned. An innovative treatment approach in children <6 years of age using only hand instruments to remove dental decay and the prepared cavities restored with a glass-ionomer cement or a stainless steel crown, without the need for a local anaesthetic, was tested in a number of settings.

The treatments were provided by dental therapists and the approach reduced the need for a specialist referral by 45% when compared with standard care practice (local anaesthesia and use of the dental drill) and was able to manage the dental treatment needs of 90% of children recommended for dental general anaesthesia. The approach was also tested in remote Aboriginal communities in WA. The approach was able to provide more treatment to more children and also reduced the occurrence of new decay among the children treated using the minimally invasive approach. Focus group interviews indicated that the key to the success lay in minimally invasive approaches facilitating the application of child-centred care.

The approach can easily be scaled up by providing further training to practising clinicians and enhancing the skills of the clinicians in child-centred care.

1. Best-practice prevention alone or with conventional or biological caries management for 3- to 7-year-olds: the FiCTION three-arm RCT. Maguire A, Clarkson JE, Douglas GV, Ryan V, Homer T, Marshman Z, McColl E, Wilson N, Vale L, Robertson M, Abouhajar A, Holmes RD, Freeman R, Chadwick B, Deery C, Wong F, Innes NP. Health Technol Assess. 2020 Jan;24(1):1-174.

3.1F: Evaluation of an audiology-led retrocochlear clinic across 6 years, Caitlin Brandenburg

Introduction:

Allied health professional (AHP) first-point-of-contact clinic models have been shown to be an effective and safe strategy to increase public health capacity and reduce overall wait times. In these clinics, AHPs assess, manage and discharge appropriate, low-risk patients on medical/surgical outpatient waitlists with minimal input from specialists.

In Australia, patients with suspected retrocochlear pathology are usually referred to ENT specialist clinics, and only 1-2% will receive a positive diagnosis. Audiology-led screening has been implemented in some clinics to reduce demand on ENTs, supported by a small amount of research evidence. This study aimed to expand on this, by evaluating the clinical and health service outcomes for an audiology-led adult Retrocochlear Clinic using a large clinical cohort across a 6 year period.

Design:

This retrospective cohort study included all patients referred to an audiology-led Retrocochlear Clinic in Queensland, Australia from 2013 to 2019 (n=1123).

Results:

Almost three-quarters (73.7%) of patients referred to the Retrocochlear Clinic were able to be discharged without need for separate consultation with an ENT. Of those discharged, only 1.8% were re-referred to the ENT clinic within 12 months of discharge, with only one patient for the same reason as the original referral. There were no adverse events reported. Waiting times significantly ($p<0.001$) decreased from a median of 748 days to 63.5 days over the 6 years. There was also a significant ($p<0.001$) improvement in attendance rates from 52.2% to 90% over that time. The proportion of patients seen within clinically recommended timeframes increased from under 15% at the clinic's inception, to over 90% within 3 years for routine patients and within 4 years for semi-urgent patients.

Conclusion:
An audiology-led Retrocochlear Clinic is a safe and effective alternative service model which was able to independently manage the majority of its referrals and contribute to reduced waiting times.

Concurrent Session 3.2 – Patient Communication

3.2A: Transforming VBHS through Choice: Consumers, Clinicians, Collaboration, Communication and Choice, Jamal Hakim

Over the last three years, we've been on a collaborative journey with health consumers and clinicians that has led to a Value-Based healthcare approach. In 2017, Marie Stopes Australia engaged the Australian National University to develop research focused on increasing understandings of consumer expectations and experiences. This seemingly straightforward engagement took an interesting and somewhat unexpected path. As the research unfolded, innovation took over, and a notion of optimising each consumer's choices, experience, and outcomes became the goal.

This new aim seemed clear-cut, but as we unpacked the concept, the complexity was apparent. The approach required more than a consumer survey; it required a novel methodology that combined research methods, clinical protocols, consumer choice and intersectionality, and a better understanding of technology. The research changed from an engagement between a service provider and a university to a true collaboration, signalling a shift in the delivery of care towards a whole-system approach that we've aligned with the Value-Based healthcare movement. Having had this realisation, we thought things would be easier – we had a new method, measures, a clinical protocol strategy, and technological options. What we underestimated was people.

The "onboarding" process has been by far the most resource-intensive. We set up a reference group and went on an eye-opening journey. Throughout this period, the organisation evolved to better understand, challenge and activate the role of values, and the associated behaviours that underpin a transformation towards person-led and values-based healthcare. The pandemic accelerated this transformation, with clearer interplay between safety and how multi and inter-disciplinary teams can collectively deliver evolving models of consumer-centred care under extreme conditions. The 5cs have been critical to implementation success – bringing consumers and clinicians with us through collaborative networked governance structures that are driven by a hybrid human-centred design and clear, responsive and inclusive communication.

3.2B: Health literacy responsive waiting areas: barriers, enablers, and consumer ideas, Cassie McDonald

Context:
Health information, resources, environments and supports for consumers accessing health services can benefit health literacy if they are patient-centred, accessible and appropriate. Health information, resources and supports in hospital waiting areas are rarely being accessed or used by consumers. This may represent waste: in terms of costs and time for health services in developing and providing health information and resources which are not useful to or used by consumers.

Aims:

This study aimed to investigate the barriers and enablers to accessing and engaging with health information, resources and supports and describe consumers design ideas for a health literacy responsive waiting area.

Methods:
Multi-centre study conducted in waiting areas at two major, tertiary hospitals. Semi-structured interviews with adult consumers attending appointments for any health condition. Framework analysis method was used to analyse data.

Results:
This study identified six themes which explained barriers and enablers from the perspective of consumers. The barrier themes were: 1) accessibility issues; 2) personal factors; and 3) poorly presented and outdated resources. The enabler themes were: 4) design suits consumer needs and preferences; 5) usable in available time or portable; 6) compatible environment for engaging and sharing. Consumers' shared design ideas which fit within four typologies.

Conclusions:
This study demonstrated that a range of barriers and enablers exist which impact on consumers' ability to engage with available health information, resources and supports. The empirical findings represent innovative, evidence-based strategies which will be implemented at the participating health services and are transferable to other health services. Creating accessible and usable health information, resources and supports can contribute to consumers' health literacy and reduce waste caused by disused or poorly designed resources.

Learnings:
Next time it would be ideal to also cost the available resources. Partnerships with consumers should be formed to design health literacy responsive health services.

3.2C: Value in Orthopaedics: Patient Choice Based on Clinical Performance, George Faithfull

Joint replacement patients are dependent on advice from their Orthopaedic surgeon as to the most appropriate choice of implant for their treatment. Patients are usually unaware of what choices there are, and rarely press for information they may not understand. Data on long-term outcomes are critical for the patient when choosing which prosthesis would provide the most value.

A significant percentage of surgeons don't consistently choose from the top clinically-superior implants, despite annual publication of the AOANJRR - a long-term, independent, comprehensive clinical quality registry. State tenders base decisions on price rather than referencing this critical information in determining which prostheses are chosen for government subsidy. Economic research has demonstrated significant savings when registries guide surgeon choice.

Early, unexpected revision of joint implants leaves patients with poorer prognosis and quality of life. A revision procedure and the greater ongoing care required, is also a significant economic cost to the healthcare system.

There is an appetite to address such issues: Getting It Right First Time began in the UK and is now piquing interest in Queensland. Choosing Wisely Australia has 5 questions to effectively overcome the doctor-patient communication reticence barrier. Encouraging the former with Orthopaedic professionals and State tenders, and providing patients with strategic Orthopaedic questions based on the AOANJRR for the latter, would be innovative, collaborative and an enabler of value for both patient and healthcare system. These programs can be specifically purposed to address these issues and catalyse value for patients and the healthcare system in one of its largest segments.

Decisions using the most successful long-term joint registry data would benefit more patients, and significantly save healthcare costs: the epitome of Value-Based healthcare.

3.2D: How patients feel about the collection of PROs, Emma Gardiner

Context/Aims/Support/Alignment to VBHC

Lung cancer has the highest rate of mortality of all cancer and is the second most common carcinoma internationally. Research into what is important to patients in their cancer care is being conducted by the Continuous Improvement in Care - Cancer (CIC Cancer) Project. This research seeks to improve patient outcomes through the integration of patient reported outcome (PRO) measures into standard clinical care provided in both a public and private hospital setting.

A sub-study of CIC Cancer was undertaken to explore patient views about the importance of PRO measurement in the management of lung cancer patients and their preferred way for completing the questionnaires. Patients were asked if they think the PRO surveys they complete at baseline, 3, 6, and 12 months capture their main symptoms and health concerns well. Participants were also asked how they preferred to complete the survey: phone, mail, email or whilst waiting for an appointment. Participants took part in a recorded interview and feedback was analysed to find out what is important to them.

Impact

This study has provided initial information on how lung cancer patients best engage with different ways of PROMs collection. Other early themes of patient responses include; patients finding the standardised questionnaires adequately encompass their symptoms, time from diagnosis to treatment is timely, and patients feel more supported in their cancer care needs through open communication with their healthcare workers and with adequate follow up.

Learnings

This research will identify patient views of PROs and how these can be used effectively in routine clinical practice.

3.2E: VBHC will not work effectively without real-time patient voice, Blaik Wilson

Value-based healthcare (VBHC) systems are patient-centric in their approach. The best measures of outcomes and experience comes from the patient. They should be partners.

We demonstrate that using real-time Patient-reported experience measures (PREMs) and Patient-reported outcomes measures (PROMs), alongside engaged health providers, are effective tools to capture, and utilise powerful insights from patients, enabling a sustainable VBHC system.

Southern Cross Health Insurance (New Zealand's largest health insurer) are on their VBHC journey, proactively moving from ‘paying for components of healthcare’ to ‘focusing on outcomes-based payments and good quality experiences’ that are important to their members. Health professionals are also adopting these measures to improve clinical practice and outcomes.

The patient’s perspective of their own health and wellbeing and their assessment of services they received are vital for effective VBHC. We use the patient voice in collaboration with providers to improve recovery, quality-of-life (QoL) and enable VBHC systems that are patient-centric and operationally efficient.

Bache demonstrated a QoL improvement of 31%, fewer ED visits, and absolute survival benefit of 8% in advanced breast cancer[1].

The real-time access of patient-reported PROs to recognise excellent performance, identify specific areas for refinements and measure the impact of VBHC strategies implemented also directly benefit organisational culture, productivity, and financial performance. A superior customer experience also correlates higher margins.

The continuous capture of real-time patient-reported measures will become the heartbeat of an effective VBHS.

- The voice of the patient has been the key missing part of a value-based health system.
    - VBHC = Patient-Centric-Care = Patient-Reported-Measures
- A VBHC systems performs better when enabled patient voice is used as a leading indicator.
- Clever technology now means that real-time PROs is much more accessible, scalable, and cost-effective.
- Technology has developed to allow for scalable, smart, and ongoing real-time measurement of the voice of PREMs and PROMs.

1. Basch et al JAMA 2017

3.2F: Simulated Patient Care Conversations: A Goals of Patient Care Workshop, David White

Establishing goals of patient care (GoPC) is key to delivering high-quality value-based care in an inpatient setting. Earlier GoPC discussions are associated with reduced readmission rates among frail patients1, fewer unwanted intensive medical interventions and better quality of life near death2. An audit of junior doctors at a tertiary teaching hospital in Western Australia (WA) found most clinicians do not receive specific GoPC communication training which was a barrier to having GoPC conversations. To address this an innovative workshop was developed, with institutional COVID-19 response funding, to improve clinicians' confidence in discussing GoPC.

Eight workshops were delivered from May-June 2020 for critical care, emergency and medical registrars. Two experienced facilitators conducted the workshop with a trained actor performing the role of a simulated patient. Pre-readings, instructional videos & an introductory presentation outlining the ICE & REMAP communication frameworks3 were delivered to participants who then implemented these in clinical scenarios with the actor role-playing as a patient or family member. Feedback was delivered to participants using the agenda-led outcome-based analysis approach4.

56 clinicians participated in the workshops, completing an evaluation survey rating their confidence in different communication skills relevant to GoPC discussions. There was a mean improvement in confidence in communication skills of 35.3% (p<0.001) among participants following the workshop which was maintained at 2-months follow-up (p<0.001). All participants (56/56) reported they would recommend the workshop to a colleague, and 65.5% (19/29) went on to share their learnings with other clinicians following the workshop.

This workshop is the first in-hospital acute care communication skills training in WA to successfully demonstrate that the use of a simulated patient and expert facilitator are effective in improving clinician's confidence in their communication abilities when discussing GoPC. A train-the-trainer approach will allow for sustainability and potential for expansion to include nursing and allied health staff.

1. Simpson N, Milnes S, Martin P, et al. iValidate: a communication-based clinical intervention in life-limiting illness. BMJ Supportive & Palliative Care 2019:bmjspcare-2018-001669.
2. Mack JW, Cronin A, Keating NL, et al. Associations Between End-of-Life Discussion Characteristics and Care Received Near Death: A Prospective Cohort Study. Journal of Clinical Oncology 2012;30:4387-95.
3. Childers JW, Back AL, Tulsky JA, Arnold RM. REMAP: A Framework for Goals of Care Conversations. Journal of oncology practice 2017;13:e844-e50.
4. Kurtz SM, Silverman J, Draper J. Teaching and Learning Communication Skills in Medicine: Radcliffe Pub.; 2005.

Concurrent Session 4.1 – Implementation Approaches

4.1A: Sustainable Chronic Condition Services in Country WA, Lindsay Adams

People with long-term chronic conditions (CC) are the most frequent users of the health care system in Australia. The WA Country Health Service (WACHS) Chronic Condition Care Coordination Service (CCCCS) is a client centred, interagency approach that provides education, supports engagement with primary health and builds individual patient self-management capacity: improving health outcomes, health experience and reducing preventable hospitalisations.

Funding uncertainty presents a risk to continuous provision of services to people with complex CC at increased risk of re-presentation to hospital. Collaboration between WACHS Business Performance and Improvement and the WACHS Central Office CC team, with vital input from regional CC staff, has seen the realisation of a value based care funding (VBC) model which provides additional CC Care Coordinators and administrative staffing to expand the CCCCS in three WACHS regions.

The combined skills of these teams in performance and finance, data analysis and reporting, understanding the whole CC patient journey, and collaboration with primary care has supported the initial success of the CCCCS and subsequent VBC model.

These same stakeholders partnered to develop a Chronic Condition Dashboard that identifies target patients in real time on presentation to hospital and allows continuous patient and service level evaluation. Improved patient outcomes demonstrated by Dashboard data (reduced ED attendances, length of stay and inpatient re/admissions) have provided additional evidence for WACHS Executive and trial regions to support adoption of the VBC funding model. Integration of more formal patient reported outcomes would further support evaluation and service model development.

This VBC model is informed by the Victoria HealthLinks: Chronic Care Model1 and provides an opportunity to create a sustainable funding framework to support patient centred care with value based rather than activity driven outcomes. This will help more people with chronic conditions better manage their condition and stay well at home.

1. Department of Health and Human Services, Victorian Government. HealthLinks Chronic Care evaluation: Summary of implementation and outcomes for 2016-17. (2019). Available from https://www2.health.vic.gov.au/primary-and-community-health/integrated-care/healthlinks

4.1B: KAHAS- A joint approach to implementing VBC in arthroplasty, Chris Hanna

The Knee And Hip Arthritis Service (KAHAS) was developed in partnership between the Northern New South Wales Local Health District (NNSWLHD), North Coast Primary Health Network (PHN), local GPs, visiting Orthopeadic Surgeons and patients. The clinic provides a patient focused service for patients with knee or hip osteoarthritis.

In NNSWLHD, the demand for joint replacement surgery was rapidly exceeding capacity. Osteoarthritis is linked to hip and knee pain, however excessive weight, weakness, stress and environmental factors also contribute to pain and reduced function. Substantial evidence exists for non-operative management of the osteoarthritic hip and knee prior to considering surgery (ACI, 2020). However, limited access to health and lifestyle assessment and services for non-operative management of joint pain means this chronic condition is often poorly managed by pharmaceuticals and long waiting periods for specialist review and surgery. KAHAS provides seamless, person centred care through partnership across primary and public service providers. Timely and evidence-based assessment and intervention is provided to reduce pain and reverse functional decline, and where appropriate, avoid joint surgery. Emphasis is on patient empowerment through better understanding of their condition and support for self-management. Timely communication between the healthcare team has been enhanced using a secure electronic messaging service. This has allowed the service to be built around the patient and their preferences.

Following a successful trial at one site, KAHAS has now been rolled out across the LHD, with interest from other Health Services in adopting the model. Over 1500 patients have commenced with KAHAS, with significant reductions in pain (pre-5.44, post-3.91), improvement in function (pre=23.9, post-28.9) and in patients not wishing to proceed to surgery (70%).

The service shows that early comprehensive assessment and evidenced-based intervention, strong communication and patient-centred practice produces value in healthcare. NNSWLHD has implemented a VBC governance structure to develop future initiatives.

1. ACI. 2020. Osteoarthritis Chronic Care Program Model of Care. retrieved from https://aci.health.nsw.gov.au/__data/assets/pdf_file/0003/165306/Osteoarthritis-Chronic-Care-Program-Mode-of-Care-High-Resolution.pdf

4.1C: Implementing a value-based model in robotic colorectal surgery, Sidney Chandrasiri

The current debate across Australia as to whether Robotic assisted surgical platforms should be introduced and/or expanded has been featured for a number of years. Demonstrating a favourable balance between the clinical benefits versus the significant cost impositions has been challenging across many surgical specialties. Whilst some clinical benefits have been shown in select areas such as prostate cancer surgery, there is limited evidence of real clinical and cost benefit across most surgical procedures for which robotic platforms are increasingly becoming commonplace. This presentation will discuss our journey of adopting a value-based modelling approach to identifying key clinical, operational and financial variances in the delivery of robotic and non-robotic hemicolectomy surgery. We will cover how VBHC principles were incorporated into our clinical services planning of robotic hemicolectomies, techniques that were effective in engaging colorectal surgeons with value-based care models and how VBHC elements were used to change clinical practice to introduce tangible financial and clinical outcome improvements.

4.1D: Evaluation of Program Improving Health of People with Mental Illness, Andrew Simpson

People living with severe mental illness live 14-23 years less than the population average (1) due mainly to treatable physical health comorbidities (2), yet receive poorer quality physical health care (3). To address this, Sydney Local Health District introduced the Living Well, Living Longer (LWLL) program, which uses a plethora of integrated care initiatives to guide individuals through the four stages of screening, detection, initiation of treatment and ongoing management.

These include:

1. The Collaborative Centre for Cardiometabolic Health in Psychosis (ccCHiP), a one-stop shop multidisciplinary clinic that provides comprehensive assessment of cardiometabolic risk and formulates treatment recommendations.
2. The Mental Health Shared Care (MHSC) program formalises care arrangements between GPs and mental health services, guided by the shared care checklist, which defines the responsibilities of the mental health care coordinator and GP and ensures care reviews and prescribed medications are communicated within a comprehensive annual cycle of care.

3. Community lifestyle clinicians, namely dietitians, exercise physiologists, and smoking cessation officer have been employed to work with consumers to develop individualised achievable and relevant health behaviour change goals and support the practical strategies required to achieve these.

Since 2014, over 1100 unique individuals have been reviewed at ccCHiP, 1200 enrolled in MHSC, and 2100 have engaged with lifestyle clinicians. As a result of these interventions, evidence is emerging showing health benefits for community mental health consumers. A power-calculated sample of 251 consumers, representative of the community mental health population, was compared between 2016 and 2020. Average Body Mass Index improved from 31 to 29kg/m2 ($p=0.047$), a shift from the obese range to the overweight range. Low Density Lipoproteins reduced from 2.88 to 2.60 ($p=0.014$) and the proportion of people with elevated blood sugars (HbA1c) reduced from 45% to 30% ($p=0.025$). The proportion of consumers with Metabolic Syndrome reduced from 74% to 51% ($p=0.005$).

1. National Mental Health Commission. Equally Well Consensus Statement: Improving the physical health and wellbeing of people living with mental illness in Australia. Sydney: NMHC; 2016.
2. 2. World Health Organization. Meeting report excess mortality in persons with severe mental disorders. WHO Headquarters, Geneva, 18-20 November 2015. Geneva: WHO 2015.
3. 3. De Hert M, Correll CU, Bobes J, et al. Physical illness in patients with severe mental disorders. I. Prevalence, impact of medications and disparities in health care. World Psychiatry 2011; 10(1): 52-77.

4.1 E: Implementing Value Based Healthcare within a Mental Health Pathway, Rumina Taylor

Despite increased interest in achieving value in mental health services, delivering this has been difficult and rarely done in practice. The South London and Maudsley (SLaM) UK NHS Foundation Trust (part of King's Health Partners, an Academic Health Sciences Centre) have developed pathway maps and clinical outcome measures for conditions. We were keen to build on this work and improve value within the older adults depression pathway. It provided an opportunity to understand the practical implications of embedding a value-based methodology within mental health.

Depression improved by 81% across all diagnoses (N=72). Improvements were reported in functioning. More severe depression was associated with increased resources and a greater number of illness episodes, but not more time within the pathway. Those with recurrent depression required higher costs, a greater number of illness episodes, and long treatment times. Care was provided by community rather than inpatient services. A decision needs to be made regarding impact and value of such presentations.

Patients wanted to be asked about history and causes of their depression. Staff wanted feedback from managers about outcomes.

This pilot identified a way to use VBHC methodology within mental health. This has the potential to enable us to identify and support older people who may be living with depression and redirect those who would benefit from accessing care to the most appropriate professional across the full pathway of care. We highlighted the importance of feedback mechanisms to staff and the necessity to identify patient and clinician reported outcomes. It was difficult to draw firm conclusions as to the relationship between outcomes, costs, and diagnosis. It would have been better to look at one type of depression diagnosis at a time with larger sample sizes.

Concurrent Session 4.2 – Digital Innovation

4.2A: Advancing Value-Based Care Through Digital Innovation, Deepak Biswal

The Western Sydney Collaborative Commissioning (WSCC) project is a whole of system approach designed, in partnership with Western Sydney LHD, Western Sydney PHN, NSW Health and the Stronger Community Cluster, to enable and support delivery of value-based, patient centred healthcare in the community. It aims to incentivise integration across the entire continuum of care, and embed local accountability for delivering value-driven, outcome-focused, and patient-centred healthcare. Western Sydney PHN spans across 766 km2, with a population projected to be over 1,000,000 by 2021, with one of the largest urban Aboriginal and Torres Strait Islander populations in Australia.

The WSCC project will see collaboration across all sectors of the system facilitated by CareMonitor which is a cloud-based, shared care, remote patient monitoring and population health management software solution. CareMonitor enables better team-based care and has been designed to enable the core principles of - Patient Centredness, Improved Access to Care, Continuity of Care, Comprehensiveness of Care, Co-ordination of care and a focus on safety and quality. The integrated platform enables safe and effective management of patients in their own home, to improve health outcomes for patients, minimise reliance on hospital-based care and ensure accessibility of clinical support for vulnerable patient groups in the community.

The Australian Digital Health Agency announced CareMonitor as a 2020 winner of the Innovation Challenge championing digital health innovation to provide a healthier future for Australians through connected healthcare.

The WSCC initiative aims to find a self-sustaining model where value is generated by making early targeted intervention and avoiding hospitalisations. The health cost savings will be used to incentivise healthcare providers to provide quality patient care thereby creating a virtuous cycle. From a sustainability perspective, this model will enable better care, reduce healthcare costs and result in an overall focus shift from activity to value.

4.2B: Digital collection of lung cancer outcome data: First steps, Neli Slavova-Azmanova

Alignment to conference themes

The Continuous Improvement in Care – Cancer (CIC Cancer) Project seeks to improve patient outcomes through the integration of patient reported outcome (PRO) measures into standard clinical care provided in both a public and private hospital setting.

Context/Aims/Support

Drawing on the International Consortium of Health Outcomes Measurement datasets, the CIC Cancer project has sought to develop an open-source informatics system capturing both clinical and PROs information, with capacity to interface with different patient information platforms in public and private hospitals.

Consumers, clinicians, hospital administrators, IT teams, and researchers worked together to identify information required to record an initial review of patients with, or suspected of having, lung cancer across two sites. The Victorian Lung Cancer Registry and the Queensland Oncology Repository were also reviewed and appropriate data elements included.

Patient demographics, risk factors, performance status, co-morbidities, examination findings, investigations, diagnosis, staging and treatment are captured to generate reports that incorporate these data elements into the electronic health record.

Impact

The reports developed will increase efficiency of clinical review management and care planning, enhance capture of an electronic medical record, and improve communication between treating, referring, and primary care clinicians. Automatic capture of PROs via tablet or mobile devices helps to understand what matters most to patients. Planned future work includes secure electronic extraction and transfer of clinical data from other data systems and integration with PROs, improved data analytics and visualisation of results for use in clinical consultation and to facilitate measuring care pathways, and economic evaluation.

Learnings

Once the fit-for-purpose CIC Cancer informatics application has been fully embedded, results of the clinical and PRO data collected will be fed back to the lung cancer services to better understand care provision; gaps in services and variations in outcomes; and ways to improve clinical practice.

4.2C: Adapting to COVID-19: value-based approach to Virtual Care, Glen Maberly

We estimate that 12% of adults (72,000 people) living in the Western Sydney Local Health District (WSLHD) catchment of 1 million people have type 2 diabetes. The average annual total indirect and direct costs of a patient with type 2 diabetes in western Sydney is $16,124. This equates to a total annual cost of $1.16 billion each year.

Western Sydney Diabetes (WSD) was established in 2012 '*to beat diabetes together*'. It is led by WSLHD, Western Sydney Primary Health Network (WSPHN), Diabetes NSW and ACT, PricewaterhouseCoopers (PwC), NSW Department of Planning Industry and Environment (DPIE). WSD also has 140 alliance partners from healthcare and non-healthcare sectors. We have developed a comprehensive '*Framework of Action'* that includes 23 interventions in both primary and secondary prevention and management.

The pandemic brought wide sweeping changes in the way all we live and work. During lockdown we learned how to move our work to telehealth, develop cloud-based digital solutions, and run virtual forums, including even a Masterclass for General Practice and community diabetes providers. Our model has been successful, with 6,603 occasions of care through virtual care compared to 5,912 during the same period in 2019 ($p=0.0056$). Our virtual care system has been recognized as a leading model of care by NSW Health and the Agency for Clinical Innovation.

After we are vaccinated the learning from 2020 will have changed our lifestyle and models of care forever. Preventing and better managing diabetes in western Sydney will be even more important, as we deal with the debt the pandemic leaves behind as well as growing healthcare costs.

This presentation considers the learnings of our process, what could have been done differently, and how this can be and is being implemented moving into 2021 and beyond, to beat diabetes, smarter, together.

4.2D: Integrated research skills training via a novel, adaptable platform, Kenneth Lee

Quality research education has been shown to better engage future clinicians in research and lays the foundation for lifelong learning. Research skills are at the core of value-based healthcare, as their application has been shown to improve clinical outcomes, decrease variation in patient outcomes, improve patient safety, and reduce healthcare costs.

Development of research-ready graduates positively impacts the health system and health service delivery through earlier engagement with problem solving and analytical endeavours. We identified substantial duplication in creation, delivery, and quality of research training content across health disciplines at our University. In 2017, we developed a unified, online platform with the view to support the research training of future clinicians, from research conception, to implementation and translation.

The platform contains curated, high-quality research training resources that have been developed by experienced clinical researchers and academics. Each topic merges theoretical concepts with practical applications. Course coordinators select the topics they need and then contextualise the concepts learned, within discipline-specific classes. Additionally, course coordinators may add their own resources to the shared platform.

A curator oversees the structure and content of the overall platform, while the platform is updated in a continuous cycle. Course coordinators benefit from reduced workload, high-quality training materials, and the opportunity to share training resources with others. Students benefit from access to all resources; and the system receives research-ready graduates.

The platform has the endorsement of the UWA Faculty of Health and Medical Sciences, and agreements with WA Health. Resources are sourced primarily from the Child and Adolescent Health Services' Research Education Program, with some inclusion of materials developed by UWA academics and the WA Health Translation Network's Research Education and Training Program. The platform currently supports a range of health disciplines at UWA including Audiology, Biomedical Sciences, Dentistry, Health Professions Education, Pharmacy, Podiatry, and Social Work.

4.2E: Integrating health data to enable better health, James Linden

Background

Context and purpose

With ageing of the Australian population and a growing number of people living in mass social environments, living for longer, and experiencing more chronic or complex health conditions, people's health needs, health vulnerabilities and health service utilisation are changing. To meet these changing needs, the challenge for the health system is to integrate services across the continuum of settings and providers to deliver person-centred, seamless, efficient and effective healthcare as outlined in the quadruple aims. NSW Health is driving this work through our Value Based Healthcare (VBHC) strategy. A key enabler of (VBHC) includes the integration of information to inform decision making and whole of system reform.

Methods

How it will be performed

Lumos is an extensive data linkage program that will run throughout New South Wales (NSW), Australia's most populous state, to map patient journeys through the continuum of care in health. The program has been granted ethics approval and is coordinated by the NSW Ministry of Health in partnership with Australian Federal Primary Health Networks and private general practices (GPs). Lumos links the records of patients from NSW GPs to other records across the NSW health system, including hospital admitted, non-admitted and emergency department data, mortality data and others. This linked dataset provides unparallel potential to measure the impact of VBHC health interventions across the health continuum and evaluate the outcomes to patients system wide and long-term.

Discussion

Summary and potential implications

Lumos is the largest primary care data linkage to be conducted in Australia and sets out to deliver an enduring, regularly updated data resource that provides unique insights about state-wide cross-sector health care utilisation. It has the potential to provide significant benefits in guiding, monitoring, planning, and evaluating the delivery of health services throughout NSW.

Concurrent Session 4.3 – System Level VHBC Enablers

4.3A: Health equity as an outcome in value-based health care, Rebecca Haddock

Alignment to conference themes: Collaboration is needed across the health system to **enable** health equity.

Context:
Health equity and associated disparities exist in Australia, notwithstanding a long history of universal healthcare through Medicare and public hospital services. The social determinants of health shape much of this inequity and particularly for those experiencing chronic illness. The costs to individuals, families, communities and the economy of health inequity are substantial. Current payment and service models have not effectively addressed health equity issues, and as new models are being developed to underpin more sustainable approaches to the funding of health services such as value-based health care programs, there is a risk that equity issues will persist or be exacerbated. Equity is also an understated consideration in the funding decisions being made with regard to innovations such as precision medicine.

Through a series of case studies, we will explore how equity is prioritised in current funding models and how value-based health care strategies can improve equity in the context of reforms currently being implemented or considered in Australia.

Impact:
Health equity is an integral component of a sustainable health system, yet metrics for measuring and monitoring equity are not well-developed or implemented in Australia. All those across health services and systems must consider their contribution to health equity.

Learnings for others:
Health equity must be a fundamental objective in transforming to value-based models of health care, with metrics needing to be identified and interpreted carefully and with consideration of the specific context in which policy makers and health services are making decisions. With the pursuit of equity being more than a funding issue, there needs to be coordinated and integrated consideration of service delivery systems, workforce, facilities, communication networks, health technologies, information systems, quality assurance mechanisms, governance and regulation.

4.3B: Payment reform for value-based health care: challenges for Australia, Sarah Wise

Alignment to themes:
How healthcare providers are currently paid creates incentives which drive behaviours that run counter to the creation of value. This paper explores how innovative payment models aim to align incentives to enable value-based healthcare, and how to overcome barriers to implementation in the Australian context.

Context, aims and support:
The value-based healthcare agenda in Australia has focussed on reducing the use of 'low-value' interventions, redesigning models of care to improve coordination between providers, and increasing the use of patient-reported measures to drive improvement. To date, the crucial role of provider payments in supporting value has received limited attention. For example, fee-for-service (and to a lesser extent, activity-based funding) models incentivise service volume and disincentivise integration with other providers, while pay-for-performance has tended to reward compliance with standards over performance in actual patient outcomes. There is widespread enthusiasm for payment models which will enhance the value produced by the Australian health care system, including a commitment in the National Healthcare Agreement. This paper identifies the main options for payment reform in Australia, each involves some form of 'bundling' or 'pooling' of payments. It also outlines the critical challenges to be addressed in the move to value-based payments: who bears the risk of holding the payment; how the measurement of value

must incorporate costs as well as outcomes; and the need for an integrating organisation to manage the bundle and initiate change.

Impact:
In the absence of payment reform, new service designs are unlikely to achieve and sustain the shift from volume to value, from fragmented to integrated care, and the reorientation of services around the outcomes and costs since the underlying incentives remain undisturbed.

Learnings for others:
This paper outlines the policy, organisational and infrastructure requirements for innovative payments that will support the shift to true value-based healthcare.

4.3C: Maps to better care: The Australian Atlas of Healthcare Variation, Gillian Giles/Meredith Page

The Australian Atlas of Healthcare Variation series explores how healthcare use varies depending on where people live. It identifies possible reasons for variation including unwarranted variation, and provides recommendations to reduce variation. It aims to drive improvements in the value of health care for patients so that they get the best outcomes with the least risk of harm. Where we see substantial variation in use of a particular treatment, it is a signal to the system that there needs to be a focus on whether appropriate care is being delivered.

If clinical variation does not reflect a difference in patients' clinical needs or preferences, it is unwarranted and can present an opportunity for the system to improve. One example of a system issue that exploration of variation highlights is the growth in the range of tests, technologies and treatments that can be used to investigate and manage health problems. Although such advances can bring great benefit, they can increase the risk of diagnosing and treating people for conditions that would never have caused them harm. The Atlas series aims to provide clinically meaningful information to improve the appropriateness, effectiveness and efficiency of health care in Australia.

Findings from the Atlas series have prompted change across the health system, spanning primary care through to acute care in both the private and public sector. This has included changes to funding arrangements through the Medicare Benefits Schedule, the development of clinical care standards, and the expansion of the National Safety and Quality Health Service Standards to include a requirement for health services to examine clinical variation and address unwarranted variation.

This presentation will include case studies demonstrating how the Atlas findings have been used to prompt local investigation, inform health policy and system redesign, and support clinicians to deliver appropriate care.

4.3D: Applying Economics to improve patient outcomes and generate benefits, Liz Hay

A key focus of VBHC is to move away from volume to value. Thirteen Leading Better Value Care (LBVC) cohorts are part of this initiative. A statewide approach to economic analysis, that commenced pre-implementation of LBVC, has been developed and is an enabler for improving patient outcomes and system benefits.

Upfront economic appraisals guided investment decisions by comparing the utilisation and cost between the Business as Usual (BaU) and LBVC scenarios.

Prospective monitoring of outcomes was developed to support a key objective of LBVC - to ensure care is provided in optimal settings and to reduce need for hospitalisations by providing patient centric care in outpatient settings. The data showed that between 2017-18 and 2018-19 non-admitted events increased by 66%.

Three out of the eight initiatives were in scope for economic measurement in 2018-19. Early results indicate that in 2018-19 activity equivalent to $73M was avoided compared to BAU- this allowed for capacity to be repurposed for other patients and used to ensure that the NSW Health system was operating efficiently. In 2018-19 against “where we would have been without the intervention”:

- 8,879 fewer patients were admitted to hospital for treatment of their diabetic foot as they received non-admitted care;
- 3,486 fewer patients were admitted for re-fracture

There are opportunities for the system to further scale and embed the LBVC initiatives to support the provision of efficient and effective care in optimal settings.

Benefits generated are re-purposed and re-invested by health districts towards other health priorities.

This innovative statewide Economics approach, which has a focus on putting patients at the centre, was possible due to close collaboration with clinicians. New initiatives can use this approach for the system to create capacity for re-investment.

4.3E: Patient complexity and policy - a conceptual framework, Peter Maree

Objective.

Clinicians across all health professions increasingly strive to add value to the care they deliver through the application of the central tenets of people-centred care (PCC), namely the ‘right care’, in the ‘right place’, at the ‘right time’ and ‘tailored to the needs of communities’. This ideal is being hampered by a lack of a structured, evidence-based means to formulate policy and value the commissioning of services in an environment of increasing appreciation for the complex health needs of communities. This creates significant challenges for policy makers, commissioners and providers of health services. Communities face a complex intersection of challenges when engaging with healthcare. Increasingly, complexity is gaining prominence as a significant factor in the delivery of PCC. Based on the World Health Organization (WHO) components of health policy, this paper proposes a policy framework that enables policy makers, commissioners and providers of health care to integrate a model of complexity into policy, subsequent service planning and development of models of care.

Methods.

The WHO components of health policy were used as the basis for the framework. Literature was drawn on to develop a policy framework that integrates complexity into health policy.

Results.

Within the framework, complexity is juxtaposed between the WHO components of ‘vision’, ‘priorities’ and ‘roles’.

Conclusion.

This framework, supported by the literature, provides a means for policy makers and health planners to conduct analyses of and for policy. Further work is required to better model complexity in a manner that integrates consumer needs and provider capabilities.

Appendices

Appendix 1. Abstract review process

Abstract reviewers

Name	Position	Organisation
Paresh Dawda	Director and Principal	Prestantia Health and Next Practice Deakin
Deborah Cole	(Immediate Past) Advisory Group Chair	Australian Centre for Value-Based Health Care
Christobel Saunders	Professor of Surgical Oncology	The University of Western Australia
Nick Steele	Deputy Director General	Queensland Department of Health
Danielle Romanes	Director, Health Service Policy	Department of Health and Human Resources, Victoria
Matthew Hickey	CEO	The Health value Alliance (CEO), AXA Health, and Intacare
Jennifer Garden	Director of Nursing – Clinical Quality, CMO	CQRA – Clinical Governance Clinical Quality, Regulation and Accreditation, Tasmania Health
Suzanne Robinson	Director, Health Systems and Health Economics	Curtin University
Rebecca Trowman	Senior Program Manager	Telethon Kids Institute and Health Technology Assessment International
Sarah Sweeney	Manager, Value Based Care and Innovation	St Vincent's Health Network Sydney
Jim Codde	Director, Institute for Health Research	University of Notre Dame
Jeannie Yoo	Clinical Director	Remedy Healthcare
Chris Reid	Research Professor	Curtin University
Audrey Koay	Executive Director, Patient Safety and Clinical Quality	Western Australia Department of Health
Grainne O'Loughlin	CEO	Karitane
Caroline Bulsara	Academic Researcher	University of Notre Dame
Cassandra Bennett	Consumer Representative	Australian Centre for Value-Based Health Care
Matt Bellgard	Director, eResearch	Queensland University of Technology
Kees Van Gool	Deputy Director, Centre for Health Economics Research and Evaluation (CHERE)	University of Technology Sydney
David Preen	Chair in Public Health, School of Global and Population Health	University of Western Australia

Abstract Review Criteria

Criteria	
Meets overall conference theme	The abstract describes a patient first, practical approach to the implementation of value-based healthcare.
Innovative, collaborative, or enabling	The described project or initiative: • is novel and capable of developing, skills and strategies for improving outcomes and driving quality improvement; or • demonstrates collaboration or productive integration between health care sectors; or • demonstrates tools, techniques, governance, and strategies that support successful outcomes and ways to overcome barriers.
Value to the conference	The described project or initiative: • delivers or will deliver a more effective, efficient and/or appropriate health service; • has, or shows the potential to have, a positive impact on the service, workplace and/or health outcomes; and places focus on both cost and outcomes.
Project adoption	The project demonstrates: • significant progression with organisational backing that will fully support its uptake; or • the process of being adopted by one or more organisations working together; or • adoption by the organisation and integration into standard operating procedure.
Ability to scale-up	The project has potential to be integrated into the broader organisation and/or other organisations.
Implications for practice and the consumer	Demonstrates recognition of consumer's needs and preferences and has been designed with patient outcomes in mind.
Learnings	The abstract provides learnings that can be applied by others.
Implementation review	The abstract provides recognition of what could have been done differently.
Clarity and readability	The abstract clearly and effectively communicates the key merits of the project.
Sufficiency	The abstract demonstrates thoughtful consideration of the criteria.

Appendix 2. Posters

Title	Presenter	Organisation
M-CHooSe Pilot: Embedded Healthcare Coordinator for Multicultural General Practice Patients	Michelle Smith/Tracey Johnson	Mater Refugee Health Service
Common Grounds Wellness Clinic	Petrina Rimmer	Sydney Local Health District
The perceptions of specialist nurses in delivering value-based integrated care	Karen Hutchinson	Australian Institute of Health Innovation
Complex patients - a unified model	Peter Maree	Dept. of Health Tasmania
Sustainable and efficient chronic disease management in General Practice	Karli Brkljacic	Central General Practice Mansfield
Integrating Care into NSW	Shireen Martin	NSW Health
Is cancer care funding keeping up with the costs?	Maryam Naghsh Nejad	UTS
Managing shifts to VBHC as a dynamic capability development process	Olga Kokshagina	RMIT
VBHC approach to NSW Diabetes Management The Case for Change	Liz Hay	NSW Health
VBHC approach to NSW Diabetes Management The Case for Change	Gillian Vesty	RMIT
Disclosing "value" in a new technology era	Lachlan Viali	ACT Health
The Value Based Health Care Landscape	Michelle Smith/Tracey Johnson	Mater Refugee Health Service

BACKGROUND

People from culturally and linguistically diverse (CALD) backgrounds are impacted by greater levels of socio-economic disadvantage and exclusion, and have complex social determinants and unmet needs affecting their health, especially those who also have refugee background (1–6).

GP practices may need additional skills, networks and resources to provide social care and health coordination work within current funding models (3,5,7–11).

Our current system does not adequately incentivise the development of mechanisms to enable patients to prioritise outcomes that matter to them nor does it adequately incentivise the improvement of cooperation within the health system or between health and social care realms (12).

Inala Primary Care (IPC) serves an area where a high proportion of the population are of a CALD background. Between Jan-Mar 2021, 18% of time delivering GP consultations involved an interpreter.

IPC estimates consultations using the Translator and Interpreter Service represents ≈15% of its annual revenue in hidden costs (TIS is free for our services). These costs stem from associated inefficiencies:

- Increased time translating the information,
- Needing to explain health concepts where no equivalent concepts or words exist in the person's culture or language,
- Increased no-show rates and administrative support.

IPC assembled stakeholders in 2019 to address unmet patient needs and inefficiencies. Mater's Integrated Refugee Health Service and IPC codeveloped the Mater CALD Health Coordinator Service – M-CHooSe.

M-CHOOSE PILOT SERVICE AIMS

- Free, patient-centred, flexible health and social care coordination service to patients of CALD backgrounds.
- Be the patient's broker and advocate for access to health and welfare services they need in a culturally safe and patient led manner.
- Enable the patient's care team to provide culturally safe and efficient care.
- Provide guidance and education on health and health systems, enabling patients and health professionals better understand health care need and appropriate pathways.

EVALUATION AIMS

Characterise unmet health coordination needs of the local CALD population. Demonstrate strengths of M-CHooSe and how it might lead to better health and health service outcomes for CALD populations.

M-CHOOSE PILOT FUNDING

M-CHooSe is a response to the COVID-19 crisis and is supported by Queensland Health funding. Ongoing funding needs to be found as patients of CALD backgrounds, not just those with refugee backgrounds, experience such marginalisation well after settlement and are part of our social fabric.

Scan me for more on M-CHooSE!

Patients from culturally and linguistically diverse backgrounds had **quicker access** to the health services they needed, **better understanding** of their **conditions and treatments** & had **better overall outcomes** because of M-CHooSe

M-CHooSe Pilot: Embedded Healthcare Coordinator for Multicultural General Practice Patients

Michelle Smith[1], David Chua[2], Tracey Johnson[2], Meryl Jones[1], Donata Sackey[1]

M-CHOOSE PILOT EVALUATION METHODS

Characterising services

There was no pre-defined service scope in order to respond to actual needs of the patients. We characterised the nurse-led service by:

a) Thematically analysing and coding (performed by Chua) service logs kept by the nurses for the first month of M-CHooSe. Themes were verified by an M-CHooSE nurse (Smith) and data saturation ensured by reanalysing at the end of 3 months.

b) At 12 months, nurses were asked to rank their perception of the "most performed" service and the "most time-consuming" service to deliver via online survey.

GP Clinicians' Survey

A modified Delphi technique was used to design survey items (13). The panel consisted of a GP practice manager, a GP service provider CEO, a GP, 3 practice nurses, 2 multicultural nurses, a multicultural service director, a social services manager and a primary care researcher.

Surveys sought to understand perceived patient outcomes, clinician satisfaction, service utility, and overall service benefits.

Surveys were electronic and any health care professional from clinics hosting M-CHooSe could participate regardless of whether they referred patients to M-CHooSe.

Mater HREC Exemption - Service Evaluation (EXMT-MML-74757).

AFFILIATIONS & CONTACT

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REFERENCES

1. Derose KP, Escarce JJ, Lurie N. Immigrants And Health Care: Sources Of Vulnerability. Health Aff (Millwood). 2007 Sep 1;26(5):1258–68.
2. Dixon-Woods M, Cavers D, Agarwal S, Annandale E, Arthur A, Harvey J, et al. Conducting a critical interpretive synthesis of the literature on access to healthcare by vulnerable groups. BMC Med Res Methodol. 2006 Jul 26;6(1):35.
3. Henderson S, Kendall E. Culturally and linguistically diverse peoples' knowledge of accessibility and utilisation of health services: exploring the need for improvement in health service delivery. Aust J Prim Health. 2011;17(2):195–201.
4. Suphanchaimat R, Kantamaturapoj K, Putthasri W, Prakongsai P. Challenges in the provision of healthcare services for migrants: a systematic review through providers' lens. BMC Health Serv Res. 2015 Sep 17;15(1):390.
5. Mengesha ZB, Perz J, Dune T, Ussher J. Refugee and migrant women's engagement with sexual and reproductive health care in Australia: A socio-ecological analysis of health care professional perspectives. PLOS ONE. 2017 Jul 20;12(7):e0181421.
6. Sackey D, Jones M, Farley R. Reconceptualising specialisation: integrating refugee health in primary care. Aust J Prim Health. 2020;In press.
7. Migrant & Refugee Health Partnership. Interpreter engagement in General Practice in Australia [Internet]. Canberra: Migrant and Refugee Health Partnership; 2020 May. Available from: https://culturaldiversityhealth.org.au/wp-content/uploads/2020/06/Interpreter-Engagement-in-General-Practice-in-Australia.pdf
8. Farley R, Askew D, Kay M. Caring for refugees in general practice: perspectives from the coalface. Aust J Prim Health. 2014;20(1):85–91.
9. Manderson L, Allotey P. Storytelling, marginality, and community in Australia: How immigrants position their difference in health care settings. Med Anthropol. 2003 Jan 1;22(1):1–21.
10. Clark A, Gilbert A, Rao D, Kerr L, Clark A, Gilbert A, et al. 'Excuse me, do any of you ladies speak English?' Perspectives of refugee women living in South Australia: barriers to accessing primary health care and achieving the Quality Use of Medicines. Aust J Prim Health. 2014 Mar 5;20(1):92–7.
11. Cheng I-H, Vasi S, Wahidi S, Russell G. Rites of passage: improving refugee access to general practice services. 2015;5.
12. Kay M, Jackson C, Nicholson C. Refugee health: a new model for delivering primary health care. Aust J Prim Health. 2010;16(1):98.
13. Ding J, Cook A, Chua D, Licqurish S, Woolford M, Deckx L, et al. End-of-life care in general practice: clinic-based data collection. BMJ Support Palliat Care. 2020;

RESULTS AND DISCUSSION

Service Reach

- 5 participating practices across Brisbane, QLD.
- M-CHooSe operated with 0.8 full time equivalent nursing (FTE-N) across all sites combined.
- 206 patients seen at IPC alone over 12 months (0.2 FTE-N).

Service Integration

100% of surveyed clinicians said it was "Extremely important" M-CHooSe was embedded because it allowed for:

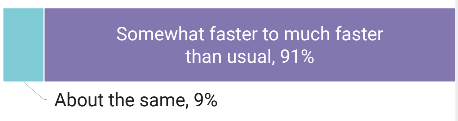
- Opportunistic access to or handover of patients.
- Less likely to no-show to MCHooSe.
- Easier physical access for patients.
- Familiar surroundings for patients.
- Quick communication back.
- Seamless sharing of medical records.

Services Delivered

	Service Frequency	Time Spent
Most	Corresponding and/or follow up with external health services	Corresponding and/or follow up with external health services
	Chart review	Social care work
	Assist patient with attending outpatients/specialist/external health care appts	Chart review
	Social care work	Assist patient with attending outpatients/specialist/external health care appts
	Patient follow up	Provided health/medication education and/or advice
	Provided health/medication education and/or advice	Patient follow up
	Assist patient with booking health care appts	Assist patient with booking health care appts
	Assist patient with attending GP or community-based health care appts	Assist patient organise transport to external health appointments
	GP Assistance (including performing obs with other activities)	Assist patient with attending GP or community-based health care appts
Least	Assist patient organise transport to external health appointments	GP Assistance (including performing obs with other activities)

Service Access & Brokerage for Patients

As a result of M-CHooSE, GP clinicians said their patients were seen by external services:



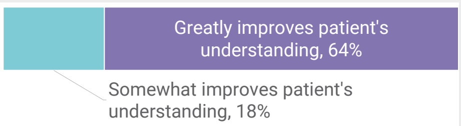
Because M-CHooSe:

- Reminds my patient to attend (30% of responses)
- Is an effective case manager (26% of responses)
- Can re-negotiate with the external service as patient has had history of non-attendance (26% of responses)
- Able to follow up outstanding referrals still yet to be processed by external service (19% of responses)

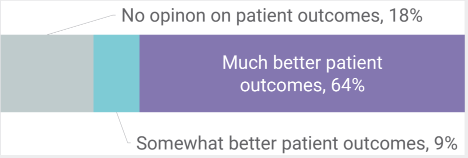
Patient Outcomes

M-CHooSE effect on patient understanding of their medical condition(s):

M-CHooSE effect on patient understanding of their management plan(s):



GP Clinician's perception of their patients' overall outcomes after M-CHooSe intervention:



Establishing a Wellness Clinic for Mental Health Consumers in an Affordable Housing Facility: Common Ground

Ho. S., Hyde, L., Bassig, R., Rimmer, P., Escott, P., Gridley, K., Xie, P., Eagle, K.

The Background

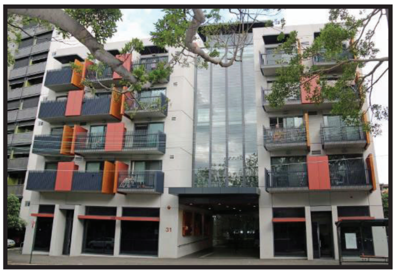
- Sydney Local Health District's Mobile Assertive Treatment Team provides care coordination for 16 residents of an affordable housing facility: Common Ground.
- These are hard-to-engage consumers characterised by severe & enduring mental illness, history of rough sleeping, drug health challenges and limited cognitive capacity.

The Problem

- The majority of these consumers are treated with Long Acting Injections (LAI) but despite assertive follow up, engagement is poor and LAIs were often overdue.
- Engagement with GPs is extremely low and many receive little to no intervention for physical health comorbidities, placing them at high risk of premature mortality.

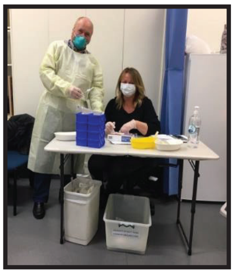
The Solution

- In partnership with Mission Australia, the team set up a fortnightly wellness clinic within the facility

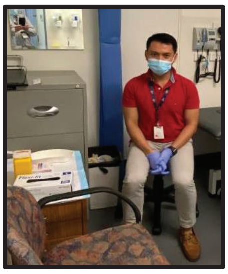


Common Ground Wellness Clinic

Peer Support →



Health Screening →

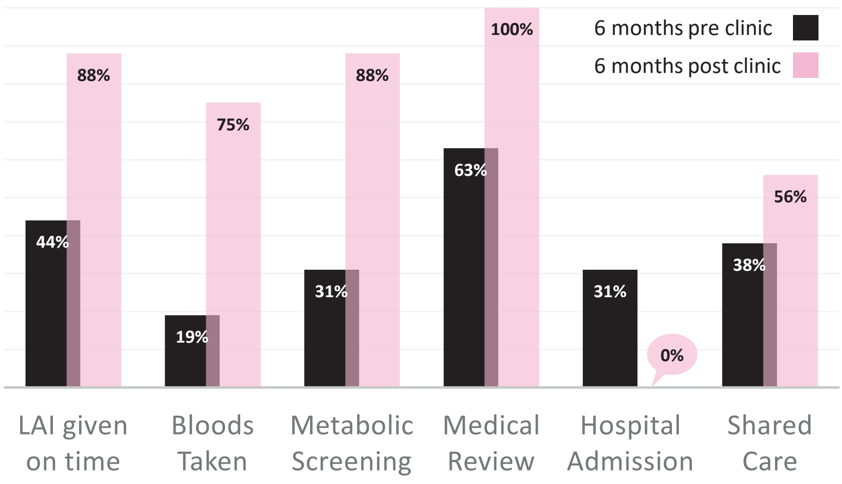


Medication →

Medical Review

The Results

Proportion of residents receiving interventions



The introduction of the Common Ground Wellness Clinic has:

- Provided the most vulnerable consumers improved access to primary healthcare
- Improved communication and integration of care
- Improved rates of health screening, hopefully leading to earlier detection and treatment
- Improved consumer engagement
- Improved the effectiveness and efficiency of care
- Is adaptable to other settings

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Clinical Nurse Consultant
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Key similarities exist between epilepsy and cancer nursing roles; however, community-located nurses reported that their **disconnect from hospitals impacted on their ability to provide connected, integrated complex care and support**

Objectives

To clarify the role of specialist nurses in supporting person-centred and integrated care and inform the future role development and scope of the specialist nurse.

Methods

In-depth qualitative interviews with epilepsy specialist nurses (ESNs) (n=12) and metastatic breast cancer nurses (mBCNs) (n=10) to examine roles, value, and responsibilities in providing person-centred supportive care in Australia. Thematic analysis drew on the Quadruple Aim to guide analysis.

Meet the nurses

Nurses working across hospital system and community applied to 8 mBCNs & 1 ESN

Nurses working in the community applied to 11 ESNs & 2 mBCNs

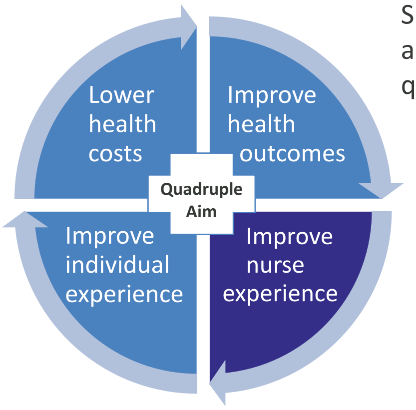
> *'I guess what I feel really fortunate about is as this role has grown and the doctors have respected me'* **mBCN**

> *'I like to think of it as a, you know, a spoke in the wheel type model, I'm sort of the middle knowing where to point people, you know, which direction to put them towards, in the end just helping to navigate a very complex health system'* **ESN**

> *'The hospitals let me use their oncology clinic….the private cancer centres let me use their counselling rooms. Cancer council has been amazingly supportive…..The private hospitals let me come and go…so I can come and see people there'* **mBCN**

> *'Not interconnected with the hospitals anymore … is a big regret'* **ESN**

KEY FINDINGS
The value of the specialist nurse in achieving the quadruple aim: (1) better care; (2) reduced healthcare costs; (3) an improved person experience; (4) clinician/provider wellbeing


Quadruple Aim

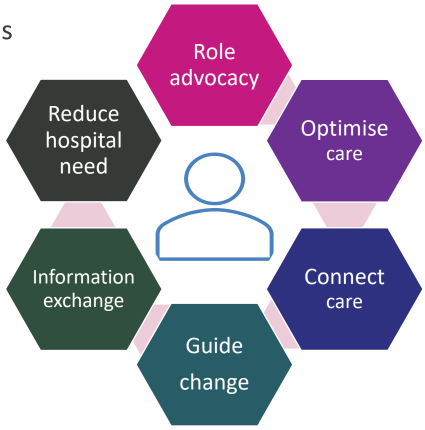
Lower health costs

Improve health outcomes

Improve individual experience

Improve nurse experience

Specialist nurses advance the quadruple aim


Role advocacy

Optimise care

Connect care

Guide change

Information exchange

Reduce hospital need

KEY FINDINGS
Similarities between epilepsy and cancer nursing roles

Multifaceted role	Provision of care	System knowledge
Care coordination	Biopsychosocial approach	Cross sector & organisational knowledge
Information & knowledge sharing Support provision – clinical, emotional & instrumental	Person & family-centred care Shared decision-making	Developed interprofessional relationships
Advocacy - Education - Research	Support for self management and /or palliative care	Boundary spanners (bridging organisational boundaries)

KEY FINDINGS
Disconnect from hospital may impact on provision of integrated, person-centred care

Nurses reported that being **connected to hospital and community** sectors helped provide integrated person-centred care AND improved their experience of providing care. **This is due to:**

- **Better knowledge flow**
- **Greater access to shared medical records**
- **More learning opportunities**
- **Multidisciplinary team working**
- **Greater role recognition and value**
- **Recognition of their clinical and supportive care role**
- **Ability to provide more face-to-face service delivery**

In summary

Specialist nurses can impact health and social outcomes, and wellbeing through holistic approaches and integrated care focused on what is important to individuals.
However, changes are needed to ensure all nurses are well placed and supported to enact their roles.

The perceptions of specialist epilepsy and cancer nurses in delivering value-based healthcare

Karen Hutchinson,[1] Andrea Smith,[1] Tayhla Ryder,[1] Marika Franklin,[1] Frances Rapport,[1] Sophie Lewis[2]
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Patient Complexity: A Unified Model

Peter Maree[1,2], Roger Hughes[1], Jan Radford[1], Jim Stankovich[1], Pieter van Dam[1]
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Why patient complexity?

- Patient complexity (as opposed to acuity) is increasingly being acknowledged as an issue for health systems.
- We need to find a way to start mitigating patient complexity via policy levers, development of strategy and models of care.
- In order to achieve this, we need a model of patient complexity that will fulfill these roles.

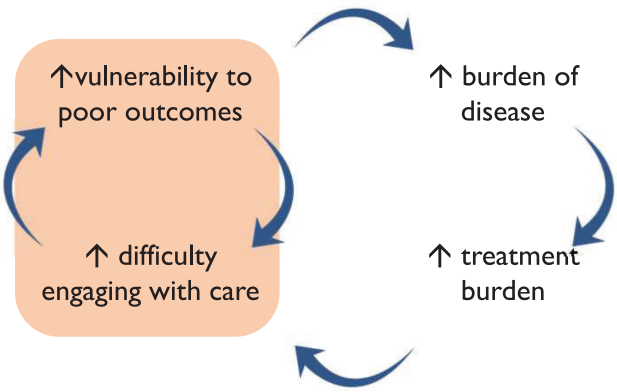
What work has already been done?

- A systematic search revealed 17 models and frameworks published in the ten years prior to February 2021.
- Revealing 108 different components relating to patient complexity.

Initial findings

- The more components that interact with one another, the greater the **cumulative effect** on patient complexity**.** This cumulative effect is also seen longitudinally.
- How we perceive and experience patient complexity (as providers and/or consumers of care) is dependent on our **perspective and context.** Available **resources** and **capacity** are key drivers.

What was brought to light…



↑vulnerability to poor outcomes

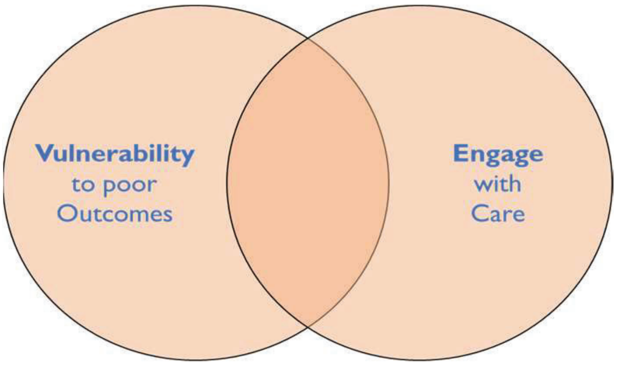
↑ burden of disease

↑ treatment burden

↑ difficulty engaging with care

- Dynamic interrelationship between components creates what appears to be a causal spiral.
- Over time, components of complexity can accumulate at different stages.
- These could be driven by patient context and / or system perspective.

Unified Model of Patient Complexity



- The art of chronic disease management is to reduce both treatment burden <u>and</u> disease burden, by
  - ○ addressing vulnerabilities

    <u>and</u>
  - ○ making it easier for people to engage with care.

A good example…

Tweet used with permission
Emphasis by lead author, P Maree

Dr Amir Khan GP @DrAmirKhanGP · Apr 14

I'm off out to vaccinate ***adults with learning disabilities in their own homes*** ①

Cool box full of vaccine at the ready, sun shining, good vibes

It's much ***easier for me*** ③ ***to go to them than the stress*** ② ***they get about coming to the surgery***

Policy and funding need to…

① Understand who is / could be vulnerable to poor outcomes and why.

② Understand how that vulnerability affects how people are able to, or should engage with care.

③ Design and deliver services in a way that enables people to engage with care, mitigating their capacity to cope.

Implementing an Efficient, Patient-Centred and Sustainable Chronic Disease Management model of care in General Practice

- **Approximately 47% of Australians have a diagnosed chronic disease (AIHW,2020).**
- **51% of hospitalisations in 2017 - 2018 involved one of the 'top 10' chronic diseases (AIHW,2020).**
- **Proactive and systematic chronic disease management (CDM) in the primary care setting can be directly linked to better patient outcomes and reduced risk of hospitalisation.**
- **Management of these conditions if becoming a focus and priority in the primary health care setting.**

STEPS TO IMPLEMENTING A SUCCESSFUL CDM MODEL OF CARE

1 Data and Software

- Understand and use available clinical data and technology including:
    - Clinical Audit Tool (i.e., PenCat, Polar)
    - Clinical Decision Support System (i.e., TopBar)
- Use an Integrated Care plan Software (i.e. Inca)

inca
Integrated Care

This will help reduce administration time, ensure sustainability of the program and best practice goals are set, and helps engage patients.

- Understand your clinical data, run reports, understand your gaps, track your progress.
- Ensure complete and properly coded data is entered into clinical records in your Patient Management System

2 Logistics

Spend time working out some simple processes for:

- Referrals and flow into the program
- Bookings and recalls
- Appointment flow
- How will the CDM program work in with core business at the clinic

3 Staff training and service delivery

- Ensure appropriately skilled and trained nursing staff are involved in the CDM model
- Recruit CDM nurses (if needed) in addition to practice nurses
- Ensure quality in appointments by having a clear set of standard processes and goals
- Larger practices may need a CDM Co-ordinator and some non-clinical co-ordination time built into the model to ensure sustainability.

4 Quality improvement

- Use the CDM model to help address PIPQI gaps and drive quality improvement activities
- Many PDSA cycles can be derived from the work completed in the CDM model
- Ensure processes are in place for ongoing evaluation and building capacity in the program

Value adds for practice

- Improves patient satisfaction
- Builds practice reputation
- Increased revenue through MBS billing
- Drives quality improvement activities
- Improves PIP QI and eHealth data
- Generates returns business through reviews and referrals
- Creates more 'activated' patients

CGP
Central General Practice Mansfield

Reference: Australian Institute of Health and Welfare (2020) Chronic Disease. Retrieved: https://www.aihw.gov.au/reports-data/health-conditions-disability-deaths/chronic-disease/overview

Author: Karli Brklijacic, Nurse Practitioner &CDM Coordinator, Central General Practice Mansfield
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How a CDM model of care improves patient outcomes:

Proactive Engagement

- Not waiting for chronically ill patients to call the clinic for help
- Not managing these patients with short episodic care
- At risk patients are targeted and invited in for appointments
- Regular reviews occur via an embedded recall system

+

Information

- Longer appointments mean more time to gather data.
- Regular appointments mean better tracking of data.
- Invaluable subjective information is obtained from regular long visits.

+

Education

- More time to educate patients.
- Identify and counsel on risk or unhealthy behaviours.
- Medication and problem education.

+

Collaboration

- GP, nurse, patient collaboration
- Opportunity for other health professional involvement and expert advice/treatment
- Increased patient access to Allied Health professionals

=

Increased Patient Activation

- More likely to play an active role in staying healthy
- Better at seeking help when they need it
- Better at following the advice of clinicians
- More likely to adhere to management plans
- Less likely to have avoidable hospitalisations

NSW Health

Integrated Care

A statewide value based healthcare program
Leading partnerships to deliver seamless care anywhere

TRANSFORMING HOW CARE IS ORGANISED BY COORDINATING SERVICES AROUND A PATIENT TO IMPROVE THEIR EXPERIENCES OF CARE AND HEALTH OUTCOMES.

In NSW, Integrated Care (IC) includes statewide strategies coordinating better communication and connectivity between health care providers in primary care, community, and hospital settings, and providing better access to community-based services closer to home.

Integrated Care involves the provision of seamless, effective and efficient care that reflects the whole of a person's health needs:

- from prevention through to end of life
- across both physical and mental health
- in partnership with the individual, carers, and family members.

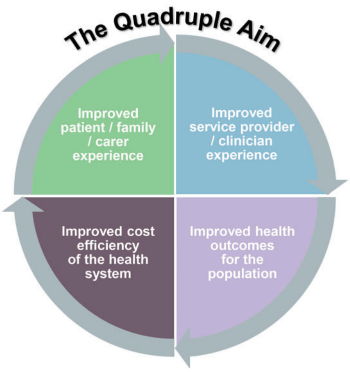
Integrate Care's primary objectives are:

1. to improve Outpatient and Community Care by reducing preventable visits to hospital by 5% through to 2023 by caring for people in the community.
2. to provide value based healthcare that strives to improve health outcomes that matter to people, the experience of receiving and providing care and the effectiveness and efficiency of delivering that care.

PRINCIPLES OF INTEGRATED CARE

Person centred	Primary care based
Continuous improvement	Collectively accountable
Targeted	Shared information

Integrated care is striving to deliver services that simultaneously improve the four essentials of value based healthcare



The Quadruple Aim

Improved patient / family / carer experience

Improved service provider / clinician experience

Improved cost efficiency of the health system

Improved health outcomes for the population

Through Integrated Care and our scaled initiatives, we are improving outpatient and community care, reducing preventable visits to hospital by 5% through to 2023 by caring for people in the community.

Initiative	Description	Benefits ↓	Benefits ↑
Secondary Triage	An ambulance pathway to support low priority need for Residential Aged Care Facilities residents, providing access to the My Emergency Doctor service to provide care as close to home as possible and decrease unnecessary transfers.	Avoidable hospital transfers	Ambulance capacity to manage true emergencies
Residential Aged Care	Promotes partnerships between NSW Health and RAC facilities to better manage the needs of residents in their care. The aged care staff are trained in early identification and management.	Significant reduction in ambulance call outs and ED presentations	Capability at RACF
Planned Care for Better Health	Identifies patients at risk of hospitalisation early and strengthens the care provided for them, to improve their experience of receiving care and to keep them healthier over the long-term	Up to 45% in ED presentations Up to 51% in admissions Up to 65% in TLOS	
ED to Community	Provides tailored case management support and specialist care in the community, addressing a patient's health, social and psycho-social needs while also reducing the need for hospitalisation.	Significant reduction in ED presentations, admissions and TLOS for enrolled patients	
Vulnerable Families	Provides care coordination for families who require health and social care support from multiple agencies improving access to better coordinated care enabling parents/carers to provide a safe and nurturing environment.	In ED presentations and length of stay	Patient and family engagement with health system
Specialist Outreach to Primary Care	Builds the capability and capacity of GPs to provide patients with specialist assessment and care in the community. GPs are linked with medical specialists to enhance their ability to assess and manage a variety of conditions.	ED presentation rate	Greater connection between primary and secondary care
Paediatric Network	Upskills local services and uses telehealth and other virtual care services enabling access to specialist paediatric care for children with complex needs closer to home.	Significant reduction in travel time, days missed from school / work	Paediatric capacity in regional areas. Capacity in metro paediatric facilities.

INTEGRATED CARE HIGHLIGHTS

- **52,000** patients enrolled in IC since 2015
- **92%** IC patients reported that their care was well-coordinated
- **68%** IC providers reported that IC initiatives have had a positive effect on the quality of care on patients in their local area
- **10,000** IC patients linked with a Lumos GP
- **55%** Reduction in Length of Stay (LoS) for patients enrolled in IC with chronic conditions 24 months post enrolment
- **20%** Improved cost efficiency for patients enrolled in IC programs
- **7** Statewide initiatives targeting vulnerable populations

INTEGRATED CARE ENABLERS

- Capability development is the process of adding to the skills and knowledge that staff already possess.
- Shared care planning is the process of facilitating communication between patients and clinicians to support long term health care.
- Patient Reported Measures will transform the health system by improving outcomes, experiences and quality of care.
- Health Pathways is a free web-based portal designed to offer support to Primary care. The portal provides access to pathways for clinical management and referral advice into local health services.
- Patient Flow Portal (PFP) enables access to multiple data sources and supports the implementation of the algorithm.
- Integrated Care Outcome Database (ICOD) hosts all of the IC enrolment links and de-identifies aggregated data to support analysis, monitoring and evaluation of the program.

> *"It's not about numbers anymore, I think we're really starting to recognise it's about better quality care and should involve a number of different health professionals working closely together, communicating with the patient at the centre of that care."*
>
> \- Clinician, VBHC Forum 2020 -

LEARNINGS MOVING FORWARD

- ✓ **Enhance Integrated Care Monitoring and Evaluation**
- ✓ **Drive continual improvement in the delivery of Integrated Care statewide**
- ✓ **Enrich workforce capabilities**
- ✓ **Influence trusted partnerships and strong stakeholder engagement**
- ✓ **Alignment with strategic priorities and Value Based Health Care**

CONTACT US

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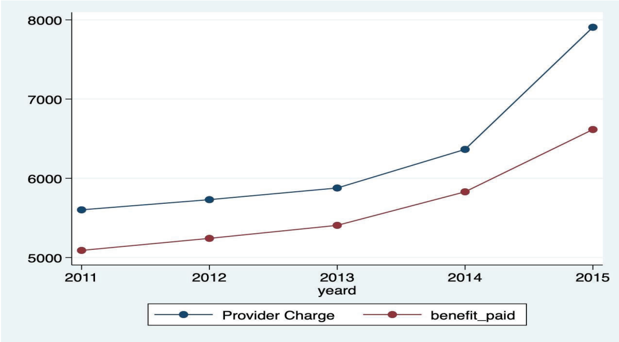
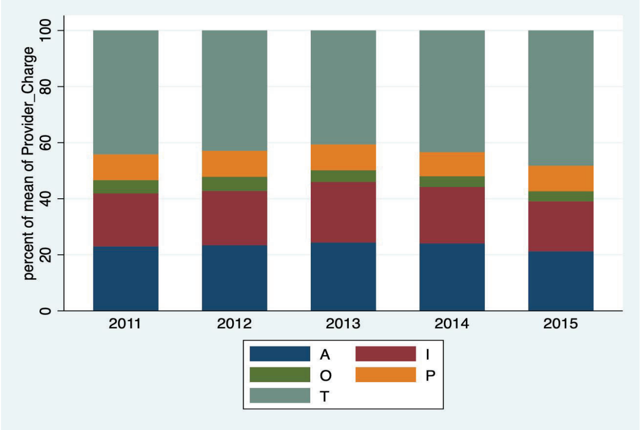
NSW GOVERNMENT

Is cancer care funding keeping up with the costs?

Maryam Naghsh Nejad



The total cost of care has been increasing over time, with growth in charges outstripping that of MBS benefits paid.
Cost of care is calculated an average out of hospital costs per person in a year following cancer diagnosis. (MBS)



The total cost of care has been increasing over time, with growth in charges outstripping that of MBS benefits paid.

Here:

A stands for PROFESSIONAL ATTENDANCES

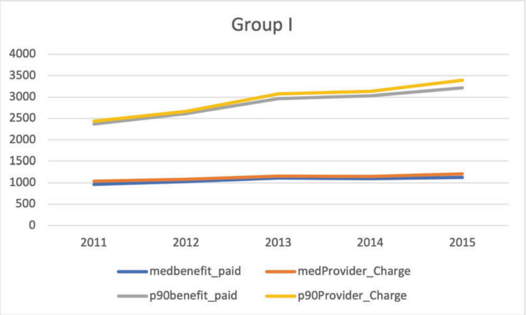
O stands for Diagnostic imaging

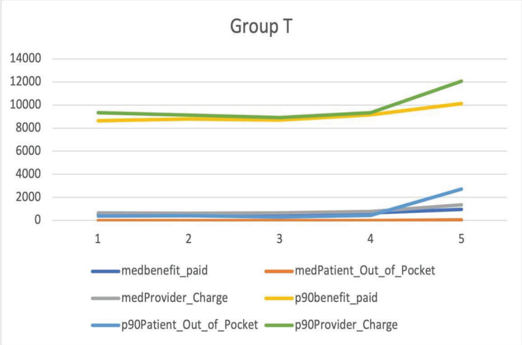
T stands for THERAPEUTIC PROCEDURES

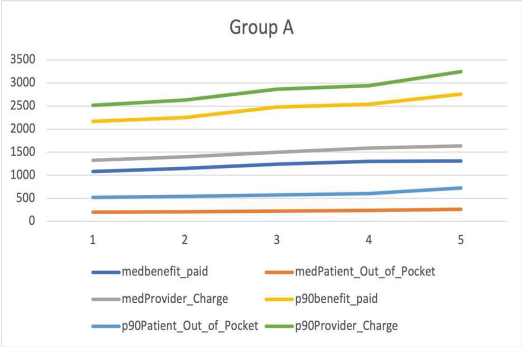
I stands for DIAGNOSTIC IMAGING SERVICES

P stands for Pathology

Out of pocket spending at median and 90th percentile over one year of care for a cancer patient.

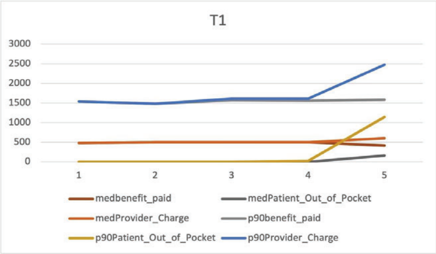




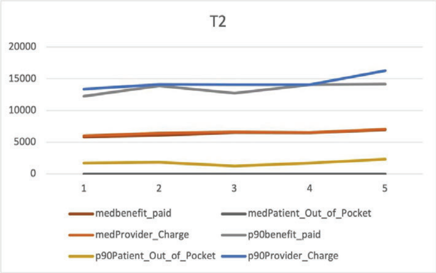


Largest growth in out of pocket spending (OOP) has been in Therapeutic procedures.

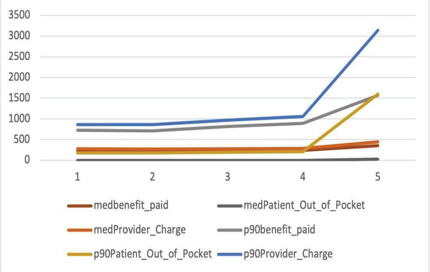
Variations within Therapeutic group



Miscellaneous therapeutic



Radiation Oncology



Surgical operations

Largest increases in costs relative to benefits are seen in T1 and T3. These differences are most pronounces in the 90th percentile of the distribution

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Managing shifts to Value-based healthcare:

A multi-level dynamic capability development process

Dr. Olga Kokshagina
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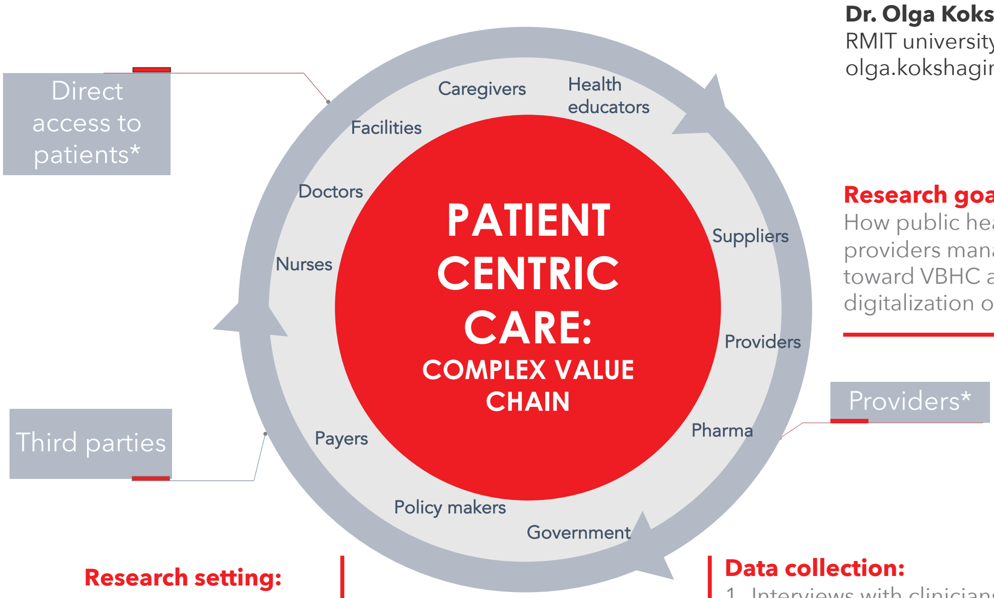


Research goal:
How public healthcare providers manage shifts toward VBHC and digitalization of healthcare?

Research setting:

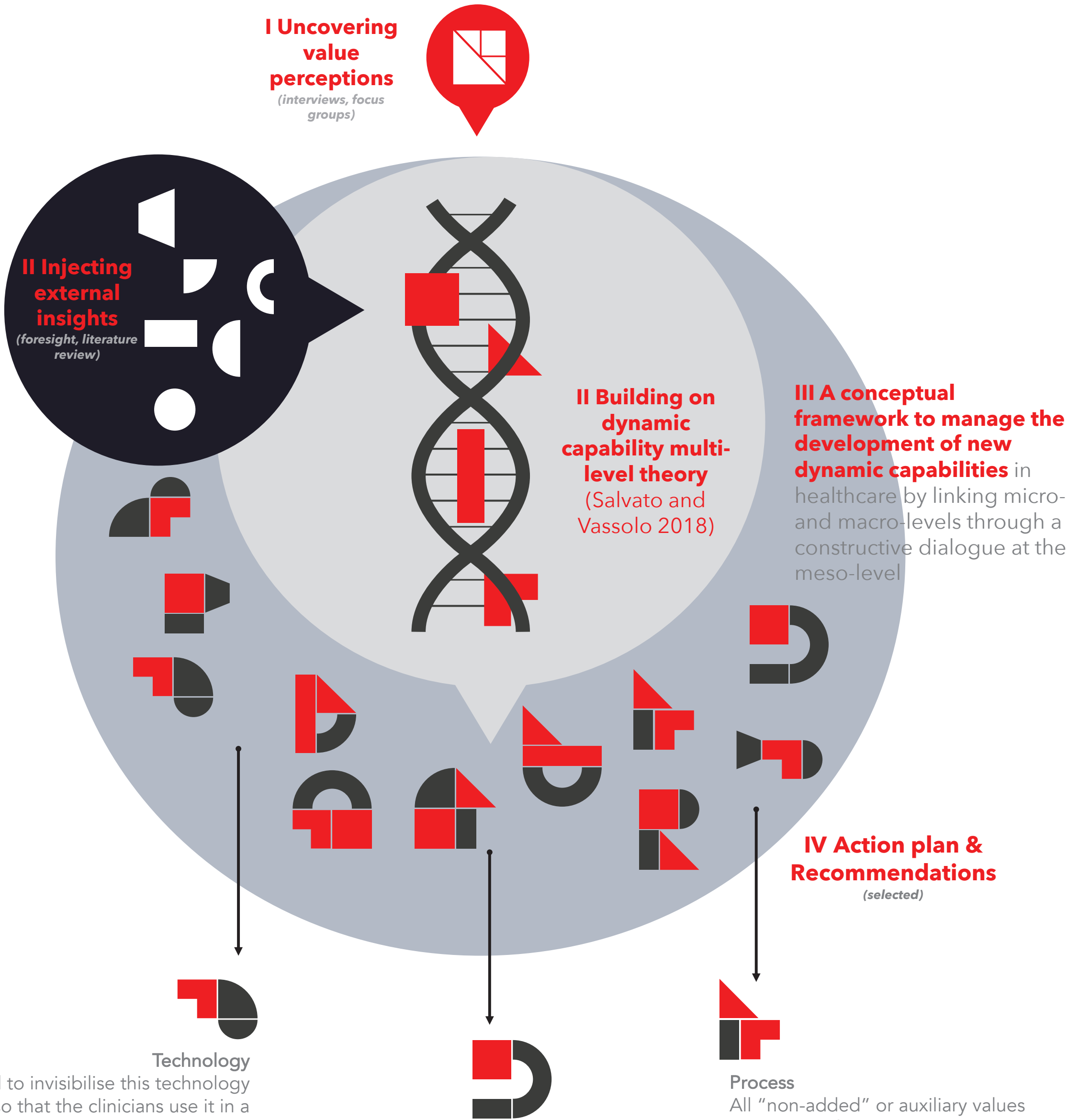
Cardiology Department

Vall d'Hebron
Barcelona Hospital Campus

Data analysis: **Systematic design driven approach**

Data collection:

1. Interviews with clinicians, nurses, admin personnel – 12 semi-structured interview
2. Focus group with clinicians and procurement
3. Systematic literature review on value based healthcare



I Uncovering value perceptions
(interviews, focus groups)

II Injecting external insights
(foresight, literature review)

II Building on dynamic capability multi-level theory (Salvato and Vassolo 2018)

III A conceptual framework to manage the development of new dynamic capabilities in healthcare by linking micro- and macro-levels through a constructive dialogue at the meso-level

IV Action plan & Recommendations
(selected)

Technology
Need to invisibilise this technology so that the clinicians use it in a natural way without the concern of how the technology works

Staff focus
Patient centric care only possible with well-being of staff ensured; yet lack of focus

Process
All "non-added" or auxiliary values kicked out of the process

Lack of consensus on who had responsibility for ensuring that health care embodies the desired high-value characteristics.

NSW
Health

Value based healthcare

VBHC approach to NSW diabetes management:
The case for change

Statewide Initiative for Diabetes Management—Case for Change development

NSW Health undertook novel analysis to understand the case for change from the patient, clinician and system perspectives. The analysis involved an original examination of linked statewide administrative data, combined with qualitative investigations of the patient journey. Novel matched cohort analysis was also conducted to compare the acute service use of patients with Type 2 diabetes to those without.

Diabetes continues to be a significant public health priority for NSW. Its prevalence is rising, and there is variation across the state.

11 Percent

Adults with diabetes in 2018.

25 Undiagnosed

For every 100 people diagnosed with type 2 diabetes[1].

Aboriginal people are three times more likely to have diabetes than non-Indigenous Australians, and type 2 diabetes is a direct or incirect cause for 20% of Aboriginal people's deaths.

1.2 Million

Episodes of hospital care 2013-19 with diagnosis of diabetes.

95%

In NSW hospitals, most patients are treated for complications of diabetes, rather than diabetes itself.

Some patients with diabetes use more acute services than similar patients without diabetes, particularly those with cardiovascular issues. These patients have longer stays and more readmissions.

Efficiency and effectiveness

A significant number of patients with diabetes are treated in acute inpatient settings

- Between 2013-14 and 2018-19, NSW public hospitals treated 431,000 patients with diabetes. They had an average hospital stay of nearly 6 days with an average cost of nearly $7,500.
- More patients are being treated in NSW hospitals for complications of diabetes, rather than diabetes alone.
    - Only 5% of patients have diabetes as a primary diagnosis
    - The number of episodes with diabetes as a comorbidity increased by 31% from 2013-14. This is mainly driven by the volume and growth in type 2 diabetes..
    - A significant number of patients are admitted to hospital for **complications of diabetes** including circulatory, digestive, kidney, eye or respiratory system issues.

Patient experience

Patients seek joined up care which empowers them to be active partners in understanding and managing their chronic condition

- There are many psychological and emotional aspects of being diagnosed with, and managing diabetes.
- Care across settings is not always coordinated. Patients have difficulty:
    - navigating the amount of information available about diabetes
    - receiving care that is timely and appropriate
    - being active partners in managing their diabetes.
- People living with diabetes have highlighted the **importance of seamless care across care settings** underpinned by effective relationships and management by general practice.

Clinician experience

Clinicians believe continuity of care within and between general practice, primary, community, aged care and hospital settings is important. Key issues are:

- Silos exist between services and across settings. There are opportunities to Integrate care modalities that are interdisciplinary and delivered across care settings.
- Earlier screening and detection is critical, and there are opportunities to systematically screen for type 2 diabetes earlier.
- Where patients are not managed in primary care, they have a higher risk of unplanned admission (8% compared to 4%) and a longer length of stay in hospital (2.7 days compared to 2.0 days where the admission is unplanned).

If nothing is done and business as usual care continues...

- the estimated costs of treating people with diabetes in the NSW Health system are significant. **Total inpatient costs would rise from $1.80B in 2019-20 to $2.55 bn in 2028-29, which is an average cost of $2.2B p.a. over ten years.**
- Over the next ten years, **more than 2.9 million episodes of care and 18 million bed days would be required** for inpatient treatment of people who also have diabetes in NSW public hospitals.

What we're doing to address this issue

- NSW Health is committed to working with partners in a '**one health system**' approach, to align policies, planning and delivery of care, that will improve the health outcomes and experiences of care for people with diabetes.
- The aim of this collaboration with Primary Health Networks including general practice, Aboriginal Controlled Community Health Organisations (ACCHOs), primary and community care organisations, is to implement a statewide initiative that supports a more coordinated approach to diabetes management to keep people well and out of hospital.
- The statewide Initiative will enable system-wide improvements where needed, through six focus areas. These align with current programs of work, local circumstances, needs and capabilities. The Initiative will define and measure common outcomes that NSW Health and its partners will work towards.
- More information at https://www.health.nsw.gov.au/Value/Pages/diabetes-about-initiative.aspx

NSW
GOVERNMENT

Developing the case for change was a collaborative effort between the Ministry of Health, Agency for Clinical Innovation and NSW Health clinicians.
Contact: Catherine Chan— Senior Economic Analyst, Economics and Analysis Unit, Strategic Reform and Planning Branch, NSW Ministry of Health

DISCLOSING “VALUE” BY PUBLIC HOSPITALS IN AUSTRALIA IN NEW TECHNOLOGY ERA

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ABSTRACT

This study explores the impact of healthcare policy on digital transformation and the move toward value-based healthcare. A key focus is on the ways in which innovative technologies can improve managerial decision making though extended multidimensional performance evaluation, across both clinical and administrative domains. The study comprises:

1. An examination of Australian government policy changes and public hospital annual reports (sourced from hospital's websites) over the last decade.
2. A systematic literature review in examining the role of accounting in value based healthcare.

BACKGROUND

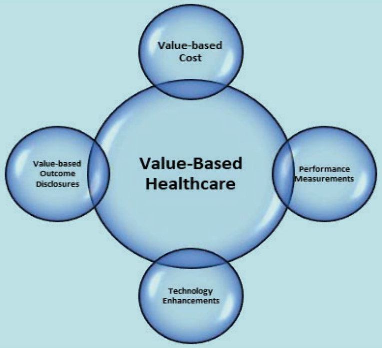
The role of accounting in supporting value-based healthcare initiatives is little understood. This includes

- Budgeting to ensure patients have access to care.
- Extending performance evaluation to include value based healthcare measures in financial decision making. (Porter & Teisberg, 2006).
- Including these new value-based accounting metrics in hospital funding and decision making.

RESEARCH QUESTIONS

The aim of the study will be incorporated into the below mentioned research questions –

- *Q1. How are hospitals measuring and disclosing “value” in a new technologically digital health era?*
- *Q2. How is the use of technology supporting performance measurement and “value” disclosures?*



METHODS

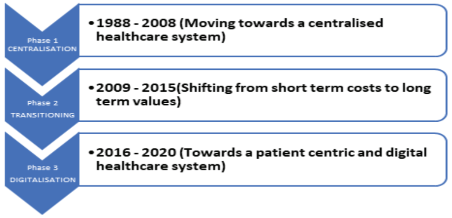
MULTIPLE METHOD APPROACH will be used in this study –

To examine the first research-question an archival/secondary research strategy will be undertaken for public hospitals (> 500 beds).

From the results, qualitative interviews will be conducted with a focus on education inclination value-based healthcare in budgeting for hospitals.

STUDY 1

- Systematic examination of Australian government policy changes and public hospital annual reports are explored as per the timeline provided below.
- The archival data provides a better understanding of how values are changing overtime and how hospitals are measuring and disclosing "value" in a new technology era and the impact that policy and technology investment have in supporting the move towards value-based care.



- **1988 - 2008 (Moving towards a centralised healthcare system)**
- **2009 - 2015(Shifting from short term costs to long term values)**
- **2016 - 2020 (Towards a patient centric and digital healthcare system)**

STUDY 2: SYSTEMATIC LITERATURE REVIEW (PRISMA)

- Examines the role of Accounting in implementing Value Based Healthcare.
- Highlights the efficiency dominated focus of accounting which is central to healthcare reforms.
- Foregrounds the need for improved accounting techniques to support healthcare models that deliver value based performance outcomes for patients.

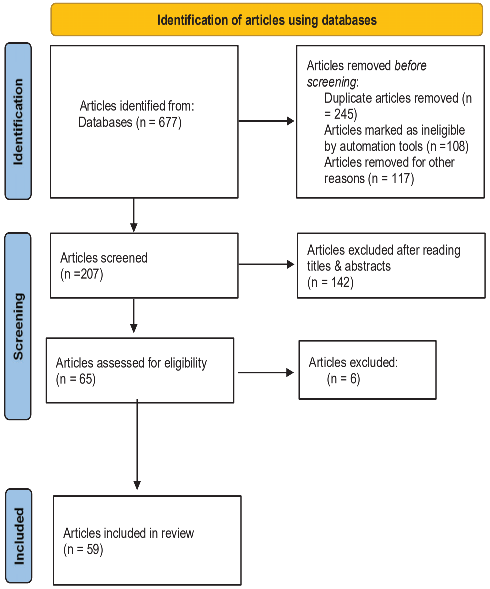
Selection of Databases

- For conducting the search: Scopus was selected as primary source, and Science Direct and Google Scholar were considered later to expand the initial source database.

List of keywords used:

1. “Accounting” and “Value-based healthcare”
2. “Accounting” and “health care” and “cost”
3. “Accounting” and “health care” and “performance measurement”
4. “Accounting” and “clinician”
5. “Value-based healthcare” and “Costing” and “Outcomes”
6. “Accounting” and “hospital” and “clinician”
7. “Accounting” and “cost*” and “value*”
8. “Accounting” and “financial manager” and “value-based healthcare”

PRISMA FLOW DIAGRAM



Identification of articles using databases

Identification

Articles identified from: Databases (n = 677)

Articles removed *before screening*:
Duplicate articles removed (n = 245)
Articles marked as ineligible by automation tools (n =108)
Articles removed for other reasons (n = 117)

Screening

Articles screened (n =207)

Articles excluded after reading titles & abstracts (n = 142)

Articles assessed for eligibility (n = 65)

Articles excluded: (n = 6)

Included

Articles included in review (n = 59)

Inclusion/Exclusion Criteria

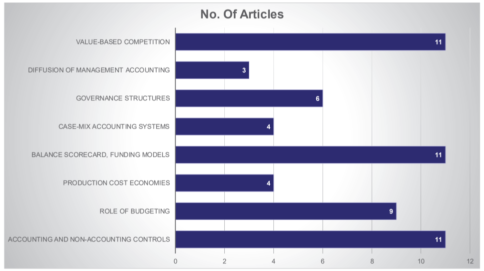
- 207 papers were retrieved based on ”abstract-title-keywords” screening and from those we selected 65 articles that met the inclusion criteria.
- Of the 65 articles, 6 were excluded, leading to the identification of 59 papers of interest.

ANALYSIS OF RESULTS

- Some of the articles were codified. The description of the characteristics of the articles has been presented, considering the source title, publication time, findings.
- The most important findings and emerging common topics among the articles selected has been presented according to Thematic analysis.

MAIN FINDINGS OF THE ANALYSED ARTICLES

- The analysed articles consider accounting as a technical practise and not a valuing practise.
- The need for accounting in health care is growing. Health care has posed unique challenges to accountants, as costing different activities but they don’t measure value
- Value based healthcare is about understanding the money spent on patient’s journeys to the OUTCOMES that matter most to the patients.



REFERENCES

Porter, M. E., & Teisberg, E. O. (2006). Redefining health care: Creating value-based competition on results. Harvard business press

Elizabeth Koff & Nigel Lyons (2020). Implementing Value based healthcare at scale. Med Journal Aust 2020

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The Value Based Health Care Landscape

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Background

VBHC precursors in the 90's were typically developed as health outcomes infrastructure projects, but most failed during the implementation stage due to political and bureaucratic barriers and a lack of a clear strategic framework.

Whilst pessimism towards VBHC is still present, recent investments into ICT infrastructure and shifts towards collaborative trial networks and registries for health outcomes studies has helped VBHC garner momentum.

Methods

Between December 2019 and February 2020, 16 Key Champions representing diverse health service organisations, universities and international experiences (see Table 1) were consulted through semi-structured interviews.

Interview transcriptions underwent thematic analyses and key themes were decided upon by five vacation scholars.

Health economics and finance	Two Opinion Leaders; Australia, America
Policy, Health System and Change	Eight Opinion Leaders; Australia, UK, Sweden, Netherlands
Patient Outcomes	Three Opinion Leaders; Australia
Implementations in Practice	Four Opinion Leaders; Australia, Germany, Sweden, Japan

Table 1. Basic Key champion information; Number of opinion leaders per category and their respective countries

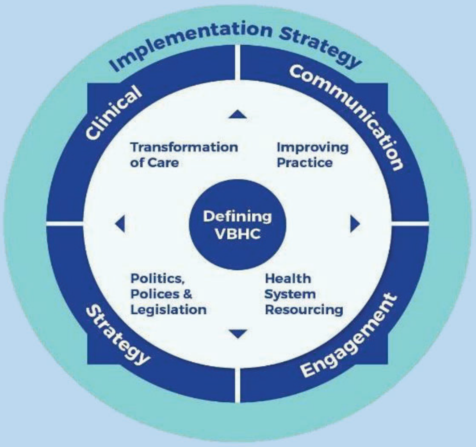
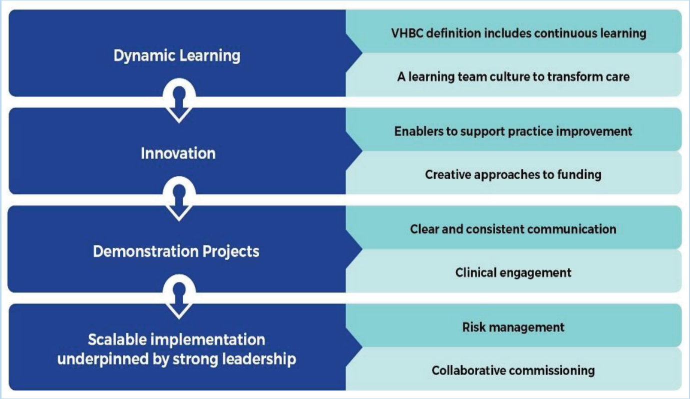


Figure 1. Eight themes associated with VBHC implementation, as identified by healthcare opinion leaders

Strategic Roadmap

The interviews with key health leaders suggest that successful VBHC implementation requires a well-planned map lining up the various components to pull together towards a stepped implementation across a health system, allowing stakeholders the opportunity to appreciate the need for a significant change to existing systems.

A strategic roadmap to support VBHC success was developed and is outlined below in Figure 2.



Dynamic Learning	VHBC definition includes continuous learning A learning team culture to transform care
Innovation	Enablers to support practice improvement Creative approaches to funding
Demonstration Projects	Clear and consistent communication Clinical engagement
Scalable implementation underpinned by strong leadership	Risk management Collaborative commissioning

Figure 2. Strategic roadmap to VBHC implementation

Knowledge Gap

Whilst the benefits to patients are clear, the need to identify and explore other success factors for VBHC implementation are made apparent through these previous experiences.

By developing a strategic roadmap through this study, we hope to provide a strong foundation for VBHC within the Australia Capital Territory.

Results

Eight global success themes were decided upon, with each one containing a number of organising themes within. These were focussed across macro, meso and micro levels, with 'Defining VBHC' at its core (see Figure 1).

Eight Success Factors

Defining VBHC	• The traditional VBHC definition was often interpreted inconsistently. A clearly outlined and continually evolving definition of VBHC is needed.
Transformation of care	• A cultural change underpinned by teamwork and integration, continuous learning and a paradigm shift is required for a smooth transition process.
Improving practice	• Appropriate validated measurement instruments, investment into data collection & dynamic ICT systems, and the use of data to improve practice are critical for both short and long-term success.
Political, policy and legislation	• It is important to engage with politicians early on using evidence-informed processes. Policy making and appropriate payment systems are also important in developing coherent VBHC.
Health system structure and resourcing	• Greater efficiency from health budgets should be prioritised over cost-cutting measures. This can be achieved by disinvesting from low-value care and reinvesting in high-value care.
Communication	• Clear and consistent communication and terminology was critical when garnering VBHC support. Utilising communication models that focus on patient-centred care and efficient outcome delivery is ideal.
Clinician engagement	• Utilising existing or 'Activated' interests and developing ways to cultivate interest (e.g. incentivising) were the most effective methods for clinician engagement.
Implementation strategy	• Strong leadership supported by patients, carers, clinicians, policymakers and governing bodies with a mix of top-down and bottom-up approaches is critical to an implementation strategy.

You can read our original paper in the Deeble Perspectives Brief by scanning this QR code!
Here you can find any references or more detailed information you might want to know.

Acknowledgements

Thank you to the international opinion leaders and champions for contributing to this project. Thank you to the ACT Health Directorate Vacation Student Scholarship Program that supported the students involved in the project.

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