

# Implementing value-based health care at scale: the NSW experience

What is value in health care and how can the system deliver it at scale?

The New South Wales health system exemplifies the worldwide challenge of health service sustainability. With 234 public hospitals and facilities employing over 130 000 staff, the system provides universal access to health care for a growing population of almost 8 million people across a diverse geography of over 800 000 km<sup>2</sup>. The NSW Health budget in 2018–19 was \$25 billion,<sup>1</sup> representing over 25% of the annual state budget. As with all health systems, NSW Health is experiencing growing pressure from chronic disease, an ageing population and the use of new technology. In response, optimising health system access and efficiency has been central to health reform in NSW.<sup>2</sup>

Value-based health care focuses on how to ensure sustainability of the system to meet these challenges while recognising that a focus on efficiency alone is insufficient. The change in emphasis from volume to value challenges the system to better understand the patient experience, critically review how and where care is delivered, and reduce unwarranted clinical variation. It involves working to develop, authorise and spread successful models that improve health outcomes for patients and value for the health system. This work builds on foundations that include:

- evidence-based models of care;
- guidelines and standards;
- consistent measurement;
- a clear picture of the costs involved in providing care;
- a focus on quality and safety;
- strong clinical leadership; and
- networks that enable long term change.

Within the past decade, value-based health care has received worldwide recognition as a more sophisticated approach to organising and providing health care than volume-based service contracting.<sup>3,4</sup> Traditional volume- or activity-based funding models focus on the number and mix of patients being treated within a service and measure throughput indicators. In an environment of increasing demand for health services and changing patient and community expectations, value-based health care focuses on improving the value derived from health care resources that are currently available and measures the outcomes of the care that is delivered.<sup>5</sup> One example is the Osteoarthritis Chronic Care Program, where the outcomes now measured include pain level and hip or knee functional status (Box 1). Previously, the activity measure would have been the number of surgeries for knee replacement. Illustrating the difference in the new approach, a key aim of the Osteoarthritis Chronic

Care Program is to reduce or delay the need for surgery; the key outcome is to provide effective patient care in the right place.

International definitions of “value” in health care place differing emphasis on cost, cost-effectiveness, quality and outcomes.<sup>5,9</sup> Across all definitions is a central premise to deliver health outcomes that matter to patients. These include reduced pain, increased mobility, and the ability to participate in daily activities.

In NSW, the definition of value-based health care considers what value means for patients, clinicians and the health system, and aims to provide health services that deliver value across four domains:

- improved health outcomes;
- improved experiences of receiving care;
- improved experiences of providing care; and
- better effectiveness and efficiency of care.

The goal is to use health resources optimally, delivering the right care in the right setting and at the right time.

The case for value-based health care is compelling as it puts the patient at the centre of care. But what does this mean in practice in the Australian context and in a health system the size of NSW? How can health services be designed and funded to deliver on this vision? How can this be done at scale and how can this shift in service delivery be incentivised? These questions are at the heart of the health reform agenda in NSW.

Leading Better Value Care is one of the flagship programs that NSW Health is using to drive value-based health care (<https://www.health.nsw.gov.au/Value/Pages/leading-better-value-care.aspx>). It is a state-wide approach to designing, implementing and embedding clinically led patient-centred models of care and assessing their impacts over time.

Leading Better Value Care is focusing on 13 areas of high impact health care where there is agreement on the need to scale up and roll out evidence-based clinical initiatives (Box 2). The first eight clinical initiatives were selected as a system priority in 2016 with the criteria that they:

- identified issues with existing clinical management or service delivery;
- highlighted potential patient benefits, experiences and reported outcomes;
- showed an opportunity to address unwarranted clinical variation; and
- had the potential to increase the capacity of the health system.

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### 1 Osteoarthritis Chronic Care Program (OACCP)

- Previous literature suggested that management of osteoarthritic pain in older people was suboptimal.<sup>6,7</sup>
- Patients who are on a waiting list for knee or hip replacement are now referred to the OACCP clinic by their orthopaedic surgeon or general practitioner. There are now OACCP clinics in each local health district across NSW. Each patient receives multidisciplinary care and an evidence-based care plan to help achieve outcomes including increased confidence, improved joint function, weight loss and reduced pain.
- Evaluation of the OACCP pilot involving 5140 patients showed that 4% of hip and 11% of knee patients who participated were removed from wait lists because they no longer needed surgery.<sup>8</sup>

### 2 Leading Better Value Care clinical initiatives

#### Eight clinical initiatives commenced implementation in 2017–2018

- Osteoarthritis chronic care program
- Osteoporosis re-fracture prevention
- Chronic heart failure
- Chronic obstructive pulmonary disease
- Inpatient management of diabetes mellitus
- Diabetes high risk foot services
- Falls in hospital
- Renal supportive care

#### Five additional initiatives being implemented in 2019–2020

- Hip fracture care
- Chronic wound management
- Bronchiolitis
- Hypofractionated radiotherapy for early stage breast cancer
- Direct access colonoscopy

In 2017, local health districts were asked to nominate other initiatives that could deliver value across the four domains using the best available evidence. Five additional initiatives were selected for development and implementation in 2019 and 2020.

Collaboration across teams and organisations is integral to all of the Leading Better Value Care initiatives. The Ministry of Health provides the strategic framework for health districts and specialty health networks to plan and implement local approaches. NSW Health Pillar organisations (Agency for Clinical Innovation, Clinical Excellence Commission, and Cancer Institute NSW) provide support and tools to help clinicians use and apply the best available evidence and implement the initiatives.

Solutions include new or improved models of care and referral pathways, clinical audits, improved documentation and patient coding processes, and new clinics. New clinics have been established across the state for High Risk Foot Services (Box 3), the Osteoporosis Refracture Prevention model of care, and the Osteoarthritis Chronic Care Program (Box 1). These require an integrated and networked approach involving acute, primary and community care services.

Measurement is a critical enabler of value-based health care. The historical approach of measuring inputs or costs is moving to measuring outcomes and experiences that are important at patient, clinician and system levels. Each Leading Better Value Care clinical initiative has a monitoring and evaluation plan

specifying how models of care are measured before, during and after implementation.

As linked data and analytics become more sophisticated, services can adjust to provide the best care for each individual. The Register of Outcomes, Value and Experience is a virtual registry that will link the information generated from providing health care to patients in the 13 Leading Better Value Care cohorts.

The NSW Health Patient Reported Measures Framework (<https://www.health.nsw.gov.au/Value/Pages/prm-framework.aspx>) aims to standardise the collection and use of patient-reported measures. These measures are a direct account of the patient's personal experiences and health outcomes and are fundamental to value-based health care. Patient-reported experience measures assess how a patient perceives the care process and how it affects their experience of receiving care. Patient-reported outcome measures focus on the patient's perception of their health status, clinical outcomes, mobility and quality of life. The capacity to collect and use patient-reported experience measures is being built into hospital electronic medical records to inform clinical decision making and improve outcomes, experiences and quality of care. Linked data from the Register of Outcomes, Value and Experience allows NSW Health to triangulate information; for example, the relationship between patient experience and length of stay in hospital.

Systematic monitoring and reporting of outcomes will be used to measure progress and effectiveness. Patient experience data indicates promising results about the early impact of Leading Better Value Care (unpublished report). For High Risk Foot Services there has been an increase in the number of non-admitted service events and more positive experiences for patients whose care was provided in this setting compared with an admitted setting (Box 3).

Strengthening and enabling the health system to achieve value is transformational, and NSW is not alone on this journey. The Commonwealth Medicare Benefits Schedule Review<sup>10</sup> aims to better align services with contemporary clinical evidence and

### 3 High Risk Foot Services

- About 20% of people with diabetes are at risk of foot ulceration. Most admissions to hospital in NSW were previously for treating patients with issues such as infections and ulcers (NSW Agency for Clinical Innovation, unpublished data). As part of Leading Better Value Care, 15 new High Risk Foot Services have been established and there is at least one service in every NSW health district.
- Patients now have improved access to local specialised podiatry and multidisciplinary care. Each service provides care locally in an out-of-hospital environment and empowers patients to self-manage their health. General practitioners, physicians and surgeons can refer patients to a High Risk Foot Service for best practice, holistic assessment and management of diabetes-related foot conditions.
- Outcomes being measured include the number and proportion of patients satisfied with the treatment received and who report understanding about managing their foot condition, the percentage of limb-saving procedures, and the rate of growth in non-admitted service events for foot infection and ulcers.

health outcomes for patients. Choosing Wisely (<http://www.choosingwisely.org.au/home>) is enabling clinicians, consumers and health care stakeholders to start important conversations about tests, treatments and procedures where evidence shows they provide no benefit or, in some cases, lead to harm. Other states and territories are considering the value-based health care agenda, and open discussion of challenges and lessons learned will help to shape their approach.

Embedding value-based health care across NSW will require significant cultural change. A clear vision, executive sponsorship and, most importantly, strong clinical leadership and engagement are central. A common theme from clinicians in health districts is that value-based health care helps them “deliver the kind of care we want to deliver” (Leading Better Value Care, unpublished report). Achieving outcomes

that matter to patients and reducing ineffective care resonate with clinical teams and managers alike.

Delivering health care is increasingly complex and demanding. Identifying and unlocking the value that exists in every aspect of the health system is a long term aspiration. It requires greater maturity of systems and the collective efforts of clinicians, health executives and managers. Ultimately the value agenda will be driven by patients and the community. Planning and providing care that reflects clinical evidence and what is important to patients is a powerful means to ensure value in the health system.

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