Allied Health Professions' Office of Queensland

Ministerial Taskforce

on health practitioner expanded scope of practice: final report

June 2014

147-163 Charlotte Street Brisbane.

Copies of this publication can be obtained at
www.health.qld.gov.au/ahwac, phone (07) 3328 9298

ISNN 978-1-876532-79-6

Minister's foreword

The Queensland Government is committed to delivering a healthcare system that will meet the health needs of Queenslanders for generations to come. The *Blueprint for better healthcare in Queensland*, released in February 2013, sets out the structural and cultural improvements needed to establish Queensland as the leader in Australian healthcare. With this in mind, I commissioned the Ministerial Taskforce on health practitioner expanded scope of practice in March 2013 to investigate the role that allied health professionals play in Queensland Health, and how this role might be optimised to meet the strategic objectives set out in the Blueprint.

Allied health professionals play an essential role in ensuring Queenslanders have access to the best healthcare in Australia. The work of the Ministerial Taskforce has shown significant improvements can be made to the effectiveness and efficiency of the system if the scope of practice for allied health professionals is expanded.

Many exciting and innovative models of service delivery which optimise the skills and expertise of allied health professionals and improve access for the community exist in pockets across our Hospital and Health Services. For reasons of culture and history, these innovations have not been implemented broadly across Queensland Health. Long-held traditions mean that tasks that are regularly performed by an allied health professional in the private sector cannot be performed by their colleagues in the public sector. This needs to stop to ensure that Queenslanders across the state receive the best care and the best value for money when it comes to public healthcare.

I thank the Ministerial Taskforce for their efforts and contribution in preparing this report and entrust the Allied Health Professions' Office of Queensland with the important task of guiding the allied health professions in the implementation of the recommendations of the report.

I encourage staff from all Hospital and Health Services to take note of the many opportunities outlined in this report for improving the system for our patients, our workforce and Queensland Health.

Lawrence Springborg
Minister for Health

Chief Allied Health Officer foreword

The diversity of skills and expertise which the allied health professions bring to Queensland Health is significant, as is the potential they have for realising tangible improvements to service delivery and patient outcomes. This has been highlighted throughout the extensive research and consultation undertaken for the Ministerial Taskforce on health practitioner expanded scope of practice.

Allied health professionals contribute daily to optimising outcomes for patients across Queensland. They provide high quality, safe and efficient models of care which are based on solid evidence and proven results. This final report of the Ministerial Taskforce highlights opportunities to better use this great allied health resource.

The Ministerial Taskforce found that in Queensland Health:

- allied health professionals are educated to competently undertake a greater range of tasks and responsibilities than are often used
- opportunities exist to extend the scope of practice of some allied health professionals in line with reforms in other Australian states and internationally to improve patient satisfaction, clinical outcomes and reduce waiting times
- the support workforce can be used more effectively to enable allied health professionals to work to their full scope of practice
- many of the current hours of operation do not align with the needs of patients and a number of barriers exist to realising the full capacity of this workforce.

The Ministerial Taskforce's recommendations call for a radical transformation of the way healthcare is delivered to the community. Queensland's allied health professionals are renowned for their skill, expertise and innovation. I believe they have the ability to tackle this difficult task and to lead their colleagues through this change. In doing so, allied health professionals can make a greater contribution to improving health services for the community in a more cost-effective manner, including:

- improving patient access to services
- reducing waiting times in emergency departments and for specialist and surgical appointments
- improving patient flow.

This report outlines a number of evidence-based models of care that expand the scope of practice of allied health professionals to address these community needs.

There are opportunities to do things differently and to do things better. We must not settle for continuing to provide health services in the same ways we have always done when we know there is a better way. I look forward to working with you as we implement the recommendations of the Ministerial Taskforce.

Julie Hulcombe
Chief Allied Health Officer

About the Ministerial Taskforce on allied health expanded scope of practice

The Ministerial Taskforce on health practitioner expanded scope of practice was established as a commitment in the *Health Practitioners' (Queensland Health) Certified Agreement (No. 2) 2011* (HPEB2). The Minister for Health appointed the Assistant Minister for Health to chair the taskforce. The taskforce comprised diverse representation and met on four occasions between March and October 2013. Objectives and deliverables aimed at best supporting Queensland Health to address priority areas were agreed, in line with the Queensland Government's *Blueprint for better healthcare in Queensland*.

Taskforce members

Chair: Dr Chris Davies, Assistant Minister for Health

Mr Mark Tucker-Evans, Council of the Ageing Queensland

Dr Alexandra Markwell, Australian Medical Association Queensland

Professor Susan Nancarrow, Southern Cross University

Professor Sandra Capra, University of Queensland

Mr Alex Scott, Together Queensland

Mr Gary Bullock, United Voice Queensland

Ms Beth Mohle, Queensland Nurses Union

Dr Elizabeth Whiting, Metro North Hospital and Health Service

Dr Bruce Chater, Central Queensland Hospital and Health Service

Dr David Rosengren, Metro North Hospital and Health Service

Mr Ian Langdon, Gold Coast Hospital and Health Board

Ms Julia Squire, Townsville Hospital and Health Service

Dr Frances Hughes, Department of Health

Ms Judith Catherwood, Metro North Hospital and Health Service

Ms Danielle Hornsby, Mackay Hospital and Health Service

Dr Michael Cleary, Department of Health

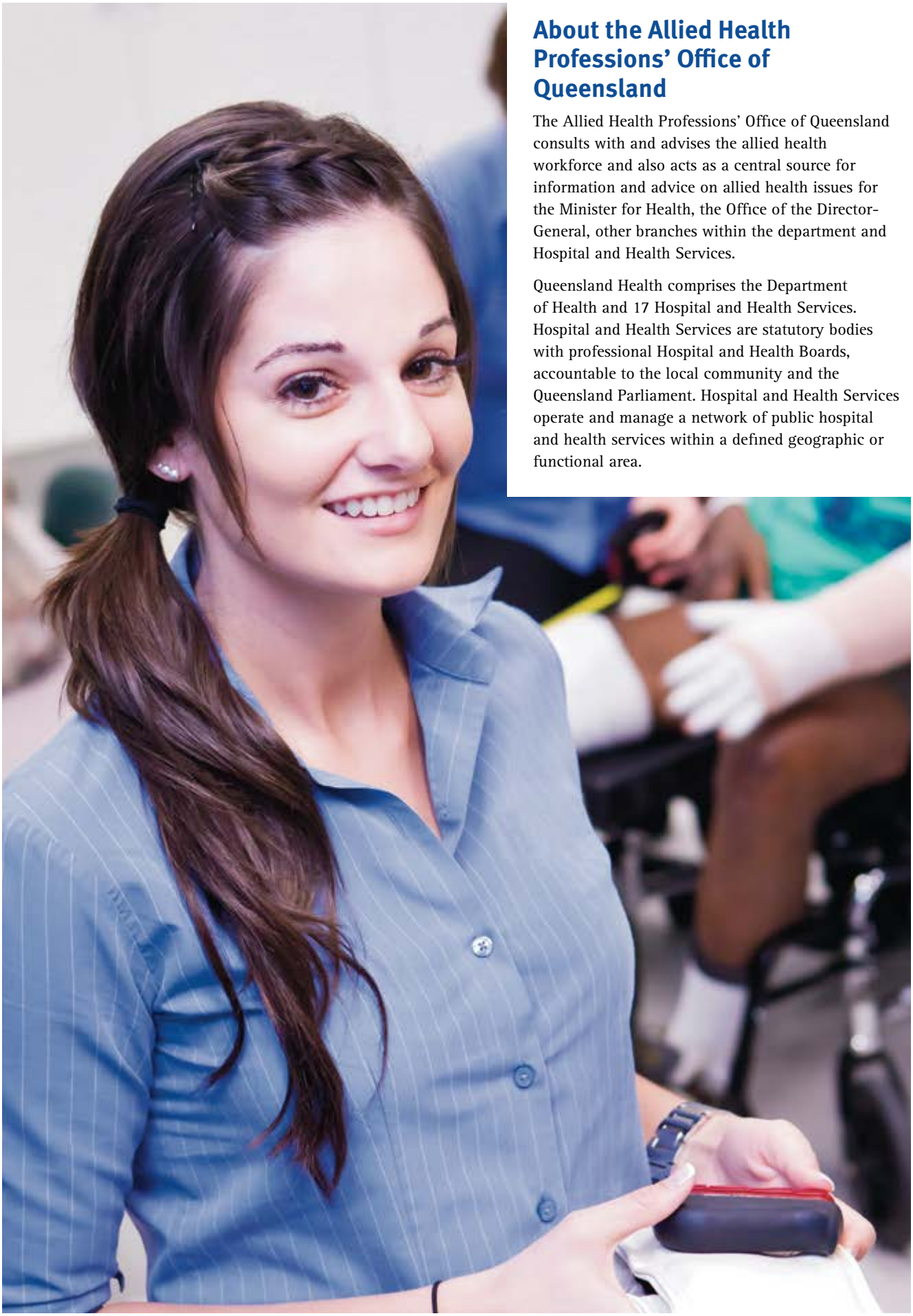
Ms Lyn Rowland, Department of Health

Mr Michael Zanco, Department of Health

Secretariat

Ms Julie Hulcombe, Department of Health

Ms Gretchen Young, Department of Health



About the Allied Health Professions' Office of Queensland

The Allied Health Professions' Office of Queensland consults with and advises the allied health workforce and also acts as a central source for information and advice on allied health issues for the Minister for Health, the Office of the Director-General, other branches within the department and Hospital and Health Services.

Queensland Health comprises the Department of Health and 17 Hospital and Health Services. Hospital and Health Services are statutory bodies with professional Hospital and Health Boards, accountable to the local community and the Queensland Parliament. Hospital and Health Services operate and manage a network of public hospital and health services within a defined geographic or functional area.

Contents

Summary

Clinicians need to work to their full scope of practice. We will challenge the myths of what is possible and be open to new ways of working and models of care. We need to break down traditional barriers between professions, build clinician leadership and promote a culture of respect for each other's knowledge and skills.

Blueprint for better healthcare in Queensland

The challenges facing Queensland Health and the need for workforce reform are well documented in the *Blueprint for better healthcare in Queensland*. Escalating demands on services and rising costs, increasing prevalence of chronic diseases, and changing demographics and community expectations are driving the need for changes to the way healthcare services are delivered and by whom.

The *2005 Australia's Health Workforce* report by the Australian Government's Productivity Commission recognised that simply expanding the workforce would not be an adequate response to these challenges. The report identified the importance of achieving improvements in the efficiency and effectiveness of health workforce arrangements, including broader scope of practice for allied health professionals.

The Ministerial Taskforce on health practitioner expanded scope of practice was established to provide recommendations to the Minister for Health on expanding the scope of practice for health practitioners in Queensland Health.

The recommendations are designed to realise more effective and efficient use of the allied health workforce in Queensland Health in order to achieve better outcomes for patients, the community and the workforce. They are based on current literature and key findings from extensive consultation with internal and external stakeholders and focus on supporting Hospital and Health Services to respond to the challenges identified in the *Blueprint for better healthcare in Queensland*.

Key principles

The taskforce established four key principles to be applied to decision-making regarding expanding the scope of practice for allied health practitioners within Queensland Health:

- delivering patient-centred care
- ensuring quality and safety
- providing cost-effective services
- providing collaborative care within a team environment.

Findings

The taskforce found that Queensland Health's allied health professionals are not able to perform the full scope of tasks and duties that they are trained and qualified to perform, and that are performed by their colleagues in the private sector. This is due to a range of legislative, administrative, funding, policy, custom and practice barriers that exist within Queensland Health.

By expanding the scope of practice of allied health professionals, Queensland Health can make great gains in improving outcomes for patients, the community and its workforce, including improvements to:

- health outcomes for patients
- patient satisfaction
- efficiency of health services
- quality of health services
- community access to health services
- job satisfaction and retention of allied health staff
- the demand on medical officers in Queensland Health and private general practitioners.

A range of evidence-based, patient-centred models of care incorporating full scope and extended scope tasks which have been successfully implemented in Australia and internationally, have been identified for implementation in Queensland Health (see Appendix A). Key models to address areas of high need within Hospital and Health Services are presented in the body of the report.

Funding implications

With appropriate review of the skill-mix and allocation of resources within clinical teams, including delegation of tasks to the support workforce, these models can be implemented within current budgets and in some circumstances achieve cost savings.

Expanded scope of practice

Expanded scope of practice in Queensland Health has been described by the taskforce as:

- optimising the full scope of practice of an allied health professional
- extending their scope of practice to include tasks that fall outside of the recognised scope of practice of that profession—under the right circumstances
- delegating specific tasks related to patient care to the support workforce to enable full and extended scope.

Full scope of practice

Full scope of practice includes the full spectrum of roles, functions, responsibilities, activities and decision-making capacity that individuals within that profession are educated, competent and authorised to perform. These include:

- first contact in the care pathway
- making direct referrals to medical specialists in Queensland Health
- making direct referrals to other allied health professionals
- requesting investigations to enhance current decision-making and care
- prescribing equipment and consumables
- documentation of findings on investigations performed by diagnostic allied health professionals
- criteria-led discharge
- criteria-led admission (e.g. from acute to sub-acute services).

The taskforce found:

- Allied health professionals are educated to competently undertake a greater range of tasks and responsibilities than current models of care within most Hospital and Health Services recognise and use.
- Other health professionals and service administrators have an incomplete understanding of the full scope of practice of the allied health professions.
- Transformational change to service delivery models across Queensland Health is required if the full capabilities of the allied health workforce are to be used.
- Current hours of allied health services within most Hospital and Health Services do not always meet the needs of the community and patients.
- Numerous barriers to implementing full scope roles and tasks exist. The impact of historical culture, custom and practice should not be underestimated. These must be considered alongside system barriers including funding models, education accreditation standards and organisational policies.

Extended scope of practice

Extended scope of practice is a discrete knowledge and skill base additional to the recognised scope of practice of a profession and/or regulatory context of a particular jurisdiction. These could, where there is clear benefit to patient care, include:

- prescribing and administration of medications where this is not already within current scope of practice
- requesting of investigations including pathology and imaging if not already within current scope of practice
- skill sharing between allied health professionals.

The taskforce found:

- National and international literature reflects safe and cost-effective examples of allied health professions undertaking extended scope tasks in appropriate situations. Outcomes include improved patient satisfaction, improved clinical outcomes, reduced waiting times and fewer clinical transactions.
- Barriers to extended scope of practice in Queensland Health reflect those for full scope of practice. Additionally, legislative barriers exist for a number of extended scope tasks.
- Some health professionals are more resistant to allied health professionals undertaking extended scope tasks than they are to the implementation of allied health full scope of practice.
- Queensland Health has effective clinical governance processes in place to support safe and effective implementation of extended scope of practice.
- Education and training to facilitate extended scope of practice needs to be sustainable, accessible and flexible to enable the workforce to be appropriately skilled.

Delegation of tasks

Delegation of tasks occurs when practitioners authorise another healthcare worker to provide treatment or care on their behalf.

The taskforce found:

- Models of care incorporating effective delegation of tasks to allied health assistants and other support staff are required for allied health professionals to dedicate a greater proportion of their time to their full scope of practice.
- These models of care are not well developed within Hospital and Health Services at this stage.

Recommendations

The taskforce has made a number of recommendations to facilitate delivery of patient-centred, cost-effective services through allied health professionals expanding their scope of practice.

Recommendation 1

Hospital and Health Boards to lead the implementation of models of care that include allied health professionals expanding their scope of practice.

Recommendation 2

Service agreements between the Department of Health and each Hospital and Health Service to require the implementation of models of care that include allied health professionals expanding their scope of practice, and to report annually.

Recommendation 3

Allied Health Professions' Office of Queensland to showcase to Hospital and Health Services, the Queensland Clinical Senate and clinical networks opportunities to enhance patient experiences and provide cost-effective services through allied health professionals expanding their scope of practice.

Recommendation 4

The Department of Health to support redesign of models of care to improve the patient journey and deliver cost-effective services in outpatient clinics, emergency departments and mental health services by allied health professionals expanding their scope of practice.

Recommendation 5

The Department of Health to address barriers to allied health professionals expanding their scope of practice by:

- identifying and implementing alternative funding models and incentives with relevant partners
- amending regulation, legislation and policy
- developing measures and facilitating research into the outcomes of full scope of practice and extended scope tasks to further contribute to evidence.

Recommendation 6

Allied Health Professions' Office of Queensland, in partnership with education providers, accreditation bodies and professional associations, to develop and facilitate access to education, training and tools to support allied health professionals to expand their scope of practice.

1 Introduction

This report provides recommendations to the Minister for Health on expanded scope of practice for health practitioners.

The recommendations are based on current literature and key findings from extensive consultation with internal and external stakeholders.

The recommendations focus on supporting Hospital and Health Services to respond to the Queensland Government's *Blueprint for better healthcare in Queensland*, and in particular, the principal theme of 'providing Queenslanders with value in health services'. More specifically, the recommendations are designed to achieve more effective and efficient use of the allied health workforce in order to achieve better outcomes for patients, the community and the workforce within Queensland Health.

The Ministerial Taskforce on health practitioner expanded scope of practice was a commitment in the *Health Practitioners (Queensland Health) Certified Agreement (No. 2) 2011 (HPEB2)*[2]. The focus was on exploring opportunities to improve service delivery and patient outcomes through health practitioners optimising their current practice through full scope of practice, extended scope of practice in appropriate contexts, and appropriate delegation of tasks and roles to the support workforce.

The terms *allied health professions* and *allied health professionals* will be used to refer to the taskforce in-scope professions.

The challenges

Challenges facing Queensland Health and the need for workforce reform are well documented. Escalating demands on services and rising costs, increasing prevalence of chronic diseases, and changing demographics and community expectations are driving the need for changes to the way healthcare services are delivered and by whom. Added to this are the challenges of working in a health system where treatment approaches and funding models have been built around short-term acute interventions[3].

The 2005 *Australia's Health Workforce*[4] report by the Australian Government's Productivity Commission recognised that simply expanding the workforce would not be an adequate response to these challenges. The report identified the importance of achieving improvements in the efficiency and effectiveness of health workforce arrangements, including broader scope of practice. It was identified that there was a need for 'a realignment of existing health workforce roles, or the creation of new roles, to make optimal use of skills and ensure best health outcomes'. The importance of giving specific attention to issues such as expanding the scope of practice across allied health roles was also emphasised, as was the need to consider more effective division of work between allied health professions and relevant assistant roles.

The opportunities

The concepts of workforce reform and redesign are not new. Nationally and internationally, there are now many examples of the health workforce delivering services in new and different ways. While the number of models facilitating expanded roles for health professionals is growing, the evidence evaluating their impact remains at a low level with a strong reliance on grey literature. Even so, emerging evidence suggests that allied health professionals working in full scope and extended scope roles can be cost-effective, decrease waiting times, improve patient flow, maintain (and in some cases improve) patient satisfaction, and achieve clinical outcomes at least equivalent to that of traditional models.

There are clear drivers for change within the local environment:

- The Queensland Government has set a clear mandate to achieve better modes of delivery and a more intelligent use of resources through structural and cultural improvements in the health system[5].
- National and international practice is progressively moving to the use of new models that use allied health professionals to the full scope of their professional roles and tasks, in addition to extended scope of practice in appropriate contexts, in combination with effective use of the support workforce.
- Within Queensland Health, there are a number of examples of successful models which use allied health professionals in full scope and extended scope roles. However, these examples are not widespread or systemic, and are often not sustained in the long term, despite demonstration of their effectiveness.

> Clinicians need to work to their full scope of practice. We will challenge the myths of what is possible and be open to new ways of working and models of care. We need to break down traditional barriers between professions, build clinician leadership and promote a culture of respect for each other's knowledge and skills.
>
> *Blueprint for better healthcare in Queensland*

[2] Queensland Industrial Relations Commission. (2011). *Health Practitioners' (Queensland Health) Certified Agreement (No. 2) 2011 (HPEB2).*

[3] Mason, J. (2013). *Review of Australian Government Health Workforce Programs.*

[4] Productivity Commission. (2005). *Australia's Health Workforce – Productivity Commission Research Report.*

[5] Queensland Health. (2013). *Blueprint for better healthcare in Queensland.*

2 Background

2.1 Origins of the taskforce

The Ministerial Taskforce on health practitioner expanded scope of practice is a commitment in the current health practitioners' industrial agreement. The *Health Practitioners (Queensland Health) Certified Agreement (No. 2) 2011 (HPEB2)*[6], indicated that a ministerial taskforce, including union representation, would be established to identify ways to address:

- advanced scope of practice areas/clinics in key occupational areas for health practitioners
- enabling patients/clients to begin treatments with health practitioners that do not require medical specialist oversight
- developing a framework to enable assistants to perform appropriate routine tasks—provided that such duties are in accordance with the relevant classification definitions and safe professional practice. This will enable a greater proportion of health practitioners' time to be focussed on duties at the upper end of the scope of practice of the roles/classification level under which they are employed.

2.2 Establishment of the taskforce

On 23 October 2012, the Minister for Health approved the establishment of the Ministerial Taskforce on health practitioner expanded scope of practice.

The Assistant Minister for Health was appointed to chair the taskforce. Key internal and external stakeholders were invited to be members. The taskforce comprised representation from consumers, industrial bodies, universities, Health Workforce Australia, and corporate and clinical services in Queensland Health. Full membership details are provided in the terms of reference in Appendix C.

[6] Queensland Industrial Relations Commission. (2011). *Health Practitioners' (Queensland Health) Certified Agreement (No. 2) 2011 (HPEB2).*

The taskforce met on four occasions between March and October 2013. These meetings focussed on determining the objectives and deliverables of the taskforce, informing the design and scope of the consultation process, providing oversight on progress, and guiding the formulation of recommendations based on consultation findings.

2.3 Objectives

The objectives of the taskforce were to identify:

- opportunities for health practitioners to work to full scope of practice (including advanced clinical practice) and extend scope in appropriate contexts
- mechanisms to achieve effective delegation and support better use of the health practitioner workforce
- an integrated education, training and clinical governance strategy to support effective introduction and integration of new roles
- the funding implications of implementing the recommendations.

2.4 Deliverables

The deliverables of the taskforce included identification of:

- evidence-based, patient-centred models regarding expanded scope health practitioner roles that Hospital and Health Boards can consider for implementation
- a contextually responsive framework of principles and processes to support implementation of expanded scope health practitioner roles in Hospital and Health Services
- funding implications of implementing expanded scope health practitioner roles in Queensland Health.

2.5 Scope

The term *health practitioner* is an industrial term used in Queensland Health to refer to a wide range of health professions, including therapy and diagnostics professionals, oral health professions, health scientists and technicians, and health promotion and population health professionals. Doctors, nurses and dentists are not included in this professional group. The scope of the taskforce was to consider a subset of the health practitioner workforce, namely the traditional allied health professions within Queensland Health. A list of in-scope health practitioners is provided in the taskforce terms of reference in Appendix C.

2.6 Supporting Queensland Health priorities

Better outcomes can be delivered to patients and the community, the workforce, and Queensland Health when allied health professionals are enabled to work to the full extent of their professional scope and to extend their scope in appropriate clinical contexts. Further improvements can be made when the support workforce is used effectively.

Introducing a model of contemporary clinical practice facilitated by effective workforce reform and supported by strong clinical governance will enable Hospital and Health Services to more successfully achieve their priorities and meet the performance measures identified in the *Blueprint for better healthcare in Queensland*.

Specifically, there are opportunities to contribute to a number of priorities outlined in the blueprint:

- reduce waiting times in emergency departments and achieve the National Emergency Access Target (NEAT)
- reduce waiting times for elective surgery and achieve the National Elective Surgery Target (NEST)
- reduce waiting times for specialist outpatient clinics
- improve patient flow
- invest in effective sub-acute care
- provide better healthcare to children
- improve health services for regional, rural and remote communities
- improve health outcomes for Aboriginal and Torres Strait Islander peoples
- support recovery from mental illness.

3 Definitions

3.1 Expanded scope of practice

Definitions for key terms relating to scope of practice for health professionals differ across professions and contexts. This can cause challenges in exploring the issues involved.

The term *expanded scope of practice* was used by the taskforce to refer to the introduction of any role or task that would result in an expansion to the current scope of a profession's practice within a particular context in Queensland Health. Expanded scope can include a number of elements, including:

- undertaking full scope tasks where historical policies or context has precluded them
- advanced practice
- extended scope.

Each of these elements represents something different but all play a part in the concept of expanded scope of practice. In some instances there will be overlap between these elements.

3.1.1 Full scope of practice of a profession

The *full scope of practice of a profession* includes the full spectrum of roles, functions, responsibilities, activities and decision-making capacity that individuals within that profession are educated, competent and authorised to perform. The full scope of a profession is set by professional standards and in some cases legislation.

Working to full scope means working to the full extent of the profession's recognised skill base and/or regulatory guidelines, acknowledging that some functions may be shared with other professions, individuals or groups. As the boundaries of each profession are not well defined, overlap and duplication can occur. While more than one profession may have the skill to perform a task, custom and practice often means that one or the other undertakes the task in a particular setting.

3.1.2 Scope of practice of an individual

The *scope of practice of an individual* is more specifically defined than the scope of practice of their profession. An individual's scope of practice is influenced by:

- the needs of the local community and patients
- the clinical context
- individual experience, training, competence and qualifications
- professional standards
- the professional skill-mix available to the context
- available supervision and support
- service policies
- local legislation[7].

Considering these variables, each individual has an obligation to make informed judgements about their own scope of practice. Given that the full scope of practice of a profession is typically broader than the experience and competence of an individual, when a specific context requires the scope of practice of an individual to include certain roles and tasks outside of their current skill-mix, additional training and supervision may be required. Conversely, despite a professional having appropriate experience and competence in certain full scope roles and tasks, local community need or the specific clinical context may mean that it is not necessary or appropriate for these full scope roles and tasks to be included in the individual's scope of practice in that context.

3.1.3 Advanced clinical practice

An advanced level of clinical practice requires a high level of clinical skill, knowledge and practice, closely integrated with clinical leadership skills, applied research and evidence-based practice capacities, and competence in facilitating education and learning of others. *Advanced clinical practice* is relevant to both generalist and focussed clinical contexts, profession-specific situations, and situations relating to specific client groups or geographic settings[8].

3.1.4 Extended scope of practice

A range of evidence-based roles and tasks that maximise health practitioner scope of practice involve extending the scope of practice of specific professions in specific circumstances. *Extended scope of practice* is a discrete knowledge and skill base additional to the recognised scope of practice of a profession and/or regulatory context of a particular jurisdiction[9]. The tasks involved are usually undertaken by other professions, such as doctors, nurses or other allied health professionals. However, over time, what once constituted extended scope of practice may become part of a profession's full scope of practice.

Extending the scope of practice of a profession is relevant where it allows more efficient management and care of the patient and decreases the number of visits or transactions in the patient journey. Legislative change may be required to legally enable extended scope of practice.

3.2 Delegation

For health practitioners to be able to dedicate a greater proportion of their time to roles and tasks at the upper end of their scope of practice, the full potential of the contribution of the support workforce, including allied health assistants and administration officers, needs to be realised. To achieve this, effective delegation of appropriate duties to the support workforce is required.

Delegation of tasks occurs when practitioners authorise another healthcare worker to provide treatment or care on their behalf. In making the decision to delegate, practitioners make the judgment that the person to whom they are delegating tasks has the appropriate education, knowledge and skills to undertake the activity safely. Delegation procedures are relatively informal, with guidance for practitioners often contained within registration boards' guidelines or codes, but often without formal legal backing[10]. The delegating practitioner remains responsible for the overall management of the client and for the decision to delegate. The person to whom responsibility has been delegated is accountable for their decisions and actions, not the delegating allied health professional[11].

[7] SA Health. (2009). *Allied Health Scope of Practice Tool*.

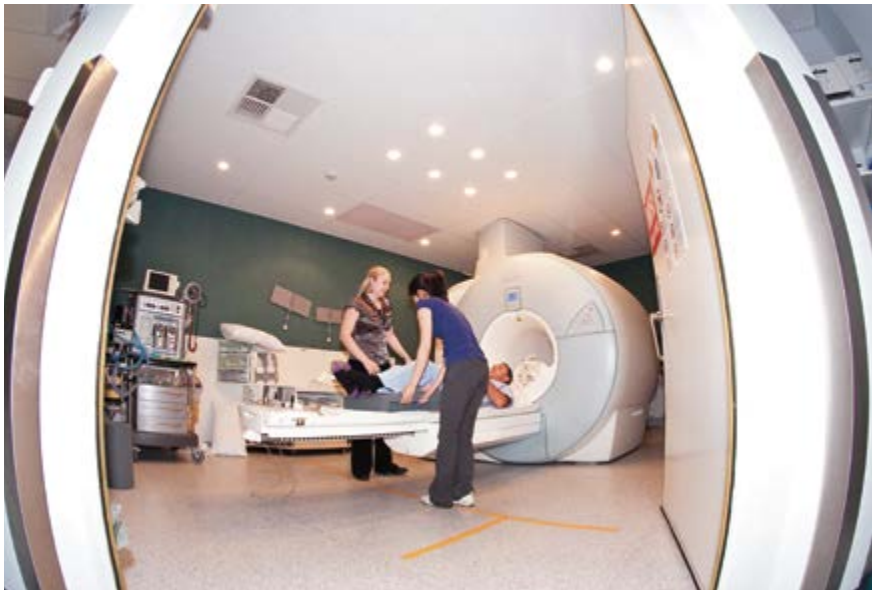
[8] Queensland Health. (2013). *Allied Health Advanced Clinical Practice Framework*.

[9] SA Health. (2009). *Allied Health Scope of Practice Tool*.

[10] SA Health. (2009). *Allied Health Scope of Practice Tool*.

[11] Physiotherapy Board of Australia. Code of conduct for registered health practitioners.

4 The case for expanded scope of practice for health practitioners



Ensuring that the scope of practice of the allied health workforce is optimised is part of an ongoing trend in workforce reform and redesign aimed at addressing current and projected health service needs. Significant work has already taken place nationally and internationally exploring new and alternative ways for allied health professions to contribute to the delivery of optimal health services.

4.1 Overview of the literature

The body of literature around the introduction of new and expanded roles for allied health professionals is steadily growing, but the level of evidence remains relatively low with a strong reliance on grey literature. There are many examples of allied health professions working in new ways that improve quality, safety and efficiency of patient care through a change to their scope of practice. The majority of this work describes discrete profession-based models from physiotherapy, pharmacy, medical imaging and radiation therapy professions. Much of this is from experiences in the United Kingdom (UK), Canada, the United States of America and New Zealand where many of the new models are now standard practice. Studies report improvements in patient flow, waiting times, waiting lists and patient satisfaction without increasing risk to patients. Additionally, improved job satisfaction for allied health professionals has been recognised.

In 2012, a systematic review of the literature, incorporating 43 systematic reviews supplemented by selected qualitative and quantitative studies, was undertaken to explore drivers of workforce reform in Australia, mechanisms to approach workforce reform, and evidence for the effectiveness of different approaches to workforce reform[12]. This work was undertaken as one component of the evaluation of the Queensland Health Practitioners' Models of Care project, which included 59 demonstration projects across 14 allied health professions.

An overview of the findings from this literature review is presented below. Findings relate to patient outcomes (including patient satisfaction, patient safety, diagnostic accuracy and treatment effectiveness), accessibility and efficiency, revision of roles, and staff outcomes.

[12] Nancarrow, S., Roots, A., Moran, A., Grace, S., Lyons, K., Hulcombe, J. & Hurwood, A. (2013). *Queensland Health Practitioners' Models of Care Project: Evaluation, Learning, and Upscaling of Results for a National Audience – Final Report.*

4.1.1 Patient outcomes

The literature review demonstrated high levels of patient satisfaction where services were received through new roles that used the skills and expertise of advanced allied health professionals. When triage was provided by allied health professionals, most patients rated their satisfaction as good to excellent.

Most patients rated their satisfaction with services provided by allied health assistants as good to excellent. Positive aspects of services provided by allied health assistants included the experience of a more patient-focussed service, more time being spent with them, listening, providing support and respect, giving hope, and improving quality of life.

The literature review found only a small number of studies reporting on patient safety or risk outcomes. One study identified that advanced allied health professionals were as safe and effective as junior doctors and another two studies revealed that allied health assistants were seen as a key link between patients and professionals, with specific roles in observing, monitoring and communicating changes.

Regarding diagnostic accuracy and treatment effectiveness, emerging evidence relating to the role of physiotherapists in orthopaedics reveals that advanced allied health professionals can provide equal or better diagnostic accuracy and treatment effectiveness than their medical colleagues. In another study, advanced allied health professionals gave more patient advice, were more likely to use conservative treatments, and provided more telephone follow-up and advice. In each of these studies, introducing a new service and model of care into an orthopaedic outpatient clinic resulted in reduced waiting lists.

4.1.2 Accessibility and efficiency

When considering service accessibility and efficiency resulting from new models of care involving allied health professionals, the literature review revealed the following outcomes:

- In two different studies, allied health triage, assessment and treatment models of care reduced waiting lists for orthopaedic outpatients with different needs from 25 months to 6.6 months and from 11 months to 32 days, as well as facilitating patient assessment within specified targets.
- When allied health professionals were involved in orthopaedic clinics, the conversion rate to surgery for those patients who ultimately saw an orthopaedic surgeon increased.
- Introducing allied health assistant roles increased service capacity and appropriate use of allied health professional time.
- Telephone triage by physiotherapists resulted in fewer occasions of failure to attend.
- When multi-disciplinary allied health assistant roles were used, there were improvements in communication, interdisciplinary working, and integrated service delivery.

4.1.3 Staff outcomes

Key outcomes identified in the literature relating to staff included:

- opportunities for skill and knowledge development, as well as career development
- professional recognition and remuneration
- changes to models of care can enable medical practitioners to dedicate more time to higher-level, more complex tasks
- sharing knowledge and experiences with other disciplines builds teamwork, collaboration and job satisfaction
- improved confidence to delegate.

On a more challenging front, changes to models of care contributed to role boundary issues and threats to professional identity when scope of practice overlapped between practitioners.

4.2 National initiatives

In Australia, work is occurring at a national level on allied health workforce reform. This reform is occurring through a combination of local initiatives across the country and nationally co-ordinated programs led by Health Workforce Australia (HWA). Examples of HWA-led initiatives include:

- *Expanding the Role of Physiotherapists in Emergency Departments*[13]—implementing models of expanded physiotherapy roles to improve productivity by decreasing waiting times in emergency departments, allowing increased medical time for acutely ill patients. Projects are developing guidelines and training to support take-up of these roles across Australia. Cairns and Gold Coast Hospital and Health Services are both participating in trials of this model.
- *National Rural and Remote Health Workforce Innovation and Reform Strategy*[14]—including a commitment to develop national workforce models for generalist roles in all relevant medical disciplines and allied health professions. A concept paper focussing on generalist allied health roles in rural and remote areas was released in May 2013[15].
- *Health Professionals Prescribing Pathway Project*[16]—establishing a national approach to prescribing by health professionals other than doctors, including an implementation plan for a national prescribing pathway. This project concluded in June 2013 and the pathway has been signed off by the Australian Health Ministers Advisory Council.

[13]Health Workforce Australia. (2012). Expanding the Role of Physiotherapists in Emergency Departments.

[14]Health Workforce Australia. (2011). National Rural and Remote Workforce Innovation and Reform Strategy.

[15]Health Workforce Australia. (2013). National Rural and Remote Health Workforce Innovation and Reform Strategy.

[16]Health Workforce Australia. (2012). Health Professionals Prescribing Pathway Project.

4.3 The Queensland experience

In recent years, considerable work has taken place regarding allied health workforce reform and redesign within Queensland Health. The Allied Health Professions' Office of Queensland has implemented a large scale *models of care* program comprising demonstration projects examining new models of care across 14 allied health professions for a diverse range of activities and geographic locations. A suite of policies and tools have been developed which complement this program to support extended and advanced scope roles and delegation of tasks:

- *Allied Health Advanced Clinical Practice Framework*[17]—a framework that defines allied health advanced clinical practice in the Queensland Health context and its intended benefits, including increased productivity through using the full scope of practice of allied health professionals; improved service access, efficacy and sustainability; and fewer transactions in an episode of care.
- *Guideline for Credentialing and Defining the Scope of Clinical Practice and Professional Support for Allied Health Professionals*[18]—a guideline to identify mandatory requirements for credentialing and defining the scope of clinical practice for allied health professionals working in Hospital and Health Services.
- *Training in Delegation Practices*[19]—training resources to support allied health professionals to develop effective delegation skills, and for allied health assistants to understand their role, that in turn facilitates successful use of the allied health support workforce.
- *Calderdale Framework*[20]—a tool purchased from Effective Workforce Solutions in the UK to provide a systematic approach to undertake task analysis, review skill-mix, develop new roles, and identify new ways of working by delegating to support staff and skill sharing between professions. This tool has been adapted to the Australian context and is available to all employees within Queensland Health.
- *Guidelines for Allied Health Professionals Requesting Pathology Tests*[21]—guidelines to inform introduction of local systems for allied health pathology requests within Hospital and Health Services. The focus of these systems is on reducing delays and enhancing patient flow, alleviating workload on medical and nursing staff, standardising care within a clinical governance framework, and reducing unnecessary pathology tests.
- *Framework for Allied Health Professional Prescribing Trials within Queensland Health*[22]—a framework describing the essential components for developing, implementing and evaluating allied health professional prescribing trials within a research framework in Hospital and Health Services. There are currently two trials being undertaken through the Gold Coast Hospital and Health Service using this methodology.

Programs that have been implemented or are being implemented

The following programs have been implemented or are being implemented in Queensland:

- *Health Practitioner Models of Care Project*—workforce redesign and reform projects focussed on using health practitioner full scope of practice, advanced or extended scope of practice, and better use of allied health assistants. More than 50 models have been trialled and their outcomes summarised[23].
- *Neurosurgical and Orthopaedic Physiotherapy Screening Clinic and Multidisciplinary service*—physiotherapists provide screening to patients with musculoskeletal conditions who are referred by general practitioners for an orthopaedic or neurosurgical opinion but are unlikely to require surgical management. Non-operative care is provided by a broader team of allied health professionals as needed. The orthopaedic model is implemented at 13 sites, with four of these sites also operating the neurosurgical model.
- *Expanding the role of Physiotherapists in the Emergency Department*—HWA is currently supporting the trial of expanded scope of practice for physiotherapists in the emergency department for the management of musculoskeletal presentations at the Gold Coast and Cairns and Hinterland Health Service. This includes the prescribing of anti-inflammatory and pain relief medication and interpretation of plain film X-rays to assist in the timely management of patients. To date, positive impacts on NEAT targets have been realised while maintaining patient safety.

[17]Queensland Health. (2013). *Allied Health Advanced Clinical Practice Framework.*

[18]Queensland Health. (2013). *Guideline for Credentialing and Defining the Scope of Clinical Practice and Professional Support for Allied Health Professionals.*

[19]University of Queensland Centre for Innovation in Professional Learning. (2013). *Training in Delegation Practices: A guide for allied health professionals and allied health assistants.*

[20]EWS Ltd. (2012). *The Calderdale Framework.*

[21]Queensland Health (2013) *Guidelines for Allied Health professionals requesting pathology tests.*

[22]Queensland Health. (2013). *A Framework for Allied Health Professional Prescribing Trials within Queensland Health.*

[23]Queensland Health. (2011). *Innovations in Models of Care for the Health Practitioner Workforce in Queensland Health.*

5 Consultation process

The outcomes of the taskforce have been informed by a comprehensive consultation strategy that commenced on 17 May 2013 and continued until 26 July 2013.

A consultation paper (Appendix D) presenting the background issues and concepts being considered by the taskforce provided the platform for the consultation. The consultation paper was made widely available to internal and external stakeholders.

The consultation strategy included:

- awareness raising activities
- face-to-face meetings with key internal and external stakeholders
- a series of workshops with the Queensland Health allied health workforce, education providers and health consumers
- a survey open to internal and external stakeholders.

An internet website was established to provide public access to the consultation paper, other background documents, work reform tools and a link to the survey.

Taskforce members were instrumental in taking discussions regarding health practitioner full scope and extended scope of practice to key forums for feedback.

A total of 442 responses were received, either through the online survey or in written form. The eight workshops conducted included 169 participants from across Queensland. A further 24 individual interviews were conducted with taskforce members and other key stakeholders.

A comprehensive outline of the consultation strategy, participation and summarised findings are available in Appendix E.

6 Key findings and discussion

The benefits of expanded scope for clients and communities are increased access to services, reduced waiting times and improved health outcomes. These should be the drivers of expanded scope of practice for health professionals.

Regional allied health educator

6.1 Guiding principles

Consultation findings indicate that stakeholders expect that models and mechanisms for maximising the scope of health practitioners must result in service provision that is:

- acceptable to clients
- client-centred
- outcome-focussed
- safe
- high quality
- evidence-based
- responsive to changing circumstances
- cost-effective and contestable
- sustainable
- relevant to the community and clinical context
- competency-based
- enabled by effective education and training
- conditional on effective clinical governance
- informed by the multidisciplinary team context
- respectful of diverse domains of professional expertise
- informed by consistent principles across Queensland.

6.2 Working to full scope

6.2.1 Unrealised opportunities

A strong and consistent message from across the allied health workforce was that they are not currently working to the full scope that they are trained and competent to undertake. Every profession was able to identify a range of tasks that, if they were working in alternate contexts (such as private practice or public health services in other national and international jurisdictions), they would be able to perform. Professionals identified that the benefits of enabling full scope of practice would include:

- improved efficiency
  - reduced waiting times
  - improved patient flow
  - reduced length of stay
  - reduced avoidable hospital admissions
  - reduced duplication
  - reduced service fragmentation
- increased service quality
  - more timely interventions
  - more appropriate interventions
- improved health outcomes
  - earlier identification and intervention
  - improved prioritisation

- increased patient satisfaction
  - improved access
  - reduced travel
  - fewer professionals and transactions
  - reduced costs
- reduced demand on Queensland Health medical officers and private general practitioners.

6.2.2 Understanding full scope of practice

The consultation demonstrated that there are many misunderstandings about what constitutes full scope of practice and how full scope is determined, as well as the ways scope of practice is both limited and enabled. This was consistent across allied health professions as well as medical and nursing professionals.

Examples of these misunderstandings included:

- variable understanding of what constitutes the current full scope of practice for individual professions
- concern that enabling full scope of practice for allied health professionals will give licence to inexperienced clinicians carrying out tasks they are not experienced or competent to undertake, even though the tasks are within the scope of their profession
- concern that by facilitating the opportunity for full scope of practice, demands would be placed on individuals to be all things to all people regardless of their clinical context, the current specified requirements of their role or their skill or competence
- a belief that scope of practice is determined by legislation, particularly for registered professionals.

6.2.3 Full scope roles and tasks

The consultation process identified the following roles and tasks that public allied health professionals cannot consistently perform within Queensland Health:

- first contact in the care pathway (e.g. audiologists autonomously receiving and triaging appropriate referrals, then assessing, diagnosing, treating and discharging patients, including referring appropriately to others in the multidisciplinary team; social workers as the first point of contact for medically well, unaccompanied children in the emergency department)
- making direct referrals to medical specialists in Queensland Health (e.g. podiatrist to an orthopaedic surgeon, psychologist to a paediatrician)
- making direct referrals to other allied health professionals for assessment, diagnostic investigations and intervention (e.g. physiotherapist referring to an occupational therapist, neurophysiology scientist referring to a sleep scientist)
- providing evidence-based mental health interventions to complement existing case management (e.g. psychologist providing cognitive behavioural therapy for psychosis, family therapy)
- requesting investigations (e.g. plain X-ray requested by a podiatrist)
- modifying a diagnostic investigation based on clinical indicators (e.g. radiographer performing computed tomography (CT) rather than a requested plain film X-ray)
- undertaking additional diagnostic investigations based on clinical findings of initial investigations (e.g. radiographer referring for CT based on findings on plain film X-ray)
- prescribing equipment and consumables (e.g. home enteral nutrition, medical grade footwear)
- diagnostic allied health professionals documenting findings on investigations they have performed (e.g. cardiac scientist providing provisional report on echocardiogram, radiographer providing written comment on plain X-rays)
- admission decisions (e.g. occupational therapist making admission decisions from acute to subacute care, physiotherapist making admission decisions from emergency department to short stay ward)
- criteria-led discharge based on allied health clinical assessment (e.g. social worker discharging children admitted for child protection reasons, physiotherapist discharging a patient when appropriately mobile).

Although there are some examples of situations where these roles and tasks do already occur, these examples are not widespread.

The examples provided for each listed full scope task are for explanatory purposes only and are not intended to limit the range of possibilities for each task by different allied health professions.

Tasks identified as not being consistently undertaken by relevant allied health professions across Queensland Health are included as part of the summary of potential tasks in Appendix B.

> If a practice is common in private industry, it should be in the public also. I have seen far too many examples where in private practice procedures and protocols enable the allied health professional to make clinical decisions that are not possible in the public sector.
>
> *Clinical measurement scientist*

6.2.4 Competence to undertake full scope roles and tasks

In many instances, significant efficiencies can be achieved through enabling full scope roles and tasks that require little to no investment in education and training (e.g. first contact in the care pathway, acceptance of referrals from nurses, acceptance of patient self-referrals).

However, the consultation did reveal a high level of awareness by allied health professionals that they may now require retraining to re-establish, not only their competence, but also their confidence to complete some roles that they may once have been competent to undertake. Even so, this did not diminish the commitment shown by the majority of respondents to participate in full scope roles and tasks.

6.3 Extended scope of practice

6.3.1 Divergent perspectives

6.3.1.1 Allied health professionals

Perspectives on both the safety and the value of allied health professionals undertaking roles and tasks were varied. The majority of allied health professionals recognised a range of extended scope roles and tasks that would be a logical extension of their full scope of practice and improve the efficiency and effectiveness of their care to patients. Even so, a small minority expressed opinions opposing the undertaking of extended scope tasks.

6.3.1.2 Allied health professional associations

The 15 allied health professional associations that made a submission to the taskforce all supported the introduction of a range of profession-specific extended scope roles that add value to patients and the healthcare system by providing a natural extension to the scope of existing professional roles. It was recognised that in some instances current funding models and the incomplete knowledge that medical officers hold of the scope of practice of different professions would not support this extension. Professional associations identified the role they can play in contributing to implementing professional standards and delivering training.

6.3.1.3 Medical officers and specialist colleges

Of the 10 respondents who were medical officers and the two specialist medical colleges that provided feedback, there was little support for allied health professionals undertaking extended scope tasks. Specific concerns included:

- the potential to compromise patient safety
- the importance of not pushing against professional boundaries based on budgetary pressures
- anticipation that health budgets would be adversely affected if the opportunity to request investigations is opened up to allied health professionals
- the inadequate evidence to support implementation of extended scope tasks
- the cost of maintaining adequate training and clinical governance
- reduced opportunity for medical officer training if tasks are undertaken by allied health professionals.

In contrast to these perspectives, one medical specialist noted the importance of educating medical officers regarding the opportunities afforded by allied health extended scope of practice, as well as the barriers that funding models present to change these practices.

6.3.2 Extended scope roles and tasks

The consultation identified the following extended scope roles and tasks as being relevant to one or a number of allied health professions:

- prescribing (e.g. prescribing by physiotherapists in the emergency department to better manage musculoskeletal presentations, supplementary prescribing by pharmacists, dietitians prescribing enzyme replacement therapy)
- administration of medications (e.g. administration of Botox for spasticity in neurology patients, administration of local and joint corticosteroid injections by physiotherapists)
- requesting investigations (e.g. physiotherapists requesting magnetic resonance imaging (MRI), occupational therapists requesting plain X-rays, podiatrists requesting pathology)
- conducting procedures (e.g. physiotherapists undertaking simple suturing, speech pathologists and dietitians providing percutaneous endoscopic gastrostomy tube care, speech pathologists conducting fibreoptic endoscopic evaluation of swallowing and tracheostomy suctioning)
- producing the final report on an investigation (e.g. radiographers producing final reports for plain X-rays, sonographers providing final reports for ultrasounds)
- making provisional diagnoses (e.g. allied health mental health professionals in an emergency department)
- skill-sharing between allied health professionals (e.g. either dietitians or speech pathologists assessing both nutrition and swallowing in the emergency department)
- admission decisions from community health services to inpatient care (e.g. allied health mental health professionals making inpatient admission decisions).

Specific examples of tasks that could be implemented to improve patient care, as identified during consultation, are summarised in Appendix B.

Requirements for implementing safe and effective extended scope of practice will vary depending on the task, the profession, and the context in question. Any or all of the following processes may be required:

- formal and informal education and training
- credentialing
- clinical monitoring and audit systems
- changes to legislation and regulation
- changes to funding models.

Over time, as extended scope tasks develop into standard practice, evolution of clinical governance processes is also appropriate.

For example, prescribing by optometrists is now included in the profession's entry level scope of practice.

The literature supports extended scope of practice for allied health professionals where there are direct patient benefits and where the clinician is appropriately trained and credentialed to undertake the task. A systematic review[24] of the literature relating to physiotherapy for patients with musculoskeletal disorders showed similar decision making competence between physiotherapists and doctors, with no significant increase in demand or cost of diagnostic tests. Patient safety was also shown to be maintained. These findings are consistent with the outcomes of a number of allied health prescribing trials that have either been completed or are in progress.

Tools identified in section 4.3 are available within Queensland Health to facilitate implementation of extended scope of practice by allied health professionals.

6.4 Delegation of tasks

While most allied health professionals recognised value in delegating tasks to allied health assistants and administration officers, there was considerable variability in the breadth and depth of tasks different individuals believed were appropriate to be delegated. Most allied health professions could identify tasks that could be undertaken by the support workforce.

Commonly, it was noted that access to the support workforce was limited as dedicated funding was not provided. Professions were unwilling to consider the support worker being included as core in the allocation of budgets. Maximisation of full scope will need divestment of tasks to other workers.

A review of the impact of allied health assistants shows that allied health professionals do not delegate consistently or frequently to administrative assistants and allied health assistants[25]. Other studies have reinforced this, arguing that other health professionals work within a hierarchical structure that includes devolved responsibility. This is not the case for allied health professionals, and as a result they do not have the skills or experience to delegate well.

It has been shown that allied health professionals do not use the allied health assistant workforce to its full extent. The reasons for this include a lack of clarity about what tasks can be safely delegated, uncertainty about how to delegate effectively, and in some situations, protection of professional boundaries and territory. Strategies to optimise the scope of practice of allied health professionals need to include education and training, and other support tools, for allied health assistants.

> Opportunities for delegation must be considered in tandem with the potential for release of full or extended scope (and vice versa).
>
> *Regional occupational therapist*

[24]Desmeules, F., Roy, J.S., MacDermid, J.C., Champagne, F., Hinse, O., Woodhouse, L.J. (2012). Advanced practice physiotherapy in patients with musculoskeletal disorders: a systematic review.

[25]Queensland Health. (2012). *Allied Health Assistant Project Phase II Completion Report.*

> Changes need to be proactive. It has been my experience that tangible action regarding models tends to only take place once issues hit crisis point. Please change this.
>
> *Medical physicist*

6.5 Achieving change

The taskforce consultation process revealed that to effectively use the allied health workforce to provide more patient-centred, cost effective services, a wide range of interconnected issues need to be addressed.

These issues are broad-ranging and include:

- culture and leadership
- funding models
- operational issues
- education and training
- liability, legislation and regulation
- accreditation standards.

Each of these issues is discussed in detail below.

6.5.1 Patient-centred care

Consumers reported that health services delivered by Queensland Health are frequently not designed in a patient-friendly way, resulting in healthcare that is less than responsive to their individual circumstances, needs and preferences. Despite this, professionals contributing to the consultation almost universally cited the delivery of patient-centred care as the primary principle that must drive changes to allied health scope of practice.

Consumers expressed a strong desire to play a far greater role in the management of their health and wellbeing. They noted their frustrations at gatekeeper processes that delay and sometimes completely block access to services that they recognise as being of significant value to their health needs and their capacity to take responsibility for their own wellbeing and that of their family.

At a system level, consumers also expressed the importance of service users being involved in the decision-making and design of the services they access. A strong point of feedback was their desire to contribute to changes that might be implemented out of the taskforce, both at a system-wide level and at the local level within individual clinical services and clinical teams.

The consultation found that while healthcare professionals have a strong commitment to patient-centred care, consumers felt that this is rarely achieved. This reflects either a significant discrepancy between how consumers and professionals understand this concept and/or considerable barriers to designing and delivering patient-centred services.

Although evidence suggests that on the most part patients are satisfied with new models of care, processes to implement these changes typically involve little patient interaction and a tendency to focus predominantly on redefining relationships between professionals[26].

[26]Nancarrow, S., Roots, A., Moran, A., Grace, S., Lyons, K., Hulcombe, J. & Hurwood, A. (2013). *Queensland Health Practitioners' Models of Care Project: Evaluation, Learning, and Upscaling of Results for a National Audience – Final Report.*

Interestingly, when consultation findings are considered more closely, there is considerable evidence of efforts by professionals to protect professional boundaries, maintain status and income, and retain importance within a hierarchy. This was most clearly evident when suggested changes presented a threat to professional boundaries between allied health professions, as well as between allied health, nursing and medical professions. When professionals focussed on these issues, their investment in exploring and reflecting patient and community need in their responses was greatly diminished.

6.5.2 Culture and leadership

Cultural barriers were identified as the most common reason expansion of allied health scope of practice has not occurred more systemically. The consultation feedback was very clear that although there are a number of legislative, regulatory and funding impediments to changing scope of practice, the greatest single difficulty is in changing the culture within Queensland Health.

6.5.2.1 Leadership

The need for strong leadership at the management and clinical level across Queensland Health was raised by many consultation participants as the key to achieving more effective use of the allied health workforce.

When considering the potential outcomes from the taskforce, the most frequently identified concern was that, as a result of inadequate leadership and commitment, nothing would change. This was the case for allied health professionals and consumers alike. Of particular note, the allied health workforce questioned the depth of leadership, particularly within management, to drive the change needed for sustainable and cost-effective models of care.

Concern was also expressed that due to inconsistencies in leadership and commitment across Queensland Health, changes would be inconsistent, resulting in marked differences in allied health scope of practice across clinically and demographically similar contexts. It was noted that the consequence of this would be inequities in clinical care to patients.

Experience demonstrates that without champions for change, strong leadership, and high levels of support and commitment, change will continue to result in small pockets of improvement that are not spread to other Hospital and Health Services.

The health practitioner career structure has enabled the allied health workforce to establish clinical career pathways, with substantial numbers of senior and advanced clinical practitioners in the system. While many of these clinicians provide leadership within Queensland Health, and more broadly within their profession, all senior clinicians must fulfil their leadership responsibilities within their profession and their multidisciplinary teams to drive change that improves practice, supports others to develop and allows other clinicians to lead in their practice area.

Although there has been a significant investment in leadership training within Queensland Health, this still appears to be an issue. This may also be linked with some of the other barriers identified where clinical leadership is not supported within teams and care is delivered within established hierarchies with allied health professionals feeling permission is needed to contribute to change, even within their own scope of practice.

6.5.2.2 Permission to lead

Although there was overwhelming enthusiasm at the allied health clinical level to see change occur that facilitates implementation of full scope and extended scope tasks in appropriate situations, the need to empower allied health clinicians and give them permission to lead was a common theme expressed through the consultation. It was unclear from whom they felt the need to seek permission to work to full scope. Even so, it was a significant factor in their decision-making regarding exploring opportunities to work to full scope or to extend their scope of practice. Active exploration of changes to scope was often not pursued as this permission was not seen to be present.

This theme was also evident in the feedback of consumers who noted the significance of the change that would be required for clinical leadership and authority to be achieved across the health workforce. Their responses demonstrated doubt about the likelihood of this being achieved.

Of note was the difference between the messages conveyed when professionals spoke about their individual experiences, in contrast to when they spoke at a more systemic level. When focussed more individually, many allied health professionals cited examples of leading important, incremental changes to clinical practice that involved the support of their allied health, medical and nursing colleagues. It was when they spoke about the broader health system that their concerns and cynicism were most evident.

6.5.2.3 Hierarchies

The hierarchies within a single allied health profession, across allied health professions, and between allied health professionals and other professions, were commonly noted as barriers to change.

Multidisciplinary teams stressed the importance of any changes to scope of practice of allied health professionals occurring across the multiple hierarchies within the system to ensure commitment and buy-in from stakeholders at all levels. Change could not be implemented through the commitment of the clinical team alone.

This finding reflects the strong published evidence of the need for both bottom-up drivers, as well as top-down support to achieve sustainable changes to models of care[27].

6.5.2.4 Concerns regarding expanding scope

Some allied health professionals indicated that they would be reluctant to take on greater clinical decision-making responsibility. This seemed to relate to broader issues of culture and lengthy experience working in settings where scope of practice is limited. Many allied health professionals indicated that they would not seek to expand their scope of practice.

Despite concerns expressed by a small proportion of respondents, it is recognised that expanded scope tasks are only appropriate to be implemented where it will optimise patient-centred care, is safe, cost-effective and supported in a collaborative team environment. Additionally, expanded scope tasks would always be logical extensions of existing clinical roles and only implemented where this is relevant to the specific circumstances of the clinical and demographic context.

In this context, only a small proportion of the allied health workforce is likely to be involved in undertaking extended scope tasks.

[27] Nancarrow, S., Roots, A., Moran, A., Grace, S., Lyons, K., Hulcombe, J. & Hurwood, A. (2013). *Queensland Health Practitioners' Models of Care Project: Evaluation, Learning, and Upscaling of Results for a National Audience – Final Report.*

6.5.3 Funding models

The consultation identified that a range of issues with funding models act as barriers to implementing patient-centred, cost-effective models of care. These are presented in detail below.

It was noted that funding models are typically service-centred, rather than patient-centred, making it difficult to measure the efficiencies that result from changes in practice, given that they may occur across funding jurisdictions and downstream from where the change to care has occurred.

It should also be noted that there are two clear decision-making levels for the allocation of funds. Funding from the Department of Health to Hospital and Health Services is allocated at a Hospital and Health Service level. How funding is then allocated internally within the Hospital and Health Service in order to deliver the agreed activity (e.g. between facilities, service lines or establishments) is at the discretion of the Hospital and Health Service. This means that Hospital and Health Services have considerable flexibility in how they direct funds to deliver the required activity.

> We need to report cost efficiencies to the professions and return the savings through investment in the professions.
>
> *Metropolitan radiographer*

6.5.3.1 Financial incentives

Allied health professionals identified the importance of financial incentives in driving change. Examples included:

- access to funding to design, implement and evaluate change
- reallocation of resources at a system level rather than within individual professional or clinical teams to facilitate service design using an optimal mix of skills across the allied health, nursing, medical and support workforce
- a commitment to reinvest budget savings resulting from service redesign back into the service in question, rather than redirecting the funds to other contexts
- industrial awards that remunerate an individual appropriately for the knowledge, skills and expertise of their role.

There are many examples of resources being invested in projects to facilitate service improvements. Even so, once projects are complete, the improvements are often not sustained. While additional funding can be a facilitator of change, it is rarely likely to be the key stimulus to achieving sustainable outcomes.

Skill-mix and resource allocation within services needs to be reviewed collaboratively across the allied health, nursing, medical and support workforce to facilitate development of models that provide optimal patient outcomes in a cost-effective way. Allied health managers must take responsibility for reviewing the way resources are currently allocated to ensure allied health resources are deployed to work where evidence supports improved outcomes for patients. This requires strong leadership from management to respond to conflicts that may result from some areas receiving a reduced service.

Currently, if innovative or contemporary models are introduced that realise savings, services are typically penalised through loss of funding. This deters future innovation, regardless of any perceived benefit for the patient. Where more cost-effective models are implemented, there must be financial incentives introduced that allow departments and clinical teams to use all, or a proportion, of the savings to further enhance service delivery.

6.5.3.2 Referral management

Allied health professionals noted that significant barriers exist to implementing evidence-based clinical pathways when referral to a specific medical specialty or specialist is rigidly adhered to. It was noted that this can compromise effective patient triage that allows timely access to appropriate care. Allied health professionals asked that clarity be sought on whether a referral made to a Hospital and Health Services gave the service the opportunity to manage the referral path in the way deemed most relevant to the patient's presenting needs.

Medical practitioners also noted that issues of liability may arise for the specialist if the patient's care is subsequently managed by an allied health professional when the patient is referred to a named public medical specialist.

The current national funding agreements provide no impediments to Hospital and Health Services making their own determinations regarding the management of referrals and patients, as long as the activity meets the activity based funding (ABF) definitions for counting, classification and reporting of activity data at a national level.

To this end, the implementation of policies regarding the management of patients referred to outpatient clinics can assist in both informing the patient of the process and guiding referrers such as general practitioners. Access to alternative service models must be clinically supported and based on patient choice. Any variation from the service model to which the patient was referred should also be communicated to their referring practitioner.

In relation to the receipt of a named referral to a medical officer as part of a revenue stream, Hospital and Health Services can elect to implement alternate service models. The impact on revenue would need to be considered in consultation with relevant medical officers. Considering the demand for services, it could be suggested that changing the model would not have a significant impact on medical officer income, dependant on type of salary package. However, there may be an impact on service revenue. There may be some change in this area linked to the recent review of these arrangements in the *Right of private practice in Queensland public hospitals* report by the Queensland Audit Office.

6.5.3.3 Activity based funding

Allied health professionals raised ABF as a barrier to change in the belief that if a service was delivered by an allied health professional rather than a medical officer it would attract a lower price.

Under the current service agreements between the Department of Health and Hospital and Health Services, funding is provided for the delivery of services based on a prescribed number of weighted activity units (WAUs). Hospital and Health Services are held to account for the delivery of activity at a service stream and the mix of clinic types beneath the service stream is at the Hospital and Health Services' discretion. If a service is delivered by allied health professionals at a lower cost, there should be no change in funding provided the WAU targets are met. In an allied health model, the WAU price-per-episode may be less, but more activity could be delivered within the overall WAU target. The impact of increasing allied health activity could lead to a decrease in services provided by medical practitioners (and consequently a decrease in cost to the Hospital and Health Service), or a redirection of their skills and activity to more complex tasks.

The new-to-review ratio in Queensland outpatient clinics could also be improved if such models were considered. One model could allow medical practitioners to undertake a greater number of initial assessments if subsequent reviews are conducted by appropriately skilled allied health professionals rather than medical practitioners.

> Maximising scope should not be limited by present funding rules. For example, I am involved in several initiatives which have potential to improve care and save money but the absence of a Medicare rebate when I supply the service (rather than a doctor) is prohibitive. As an individual I have been officially credentialed to do things beyond the usual professional scope of practice, agreed by all parties because it is the best thing for patients. However each time I do provide these services rather than a doctor, my Hospital and Health Service has to take a financial hit because the Medicare rebate is not available. As one individual it's a drop in the ocean financially, but if the aim here is service innovation to improve care for patients on a large scale, funding rules will have to evolve as a top priority.
>
> *Regional physiotherapist*

6.5.3.4 Revenue incentives

Most Hospital and Health Services use Medicare item numbers to generate revenue. The threat to revenue raised through Medicare has been raised as a major barrier for not allowing changes in models of care, in particular allied health professionals' ability to request plain X-rays or pathology.

While financial incentives through revenue linked to salaries continue in Queensland Health, implementation of alternate models to maximise full scope or extend scope for allied health professionals will be difficult to realise. Alternative models of care using allied health professionals for outpatient consultations can be implemented. However, the business case would need to consider all funding impacts, including Medicare revenue and labour costs. Any impact on revenue by implementing an allied health model could be offset by an increased capacity to meet waiting list targets.

Evidence from sites where requests for plain film imaging by physiotherapists has been implemented demonstrates that physiotherapists are more likely to make appropriate requests and demand does not increase. However, some radiology services continue to not accept referrals from physiotherapists due to the perception that there will be a loss of revenue and an increase in demand. There should be no barrier to implementation of referral mechanisms in the emergency department as there is no ability to claim Medicare for these services in this context.

6.5.3.5 Allied health access to Medicare rebates

Limited access to Medicare rebates for services provided by allied health professionals was raised repeatedly as a barrier to providing timely clinical services in the fewest number of clinical transactions. Many suggested that without a change to this variable, it will be difficult to achieve meaningful change towards more effective, evidence-based models of care through working to their full scope of practice and undertaking extended scope tasks in appropriate contexts.

Even where patients can claim a Medicare rebate for allied health services, there are a number of conditions surrounding eligibility, including the need for a medical referral and often a care plan. Access is limited to:

- chronic disease management—limited to five allied health sessions per year per patient with a general practitioner management plan (items 10950–10970)
- provision of autism, pervasive developmental disorder or disability services by allied health professionals—limited to four assessment services and 20 treatment services (items 82000–82035)
- follow-up allied health services for people of Aboriginal or Torres Strait Islander descent—limited to five allied health sessions per year per patient following referral from a general practitioner, in addition to access to items 10950–10970 (items 81300–81360)
- the treatment of spasticity post-Botox injection for physiotherapists and occupational therapists (item 18361)
- psychology—up to five treatments per year with general practitioner management plan (item 10968)
- psychological therapy services for clinical psychologists (items 80000–80020)
- focussed psychological strategies—allied mental health by eligible psychologists, occupational therapists and social workers (items 80100–80170)
- pregnancy support counselling—allied health professional by psychologists and social workers (items 81000–81010)
- eye care by optometrists (items 10900–10943)
- physiotherapist requests for plain film diagnostic images (items 57712, 57715, 58100–58106, 58109, 58112, 58120, 58121)
- podiatrist requests for plain film diagnostic and ultrasound images (items 55836, 55840, 55844, 57521, 57527).

Patients of optometrists who are prescribed ocular therapeutics are able to access some medications on the Pharmaceutical Benefits Scheme (PBS).

The *Health Insurance Act 1973* does not allow public allied health professionals to access these item numbers, except in section 19(2) exempt sites (which are communities with a population of less than 3000). Revenue is being collected for allied health consultations in some sites (e.g. Torres Strait-Northern Peninsula and South West Hospital and Health Services).

As a result, patient access to allied health services outside Queensland Health is limited, unless they have the capacity to pay.

To assist in maintaining function and prevent admissions to acute care, many allied health services would ideally be provided in the community. Although the simple solution is to provide greater access to allied health services under Medicare, this is unlikely to occur in the immediate future. However, there may be the potential to trial alternate funding models in collaboration with the Australian Government to meet identified priorities. These could potentially be implemented in partnership with Medicare Locals. Possible trials include:

- Improved access to enhanced primary care Medicare items for rural and remote communities, with allied health professionals able to develop and coordinate the care plan required under this program. This is particularly important in rural settings where access to general practitioners may be a barrier to patients being able to seek allied health consultations to assist in management and treatment of their chronic condition.
- Access for podiatrists, working collaboratively with general practitioners and/or endocrinologists, to refer for appropriate pathology tests under the Medical Benefits Schedule (MBS) in the management of patients with high-risk foot conditions.
- Provide funding to Medicare Locals to purchase public allied health outpatient services. This could be done through growth funds or disinvestment from the public sector.

6.5.4 Operational issues

6.5.4.1 Demand management

The vast majority of allied health professionals articulated strong support for working as first contact professionals and identified significant opportunities where this would contribute to improving models of care. Some stakeholders suggested that allied health-led services, such as orthopaedic physiotherapy screening clinics, would result in higher conversion rates to surgery from medical consultations and raised concerns regarding how this increase would be managed. In addition, concerns were raised that there would be insufficient work for the medical workforce and excessive demand for allied health services if patient self-referral was implemented.

It is important that patient need informs changes to scope of practice and associated service models. An increase in surgery conversion rates indicates that patients are seeing the right professional at the right time.

Allied health professionals working as first contact practitioners provide a far more efficient use of resources than surgeons consulting with a high proportion of patients whose needs can be effectively and safely supported by the allied health workforce. It is entirely appropriate that surgeons primarily consult with patients triaged on the basis of their need for a surgeon's expertise.

Considering the current demand for services and length of waiting lists, there is more than enough work for all health professionals, including doctors, nurses and allied health professionals.

Finally, where self-referral to allied health professionals might be considered, this would only be in the context of appropriate triage criteria relevant to the priorities of the service in question. Feedback from professionals involved in similar models in the UK indicate that although implementing such a model can bring an initial spike in referrals, this is not typically sustained in the long term and that patient access is improved through the availability of a variety of referral pathways.

6.5.4.2 Responsibility and accountability

The issue of responsibility and accountability was raised by medical staff in the context of allied health professionals taking on extended scope tasks. It was often presented as a barrier to change of practice as it was not clear who would be responsible or accountable for the decisions and actions where new tasks became part of the practice of an allied health professional.

It is important that a clear distinction is made between the delegation of tasks from one professional to another or from a professional to the support workforce and skill-sharing between professionals where both have the skills and responsibility for undertaking the same clinical tasks.

As outlined in Section 3.2, in the context of delegation (e.g. an allied health professional delegating to an allied health assistant) the delegating practitioner remains responsible for the overall management of the patient and for the decision to delegate. The person to whom responsibility is delegated is accountable for their decisions and actions, not the delegating professional.

Where skill-sharing of specific tasks between professions occurs (e.g. social workers and psychologists, speech pathologists and medical practitioners), the responsibility and accountability for decisions and actions relating to the task lies wholly with the professional undertaking the specific task.

It is always assumed that patient care is undertaken in a collaborative model with mutual respect and understanding of the limitations of scope with appropriate referral to, and consultation with, other members of the team.

6.5.4.3 Authorising services and resources

The consultation process identified a number of other barriers that impact on patient access and the timeliness of service delivery.

Currently, occupational therapists are the only health professionals who can authorise home modifications through Queensland Government community and home care services. Implementation of skill-sharing models of care means that other health professionals will have the necessary skills to determine if a patient requires home modifications but, under the current eligibility criteria, it will not be possible for these professionals to authorise the modifications through the Department of Communities, Child Safety and Disability Services.

Similarly, eligibility criteria exist under the Medical Aids Subsidy Scheme that only authorises specified health professionals to order certain equipment. The implementation of skill-sharing models means that other health professionals will have the skill set to determine the need and specifications for the equipment, but will be unable to order it.

> Any models maximising scope of practice must be underpinned by appropriate education and training, both for those tasks taken on by health practitioners in extending scope of practice, as well as those tasks delegated to support or other workforces. Such training must ensure that recognised standards are maintained no matter by whom, and in what context, tasks are performed.
>
> *Allied health professional association*

6.5.5 Education and training

6.5.5.1 Education and training of allied health professionals

Education and training was consistently raised as an enabler to expanding scope of allied health practice and was highlighted as necessary for such changes to occur. This was the case for both full scope and extended scope tasks.

The allied health workforce raised the loss of clinical skills due to historical practice in some domains in Queensland Health. This issue was most notable in the allied health mental health workforce.

Given the large breadth of scope of practice for most professions, targeted training will be required to facilitate the workforce to provide services across the full scope of allied health practice. The education and training required will vary across professions and clinical practice areas.

In contrast to full scope tasks, extended scope tasks require education and training targeted at both the knowledge and skill required to perform the task. The availability of this education and training varies across professions and extended scope tasks. Some larger professions will have greater capacity to support viable dedicated programs, but even this could be difficult as extended scope tasks will only be appropriate in defined contexts and locations, using a discrete workforce.

> We currently rely too much on individual competencies and relations with medical teams to allow for expanded scope of practice. We need to focus more on producing a workforce that has the credibility and relevant competencies.
>
> *Metropolitan pharmacist*

Developing the capacity of allied health professionals to delegate to the support workforce, particularly the clinically-based assistant workforce, appears to be lacking in most professional training. The allied health workforce struggles to effectively delegate tasks to enable their time to be dedicated to perform tasks falling within their professional scope. The Allied Health Professions' Office of Queensland has developed and made available a learning package to assist the workforce to develop these skills. However, given these skills are required by all clinicians on graduation, the addition of delegation to accreditation standards, and consequently undergraduate training, would support this practice significantly.

Investigation into the most sustainable method of education and training to support the workforce working to full and extended scope needs to occur. This includes looking at viability of training across professions, particularly as the volume within each profession is likely to be low. Modular-based skill sets may be the most cost-effective and efficient method for training the workforce in the short term. However the Department of Health also needs to work with education providers, professional associations, registration boards and accreditation bodies to ensure all contributions to education are consistent with the workforce models that will effectively support patient and community needs now and in the future.

6.5.6 Liability, legislation, regulation and accreditation standards

6.5.6.1 Liability

The issue of liability and indemnity was repeatedly raised by medical practitioners and a small number of allied health professionals as a barrier for changes in scope of practice, particularly in relation to allied health professionals being first contact professionals and undertaking extended scope tasks.

The Department of Health's policy *Indemnity for Queensland Health Employees and Other Persons* (QH-POL-152:2012) states in respect to staff indemnity eligibility for civil proceedings:

> *The State will provide legal assistance and/or an indemnity to an employee or other person in relation to a civil proceeding when:*
>
> - *the civil proceeding arises from or relates to the person's duties or functions undertaken for, or on behalf of, Queensland Health or a Hospital and Health Service*
> - *the decision-maker is satisfied that the person has diligently and conscientiously endeavoured to carry out such duties or functions.*

Allied health professionals undertaking extended scope of practice need to be appropriately educated and skilled to competently perform the required task/role, and be credentialed by the Hospital and Health Service where the scope of practice is implemented. Where an allied health professional meets these requirements and has complied with the terms of the policy, they will be eligible for indemnity cover by the State.

> ...the regulatory framework established by the National Law does not establish barriers to extended scopes of practice. National Boards and AHPRA note that this issue is not always well understood.
>
> *Australian Health Practitioner Regulation Agency*

6.5.6.2 Legislation and regulation

The consultation process identified that although nationally significant reform is occurring within the allied health professions in relation to scope of practice, Queensland legislation does not always enable reformed practices to be implemented and does not currently reflect the full scope of practice available to some allied health professions.

Consultation participants identified the following legislation and regulations as impacting on the capacity of allied health professionals to implement contemporary models of care:

- *Radiation Safety Act 1999*—Radiation Safety Regulation 2010
- *Health Act 1937*—Health (Drugs and Poisons) Regulation 1996
- *Mental Health Act 2000*
- *Health Practitioner Regulation National Law Act 2009*

Radiation Safety Act 1999—Radiation Safety Regulation 2010

Presently the Radiation Safety Regulation 2010 does not allow physiotherapists to request plain film diagnostic images. In the private sector, physiotherapists routinely refer patients for imaging, and patients are eligible for a Medicare rebate. The Radiation Advisory Committee has made a recommendation to the Minister for Health to amend the regulation to reflect practice and align with other jurisdictions.

Health Act 1937—Health (Drugs and Poisons) Regulation 1996

This Act and regulation are being reviewed which may allow more streamlined revisions to the regulation as an outcome. Currently, there are a number of issues which make this a barrier to maximising full scope of practice. For example, as drugs regulations are state based, podiatrists with an endorsement to prescribe on their registration are unable to prescribe the nationally endorsed list of medications as the regulation does not authorise podiatrists to do so in Queensland. This presents a significant quality and safety issue, as scope of practice differs across jurisdictions.

While there are mechanisms to support trials under the regulation, experience has shown that when the trial is complete, regardless of the success, there is no method to permanently implement the change to maintain the service.

Mental Health Act 2000

Currently, the *Mental Health Act 2000* is being revised. The review needs to consider the inclusion of health practitioners, including allied health professionals, in the pathway to facilitate patient management and outcomes.

Health Practitioner Regulation National Law Act 2009

Although registration was often raised as a barrier to practice during the consultation, there appeared to be some misunderstanding of the role of the National Registration and Accreditation Scheme. Advice from the Australian Health Practitioner Registration Agency (AHPRA) indicates that, under the *Health Practitioner Regulation National Law Act 2009*, there is minimal restriction to scope of practice in a legal sense. The law under which all registered health practitioners are regulated operates on the protection of title rather than scope of practice restrictions. The only practice protections are for restricted dental acts, cervical spine manipulation and prescription of optical appliances. Otherwise, it is intended that registered practitioners are able to practice to the full extent of their competence.

The code of conduct shared by most national board's states, 'practitioners have a responsibility to recognise and work within the limits of their competence and scope of practice. Scopes of practice vary according to different roles; for example, practitioners, researchers and managers will all have quite different competence and scopes of practice. To illustrate, in relation to working within their scope of practice, practitioners may need to consider whether they have the appropriate qualifications and experience to provide advice on over-the-counter and scheduled medicines, herbal remedies, vitamin supplements, etc'[28].

Accordingly, practitioners make judgements about their own scope of practice, based on their qualifications, skills and experience, and ethical responsibilities and obligations under the relevant code of conduct.

It is important to realise that there are a number of allied health professions which are not nationally registered, although they mostly have self-regulatory models in place through the professional association and their accreditation bodies.

[28]Australian Health Practitioner Regulation Agency. (2013). Email communication.

6.5.6.3 Accreditation standards

In the consultation, the Allied Health Education Standing Committee expressed support for Queensland Health to work closely with relevant accreditation bodies to ensure that accreditation standards reflect current and emerging clinical practice and community needs.

Accreditation standards are set either by a professional body or independent council and inform tertiary education providers of the standards required of graduates in a specified profession. Some accreditation standards are not currently consistent with what is required of a graduate to meet patient needs. Experience shows that the standards, and bodies who set them, are not sufficiently responsive to reform in service delivery. The approval of accreditation standards and programs of study for registered professions currently sits with the national boards. Influencing their accreditation standards will be necessary to achieve long-term sustainable change. This will require significantly more consultation and negotiation.

7 Model of care

Through consideration of the literature and the taskforce consultation process, a range of models of service delivery that have a track record of improving outcomes without compromising clinical safety or quality, including improving patient access, reducing waiting times and achieving clinical improvements, were identified.

This section presents a summary of a range of models of care where implementing full or extended scope allied health practice can contribute significant benefits to clinical domains where current Queensland Health data indicates Hospital and Health Services experience high demand and significant challenges in meeting targets.

Many of these models have been introduced in Australia and internationally to assist in reducing the long waiting times consumers experience in accessing public health services and the emergency department.

Queensland Health emergency departments have made significant improvements in meeting the nationally required standard for emergency care access. However further improvements can be made through better utilisation of the allied health workforce.

As at July 2013, there were 232,603 people waiting for a specialist outpatient appointment. Table 1 provides data on the specialist outpatient clinics with the highest waiting times where changes in the role of allied health within their models of care could improve access. There are additional specialist outpatient clinics where changes to current allied health scope of practice has the capacity to make significant contributions to meeting specific local priorities

In addition to the clinical areas detailed in Table 1, as demand for mental health and cancer care services increase, refinement of current service delivery models will be required in these areas to ensure optimal clinical contact from all relevant clinicians.

Table 1 Waiting times at July 2013
Queensland public health reporting hospitals waiting list*

Specialist outpatient clinic	Category	Percentage not seen within recommended time-frames	Number not seen within recommended time-frames	Total number on waiting list
Orthopaedics	Category 1	34%	511	1,507
	Category 2	77%	13,272	17,196
	Category 3	51%	10,938	21,246
Ear, nose and throat	Category 1	45%	207	459
	Category 2	83%	10,902	13,091
	Category 3	52%	5,955	11,409
Ophthalmology	Category 1	50%	158	317
	Category 2	77%	3,977	5,173
	Category 3	62%	6,158	9,981
Gastroenterology	Category 1	76%	1,009	1,323
	Category 2	71%	3,640	5147
	Category 3	52%	1,481	2,825
Paediatrics	Category 1	47%	191	403
	Category 2	43%	1,733	4,050
	Category 3	41%	1,551	3,816
Neurosurgery	Category 1	59%	163	275
	Category 2	88%	5,274	5,969
	Category 3	58%	1,279	2,208

** Data for the Princess Alexandra Hospital was not available*

7.1 Allied health professionals and the emergency department

Model

Models involving physiotherapists as first contact practitioners in emergency departments are widely reported in the literature. Most models involve physiotherapists treating patients from triage Categories 3, 4, and 5 with a range of agreed musculoskeletal presentations. This contact is either as first contact or on referral from other emergency department staff. The role typically includes assessment, intervention, referral for further treatment and assessment where appropriate, and discharge. Some models include extended scope tasks, including referral for and interpretation of plain film X-rays and pathology, prescription of limited medications, plastering and simple suturing.

There is the potential for a wider application of this model to other allied health professionals working in full scope or extended scope roles, including:

- mental health professionals working with people presenting with a primary mental health need (approximately 10 per cent of emergency department presentations)
- social workers working with people presenting with a primary psychosocial need
- podiatrists working with high-risk diabetic patients
- occupational therapists working with patients with hand injuries.

Queensland Health priorities

- NEAT

Examples and evidence

Primary contact musculoskeletal physiotherapists in the emergency department, The Alfred Hospital, Victoria www.hwainventory.net.au

Physiotherapists completed training in radiology, pharmacology and specific skills such as plastering. Patients with musculoskeletal presentations have primary contact with a physiotherapist, resulting in improved capacity of medical officers to see other patients, consistent improvement in four hour wait times, and patients with back pain being 14.5 times less likely to be admitted. This example, and a model trialled in the Australian Capital Territory, are the lead sites for the HWA Expanded scope of physiotherapy in emergency departments trial. Trials are also being undertaken at the Gold Coast and in Cairns and Hinterland Hospital and Health Services.

Emergency physiotherapy practitioner, Northern Health, Victoria www.hwainventory.net.au

Physiotherapists assess and independently manage patients presenting to the emergency department with acute low back pain and peripheral musculoskeletal injuries. Outcomes include increased availability of emergency department medical staff to manage higher acuity patients, quality care for people presenting with peripheral musculoskeletal injuries and low back pain, and improved emergency department ability to meet access targets.

7.2 Allied health professionals and musculoskeletal services

Model

There are many models nationally and internationally that expand the traditional scope of allied health professionals to respond to the needs of patients with musculoskeletal needs, including orthopaedics, rheumatology, neurosurgery and hypertonicity. Models involve physiotherapists, occupational therapists or podiatrists as the first point of contact for Category 2 and Category 3 referrals that are likely to benefit from conservative management. The allied health professional provides triage, assessment, conservative intervention and onward referral to other allied health professionals (including dietetics and psychology) and medical specialists.

In some contexts, appropriately trained and credentialed physiotherapists, podiatrists and occupational therapists carry out extended scope tasks, including ordering diagnostic tests, directly listing patients for surgery, providing post-operative review, carrying out supplementary prescribing, prescribing analgesics and anti-inflammatory medications, administering joint injection therapy and administering Botox injections.

Queensland Health priorities

- NEST
- Specialist outpatient waiting time

Examples and evidence

Neurosurgical and orthopaedic physiotherapy screening clinic (N/OPSC) and multidisciplinary service, multiple sites, Queensland Health

Referrals to neurosurgical and orthopaedic outpatient clinics are triaged by either a neurosurgeon or orthopaedic consultant and referred to the N/OPSC as appropriate. Patients are assessed by a physiotherapist, including screening to identify potential benefit from referral to occupational therapy, psychology, or dietetics. The need for further investigation (e.g. X-ray, CT, and MRI) is discussed with the neurosurgical/orthopaedic consultant. Patients are reviewed through the N/OPSC as necessary and retain their position on the waiting list to see the neurosurgical/orthopaedic consultant.

Statewide outcomes for the N/OPSC for 2012–13 indicate that 5532 new patients and 4832 review cases were seen from the specialist outpatient waiting list (new-to-review ratio of 1.14:1). Of patients discharged between April 2012 and July 2013, 72 per cent were referred for non-surgical management and 64 per cent of discharged patients were removed from the specialist outpatient department waiting list without needing an appointment with a consultant. Of patients who continued to consultant review, one-third received earlier medical review due to identification of more urgent need than was evident at triage.

Current resourcing does not allow all patients who could be appropriately managed through the N/OPSC service to be seen. The service has the potential to have a greater impact on direction to appropriate services and reductions in waiting times.

Orthopaedic podiatry triage clinic, multiple sites, Queensland Health

A podiatrist screens all non-urgent patients with foot and ankle problems to determine if conservative treatment, including footwear prescription, foot orthoses and exercise is likely to be of benefit. Patients screened as still needing to see the orthopaedic surgeon are placed back on the waiting list in their original position. Patients who returned onto the consultant list were also provided with podiatry treatment as an interim severity reduction measure.

Introduction of this service at Logan Hospital has resulted in a reduction of 49.7 per cent in the orthopaedic foot and ankle waiting list since 2009. Of patients screened, almost half were identified as suitable for conservative podiatry treatment and were discharged from the consultant waiting list. The conversion of patients progressing from orthopaedic consultation to surgery also increased, indicating that more appropriate patients are seen by the orthopaedic consultant.

Hand Therapy Clinic, Scotland, UK www.scotland.gov.uk

Creating first point of contact with occupational therapists for assessment, diagnosis and intervention has resulted in more than 700 orthopaedic consultant appointments being saved in a year. Patients presenting with conditions such as trigger finger, carpal tunnel syndrome and Dupuytren's contracture are triaged into the occupational therapy-led treatment pathway. Through splinting, activity modification, expert advice and, where necessary, joint injection, a significant number of patients are able to avoid surgery. Those who do require surgery receive follow-up through the postoperative occupational therapy pathway. Benefits have included consistent referral management, reduced waiting lists, standardised high-quality care and improved patient experience and outcomes.

7.3 Audiologist and ear, nose and throat services

Model

Paediatric and adult Category 2 and 3 referrals to an ear, nose and throat (ENT) specialist are triaged and assessed by an audiologist. Based on assessment findings, patients requiring urgent attention are escalated for more urgent specialist assessment. Patients with normal hearing and no other concerns are discharged. In relevant contexts, appropriately trained and credentialed audiologists list patients for routine surgery, provide post-operative review for routine procedures, and discharge to primary care providers as appropriate.

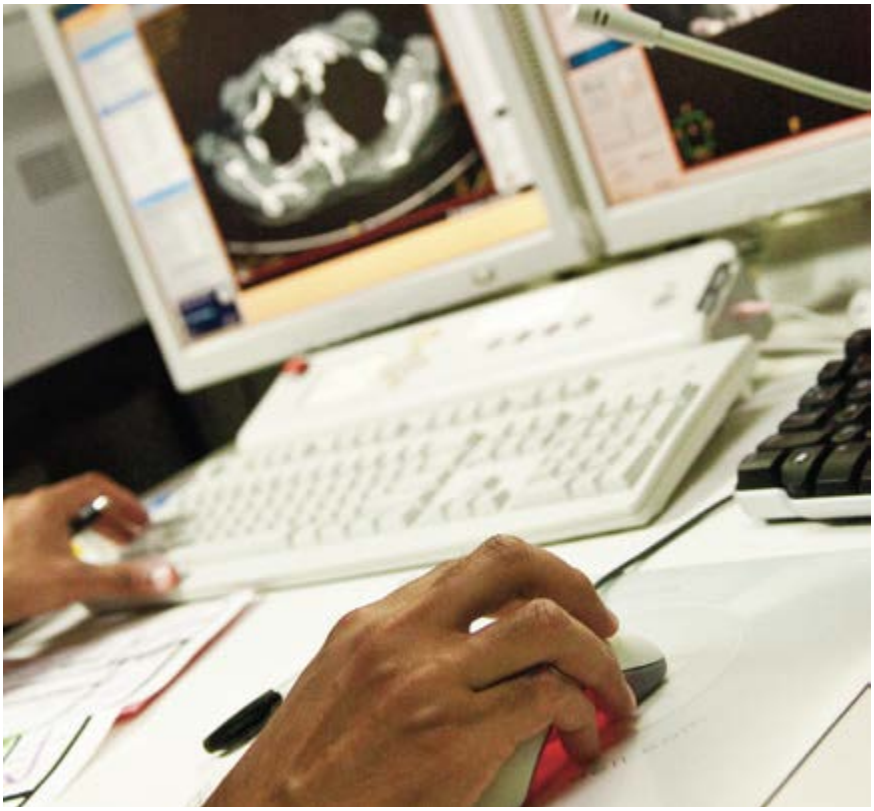
Queensland Health priorities

- Specialist outpatient waiting times
- NEST

Examples and evidence

Royal National Throat, Nose and Ear Hospital, Royal Free Hampstead NHS Trust www.improvement.nhs.uk

Seventy-five per cent of otological referrals to ENT services did not meet red flag criteria, and could potentially be managed by diagnostic audiology services in a direct access service by staff with appropriate skills and the



ability to request MRI scans. In 95 per cent of cases, audiologists and ENT specialists were in agreement on the referral pathway to audiovestibular medicine or ENT. The new model released 45 outpatient appointments with ENT specialists per week.

Innovative ENT Pathways, Logan Hospital ENT model of care project, Metro South Hospital and Health Service, Queensland Health

From July 2013, paediatric patients with Category 2 and 3 glue ear referred for ENT services will be triaged, assessed and managed by an audiologist prior to consultation with an ENT specialist. It is anticipated that 50 per cent of these children will be discharged without needing specialist assessment, 35 per cent will be referred directly from the audiologist to discuss surgical options, and 73 per cent of children who ultimately receive grommets will receive post-operative review by an audiologist and be discharged directly to primary care services with their general practitioner.

Anticipated outcomes include reduced waiting times and increased non-surgical management for patients with routine conditions, escalation of referrals for patients with complex needs and interim conservative management, release of ENT consultant time to increase timely access to specialist services by patients with complex needs.

7.4 Optometrists and ophthalmology services

Model

Patients referred for blurred vision, general eye reviews, diabetic eye checks, dry eyes, itchy eyes, floaters with no symptoms, and eye checks in the context of a family history of conditions such as glaucoma and age-related macular degeneration are assessed in the first instance by an optometrist—either community based or in a collaborative optometry and ophthalmology clinic. In contrast, patients presenting with a clear diagnosis (e.g. cataract, pterygium, glaucoma, blocked tear ducts), lid lesions/abnormalities, or meeting other specified conditions or circumstances directly access ophthalmology services.

Queensland Health priorities

- Specialist outpatient waiting times
- NEST

Examples and evidence

www.hwainventory.net.au

The Royal Victorian Eye and Ear Hospital (RVEEH) and the Australian College of Optometry (ACO) collaborated to develop a public model providing integrated ophthalmology and optometry. Evidence-based clinical guidelines and referral pathways were established to triage patients to either the combined clinic or the traditional ophthalmology service—34 per cent (1350) of patients were eligible for the combined clinic. Of the 686 patients who ultimately attended the clinic, 72 per cent were discharged after assessment at the clinic (14 per cent with no need for follow-up, 56 per cent to ongoing care through ACO, 2 per cent to a general practitioner) and 28 per cent were referred for ongoing review through RVEEH. The impacts have included a reduction in wait time for general eye clinic patients from 12 months to 9 months and a 130 per cent increase in general eye clinic patients seen at RVEEH.

7.5 Allied health and outpatient paediatric services

Model

Children referred to a hospital paediatric outpatient clinic for behavioural and/or developmental concerns are triaged, assessed and referred for other suitable allied health assessments by a relevant allied health professional prior to specialist medical assessment.

Queensland Health priorities

- Specialist outpatient waiting times

Examples and evidence

General paediatrics allied health screening service, Children's Health Queensland Hospital and Health Service, Queensland Health

Referrals of children to the paediatric outpatient clinic with concerns about challenging behaviour, mild anxiety, social/mild pragmatic concerns, faecal incontinence, nocturnal enuresis, daytime functional urinary incontinence, or speech and language delays were triaged collaboratively between allied health professionals and a general paediatrician. The psychologist contacted the family to discuss the service, appropriate referrals received assessment and brief intervention, and inappropriate referrals were directed to an appropriate internal or external service or back to the referring general practitioner.

7.6 Mental health services

Significant attention has been directed to the management and provision of mental health services. The last decade has seen major changes in the way mental healthcare is delivered with a priority placed on supporting patients to reside within their local community. Models have evolved with allied health professionals spending significant time case-managing clients rather than delivering profession-specific interventions. Attention needs to be given to ensuring that the case management model works well to provide treatment and care for the patient. Redesign of services to better use the specific skills of these allied health professionals can improve efficiency and effectiveness and improve patient well-being.

Examples of how allied health professionals can improve the model of care include:

- pharmacists providing repeat/maintenance prescribing for particular psychotropic medications and prescription of as-required medications (e.g. antidepressant medications, laxatives for clozapine-induced constipation) and counselling on medications to aid in adherence to therapy
- psychologists diagnosing and managing mental health disorders and prescribing appropriate medications, in collaboration with a general practitioner
- the use of the support workforce within public mental health services. Opportunities exist to delegate tasks to appropriately trained support workers to enable the professional workforce to work to its full capability. The Metro North Transitional Housing Team has introduced rehabilitation therapy aids to work with occupational therapists which has improved patient access by freeing up professional time and improved patient flow as discharge processes are enhanced.

Queensland Health priorities

- Support recovery from mental illness

7.7 Allied health clinical leads in subacute contexts

Model

Allied health professionals provide multidisciplinary assessment, treatment planning and coordination for adult patients requiring acute stroke management, rehabilitation, or geriatric evaluation and management.

Queensland Health priorities

- Investing in effective sub-acute care

Examples and evidence

Bayside rehabilitation model of care, Metro South Hospital and Health Service

At the Redland and Wynnum hospitals an advanced allied health professional position was established to guide allied health-led rehabilitation services. This occurred because of a need to improve efficiency and quality of rehabilitation services in an environment of a shortage of geriatricians and rehabilitation consultants.

The advanced allied health professional role coordinates the interdisciplinary team, acts as a single point of contact for all rehabilitation and geriatric referrals, completes initial assessments, accepts patients for the rehabilitation program or makes alternative recommendations, coordinates the shared care model for medical management of patients and makes recommendations under the clinical supervision of the geriatrician, and completes and enters the online comprehensive geriatric assessment, having been accredited in this process.

Outcomes have included 73 per cent of patients referred for rehabilitation or geriatric assessment being reviewed by the advanced allied health professional prior to a consultant review (September 2012 to June 2013), improved efficiency of the geriatrician's time, improved timing and accuracy of coding of patients with improved funding implications, reduced time between referral for review by geriatrician and date of assessment, and good patient satisfaction outcomes.

7.8 Allied health clinical leads in acute medical contexts

Model

Allied health professionals skill share assessment, intervention, care planning, referral and discharge where appropriate to decrease duplication and provide more timely access to care.

Queensland Health priorities

- Improve patient flow
- Improve health services for regional, rural and remote communities

Examples and evidence

Medical assessment and planning unit, Toowoomba Hospital, Darling Downs Hospital and Health Service

This model of care was trialled in the context of delays in discharge planning, delays in commencement of allied health intervention, duplication in some aspects of allied health assessment and intervention, under-use of allied health support workers, and gaps in access to allied health.

The trial of an allied health clinical leader in the medical assessment and planning unit of the Toowoomba Hospital involved job-sharing by an occupational therapist and a physiotherapist operating as the first point of clinical contact for allied health. The professionals each had advanced level skills and operated under a skill-share model to complete comprehensive allied health assessment and implement appropriate intervention.

Outcomes for patients receiving care through the new model, compared to those receiving standard care, included reduced length of stay (60 per cent shorter on average), more timely access to allied health services (11 hours earlier on average), more effective identification of needs relevant to allied health referral and the capacity for these needs to be responded to on an outpatient basis, more effective cross referrals (64 compared to 2 for those receiving standard care), improved patient experience through fewer transactions with different professionals, improved patient outcomes at one-month follow-up (including balance and mobility, self-reported quality of life, and self reported activities of daily living), and decreased rates of re-presentation to the emergency department.

7.9 Chronic disease (cardio-respiratory, podiatry)

Model

Allied health professionals lead chronic disease outpatient clinics to prevent admission to acute care and assist the patient in managing their health within the community.

Queensland Health priorities

- Specialist outpatient waiting times
- NEST
- NEAT

Examples and evidence

Podiatry-led foot disease services, Metro North Hospital and Health Service

Foot disease is the leading cause of amputation in Australia and causes the second largest burden of hospitalisation and disease of the four major diabetes complications. Australia has the second highest diabetes amputation rate in the developed world (18 per 100,000 people). International research consistently demonstrates multi-faceted, service-wide strategies significantly reduce diabetes foot hospitalisation and amputation.

The podiatry-led, multidisciplinary foot disease teams at The Prince Charles Hospital and the Royal Brisbane and Women's Hospital facilitate necessary escalation of care for patients with acute foot ulcerations from the secondary care high-risk foot clinics to the subacute and ambulatory service and hospital emergency department services. Furthermore, the secondary care high-risk foot clinics facilitate necessary escalation of care for patients with foot ulceration, or those at significant risk of foot ulceration, from general practitioners and the primary care sector. Metro North Hospital and Health Service high-risk foot service results have seen reductions of up to one-third since 2008 (19.5 diabetes amputations per 100,000 in 2006 to 13.3 per 100,000 in 2010).

Cardio-respiratory prehabilitation, Central Queensland Hospital and Health Service

Patients referred for specialist cardio-respiratory care are reviewed by a medical specialist and allied health professional or nurse practitioner. Category 1 patients are directed to the specialist outpatient waiting list. Suitable category 2 and 3 patients are referred for prehabilitation i.e. intake screening with an allied health professional or nurse practitioner, and are directed for assessment through an appropriate clinical measurements professional as appropriate. A subsequent interdisciplinary case conference determines the patient's subsequent path to either supported self-management through their general practitioner and multidisciplinary care team, a relevant disease management pathway (medication review, smoking cessation, exacerbation and self management) or specialist outpatient appointment.

7.10 Cancer services

Australia is currently experiencing a shortage of medical physicists. The growth of radiation services has placed increased demand on the radiation oncology medical physics workforce. A long training pathway with onerous supervision requirements means there is a delay in growing the qualified workforce. Current models of service delivery result in physicists spending significant amounts of time on lower-order tasks. Radiation therapists may be able to undertake some of the tasks of the medical physicist to allow this workforce to focus on more advanced procedures.

A number of projects have also looked at advanced roles for radiation therapists in the management of patients with cancer. More information is presented in Appendix A.

Queensland Health priorites

- Improve patient flow

7.11 Rural and remote communities

The *Safe Applicable Healthcare in Rural and Remote Areas of Queensland*[29] report proposes a number of initiatives to improve health services in rural and remote areas. This report demands innovative responses in models of care across the healthcare system. The relevant suggested responses for allied health professions in this report include:

- generalist allied health professional models of practice to be initiated to safely expand the scope of practice and effectiveness of rural and remote allied health workers
- public-private partnerships, including joint employment with Medicare Locals
- local resident services should be given priority opportunity to provide services to public hospitals
- where resident services are not available, allied health professional services be provided by Telehealth with an allied health assistant complemented by onsite visits.

A pilot of the rural and remote allied health generalist began in January 2014 and will be managed in partnership with the Rural and Remote Clinical Network.

Queensland Health priorites

- Improve health services for regional, rural and remote communities.

7.12 Extension of hours of service

Highlighted throughout the taskforce was the potential impact on patient flow of increasing the hours that allied health professionals are available to patients. As health services are provided 24-hours-a-day, seven-days-a-week, improvements can be achieved through offering services for a greater range of hours in the day and across the entire week.

[29]Queensland Health. (2013). *Safe applicable healthcare for rural and remote areas of Queensland*

8 Taskforce outcomes and recommendations

While population growth, an ageing population and increasing rates of chronic disease contribute to longer waiting lists for patients and rapid and unsustainable increases in health expenditure, the allied health workforce within Queensland Health is not being used to the full extent of its recognised skill base and regulatory guidelines.

The taskforce concluded that improvements to patient-centred care, as well as service effectiveness and efficiency, can and should be achieved by expanding allied health scope of practice within Queensland Health through:

- applying agreed principles to decision-making regarding allied health scope of practice
- implementation of full scope of practice
- implementation of extended scope of practice in appropriate contexts
- delegation of appropriate tasks to the support workforce.

8.1 Key principles

The taskforce identified four key principles to be applied to decision-making regarding allied health scope of practice within specific models of care. These are:

- delivering patient-centred care
- ensuring quality and safety
- providing cost-effective services
- providing collaborative care within a team environment.

8.2 Implementing full scope of practice

A profession's scope of practice includes the full spectrum of roles, functions, responsibilities, activities and decision-making capacity that individuals within that profession are educated, competent and authorised to perform.

Through the literature and taskforce consultation process, numerous models of care and specific clinical tasks that are within the scope of practice of the allied health professions were identified. These models and clinical tasks have the potential to facilitate more effective use of the allied health workforce and, in turn, improve the patient journey and enhance service efficiency and effectiveness, while maintaining safety and quality.

The taskforce findings have demonstrated that, for the full capabilities of the allied health workforce to be used, transformational change to service delivery models across Queensland Health is required.

To progress this change, it will be necessary to address the numerous barriers to implementing full scope roles and tasks. The most significant of these is the impact of historical culture, custom and practice. Allied health professionals and consumers both expressed a desire for Queensland Health to challenge old ways with strong leadership, as well as new policies and processes. This issue must be considered alongside the system barriers of funding models, education accreditation standards, organisational policies, and the incomplete understanding of health professionals and service administrators regarding the scope of practice of the allied health professions.

8.3 Implementing extended scope of practice

Extended scope of practice is a discrete knowledge and skill base additional to the recognised scope of practice of a profession and/or regulatory context of a particular jurisdiction.

Feedback from taskforce participants, as well as national and international literature, reflects safe and cost-effective examples of allied health professions undertaking extended scope tasks in appropriate situations. Outcomes include improved patient satisfaction, improved clinical outcomes, reduced waiting times and fewer clinical transactions.

Barriers to extended scope of practice in Queensland Health reflect those for full scope of practice. However, additional legislative barriers exist for a number of extended scope tasks. Some health professionals are more resistant to allied health professionals undertaking extended scope tasks than they are to implementation of allied health full scope of practice. Despite these concerns, Queensland Health has effective clinical governance processes in place to support safe and effective implementation of extended scope of practice.

To develop a workforce that is appropriately skilled to deliver extended scope of practice, education and training that is sustainable, accessible and flexible needs to be available.

8.4 Delegation to the support workforce

Delegation of tasks occurs when practitioners authorise another healthcare worker to provide treatment or care on their behalf. Models of care incorporating effective delegation of tasks to allied health assistants and administrative officers are required for allied health professionals to dedicate a greater proportion of their time to roles and tasks at their full scope of practice. Although there are some clinical teams making good use of the support workforce, these models are not well developed within Hospital and Health Services across Queensland.

8.5 Evidence–based, patient-centred models

The taskforce identified evidence-based models incorporating full scope and extended scope tasks. These models focus on:

- optimising health service delivery by enabling the allied health workforce to work to full scope of practice, with an emphasis on allied health-led, first contact triage, assessment and intervention services for specialist outpatient waiting lists and the emergency department. Such models have demonstrated positive outcomes for patients who would benefit from non-surgical management and for facilitating more timely access to specialist medical services for patients with more complex needs
- extending scope where it is appropriate to enhance the patient journey, including relevant professions requesting X-rays and pathology and prescribing medications as needed.

To achieve this in a cost-effective and contestable manner, the skill-mix of teams and the use of the allied health workforce needs to be reviewed. This includes delegation to the support workforce and reallocation of resources from services where evidence supports alternate approaches to care.

8.6 Change management

Clinical service productivity and sustainability has the potential to be optimised by effectively using the full scope of practice of allied health professionals in ways that are responsive to the circumstances of specific contexts.

Facilitating change towards full scope of practice is dependent on redefining organisational policies and processes, reviewing team roles and functions, further education and training where necessary, and supporting changes in team culture. Changing the hours of operation of allied health professionals to include evenings and weekends can also facilitate improved patient access to full scope services.

For change to occur successfully, a number of factors must be satisfied:

- the team must be committed to change
- the team must understand what the full scope role can achieve for patients and the service system
- the team must understand how the change will impact on patients, other team members, and clinical and administrative processes
- the allied health professional must be clinically competent to undertake the full scope tasks
- in most situations, there must be a critical mass of patients that the change is relevant to so the allied health professional can develop and maintain skills that ensure safe practice
- there must be support from management to pursue the change[30].

Supporting full scope of practice does not represent a licence for any in-scope task to be undertaken by any individual professional within any context. Appropriate clinical governance must always be applied and the mandate of particular clinical services would continue to guide the nature of services to be delivered.

8.7 Recommendations

The taskforce has made a number of recommendations to facilitate delivery of patient-centred, cost-effective services through allied health professionals expanding their scope of practice. Expanded scope of practice includes:

- working to full scope of practice
- undertaking extended scope tasks in appropriate contexts
- delegating relevant tasks to the support workforce.

Recommendation 1

Hospital and Health Boards to lead the implementation of models of care that include allied health professionals expanding their scope of practice.

Recommendation 2

Service agreements between the Department of Health and each Hospital and Health Service to require the implementation of models of care that include allied health professionals expanding their scope of practice, and to report annually.

Recommendation 3

Allied Health Professions' Office of Queensland to showcase to Hospital and Health Services, the Queensland Clinical Senate and clinical networks opportunities to enhance patient experiences and provide cost-effective services through allied health professionals expanding their scope of practice.

Recommendation 4

The Department of Health to support redesign of models of care to improve the patient journey and deliver cost-effective services in outpatient clinics, emergency departments and mental health services by allied health professionals expanding their scope of practice.

Recommendation 5

The Department of Health to address barriers to allied health professionals expanding their scope of practice by:

- identifying and implementing alternative funding models and incentives with relevant partners
- amending regulation, legislation and policy
- developing measures and facilitating research into the outcomes of full scope of practice and extended scope.

Recommendation 6

Allied Health Professions' Office of Queensland, in partnership with education providers, accreditation bodies and professional associations, to develop and facilitate access to education, training and tools to support allied health professionals to expand their scope of practice.

[30]Victorian Department of Health. (2010). *Review of Primary Contact Physiotherapy Services.*

Appendix A: Summary of allied health service delivery models

The following table is a summary of models of service delivery that were either provided to the taskforce through the consultation process or were identified within the literature. The majority of the models of care use the full scope of practice of the allied health professions. In appropriate contexts, some extended scope tasks have been added to the practice of an allied health professional to better meet patient needs. Where this is the case, this is noted in the 'extended scope' column. If an extended scope task is known to require a legislative or policy change prior to it being able to be implemented within the Queensland Health context, this is denoted by a * in the extended scope column.

A number of models using the allied health support workforce are also presented. Where a model involved delegation, this is noted in the 'delegated' column.

Acute

Initiative details	Approach	Outcome	Delegated	Extended scope	Priority area
1. Initiative Allied health acute medical clinical leader **Location** Medical Assessment and Planning Unit, Toowoomba Hospital Darling Downs Hospital Health Services, Queensland **Workforce** Multidisciplinary **Model** Single centre study **Reference** www.health.qld.gov.au	An allied health clinical leader role was established to provide assessment and intervention as the first point of contact for allied health for patients in the Medical Assessment and Planning Unit (MAPU). A framework of skill-sharing was introduced across physiotherapy, occupational therapy, podiatry, speech pathology, nutrition and dietetics, psychology and social work.	Patients discharged 82 hours earlier than those seen by standard care therapists. Initial allied health assessment provided 11 hours earlier than the standard care service At one month follow-up, patients demonstrated superior outcomes for balance and mobility and self-reported quality of life. Reduced emergency department re-presentation (10% compared to 24% at 1 month).			Improve patient flow
2. Initiative Dietitians and speech pathologists in stroke management **Location** UK, USA, Canada **Workforce** Nutrition and dietetics Speech pathology **Model** Established practice **Reference** Wright, L. et al (2009). Dysphagia and nutrition: An extended scope of practice. *Proceedings of the Nutrition Society* 68, (OCE1): E59	For stroke patients, dietitians screen for and manage dysphagia while speech pathologists screen for and manage malnutrition.	Patients assessed and treated more quickly. Earlier intervention through more timely and accurate referrals can improve nutritional status and overall health in patients with dysphagia.		✓	Improve patient flow

Acute					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
3. Initiative Fibreoptic endoscopic evaluation of swallowing (FEES) clinics **Location** Princess Alexandra Hospital, Royal Brisbane and Women's Hospital, The Townsville Hospital, Gold Coast Hospital, Queensland **Workforce** Speech pathology **Model** Established practice **Reference** www.heath.qld.gov.au	Four regular and established FEES clinics across Queensland. Development and implementation of a FEES competency training program—introductory and advanced levels. Patients requiring dysphagia assessment with FEES can be managed by a speech pathologist without need for referral to an ENT surgeon, or can be removed from an ENT waiting list. Not dependent on access to radiology suite/ENT. Can be repeated flexibly as required.	Reduced waiting time for instrumental dysphagia examinations. Reduction of 24–48 hours for urgent referrals. Timely commencement of patient diet/fluid recommendations. Reduced duplication of attendance for dysphagia assessment and ENT assessment. Reduced referral to radiology for videofluoroscopy by 25%.		✓	Improve patient flow Reduce outpatient department waiting time
4. Initiative Initial dysphagia screening by speech pathology assistants **Location** Monash Health, Victoria **Workforce** Speech pathology Allied health assistance **Model** Established practice **Reference** Department of Health, Victoria (2012). *Supervision and delegation for allied health assistants,* www.health.vic.gov.au/workforce/reform/assistant.htm	Speech pathology assistants on an adult medical ward: • conducted dysphagia screening • planned, performed and monitored mealtime performance for diet and fluids • provided feeding assistance in non-complex videofluoroscopy procedures for adult patients.	Audits showed: • dysphagia screening tool valid and reliable • no adverse outcomes identified • speech pathology assistant decisions 100% consistent with speech pathologist. Seven hours per week of speech pathologist time was released allowing speech pathologists to perform diagnostic assessments and provide treatment to patients with complex needs.	✓		Improve patient flow
5. Initiative Malnutrition screening by nutrition assistants **Location** Princess Alexandra Hospital, Metro South Hospital and Health Services, Queensland **Workforce** Allied health assistance **Model** Single centre study **Reference** Murray, E. et al. (2013). Malnutrition screening solutions in Medical Assessment and Planning Unit. *Nutrition and Dietetics*. 70 (Suppl. 1) :18. Miller, K. et al (2013). Accuracy of malnutrition screening more than one year post training. *Nutrition and Dietetics*. 70 (Suppl 1) :36	Nutrition assistants were trained to implement nutrition screening at a tertiary teaching hospital.	Reduced cost of training. Improved rates of screening (›80% compared to 30%) Higher accuracy screening completion (100%) Substantially lower cost compared to other workforce. Expected outcome: • optimal use of nursing staff skills and time.	✓		Improve patient flow

Acute					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
6. Initiative Nutrition assistant in rural setting **Location** Orange Base Hospital, New South Wales **Workforce** Allied health assistance **Model** Single centre study **Reference** Scott, E. et al. (2009). Optimising nutrition and improving outcomes for patient and provider through implementation of nutrition assistant in a rural health service. *Nutrition and Dietetics*, 66: A17	Nutrition assistants were introduced into wards to complete work processes developed by dietitians.	Improved nutritional intake leading to: • reduced readmissions • reduced length of stay • increased cost efficiencies • increased bed availability.	✓		Improve patient flow
7. Initiative Occupational therapy allied health assistant on the acute medical ward **Location** The Townsville Hospital, Townsville Hospital and Health Service, Queensland **Workforce** Occupational therapy Allied health assistance **Model** Single centre study **Reference** www.health.qld.gov.au	Allied health assistant employed to complete important but delegable tasks for patients with complex medical needs and extended hospital admissions to enable the occupational therapist to work to their full scope of practice.	Improved service delivery Expected outcomes: • improved patient function • reduced length of stay • reduced adverse events.	✓		Improve patient flow
8. Initiative Pharmacist in operating suite **Location** Austin Health, Victoria **Workforce** Pharmacy **Model** Established practice **Reference** Booth, J et al. (2012). Establishing clinical pharmacy services in the operating suite. *J Pharmacy Practice and Research,* 42:296-9	Pharmacist assumes a role in: • medication supply • medication waste minimisation • legal compliance • medication advice to staff • perioperative antimicrobial prescribing • perioperative management of patient's regular medication.	Cost minimisation Clinical benefits: • medication safety • antibiotic stewardship • quality use of medicines.		✓	Improve patient flow
9. Initiative Pharmacist initiated e-Script transcription project **Location** Peninsula Health, Victoria **Workforce** Pharmacy **Model** Established practice **Reference** www.hwainventory.net.au	Medical officer refers patients to pharmacist 24 hours before discharge. Pharmacist reconciles current and preadmission medications and prepares and prints prescriptions. Medical officer confirms and signs prescriptions. Pharmacist details medication changes and reasons for changes. Details are automatically populated into a discharge summary. Pharmacist provides a role model for junior medical officers regarding safe prescribing.	Earlier patient discharge Reduced waiting times Improved opportunities for education of junior medical officers Fewer prescribing errors Reduced clerical workload for medical officers			Improve patient flow

Acute

Initiative details	Approach	Outcome	Delegated	Extended scope	Priority area
10. Initiative Pharmacist-led lipid clinic **Location** Barwon Health, Victoria **Workforce** Pharmacy **Model** Single centre study **Reference** Weeks, G. et al. (2012). Hospital pharmacist-led lipid clinic for surgical patients with PVD at a regional Australian hospital. *J Pharmacy Practice and Research*, 42:17-21	Pharmacist trained by a cardiologist. Surgical patients with peripheral vascular disease were reviewed by a pharmacist over four, 6-weekly visits and provided with lifestyle advice, lipid measurements and statin therapy if required.	Patients had lowered high-density lipoprotein cholesterol levels compared with control group.		✓	Reduce outpatient department waiting time
11. Initiative Pharmacy checking technicians **Location** Multiple sites across USA **Workforce** Allied health assistance **Model** Established practice **Reference** Adams, A. et al. (2011). "Tech-Check-Tech" A review of the evidence on its safety and benefits. *American Journal of Health-System Pharmacy*, 68:1824-33	Appropriately qualified technicians check that prescriptions are accurately filled, leaving the pharmacist to check whether it is clinically appropriate.	Published evidence demonstrates that pharmacy technicians can perform as accurately as pharmacists. Released pharmacist time.	✓	✓*	Improve patient flow
12. Initiative Pharmacy support staff **Location** Princess Alexandra Hospital, Metro South Hospital Health Service, Queensland **Workforce** Pharmacy Pharmacy assistants/technicians **Model** Single centre study **Reference** www.health.qld.gov.au	Pharmacy assistants/technicians performed an advanced scope role as part of a ward-based clinical pharmacy team servicing four medical wards.	Ward-based pharmacy assistant/technician roles improved: • ward medication management • organisation and efficiency of ward pharmacy services • patient waiting times for medications • patient waiting times in emergency department • pharmacists' and nurses' workloads.	✓		Improve patient flow
13. Initiative Placement of feeding tubes by dietitians **Location** Baylor University Medical Centre, USA **Workforce** Nutrition and dietetics **Model** Established practice **Reference** Tynan, C. et al (2008). Placement of small bowel feeding tubes by advanced practice dietitians: common practice? *Support Line*, August: 12-20	Dietitian and nurse teams in the intensive care unit trained to insert small bowel feeding tubes using electromagnetic tube placement device technology. Initial pilot of 101 small bowel feeding tube placements showed higher success rates compared to traditional methods.	Initial pilot of 101 small bowel feeding tube placements showed: • lower radiography costs • reduced time to initiation of feeding compared to traditional methods.		✓	Improve patient flow

Acute					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
14. Initiative Podiatric high-risk foot coordinator **Location** Great Western Hospital, Swindon, UK **Workforce** Podiatry **Model** Established practice **Reference** Cichero, M. et al. Reducing length of stay for acute diabetic foot episodes using an extended scope of practice podiatric high-risk foot coordinator in an acute foundation trust hospital. Ahead of publication	Introduction of a podiatric high-risk foot coordinator to focus on more efficient and timely management of people with complex diabetic foot disease.	Average length of stay for patients with complex diabetic foot disease reduced by 10 days. No statistically significant difference in readmission rates.			Improve patient flow
15. Initiative Social work assistant role **Location** Mater Health Services, Queensland **Workforce** Allied health assistance **Model** Established practice **Reference** www.health.qld.gov.au	The social work assistant role was introduced within a delegation model.	Enable social workers to operate at full scope of practice and undertake more complex tasks. Productivity and cost-effectiveness benefit with a 20% increase in number of new patients seen, and an 11% reduction in cost per occasion of service.	✓		Improve patient flow
16. Initiative Speech pathology tracheostomy suctioning **Location** Nambour Hospital, Sunshine Coast Hospital and Health Service, Queensland **Workforce** Speech pathology **Model** Single centre study **Reference** Speech Pathology Department, Nambour Hospital	Speech pathologists are trained to undertake tracheal suctioning in non-complex, non-ventilated tracheostomy patients who are located on general hospital wards, not including the intensive care unit. *Queensland Health interdisciplinary tracheostomy suctioning skills development framework for nursing, physiotherapy and speech pathology* has been developed.	Expected outcomes: • successful implementation of training to appropriately skilled speech pathologists to undertake tracheal suctioning during swallow assessments of tracheostomised patients • release capacity of nursing and physiotherapy workforce to undertake other patient care duties.		✓	Improve patient flow
17. Initiative Tracheostomy weaning and decannulation by physiotherapists, speech pathologists and nurses **Location** University Hospital of Wales, UK **Workforce** Physiotherapy Speech pathology **Model** Single centre study **Reference** National Leadership and Innovation Agency for Health, Wales. (2010). *Development of training programme and service mode to facilitate timely, tracheostomy meaning and decannualtion.* www.nliah.com	The program empowers the ward-based multidisciplinary team to facilitate timely and effective weaning for patients with tracheostomy tubes. An initial training program was developed and delivered by the clinical specialist physiotherapist and speech pathologist. Links with the consultant clinical lead for critical care allowed development of strategies and processes to formalise care for complex patients. Physiotherapy and speech pathology departments developed profession-specific competency documents to enable individuals to direct learning and development needs.	Timely weaning through to successful decannulation impacted positively on overall patient experience. Timely repatriation of patients to their referring hospital. Timely repatriation of patients to community and rehabilitation options where many rehabilitation facilities have either limited or no provision for patients with a tracheostomy. Released nursing time from 2-hourly tracheostomy cares towards other elements of patient care.			Improve patient flow

Acute					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
18. Initiative Transdisciplinary screening and intervention in nutrition, cognition, communication and swallowing **Location** Eastern Health, Victoria **Workforce** Speech pathology Nutrition and dietetics **Model** Single centre study **Reference** Porter, J. et al. (2012). Transdisciplinary screening and intervention – an opportunity to extend dietic practice. *Nutrition and Dietetics,* 69 (suppl. 1) :30	Early screening and intervention for nutrition, cognition, communication and swallowing deficits were provided for medical admissions in a large metropolitan hospital with no weekend dietetic or speech pathology service. Using validated tools, dietitians placed patients on 'nil by mouth' if sub-optimal results were demonstrated on a speech pathology screen. Speech pathologists commenced patients on high energy diets if they were identified with malnutrition.	As a result of successful implementation of education and training to appropriately skilled speech pathologists and dietitians, screening across both clinical practice areas was implemented to better meet patient needs, particularly out of regular business hours.		✓	Improve patient flow
19. Initiative Warfarin dosing by pharmacists **Location** Brighton General Hospital, UK **Workforce** Pharmacy **Model** Single centre study **Reference** Burns, N. (2004). Evaluation of warfarin dosing by pharmacists for elderly medical in-patients. *Pharmacy World and Science,* 26:232-7	Pharmacists controlled warfarin dosing for elderly medical patients.	Beneficial effect on most aspects of anti-coagulation control.		✓	Improve patient flow

Cancer Care

Initiative details	Approach	Outcome	Delegated	Extended scope	Priority area
20. Initiative Allied Health Radiation Oncology Centre **Location** Cairns Base Hospital, Cairns and Hinterland Hospital and Health Service, Queensland **Workforce** Speech pathology Occupational therapy Physiotherapy **Model** Single centre study **Reference** Radiation Oncology Centre, Cairns Base Hospital	This project runs from July 2012 to June 2014. Using a *skill-sharing and delegation practice framework (Calderdale Framework)* to identify and train for skill-share tasks for: • speech pathology and physiotherapy, including oral secretion management (oral cavity and oro-pharyngeal suctioning), basic respiratory assessment (including auscultation) and tracheostomy management • occupational therapy and physiotherapy, including assessment of a patients' mobility, mobility on stairs and balance.	Expected outcomes: • reduced duplication and waste to allow for a more efficient and effective service delivery • improved access to radiation oncology allied health services for patients and their families affected by cancer.		✓	Improve patient flow
21. Initiative Breast practitioner **Location** Peter MacCallum Cancer Centre, Victoria **Workforce** Radiation therapy **Model** Established practice **Reference** Peter MacCallum Cancer Institute. (2012). *Evaluation of specialist practitioner radiation therapist roles at Peter MacCallum Cancer Centre*, Report provided to Department of Health, Feb 10 2012	Breast practitioner role developed in 2005. Radiation oncologist delegated the responsibility for breast tissue/field border delineation in computed tomography (CT) pre-planning to trained and credentialed radiation therapists for defined patient groups. Training provided by university and mentoring in-house.	Improved workflow efficiencies at CT simulation. Improved patient experience. Radiation oncologist can simulate patients off-site. Streamlined planning process post-simulation.		✓	Improve patient flow
22. Initiative Radiation therapists in breast and urological cancer treatment **Location** Multiple sites accross Australia **Workforce** Radiation therapy **Model** Multi-centre study **Reference** www.hwainventory.net.au	Projects to develop senior radiation therapists' capacity to play a greater role in the continuum of radiation therapy for patients with breast and prostate cancer.	Expected outcomes: • radiation oncologists' time freed to perform other duties • patient waiting times reduced • better use of the knowledge, skill and abilities of both radiation oncologists and radiation therapists • improved capacity of the system to deal effectively with workload increase.			Improve patient flow Reduce outpatient department waiting time

Cancer Care

Initiative details	Approach	Outcome	Delegated	Extended scope	Priority area
23. Initiative Imaging practitioner **Location** Peter MacCallum Cancer Centre, Victoria **Discipline** Radiation therapy **Model** Established practice **Reference** Peter MacCallum Cancer Institute. (2012). *Evaluation of specialist practitioner radiation therapist roles at Peter MacCallum Cancer Centre*, Report provided to Department of Health, Feb 10 2012	Delegation from radiation oncologist for cone beam computed tomography (CBCT), soft tissue assessment and contouring organs at risk during radiation therapy planning.	Reduced radiation oncology contouring time. Release radiation oncologist time for other clinical tasks. Improved efficiencies in the image review process—CBCT.		✓	Improve patient flow
24. Initiative Radiation therapist in planning target volume delineation of patients with prostate cancer **Location** Newcastle-upon-Tyne, UK **Workforce** Radiation therapy **Model** Established practice **Reference** Wilkinson, J. et al. (2005). Work-based learning, role extension and skills mix within dose planning: Target volume definition for carcinoma of the prostate by non-clinicians. *Clinical Oncology*, 17:199–202	The radiation therapist was provided with training by a radiation oncologist. The oncologist supervised an agreed number of cases before the therapist completed a number of unsupervised cases subsequently reviewed by the oncologist. After being deemed competent, the therapists went on to delineate target volume, critical organs and generate an appropriate plan. The oncologist would review the complete 'package' prior to the treatment commencing.	Positive effect on the workload of the radiation oncologist. Streamlining patient throughput and reducing delays.		✓	Improve patient flow
25. Initiative Radiation therapist in the Radiation Oncology Mater Centre **Location** Radiation Oncology Mater Centre, Metro South Hospital and Health Service, Queensland **Workforce** Radiation therapy **Model** Single centre study **Reference** Radiation Oncology Mater Centre, Metro South Hospital and Health Service	The radiation therapist manages and performs simple palliative treatments. The radiation therapist participates in all stages of the treatment process, beginning with attending the clinic and liaising closely with the radiation oncologist, to booking timely appointment slots, through to the technical radiation therapy components of simulation, planning and treatment. In 2011, 54% of patients treated at the Radiation Oncology Mater Centre were treated with palliative intent.	Expected outcome: • improved capacity of the current workforce to deliver more streamlined and individualised services to palliative care patients.		✓	Improve patient flow

Cancer Care					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
26. Initiative Speech pathology telehealth service for head and neck cancer patient support **Location** Royal Brisbane and Women's Hospital, Nambour Hospital, Hervey Bay Hospital, Rockhampton Hospital, Queensland **Workforce** Speech pathology **Model** Multi-centre study **Reference** Burns, C. et al. (2012). A pilot trial of a speech pathology telehealth service for head and neck cancer patients. *J TelemedTelecare*, 18:443-6	Speech pathologists provided a telehealth clinic for head and neck cancer by using a digital quality telehealth system. All clinicians reported that they were able to satisfactorily and competently assess the client using the Telehealth system. All clinical issues were effectively managed during telehealth sessions. All patients agreed that they would be comfortable to use telehealth if it was available in their local facility.	No patients were required to travel to RBWH for face-to-face appointments.			Improve health services for regional, rural and remote communities

Diagnostic Services					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
27. Initiative Musculoskeletal examinations by sonographers **Location** Hull Royal Infirmary, UK **Workforce** Sonography **Model** Established practice **Reference** NHS Modernisaton Agency. (2004). *Ultrasound service improvement: An in depth look at the impact and benefits for patients and staff – A collection of local case studies,* www.improvement.nhs.uk/diagnostics	Sonographers trained to perform musculoskeletal therapeutic steroid injections and produce independent reports.	Average reduction of 768 patients per annum (40% reduction — wait time previously 14 months). Patients have an option of being treated closer to home which is important as often uncomfortable post-injection.		✓	Reduce outpatient department waiting time
28. Initiative CT examinations by nuclear medicine technologists **Location** Multiple sites across Victoria, New South Wales and South Australia **Workforce** Nuclear medicine technology **Model** Established practice **Reference** The Victorian Society of Nuclear Medicine Technologists Inc. (2010) *Diagnostic CT for Molecular Imaging Course Information Booklet 8/13,* www.vsnmt.com Bar-Shalom, R. (2003). Clinical performance of PET/CT in evaluation of cancer: additional value for diagnostic imaging and patient management. *J Nucl Med, 44 : 1200-1209*	The Victorian Society of Nuclear Medicine Technologists (VSNMT) in collaboration with RMIT University and a senior CT radiographer have developed a program to train nuclear medicine technologists to perform routine diagnostic CT examinations at the same time as a positron emission tomography—computed tomography (PET/CT) scan. Nuclear medicine technologists who complete the course will be granted a radiation use licence to perform diagnostic CT on hybrid systems in Victoria, New South Wales (EPA) and South Australia (EPA). The VSNMT is waiting on a decision in Queensland.	Hybrid PET/CT improves the diagnostic interpretation of PET and CT in cancer patients and has an impact on both diagnostic and therapeutic aspects of patient management.		✓	Improve patient flow

Diagnostic Services

Initiative details	Approach	Outcome	Delegated	Extended scope	Priority area
29. Initiative Radiographer role extension **Location** Heart of England Foundation Trust, UK **Workforce** Radiography **Model** Established practice **Reference** www.heft-radiology.co.uk	The radiology directorate supports a 4-tier career structure comprising: • assistant practitioners • registered practitioners • advanced practitioners • consultant practitioners. The appointment of qualified assistant practitioners has allowed the expansion of advanced practice amongst the radiographic staff. Advanced radiographers undertake activities previously undertaken by consultant radiologists, thus developing appropriate skill mix and maximising the opportunities of advanced practice across all sites. Advanced practice radiographers report on plain film images, CT scans, magnetic resonance imaging (MRI) scans and fluoroscopy examination (e.g. barium swallows).	Released radiographers' time. Increased access to services. Consistently deliver national targets of 5-week wait time for all examinations.	✓	✓	Improve patient flow Reduce outpatient department waiting time
30. Initiative Sonographers performing hysterosalpingo-contrast ultrasound procedures **Location** Hull Women's and Children's Hospital, UK **Workforce** Sonography **Model** Established practice **Reference** NHS Modernisation Agency. (2004). *Ultrasound service improvement: An indepth look at the impact and benefits for patients and staff – A collection of local case studies*, www.improvement.nhs.uk/diagnostics	Sonographers trained to perform hysterosalpingo-contrast ultrasound procedures.	Waiting list reduced to close to zero. Proficiency of sonographers provides a comfortable examination for the patient in a calm environment. No anaesthesia risk encountered. Procedure directs pathway for fertility treatment.		✓	Reduce outpatient department waiting time
31. Initiative Sonographers performing transrectal ultrasound (TRUS) and biopsy **Location** Multiple sites across UK **Workforce** Sonography **Model** Established practice **Reference** NHS Modernisation Agency, (2004). *Ultrasound service improvement: An indepth look at the impact and benefits for patients and staff–A collection of local case studies*, www.improvement.nhs.uk/diagnostics	Sonographers trained to perform TRUS and TRUS biopsy.	No difference in positive pick up rate, complication rate or re-biopsy between sonographers and radiologists. Wait time decreased from 13 weeks to one week with sonographers performing procedures.		✓	Reduce outpatient department waiting time

Emergency Department					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
32. Initiative Allied health in the emergency department **Location** Mackay Hospital, Mackay Hospital and Health Service, Queensland **Workforce** Occupational therapy Physiotherapy **Model** Single centre study **Reference** www.health.qld.gov.au	The *Calderdale Framework* was used as a workforce redesign tool to train occupational therapists and physiotherapists to skill-share each other's clinical tasks for non-complex clients (older people with functional decline) and additionally trained in social work, speech pathology, dietetics and podiatry tasks.	Professional skill-sharing between occupational therapists and physiotherapists was equivalent in outcome to uni-professional intervention, in a cohort of community dwelling older people experiencing functional decline. Patients preferred a model where care was provided by one, as opposed to multiple, allied health clinicians.		✓	Improve patient flow National Emergency Access Target (NEAT)
33. Initiative Allied health rural generalist clinical leader in the emergency department **Location** Warwick Hospital Darling Downs Hospital and Health Service, Queensland **Workforce** Physiotherapy Occupational therapy Speech pathology Nutrition and dietetics Podiatry Social work **Model** Single centre study **Reference** www.health.qld.gov.au	The allied health clinical lead was trained in a range of allied health assessments and interventions as guided by a professional skill-sharing framework (i.e. *Calderdale Framework)*. Category 4 and 5 patients presenting to the emergency department were assessed and managed by the allied health clincial lead.	Reduced referrals from the emergency department/ outpatients to allied health outpatients. Reduced occasions of service in allied health outpatients. Improved ability to meet best practice guidelines for conditions such as falls and stroke in the emergency department. Patients perceived that the integration of the service improved their experience and outcome.		✓	NEAT Reduce outpatient department waiting time
34. Initiative Physiotherapy in the emergency department **Location** Cairns Hospital Cairns and Hinterland Hospital and Health Service, Queensland Robina Hospital, Gold Coast Hospital and Health Service, Queensland **Workforce** Physiotherapy **Model** Multi-centre study **Reference** Physiotheraphy Department, Cairns Base Hospital and Gold Coast Hospital	As part of the *HWA Expanding the role of physiotherapist in emergency department*, category 3–5 patients presenting with an appropriate musculoskeletal injury/disorder are assessed, treated and discharged directly by the physiotherapist from triage. Tasks include fracture diagnosis, simple fracture management, joint relocation, sick certification, plastering, radiology referral and interpretation. The addition to the role of ordering of radiology, injecting of local anaesthetic and limited prescribing of analgesia is being explored.	Expected outcomes: • reduced time in emergency department • released capacity/availability of medical officer and nursing resources for higher acuity patients (especially category 1–3).		✓	NEAT

Emergency Department					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
35. Initiative Primary contact musculoskeletal physiotherapists in the emergency department **Location** Alfred Hospital, Victoria **Workforce** Physiotherapy **Model** Single centre study **Reference** www.hwainventory.net.au	Physiotherapists who completed training in radiology, pharmacology and specific tasks (e.g. plastering) managed patients allocated to fast-track in the emergency department.	Consistent improvement in 4-hour waiting time for non-admitted patients. Patients with back pain seen by physiotherapists were 14.5 times less likely to be admitted. Released capacity of medical staff to manage other patients.		✓	NEAT
36. Initiative Radiographer abnormality description worksheet **Location** Royal Brisbane and Women's Hospital, Metro North Hospital and Health Service, Queensland **Workforce** Radiography **Model** Single centre study **Reference** www.health.qld.gov.au	Radiographers undertook a short course in image interpretation. Radiographers communicated their findings on plain film appendicular X-rays to emergency department clincians using a standard radiographer abnormality description (RAD) worksheet.	High degree of radiographer image interpretation senstivity and agreement with radiologist report. Completed RAD worksheets were provided to emergency department physicians within an average of 16 minutes—a clincially useful timeframe. RAD worksheets reduced the incidence of missed abnormalities in the emergency department setting.			Improve patient flow NEAT
37. Initiative Radiographer image interpretation of plain radiographs at the point-of-care in the trauma setting **Location** Multiple sites across Australia **Workforce** Radiography **Model** Multi-centre study **Reference** www.hwainventory.net.au	Multi-site trial of up-skilled radiographers providing written commentary (at time of presentation) on plain radiographic images for patients with musculoskeletal injuries attending the emergency department. Opinion then immediately available to referrer to inform decision-making. Aim to inform development of a national best practice model.	Expected outcomes: • remove need for radiologist to be available to provide reports at point-of-care for this patient cohort • improved diagnostic accuracy at point-of-care • reduced need for patients to re-present to the emergency department because of missed abnormalities.			Improve patient flow NEAT

Emergency Department					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
38. Initiative Soft tissue injury management by physiotherapists in emergency department **Location** University Hospitals Bristol NHS Foundation Trust, UK **Workforce** Physiotherapy **Model** Single centre study **Reference** McClellan, C. et al. (2012). A randomised trial comparing the clinical effectiveness of different emergency department healthcare professionals in soft tissue injury management. *BMJ Open,* 2: e001092	Adults presenting to the emergency department with peripheral soft tissue injury were randomly assigned to/and managed by physiotherapist, emergency nurse practitioner or doctor. Measures taken: upper and lower limb functional scores, quality of life, days off work.	All three groups had clinically equivalent outcomes.			Improve patient flow NEAT

Outpatients					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
39. Initiative Advanced practice physiotherapy for musculoskeletal disorders **Location** Review of global current practice **Workforce** Physiotherapy **Model** Established practice **Reference** Desmeules, F. et al. (2012). Advanced practice physiotherapy in patients with musculoskeletal disorders: a systematic review. *BMC Musculoskeletal Disorders*, 13:107	The advanced practice roles described varied depending on the clinical setting and country and included: • communicating a medical diagnosis • triaging patients to be seen by physicians or specialists for consultation or surgery • ordering of diagnostic tests (imaging or laboratory) • conservative treatment recommendations that may include medication prescription and/or injection • referral to other healthcare providers including other physiotherapists.	Physiotherapists in advanced practice roles provided equal or better than usual care in comparison to physicians in terms of diagnostic accuracy, treatment effectiveness, use of healthcare resources, economic costs and patient satisfaction. Reduced cost of services. Enhanced patient outcomes.		✓*	Improve patient flow Reduce outpatient department waiting time
40. Initiative Allied health in pain management **Location** Royal Brisbane and Women's Hospital, Metro North Hospital and Health Service, Queensland **Workforce** Psychology Occupational therapy Physiotherapy **Model** Single centre study **Reference** www.health.qld.gov.au	Allied health professionals were involved in triage, initial assessment, case coordination, care planning and providing self management education for category 2 and 3 adults presenting with persistent non-malignant pain.	Outcome to date: • reduced assessment replication. Expected outcome: • reduced outpatient waiting time.		✓	Improve patient flow Reduce outpatient department waiting time
41. Initiative Allied health-led vestibular screening clinic **Location** Royal Brisbane and Women's Hospital, Metro North Hospital and Health Service, Queensland **Workforce** Audiology Physiotherapy **Model** Single centre study **Reference** www.health.qld.gov.au	Category 2 and 3 ENT waiting lists are audited and screened by audiologist and physiotherapist for targeted patients reporting vestibular symptoms: • assessments and treatments conducted as required • referrals to the audiology department and other relevant health professionals • on completion of rehabilitation patient discharged back to the care of the ENT director and the referring doctor—usually the general practitioner (GP).	Achieved clinically effective assessment and treatment of patients referred with dizziness. Expected outcomes: • reduction in waiting list • reduction in falls.			Reduce outpatient department waiting time Improve patient flow

Outpatients					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
42. Initiative Allied health practitioner ENT services **Location** Logan Hospital, Metro South Hospital and Health Service, Queensland **Workforce** Audiology Speech pathology **Model** Single centre study **Reference** www.health.qld.gov.au	Adult patients referred for non-complex hearing, balance, or tinnitus will be seen in an adult audiology allied health professional clinic. Adult patients referred for non-complex routine voice and swallowing disorders will be seen in an adult speech pathology allied health professional clinic. Children referred for non-complex glue ear or routine middle ear disease will be seen in a paediatric audiology allied health professional clinic. All allied health professional clinics will be conducted under on-site ENT consultant supervision.	Expected outcomes: • reduced waiting times for adult and paediatric patients eligible for the ENT allied health professional service • a reduction in paediatric ENT waiting lists.		✓	Reduce outpatient department waiting time Provide better health care to children
43. Initiative Physiotherapist assessment of spinal pain using Telehealth **Location** Sir Charles Gairdner Hospital, Western Australia **Workforce** Physiotherapy **Model** Established practice **Reference** www.hwainventory.net.au	Initial assessment of patients in regional areas referred to neurosurgery clinic with spinal pain is done by telehealth, with assistance from a regional physiotherapist performing the examination in real time. Patients come to Perth and see the surgeon the same day as their imaging is performed. Sustained for the past three years.	Reduced costs for travel. Reduced patient stress.			Improve health services for regional, rural and remote communities Improve patient flow
44. Initiative Audiologist-led triage clinic **Location** Royal National Throat, Nose and Ear Hospital, UK **Workforce** Audiology **Model** Single centre study **Reference** NHS Improvement. (2010). *Pushing the boundaries – Evidence to support the development and implementation of good practice in Audiology 2010*. www.improvement.nhs.uk/audiology	Audiology team reviewed patients on the waiting list for ENT to determine the number of suitable referrals (i.e. did not meet any 'red flag criteria' indicating referral to ENT), and made decisions regarding appropriate management.	Initial findings suggest that 75% of referrals did not meet 'red flag criteria' and could potentially be managed by the diagnostic audiology department in a direct access service. New model would potentially release approximately 45 outpatient appointments with ENT per week. In 95% of cases, audiologists and ENT were in agreement as to the referral pathway to audiovestibular medicine or ENT.		✓	Reduce outpatient department waiting time

Outpatients					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
45. Initiative Audiology-led direct referrals for asymmetrical hearing loss **Location** Doncaster Royal Infirmary, UK **Workforce** Audiology **Model** Single centre study **Reference** Wong, B. et al. (2012). Incidence of vestibular schwannoma and incidental findings on the magnetic resonance imaging and computed tomography scans of patients from a direct referral audiology clinic. *J of Laryngol Otol* 126: 658-662	Audiology-led direct referral to MRI/CT to screen for retrocochlear pathologies for asymmetrical sensorineural hearing loss in older patients. Patients referred from the direct referral audiology clinic had a low incidence of vestibular schwannoma detection.	Avoided more than 300 patients being needlessly added to the ENT clinic list.		✓*	Reduce outpatient department waiting time Improve patient flow
46. Initiative Audiology assessment prior to ENT triage **Location** Mater Health Services, Queensland **Workforce** Audiology **Model** Single centre study **Reference** www.health.qld.gov.au	Audiologists audited and assessed category 2 and 3 ENT referrals for hearing concerns including paediatric referrals ‹16 yrs of age and adult referrals 16 yrs+. Results were reviewed by an ENT and recommendations made.	Paediatric results: • 100 children were assessed • 50% hearing within normal limits • 38% discharged and removed from ENT waiting list • 12% offered an ENT appointment (upgraded to category 1) 50% remained on ENT waiting list • 6/120 sought private ENT opinion. Adult results: • 24 patients assessed • 18% discharged from ENT waiting list • 52% remained on ENT waiting list • 30% offered ENT appointment (upgraded to category 1) • 0/28 sought a private ENT opinion.			Reduce outpatient department waiting time Improve patient flow
47. Initiative Audiology review post-grommets **Location** Royal Cornwall Hospital, Truro, UK **Workforce** Audiology **Model** Established practice **Reference** Davies-Husband, C. et al (2012). Post-surgical tympanostomy tube follow up with audiology: experience at the Freeman Hospital. *J of Laryngology and Otology*, 126: 142-146	An audiologist provides 6-week post-grommets follow up: • discharge if normal • refer to ENT outpatients if complication.	A 54% reduction in patients followed up by an otolaryngologist.		✓	Reduce outpatient department waiting time Provide better health care to children

Outpatients					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
48. Initiative Cardiology outpatient department (OPD) test referral triage **Location** Logan Hospital, Metro South Hospital and Health Service, Queensland **Workforce** Cardiac science **Model** Single centre study **Reference** Clinical measurement departmental statistics, Logan Hospital	The senior cardiac scientist triaged referrals to cardiac OPD to determine whether the diagnostic testing requested (according to referral type) was appropriate or needed to be amended. In some cases the senior cardiac scientist was entrusted with making the decision on what alternate test to perform if the original test wasn't suitable. To date there have been no known adverse effects to patients with this initiative.	Category 1 referrals for a cardiology OPD appointment reduced from greater than 90 days to within 30 days. Category 2 referrals mostly reduced from six months or more to within 60 days. Significantly fewer patients arriving for a test only to find out test was unsuitable therefore requiring rebooking.		✓	Reduce outpatient department waiting time Improve patient flow
49. Initiative Clinical specialist radiation therapist sustainability project **Location** Multiple sites across Ontario, Canada **Workforce** Radiation therapy **Model** Established practice **Reference** www.cancercare.on.ca	Palliative clinical specialist radiation therapist (CSRT), metastatic bone cancer CSRT, head and neck cancer CSRT positions perform tasks delegated from radiation oncologists including: • assessment and triage • ordering tests and analysing results • designing care plans • treatment planning and prescribing medication (limited formulary).	Increased access for new patients. Reduced patient wait time. Improved patient satisfaction. Released radiation oncologist time for more complex patients.		✓	Improve patient flow
50. Initiative Congenital talipes equinovarus and developmental dysplasia of the hip management by physiotherapist **Location** Alice Springs Hospital, Northern Territory **Workforce** Physiotherapy **Model** Established practice **Reference** Physiotherapy Department, Alice Springs Hospital	A physiotherapist performs the plastering and bracing required by babies with congenital talipes equinovarus and developmental dysplasia of the hip. The paediatric orthopaedic team from Adelaide review the patients once every three months. The physiotherapist is responsible for the full management and referral to orthopaedics.	Improved patient flow. Reduced waiting time. Reduced the need to fly all paediatric orthopaedic patients to Adelaide for specialist services.		✓	Reduce outpatient department waiting time Provide better health care to children

Outpatients					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
51. Initiative Credentialed diabetes educators **Location** Australia wide **Workforce** Nutrition and dietetics **Model** Established practice **Reference** Australian Diabetes Educators Association (2007). *The Credentialled Diabetes Educator in Australia – Role and Scope of Practice*, www.adea.com.au	Dietitians who are credentialed diabetes educators can: • authorise registrations on the National Diabetes Services Scheme (NDSS) • authorise NDSS registration to access insulin pump consumables.	Reduce outpatient department waiting time. Increase access to diabetes services.		✓	Reduce patient waiting times. Improve patient flow
52. Initiative Dietitian as first contact in gastroenterology clinics **Location** Royal Brisbane and Women's Hospital, Metro North Hospital and Health Service, Queensland **Workforce** Nutrition and dietetics **Model** Single centre study **Reference** www.health.qld.gov.au	Dietetic-led screening clinic for gastroenterology referrals to the category 2 and 3 surgical outpatient clinic meeting specified criteria. Independently request and interpret relevant pathology and diagnostic tests under the jurisdiction of the surgical consultant. Refer to the surgical team for opinion or review/discharge back to community-based services.	Reduced wait times for patients (up to 283 days). Potential for 5% reduction of gastroenterology outpatient wait lists. Fewer appointments required with gastroenterology consultants—opportunity cost savings. Patients and staff satisfied with service. Model of care to continue.		✓	Reduce outpatient department waiting time Improve patient flow
53. Initiative Dietitian in adult gastroenterology clinic **Location** Multiple sites across, UK **Workforce** Nutrition and dietetics **Model** Established practice **Reference** Lomer M. (2009). The role of a consultant dietitian in gastroenterology in the UK. *Nutrition Today,* 44:174-9	Specialist dietitian recruited to gastroenterology clinic • assess new patient referrals for altered bowel habits, requests investigations and discusses findings with gastroenterologist.	Gastroenterologist time freed for endoscopic procedures.		✓	Reduce outpatient department waiting time Improve patient flow

Outpatients

Initiative details	Approach	Outcome	Delegated	Extended scope	Priority area
54. Initiative Dietitian in renal clinic **Location** Multiple sites across USA **Workforce** Nutrition and dietetics **Model** Established practice **Reference** Brommage, D. et al. (2009). American Dietetic Association and the National Kidney Foundation Standards of Practice and Standards of Professional Performance for Registered Dietitians (Generalist, Specialty, and Advanced) in Nephrology Care. *Journal of Renal Nutrition*, 19:345-356	Dietitian-led management of bone disease in renal patients involving ordering of appropriate biochemical tests to evaluate renal function; and prescribing and adjustment of vitamin D and phosphate binders. Management of anaemia in renal patients—ordering of haemoglobin and full blood count. Prescribing of erythropoietin analogue (EPO); iron infusion. Fluid assessment and advising on weighing for fluid balance.	Decreases the workload of doctors and renal physicians.		✓	Reduce outpatient department waiting time Improve patient flow
55. Initiative Dietitian management of outpatient enteral feeding **Location** Multiple sites across UK **Workforce** Nutrition and dietetics **Model** Established practice **Reference** Lomer, M. (2009). The role of a consultant dietitian in gastroenterology in the UK. *Nutrition Today*, 44:174-9	Dietitian involved in enteral feeding in outpatient and community settings routinely checks percutaneous endoscopic gastrostomy (PEG) site at each consultation to check for signs of redness, ooze and infection and reports to relevant staff (e.g. GP or nurses) to initiate early treatment if needed.	Early identification of potential wounds and infections reduces treatment duration and potentially prevents hospital admission.		✓	Reduce outpatient department waiting time Improve patient flow
56. Initiative Direct listing for total hip replacement by primary care physiotherapists **Location** Northern Devon Healthcare NHS Trust, UK **Workforce** Physiotherapy **Model** Established practice **Reference** Parfitt, N. et al. (2012). Direct listing for total hip replacement (THR) by primary care physiotherapists. *Clinical Governance: an International Journal*, 17:210-6	Primary care-based extended scope physiotherapist-led service places patients directly onto surgical wait list of secondary care orthopaedic surgeons.	Over a 2-year period, 130 referrals for direct listing were made and 98% required total hip replacement. Patients did not require orthopaedic outpatient appointment until pre-assessment clinic. Approximate saving of £145 per patient.		✓*	Improve patient flow

Outpatients					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
57. Initiative Dose adjustment for normal eating by dietitians **Location** Australia wide **Workforce** Nutrition and dietetics **Model** Established practice **Reference** www.dafne.org.au	Dietitians and diabetes educators (with appropriate post-graduate training and experience) support adults with type 1 diabetes to adjust insulin dose.	Improved quality of life and improvement in clinical indicators.		✓	Reduce outpatient department waiting time
58. Initiative ENT audiology component **Location** Royal Children's Hospital, Children's Health Queensland **Workforce** Audiology **Model** Single centre study **Reference** www.health.qld.gov.au	Audiology offers a hearing assessment to all children with hearing or ear-related concerns on ENT waiting list in order to clinically assess and escalate those requiring urgent ENT attention. Children with normal hearing and no other ENT concerns are discharged, with appropriate documentation from director of ENT back to referral source. Retrospective review of all previously assessed children still on wait list with normal hearing—for discharge as above. Joint triaging of all referrals by audiologist and director of ENT ensures clinical consistency. Audiology assessments are offered at time of referral as part of triage process—clinical category initially assigned to child reviewed based on audiology findings.	As at 7 March 2013, 54.6% of children tested found to have normal hearing. Increased discharge rate of children removed from the waiting list (i.e. normal hearing and nil other ENT concerns) from 36% (pre-trial) to between 63–71% since the trial. Significant reduction in waiting list numbers and wait times. Timely identification and management of children with permanent hearing losses requiring hearing aids; at high clinical risk of complications arising from long-term middle ear dysfunction (e.g. cholesteatoma) and children with moderate or greater hearing losses requiring more urgent ENT intervention.		✓	Reduce outpatient department waiting time Improve patient flow
59. Initiative Optometrist in diabetes care **Location** Ipswich Hospital, West Moreton Hospital and Health Service, Queensland **Workforce** Optometry **Model** Established practice **Reference** Chronic Conditions Service, Ipswich Community Health, West Moreton Hospital and Health Service	Diabetic patients referred to the hospital eye clinic for routine diabetes eye screening are provided with the option of staying on the waitlist or being seen by the local optometrist. Optometrists send a report to the client's GP and have an annual recall system. If required, the optometrist can refer to a public or private ophthalmologist. There is a high uptake of the option to see the local optometrist due to easy access.	Decreased hospital eye clinic waiting list numbers. Increased annual diabetes eye screening which meets evidence-based guidelines for diabetes care. Quality of referrals to the ophthalmologist improved. The role of the optometrist in diabetes care was promoted.			Reduce outpatient department waiting time Improve patient flow

Outpatients					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
60. Initiative Community forensic mental health outreach service **Location** Multiple sites across Queensland Hospital and Health Services **Workforce** Psychology Social work **Model** Established practice **Reference** www.health.qld.gov.au/forensicmentalhealth/	Psychologists and social workers (together with nurses and psychiatrists) provide targeted interventions to address problem behaviours identified in prior forensic assessment to reduce risk (e.g. sexual offending, stalking and violence). This community-based service is delivered by clinicians within the client's mental health treating team. The program has great potential to assist Hospital and Health Services to better address both the criminogenic and mental health treatment needs of people with mental illness who offend or who are at risk of offending.	Increased access for targeted client groups.			Support recovery from mental illness
61. Initiative General paediatrics allied health screening service **Location** Royal Children's Hospital Children's Health Queensland **Workforce** Psychology Speech pathology Occupational therapy Physiotherapy **Model** Established practice **Reference** www.health.qld.gov.au	During a trial of allied health screening and brief intervention service to decrease waiting list in general paediatrics, 247 referrals were triaged out of general paediatrics into an allied health service. Phone triage was used to gather information and refer to the most appropriate service, including back to general paediatrics (13/230).	Reduced duplication of service. Timely access to more targeted services. Release medical specialist's time to see more complex cases.		✓	Reduce outpatient department waiting time Improve patient flow
62. Initiative Occupational therapy-led hand therapy clinic **Location** Multiple sites across Scotland, UK **Workforce** Occupational therapy **Model** Established practice **Reference** The Scottish Government. (2011). *From strength to strength: celebrating 10 years of the allied health professions in Scotland.* www.scotland.gov.uk	Patients presenting with conditions such as trigger finger, carpal tunnel syndrome and Dupuytren's contracture are triaged into the occupational therapy-led treatment pathway which includes splinting, activity modification, expert advice and, where necessary, joint injection.	A significant number of patients are able to avoid undergoing surgery. Those who do require surgery receive follow-up through the postoperative occupational therapy pathway. Consistent referral management. Reduced waiting lists.		✓	Reduce outpatient department waiting time

Outpatients

Initiative details	Approach	Outcome	Delegated	Extended scope	Priority area
63. Initiative Integrated employment program in mental health **Location** 12 Hospital and Health Services across Queensland **Workforce** Occupational therapy **Model** Multi centre study **Reference** The Prince Charles Hospital Integrated Employment program. Metro North Mental Health Service	An occupational therapist works with the employment consultant (located with the clinical team) to conduct specific work assessments and develop tailored intervention for successful employment of mental health consumers. The occupational therapist also leads the service-wide partnership team, consisting of service managers, disability employment network services and team leaders.	An evaluation of outcomes at The Prince Charles Hospital showed that 63% of mental health consumers who participated in the program gained competitive employment.			Support recovery from mental illness
64. Initiative Interprofessional eye clinic **Location** Royal Victorian Eye and Ear Hospital, Victoria **Workforce** Optometry **Model** Single centre study **Reference** www.hwainventory.net.au	The Royal Victorian Eye and Ear Hospital (RVEEH) and Australian College of Optometry (ACO) implemented a pilot clinic to promote integrated care between ophthalmology and optometry. Relevant new patients referred by GP to RVEEH were diverted to the ACO. With clear pre-diagnostic work undertaken, patients could bypass the general eye clinic and be streamed directly into sub-speciality clinics such as glaucoma and medical retina.	Improved patient care. Greater access to clinical eye care. Reduced waiting times for new appointment. Greater use of the existing skilled eye health workforce.			Reduce outpatient department waiting time Improve patient flow
65. Initiative Lymphoedema therapy services **Location** The Townsville Hospital, Townsville Hospital and Health Service, Queensland **Workforce** Occupational therapy Physiotherapy **Model** Established practice **Reference** Occupational Therapy Department, The Townsville Hospital	There is a shared model of care between occupational therapy and physiotherapy lymphoedema services where both professions are responsible for complex decongestive treatment including compression bandaging and manual lymphatic drainage.	Reduced waiting time. Reduced unnecessary duplicated appointments.			Reduce outpatient department waiting time Improve patient flow
66. Initiative Multidisciplinary high-risk foot team **Location** Amputation Prevention Center, Los Angeles USA **Workforce** Podiatry **Model** Established practice **Reference** Rogers, L. et al (2010). Toe and flow: essential components and structure of the amputation prevention team. *JVascSurg*, 52:23S-7S	Conjoined model involving podiatry and vascular surgery—the 'toe and flow' model.	Reductions in major amputations and foot complications.			Improve patient flow

Outpatients					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
67. Initiative Multidisciplinary paediatric urinary incontinence clinic **Location** Mater Children's Hospital, Queensland **Workforce** Physiotherapy **Model** Single centre study **Reference** Mater Physiotherapy, Mater Health Services	All paediatric urinary incontinence referrals are triaged by consultant urologist and category 3 patients are referred to physiotherapist for conservative intervention. Patients referred to physiotherapy are discharged from specialist clinic wait list if conservative treatment is successful.	Intended outcomes: • patients receive the right service in the most time efficient way • free up specialist clinics for medical/surgical candidates.			Reduce outpatient department waiting time Improve patient flow
68. Initiative Multidisciplinary referral pathway for female urinary incontinence **Location** Mater Mothers' Hospital, Mater Adult Hospital, Queensland **Workforce** Physiotherapy **Model** Established practice **Reference** Physiotherapy Services at Mater Adult Hospital	All female urinary incontinence referrals are screened by a surgeon. Patients are initially offered three months of conservative physiotherapy treatment (including urodynamics) before medical or surgical intervention. Urodynamic studies are reserved for appropriate patients (i.e. following failure to respond to conservative management but prior to surgical intervention). Patients are discharged from urodynamic and surgical wait list on completion of successful conservative physiotherapy intervention.	In 2012: • patients referred with female urinary incontinence—260 • patients treated by physiotherapy intervention only—120 • number of patients referred for urodynamic studies from this pathway—140 • patients treated by surgical intervention—52.			Improve patient flow
69. Initiative Multidisciplinary triage model in persistent pain service **Location** Austin Hospital, Victoria **Workforce** Psychology Physiotherapy **Model** Single centre study **Reference** www.hwainventory.net.au	Physiotherapists applied pre-appointment management tools to more accurately triage written referrals. Direct access to physiotherapy and psychology pain services if appropriate.	A 32% reduction in acceptance of inappropriate referrals. A three week interval between referral and communication of triage decision to patient and GP. A 25% increase in new appointments for accepted patients. An 8% reduction in missed first appointment. A 6% increase in patients managed by physiotherapy and psychology without pain physician. Removal of triaging responsibilities for physician, allowing more clinical time.			Reduce outpatient department waiting time Increase patient flow

Outpatients					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
70. Initiative Musculoskeletal interface service **Location** Orthopaedic Choice, Hampshire Primary Care Trust, UK **Workforce** Physiotherapy Podiatry Occupational therapy **Model** Established practice **Reference** NHS Institue for Innovation and Improvement. (2009). *Focus on: Musculoskeletal Interface Services* (p13), www.institute.nhs.uk/msk	A community-based, multi-professional team provides an alternative referral to GPs—brief consultation with physiotherapist, podiatrist and occupational therapist and ready access to an on-site specialist for opinion when required. All patients who require surgical intervention are assessed for fitness for surgery prior to onward referral to a choice of providers. The consultant presence facilitates ongoing staff development and training.	Reduced waiting time. Early access to diagnostics. Patients receive appropriate treatment closer to their homes. Reduced referrals to acute secondary care. Reduced surgical procedures per 100 population.		✓	Reduce outpatient department waiting time
71. Initiative Physiotherapy musculoskeletal pathway with prescribing **Location** Gold Coast Hospital and Health Service, Queensland **Workforce** Physiotherapy **Model** Single centre study **Reference** www.health.qld.gov.au	Research project investigating prescribing and/or injecting by physiotherapist clinical leader in the orthopaedic physiotherapy screening clinic setting. Appropriately trained allied health professionals being able to (and accepted by others as able to) autonomously manage non-surgical musculoskeletal care, including medicines.	Legislative approval under the Health (Drugs and Poisons) Regulation 1996, for a physiotherapist to prescribe within the research trial. Integration of new extended scope practice into services including requesting of ultrasound-guided corticosteroid and local anaesthetic injections and blood tests. Expected outcome: • reduced wait time for access to musculoskeletal services.		✓*	Improve patient flow Reduce outpatient department waiting time
72. Initiative Multidisciplinary musculoskeletal triage **Location** Kingston Hospital NHS Trust, UK **Workforce** Multidisciplinary **Model** Single centre study **Reference** NHS Institue for Innovation and Improvement. (2009). *Focus on: Musculoskeletal Interface Services* (p13) www.institute.nhs.uk/msk	Allied health practitioners triage, assess (including the organisation of relevant diagnostic tests) and arrange onward management for a variety of orthopaedic conditions.	Reduced waiting times for carpal tunnel decompression from up to 76 weeks to 4 weeks. Shorter waits to see allied health practitioners compared to consultants. Flexibility of staff mix within the service. Fewer follow-ups.		✓	Improve patient flow

Outpatients					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
73. Initiative Neurosurgical physiotherapy post-operative review clinic **Location** The Alfred Hospital , Victoria **Workforce** Physiotherapy **Model** Established practice **Reference** www.alfredhealth.org.au/physiotherapy/	Experienced musculoskeletal physiotherapists conduct the routine 6-week post-operative review of patients following uncomplicated neurosurgical procedures such as laminectomy and discectomy instead of the orthopaedic surgeon.	Decreased waiting times for post-operative review appointments. Decreased waiting time on the day of appointment. Increased patient satisfaction and experience. Increased capacity for neurosurgeons to see new patients. Increased education and access to rehabilitation/advice for patients.		✓	Reduce outpatient department waiting time
74. Initiative Neurosurgery outpatient screening clinic **Location** Northern Health, Victoria **Workforce** Physiotherapy **Model** Single centre study **Reference** www.hwainventory.net.au	Physiotherapists provided screening assessment for patients with back and neck pain on the neurosurgical wait list. Conservative management arranged as appropriate. Patients requiring consultant review were referred to the neurosurgery clinic.	Reduced demand on neurosurgery outpatient clinic. Effective use of neurosurgical consultants' time.			Reduce outpatient department waiting time
75. Initiative Neurosurgical physiotherapy screening clinics (NPSC) **Location** Princess Alexandra Hospital, Gold Coast Hospital, Royal Brisbane and Women's Hospital, Townsville Hospital, Queensland **Workforce** Physiotherapy **Model** Established practice **Reference** Service delivery models, patient flow, Health Systems Innovation Branch, Department of Health, Queensland	Selected category 2 and 3 patients referred to specialist outpatients (neurosurgery) are screened by a physiotherapist who undertakes assessment, further investigation as required and differential diagnosis. Patients with non-musculoskeletal conditions or for whom surgical management is indicated are re-prioritised or returned to wait list. Appropriate patients are offered tailored multidisciplinary non-surgical management. Patients are discharged from specialist outpatient wait list if non-surgical treatment successful or further medical consultant review not indicated. In 2011–12, 901 new cases seen statewide in neurosurgical physiotherapy screening clinics.	Statewide: • 65% of patients screened in neurosurgical physiotherapy screening clinics provided with multidisciplinary non surgical management • 66% of patients discharged in 2011–12 were removed from specialist outpatients wait list without requiring medical consultant review • of those patients requiring further medical consultant review, 25% were identified as requiring more urgent review than originally categorised, demonstrating an effective safety net for patients with previously unidentified significant or non-musculoskeletal pathology • better prepared for surgery where patient proceeds to surgery.			Improve patient flow

Outpatients					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
76. Initiative Non-medical prescribing **Location** Multiple sites across Scotland, UK **Workforce** Physiotherapy Podiatry Radiation therapy **Model** Established practice **Reference** The Scottish Government. (2011). *From strength to strength: Celebrating 10 years of the Allied Health profession in Scotland,* www.scotland.gov.uk	In diabetes services, podiatrists prescribe antibiotics for foot ulcers and change insulin doses. In rheumatology services, physiotherapists and podiatrists provide joint injection therapy and change doses of steroids. In orthopaedic services, physiotherapists prescribe analgesics and anti-inflammatory medicines. In radiotherapy for treatment of cancer, radiation therapists prescribe antiemetic medicines for patients suffering from nausea.	Quicker access to antibiotics for patients presenting with infections, especially for patients with diabetes. Quicker and direct access to other medicines that patients need. Improved patient journey, as all patient health needs are managed by the allied health professional with no need for referral to another service or practitioner. Reduction in waste of dressings, as the allied health practitioner is the main prescriber. Releasing time in general practices as patients are not required to make additional appointments to access specific medicines. Increasing pain management options through prescribing.		✓*	Improve patient flow
77. Initiative Arthroplasty management by physiotherapists **Location** Northern Health, Victoria **Workforce** Physiotherapy **Model** Single centre study **Reference** www.hwainventory.net.au	Physiotherapists in primary contact capacity carried out post-surgical outpatient reviews following hip and knee replacement, as an alternative to orthopaedic reviews. Evaluated recovery with respect to desired outcomes and facilitated appropriate referral for rehabilitation.	Improved outpatient access and flow. Reduced demand on orthopaedic consultant workforce.			Reduce outpatient department waiting time Improve patient flow
78. Initiative Occupational therapist in hand clinic **Location** Guy's and St Thomas NHS Foundation Trust, London, UK **Workforce** Occupational therapy **Model** Single centre study **Reference** Rose R. et al. (2009). Development and implementation of a hand therapy extended scope practitioner clinic to support the 18-week waiting list initiative. *Hand Therapy*, 14: 95-104	Occupational therapy-led clinic for selected hand condition referrals. Role is autonomous and includes referral for blood tests, X-rays, electromyography, dynamic ultrasound and MRI. Occupational therapists obtain first-line consent for specified elective hand surgery procedures.	Improved the patient pathway by providing earlier access to a specialist opinion for a diagnosis and management of hand conditions. Reduced waiting times to the first appointment where diagnosis can be confirmed and treatment can be provided. Occupational therapists effectively diagnosed and managed GP referrals for carpal tunnel syndrome and first carpometacarpal osteoarthritis without increasing the demand for surgical opinion or procedures. Also effective in diagnosing other conditions such as early-onset Dupuytren's disease, de Quervain's disease, ganglions and trigger finger.		✓	Reduce outpatient department waiting time Improve patient flow

Outpatients					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
79. Initiative Occupational therapy vascular clinic **Location** Cairns Base Hospital, Cairns and Hinterland Hospital and Health Service, Queensland **Workforce** Occupational therapy **Model** Single centre study **Reference** Occupational Therapy Department, Cairns Base Hospital	Occupational therapists measure brachial pressure index readings using doppler. Wound management (limited to wounds of 10 cent piece size). Negative pressure wound therapy which builds on the wound management process.	Improved efficiency of service Decreased patient wait times between clinicians.		✓	Reduce outpatient department waiting time Improve patient flow
80. Initiative Orthopaedic physiotherapy screening clinic (OPSC) **Location** Multiple sites across Queensland Hospital and Health Services **Workforce** Physiotherapy **Model** Established practice **Reference** Service delivery models, patient flow Health Systems Innovation Branch, Department of Health, Queensland	Screening process to manage patients with musculoskeletal conditions referred by GPs for orthopaedic opinion but unlikely to require surgical management. Selected patients re-directed to the OPSC where musculoskeletal physiotherapists undertake assessment, diagnosis and case management. Non-operative care provided by multidisciplinary allied health team. Stakeholder satisfaction survey outcomes 'highly satisfactory' across all indicators.	Statewide outcomes: • 4431 new cases seen in 2011–12 • 72% of patients screened provided with multi-disciplinary non-surgical management • of those patients requiring further medical consultant review, 32% were identified as requiring more urgent review than originally categorised, demonstrating an effective safety net for patients with previously unidentified significant or non-musculoskeletal pathology • clinical outcome measures statistically significant across all measures • wait time reduced (e.g. at Cairns Hospital, in the month of February 2013, the time to initial consultation in OPSC for category 2 and 3 patients was 75 and 90 days respectively. Whereas for initial orthopaedic consultation the waiting time for category 2 and 3 patients was 193 and 433 days respectively).			Reduce outpatient department waiting time
81. Initiative Physiotherapy orthopaedic screening clinics **Location** The Alfred Hospital, Victoria **Workforce** Physiotherapy **Model** Established practice **Reference** www.hwainventory.net.au	Physiotherapists triaged patients referred to the osteoarthritis hip and knee service to determine the need for surgical or conservative intervention with 6-monthly monitoring. Patients were fast-tracked for surgical consult as appropriate.	Reduced waiting time from 18 months to 3 months. 40% of patients seen by physiotherapist fast-tracked to surgeon, with imaging to facilitate consultation. Most patients seen by physiotherapist managed conservatively and discharged without having to see a surgeon. Freed up surgeons' consultation time.			Reduce outpatient department waiting time

Outpatients

Initiative details	Approach	Outcome	Delegated	Extended scope	Priority area
82. Initiative Physiotherapy orthopaedic outpatient screening clinic **Location** Northern Health, Victoria **Workforce** Physiotherapy **Model** Established practice **Reference** www.hwainventory.net.au	Physiotherapists screened patients on orthopaedic wait list with shoulder and knee pain. Conservative management arranged as appropriate. Referred to orthopaedic clinic as required.	Decreased wait times for orthopaedic clinic. Approximately 78% of screening clinic patients managed entirely by physiotherapists and do not require orthopaedic review. More than 85% referred to consultant go on to have orthopaedic surgery/intervention. Reduced demand on orthopaedic consultants.			Reduce outpatient department waiting time
83. Initiative Orthopaedic podiatry triage clinic **Location** Logan Hospital, Ipswich Hospital, Townsville Hospital, Queensland **Workforce** Podiatry **Model** Multi-centre study **Reference** www.health.qld.gov.au Homeing L. (2012). Orthopaedic podiatry triage: process outcomes of a skill mix initiative. *Australian Health Review,* 36:457-60	Podiatrists screened non-urgent patients (on foot and ankle surgery waiting lists) to determine those suitable for conservative podiatric treatment. Patients successfully treated were discharged from surgical waiting list.	Orthopaedic foot and ankle waiting list reduced by between 23–50%. Increased conversion to surgery rates—orthopaedic surgeon sees patients who want and need surgery. Improved foot health outcomes for patients who have been screened and treated by the podiatrist.			Reduce outpatient department waiting time Improve patient flow
84. Initiative Physiotherapy-led osteoarthritis hip and knee services **Location** 14 sites across Victoria **Workforce** Physiotherapy **Model** Established practice **Reference** www.health.vic.gov.au/oahks/	Physiotherapists assess patient's severity of disease, initiate appropriate conservative management and refer to surgeon and fast-track as appropriate.	Statewide outcomes: • more appropriate use of specialist orthopaedic services • patient satisfaction with the service and the care received.			Improve patient flow
85. Initiative Osteoarthritis hip and knee physiotheraphy service **Location** Northern Health, Victoria **Workforce** Physiotherapy **Model** Single centre study **Reference** www.hwainventory.net.au	Physiotherapists screened osteoarthritic hip and knee referrals from an orthopaedic waitlist. Conservative management as appropriate. Referral for orthopaedic consultant assessment. Prioritisation on need, not chronology.	Reduced wait time for surgical assessment. Increased conversion rate to surgery for arthroplasty from initial orthopaedic assessment (approximately 70%). Reduced wait for orthopaedic assessment from GP referral (down from 2.5 years to 2–6 months). Effective use of consultant time.			Reduce outpatient department waiting time

Outpatients					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
86. Initiative Multidisciplinary triage in persistent pain management service **Location** Nambour Hospital, Sunshine Coast Hospital and Health Service, Queensland **Workforce** Psychology **Model** Single centre study **Reference** www.health.qld.gov.au	Multidisciplinary triage was overseen by an allied health professional who conducted an assessment prior to the patients' appointment with the senior medical officer (SMO) and provided a clinical handover.	96.7% of patients are triaged within five working days, compared with previous rate of 66.7%. Substantially reduced waitlists. Waitlist 100% within key performance indicator timeframe for each category. A saving of at least five hours per week of SMO face-to-face patient time, in addition to SMO time previously spent writing assessment reports. Increased weighted activity unit-related revenue through increased numbers of patients seen and increased ratio of new to review patients.			Reduce outpatient department waiting time
87. Initiative Pharmacist anticoagulant dosing service **Location** Alfred Health, Victoria **Workforce** Pharmacy **Model** Single centre study **Reference** Dooley, M. et al. (2011). Successful implementation of a pharmacist anticoagulant dosing service in ambulatory care. *J Pharmacy Practice and Research,* 41:208-11	Patients admitted to hospital in the home service for anticoagulation enrolled in pharmacist dosing service.	Reduced number of days to stabilisation. Comparable mean number of international normalised ratios measured.		✓*	Improved patient flow
88. Initiative Pharmacist prescribing in an HIV clinic **Location** Gold Coast Sexual Health Clinic Gold Coast Hospital and Health Service, Queensland **Workforce** Pharmacy **Model** Single centre study **Reference** www.uq.edu.au/safeprescribing/documents/gold_coast_pilot.pdf	A Gold Coast sexual health clinic is using the prescribing expertise of a HIV specialist pharmacist working in collaboration with clinical specialists.	Expected outcome: • release medical officer time for more complex cases • reduce waiting time.		✓	Reduce outpatient department waiting time

Outpatients

Initiative details	Approach	Outcome	Delegated	Extended scope	Priority area
89. Initiative Pharmacy-led pain management clinic **Location** Lovelace Medical Group, Albuquerque, New Mexico, USA **Workforce** Pharmacy **Model** Established practice **Reference** Dole, E. et al. (2007). Provision of pain management by a pharmacist with prescribing authority. *American Journal of Health-System Pharmacy* 64:85-9	A pharmacist responsible for medication management in a clinic where 90% of the patient population is treated for chronic non-cancer-related pain. These services are billable under New Mexico law.	Consistent decrease in mean visual analog scale scores for pain with continued visits. Clinic generated revenue.		✓	Reduce outpatient department waiting time
90. Initiative Pharmacy-run anticoagulation clinics **Location** University of Alberta Hospital, Canada **Workforce** Pharmacy **Model** Established practice **Reference** Bungard, T. et al. (2009). Evaluation of a pharmacist-managed anticoagulation clinic: Improving patient care. *Open Med,* 2009; 3:e16–21	Clinic initiated in 2001 as a pilot project and is unique in the Canadian setting, as all direct patient care is provided by pharmacists who have an extended scope of practice and who work in consultation with specialist physicians.	Significantly better international normalised ratio control and reduced rates of thromboembolic complications compared with standard care. Resource use was substantially reduced.		✓*	Improve patient flow
91. Initiative Phenol block and botox injections by physiotherapists **Location** Glasgow, Scotland, UK **Workforce** Physiotherapy **Model** Established practice **Reference** Royal College of Physicians, British Society of Rehabilitation Medicine, Chartered Society of Physiotherapy, Association of Chartered Physiotherapists Interested in Neurology (2009). *Spasticity in adults: management using botulinum toxin. National guidelines.* www.rcplondon.ac.uk/sites/default/files/documents/spasticity-in-adults-management-botulinum-toxin.pdf	Phenol block and botox injections are performed by physiotherapists in a spasticity clinic. Physiotherapists administer botox under direction in conjunction with a physiotherapy program for spasticity.	Improved patient flow.		✓	Reduce outpatient department waiting time Improved patient flow

Outpatients					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
92. Initiative Phosphate binder adjustment by dietitians **Location** University Hospitals of Leicester, NHS Trust, UK **Workforce** Nutrition and dietetics **Model** Established practice **Reference** Ruddock, N. (2010). Changing clinical practice can lead to significant improvement in control of serum phosphate in a large haemodialysis population. Abstract 061, www.britishrenal.org	A collection of interventions were introduced to improve phosphate control including the introduction of extended roles for dietitians to allow them to address medication changes when necessary.	Prevent delays in treatment change. Over two years: • mean serum phosphate fell from 1.62 ± 0.52mmol/l to 1.47 ± 0.40mmol/l (p=0.01) • the proportion of patients with serum phosphate ›1.8mmol/l fell significantly from 30.6% to 16.8% (p=0.009) • the proportion of patients achieving the Renal Association standard of 1.1 – 1.8mmol/l increased from 53.6% to 62.9% (p=0.24).			Improve patient flow
93. Initiative Physiotherapist-led ankylosing spondylitis clinic **Location** East Kent Hospital University Foundation Trust, Canterbury, UK **Workforce** Physiotherapy **Model** Established practice **Reference** Van Rossen, L. et al. (2012). Improving the standard of care for people with ankylosing spondylitis and a new approach to developing ESP-led AS clinics. *Musculoskeletal Care, 10:171-7*	Physiotherapist-led specialist clinic for ankylosing spondylitis assessment and monitoring. Over eight years, the number of patients seen has risen from 62 to 352, and annual consultations from 186 to 986. 97 patients have started tumour necrosis factor (TNF) blocker.	Improved quality of care. Cost effective use of staff resources.		✓	Improve patient flow
94. Initiative Physiotherapist-led shoulder clinic **Location** Holland Orthopaedic and Arthritic Centre Ontario, Canada **Workforce** Physiotherapy **Model** Established practice **Reference** Razmjou, H. (2013). Evaluation of an advanced-practice physical therapist in a specialty shoulder clinic: diagnostic agreement and effect on wait times. *Physiotherapy Canada,* 65:46-55	Comparison of physiotherapy-led and surgeon-led shoulder clinics. Agreement on major diagnostic categories varied from good to excellent and indication for surgery—good.	Wait time for physiotherapist was shorter than for surgeons. Surgeons' wait time reduced over a three year period.		✓	Reduce outpatient department waiting time

Outpatients					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
95. Initiative Physiotherapist musculoskeletal screening clinic **Location** Northern Hospital, Melbourne, Victoria **Workforce** Physiotherapy **Model** Single centre study **Reference** Oldmeadow, L. et al. (2007) Experienced physiotherapists as gatekeepers to hospital orthopaedic outpatient care. *Med J Aust,* 186:625-8	Patients with non-urgent musculoskeletal conditions were assessed by physiotherapists and subsequently by an orthopaedic surgeon.	Nearly two-thirds of patients with non-urgent musculoskeletal conditions did not need to see a surgeon at the time of referral. Patients were appropriately assessed and managed by experienced, qualified physiotherapists.			Reduce outpatient department waiting time
96. Initiative Physiotherapist neurosurgery screening and post-operative review clinics **Location** The Alfred Hospital, Victoria **Workforce** Physiotherapy **Model** Single centre study **Reference** www.hwainventory.net.au	Physiotherapists triaged neurosurgery outpatients to determine need for surgical or conservative intervention. Physiotherapists reviewed post-operatively—wound checks, neurological status, bony healing, documented outcomes, and provided recommendations.	Initial appointment wait reduced from 12 months to 4 months. 20% of patients seen by physiotherapist fast-tracked to surgeon, with imaging to facilitate consultation. Most patients seen by physiotherapist managed conservatively and discharged without having to see a surgeon. Freed up surgeons' consultation time.			Reduce outpatient department waiting time
97. Initiative Physiotherapy-led neurosurgery spinal pain triage **Location** Sir Charles Gairdner Hospital, Western Australia **Workforce** Physiotherapy **Model** Established practice **Reference** www.hwainventory.net.au	Physiotherapists assess patients referred to neurosurgery with spinal pain. Imaging arranged before surgical consult. Sustained for the past six years.	Reduced waiting times. Reduced need for neurosurgical consults.			Reduce outpatient department waiting time

Outpatients

Initiative details	Approach	Outcome	Delegated	Extended scope	Priority area
98. Initiative Physiotherapy for female stress urinary incontinence **Location** Multiple sites across Australia **Workforce** Physiotherapy **Model** Multi sites across Australia **Reference** Neumann, P. et al. (2005). Physiotherapy for female stress urinary incontinence: a multicentre observational study. *Australian and New Zealand Journal of Obstetrics and Gynaecology*, 45:226-32	Observational multi-centre clinical study of physiotherapy management of female stress urinary incontinence with follow up at one year. An episode of physiotherapy care consisted of a median of five (four–six) visits.	208 patients completed an episode of physiotherapy care. 84% cured and 9% improved on stress testing. 53% cured and 25% improved according to the 7-day diary. Significant improvement in all quality of life domains. At one year, approximately 80% of respondents had positive outcomes on all outcome measures.			Reduce outpatient department waiting time
99. Initiative Physiotherapy in fracture clinic **Location** Cork University Hospital, Ireland **Workforce** Physiotherapy **Model** Single centre study **Reference** Moloney, A. et al. (2009). A 6-month evaluation of a clinical specialist physiotherapist's role in a fracture clinic. *Physiotherapy Ireland*, 30:8-15	The clinical specialist physiotherapist reviewed a caseload of 403 patients with uncomplicated fractures and soft tissue injuries in fracture clinic.	Patient caseload increased over 4-month treatment period. Specialist registrar hours decreased due to review by physiotherapist.		✓	Improve patient flow
100. Initiative Physiotherapy in orthopaedic clinic **Location** Multiple sites across Canada **Workforce** Physiotherapy **Model** Established practice **Reference** Aiken, A. et al. (2009). Role of the advanced practice physiotherapist in decreasing surgical wait times. *Healthcare Quarterly,* 12: 80-3	Physiotherapist screens patients pre- and post-operatively, triages patients for surgery, prescribes conservative management and monitors patients on an ongoing basis.	Reduce wait times for hip and knee replacement surgeries. Physiotherapist can effectively manage more than 30% of the patients referred to a surgeon for hip or knee replacement surgery because these patients do not require surgery; rather, they require conservative management. Improve patient access to timely surgical care.			Improve patient flow Reduce outpatient department waiting time

Outpatients

Initiative details	Approach	Outcome	Delegated	Extended scope	Priority area
101. Initiative Physiotherapy in orthopaedic outpatient clinic **Location** Sacré-Coeur Hospital, Canada **Workforce** Physiotherapy **Model** Single centre study **Reference** Desmeules, F. et al. (2013). Validation of advanced practice physiotherapy model of care in an orthopaedic outpatient clinic. *BMC Musculoskeletal Disorders,* 14:162	Orthopaedics outpatient clinic for hip or knee complaints—diagnosis and triage to conservative or surgical management by physiotherapist or orthopaedic surgeon. 120 patients; 91% for knee complaint. Agreement for diagnosis was very high; for triage recommendation—high. No differences for imaging tests ordered.	Physiotherapist gave more education and prescribed more nonsteroidal anti-inflammatory drugs (NSAIDS), joint injections, exercises and supervised physiotherapy. Patient satisfaction was higher for physiotherapy care.		✓*	Improve patient flow
102. Initiative Physiotherapy joint arthroplasty review **Location** St Vincent's Hospital, Victoria **Workforce** Physiotherapy **Model** Single centre study **Reference** www.hwainventory.net.au	Physiotherapists reviewed and managed non-complex patients following joint replacements, at usual post-operative intervals instead of orthopaedic surgeons. Divergences from normal post-operative pathway were referred to orthopaedic surgeon.	High levels of patient satisfaction. Targeted use of orthopaedic surgeons' time for new and complex cases.			Reduce outpatient department waiting time
103. Initiative Physiotherapy orthopaedic triage **Location** Goulburn Valley Health, Victoria **Workforce** Physiotherapy **Model** Single centre study **Reference** www.hwainventory.net.au	Physiotherapists triaged all patients on elective surgery waiting lists for total/partial hip or knee joint replacement in order to prioritise referrals for orthopaedic consultant review.	More efficient, streamlined service delivery for specialist consultants and health service wait list management.			Reduce outpatient department waiting time
104. Initiative Physiotherapy telephone orthopaedic triage **Location** The Canberra Hospital, ACT **Workforce** Physiotherapy **Model** Single centre study **Reference** Morris, J. et al. (2011). Effectiveness of a physiotherapy-initiated telephone triage of orthopaedic waitlist patients. *Patient Relat Outcome Meas*, 2:151-9	Physiotherapists conducted a telephone triage using a standard instrument for all new patients on the orthopaedic waiting list. Patients were offered primary treatment options of retaining their appointment, being discharged, referral to a new model of assessment (multidisciplinary specialist clinic), or referral to physiotherapy.	The telephone triage process released 21 booked appointments on the outpatient clinic waiting list over three months. 26% of patients were referred directly to physiotherapy. The waiting time for an appointment for patients who remained on the waiting list was significantly shorter. There were significantly lower rates of failure to attend appointments.		✓	Reduce outpatient department waiting time

Outpatients					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
105. Initiative Podiatrist-led musculoskeletal clinic **Location** The Northern Hospital, Victoria **Workforce** Podiatry **Model** Single centre study **Reference** www.hwainventory.net.au	Podiatrist-led clinic assessed patients (of low priority for foot surgery) to determine benefits of conservative management versus surgery.	Reduced waitlist for orthopaedics. Quicker access to appropriate care. Improved outcomes through timely conservative management.			Reduce outpatient department waiting time Improve patient flow
106. Initiative Psychologist as first contact for general paediatric referrals **Location** Ipswich Hospital, West Moreton Hospital and Health Service, Queensland **Workforce** Psychology **Model** Single centre study **Reference** Psychology department, Ipswich Hospital	The psychologist provided the first point of contact following triage for 60% of category 2 and 3 referrals to general paediatric clinics. Where required, the psychologist referred directly to the paediatrician.	Significant reduction in wait time. 25% of patients seen by psychologist required referral on to paediatrician.			Reduce outpatient department waiting time
107. Initiative Rural generalist allied health practitioner **Location** Chinchilla Health Service, Darling Downs Hospital and Health Service, Queensland **Workforce** Occupational therapy Physiotherapy Speech pathology Nutrition and dietetics **Model** Single centre study **Reference** www.hwainventory.net.au	Development and piloting of integration of rural generalist allied health practitioner with medical and nursing staff in medical outpatient setting in a small rural hospital. Use of competency based framework to support skill-sharing across workforce (within allied health and across allied health, nursing and medical). Allied health intake process in the acute setting for those admitted with chronic and/or complex conditions. Improved coordination of case management and allied health services in the acute setting. Appropriate and prioritised referrals onto allied health services. Improved clinical outcomes as a result of timely intervention and management as per best practice recommendations.	Increased and timely access to allied health services.		✓	Improve patient flow

Outpatients					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
108. Initiative Self-referral for musculoskeletal physiotherapy **Location** Multiple sites in NHS, England and Scotland, UK **Workforce** Physiotherapy **Model** Established practice **Reference** Chartered Society of Physiotherapy. (2013) *Self-referral*. www.csp.org.uk/topics/self-referral	Patients contact NHS physiotherapy services directly, rather than going through their GPs. The patient completes a short self-assessment questionnaire, which is reviewed by a physiotherapist and, depending on their clinical need; an appointment (which may include a waiting time) is allocated accordingly.	Reduces the need for healthcare interventions such as X-rays and prescribing. Reduces need for referrals to orthopaedic specialists. People who self-refer to physiotherapy take fewer days off work. Early intervention for lower back pain reduces its recurrence in the following year by up to 40%. Self-referral has not led to an increase in demand for physiotherapy.		*	Reduce outpatient department waiting time Improve patient flow
109. Initiative Speech and language-led clinics for endoscopic examination of the larynx **Location** Multiple sites across Scotland, UK **Workforce** Speech pathology **Model** Single centre study **Reference** The Scottish Government. (2011). *From strength to strength: Celebrating 10 years of The Allied Health professions in Scotland.* www.scotland.gov.uk	Speech pathologists who specialise in voice disorders were trained in nasendoscopy and laryngeal examination. The speech pathology-led clinic was established with referrals coming through ENT clinics. This later developed to include referrals from GPs.	Patients with Parkinson's disease were routinely examined prior to intensive therapy for voice. Occupational and professional voice users were fast-tracked.		✓*	Improve patient flow
110. Initiative Orthoptic management of chronic eye conditions **Location** Northern Health, Victoria **Workforce** Orthoptics **Model** Single centre study **Reference** www.hwainventory.net.au	An orthoptic workforce was credentialed (using a competency training package) to undertake assessment and management of patients with chronic eye conditions, including diabetic retinopathy, cataracts and glaucoma.	More timely access to care. Increased staff capacity. Allowed for development of a service for patients with retinal disorders. Freed up ophthalmologists to take on more complex cases.		✓	Reduce outpatient department waiting time Improve patient flow

Pre-admission Clinic					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
111. Initiative Pharmacist prescriber in an elective surgery pre-admission clinic **Location** Princess Alexandra Hospital, Metro South Hospital and Health Service, Queensland **Workforce** Pharmacy **Model** Single centre study **Reference** Hale, A. et al. (2013). Perioperative medication management: expanding the role of the preadmission clinic pharmacist in a single centre, randomised controlled trial of collaborative prescribing, *BMJ Open*, 3(7): e003027	A pharmacist generated the inpatient medication chart in an elective surgery pre-admission clinic to reflect the patient's regular medication; plan for medication peri-operatively and plan for venous thromboembolism (VTE) prophylaxis requirements.	Medication charts in the intervention arm contained fewer omissions and prescribing errors compared with charts generated by resident medical officers. Pharmacists equivalent to resident medical officers in appropriateness of VTE prophylaxis ordered at time of admission. Time saving for junior house officers and anaesthetists.		✓*	National Elective Surgery Target (NEST) Improve patient flow

Sub-acute					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
112. Initiative Indigenous health worker in Deadly Ears program **Location** Cherbourg Health Service, Darling Downs Hospital and Health Service **Workforce** Indigenous health **Model** Established practice **Reference** Deadly Ears program www.health.qld.gov.au	The Indigenous health worker in Cherbourg enables children to access ENT services through Telehealth. Hearing and ear health screening (video otoscopy, tympanometry, screening audio) are completed by health worker and reviewed by ENT and triaged into service.	Improved patient flow. Reduced waiting lists for ENT. Increased level of coverage for screening. Increased ear health understanding for community.			Improve health services for regional, rural and remote communities Reduce outpatient department waiting time Improve patient flow
113. Initiative Primary care-based child clinical psychology service **Location** Multiple general practices across London, UK **Workforce** Psychology **Model** Established practice **Reference** Department of Health. (2011). *Models of Collaborative care for children and youth (0-25 years)*, www.health.qld.gov.au.	A psychology service was established within GP practices to provide mental health care provision for children (up to 17 years). Referral to tertiary/specialist services was made as required.	A reduced number of sessions were required to complete treatment with a corresponding reduction in costs of up to 50% over a 12-month period. Increased access to psychology services for families.			Provide better healthcare to children Improve patient flow

Sub-acute					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
114. Initiative Allied health in aged care **Location** Nambour Hospital, Sunshine Coast Hospital and Health Service, Queensland **Workforce** Physiotherapy Occupational therapy Allied health assistance **Model** Single centre study **Reference** www.health.qld.gov.au	Two new roles—an advanced allied health practitioner supported by an advanced allied health assistant, were implemented in an outpatient geriatric clinic to improve patient access to earlier intervention and specialist services. The roles were supported by targeted training and development of criteria-based decision-making processes.	Preliminary outcomes: • more targeted geriatrician time for both simple and complex cases • reduced waiting time to specialist geriatrician services • targeted earlier referral to appropriate community-based allied health services • reduced hospital admissions/improvements in patient function and/or functional maintenance.	✓	✓	Effective sub-acute care Improve patient flow
115. Initiative Allied health in transition care program **Location** Mackay Hospital, Mackay Hospital and Health Service, Queensland **Workforce** Physiotherapy Occupational therapy **Model** Single centre study **Reference** www.health.qld.gov.au	A model of professional skill-sharing was implemented to reduce duplication and improve service efficiency in allied health services and patient experience for community-dwelling older people experiencing functional decline.	Professional skill-sharing between occupational therapists and physiotherapists was equivalent in outcome to uni-professional intervention. Patients preferred a model where care was provided by one, as opposed to multiple, allied health clinicians.		✓	Effective sub-acute care Improve patient flow

Sub-acute					
Initiative details	**Approach**	**Outcome**	**Delegated**	**Extended scope**	**Priority area**
116. Initiative Allied health-led inpatient rehabilitation **Location** Redland and Wynnum Hospitals, Metro South Hospital and Health Services, Queensland **Workforce** Speech pathology Physiotherapy Occupational therapy **Model** Single centre study **Reference** www.health.qld.gov.au	Allied health professional is first point of contact for rehabilitation and geriatric referrals: • completing initial assessment • accepting patients for the rehabilitation program, or • making alternative recommendations. The allied health professional coordinates the shared-care model for medical management of patients and makes recommendations under the clinical supervision of the geriatrician.	Preliminary outcomes: • reduced time between referral and review by geriatrician • improved access to geriatrician for review of rehabilitation and geriatric patients • improved timing and accuracy of coding for rehabilitation patients providing funding benefits • decreased admission rates within 28 days for this patient group • staff satisfaction survey suggested good satisfaction with functioning of role.		✓	Effective sub-acute care Improve patient flow
117. Initiative Pharmacy-generated medication chart for discharge to residential care **Location** Austin Health, Victoria **Workforce** Pharmacy **Model** Established practice **Reference** Tran, T. et al. (2012). Development and Evaluation of a Hospital Pharmacy Generated Interim Residential Care Medication Administration Chart. *J Pharmacy Practice and Research,* 42: 100-5	Interim residential care medication administration chart (IRMAC) preparation integrated into pharmacy discharge process. IRMAC took a mean of 8.7 minutes to prepare.	For patients discharged to a residential care facility: • 95% had IRMAC compared with pre-intervention rate of 38% • medication discrepancy rate was 1%.			Effective sub-acute care

Appendix B: Summary of stakeholder identified full and extended scope tasks and procedures

The following tasks were submitted to the taskforce during the consultation period and represent what is currently in practice in some areas of Queensland, Australia or internationally. Known legislative and funding barriers that impede or inhibit this practice in Queensland have been identified.

Allied health workforce	Task	Change required
Allied health assistance	Perform circumferential and bioimpedence measures in lymphoedema assessment	Nil
	Perform malnutrition screening	Nil
	Pharmacy assistants supply a medicine on prescription under supervision of pharmacist in rural and remote areas	Legislation
	Pharmacy technicians check the accuracy of dispensed medications	Legislation
Allied health profession	Admission decision for transition from acute care to rehabilitation or geriatric evaluation management (GEM)	Nil
	Admission decision to emergency department short-stay	Nil
	Admission decision to palliative care	Nil
	Criteria-led discharge of patients from acute and sub-acute services	Nil
	Measure blood pressure and blood glucose levels in diabetes clinics	Nil
	Refer directly to acute care from community mental health	Nil
	Refer directly to other allied health professionals within public sector	Nil
	Receive direct referrals from nurses in public sector	Nil
	Provide sick leave certificates	Legislation
	Refer for plain film imaging	Funding
	Request pathology related to clinical area	Funding
	Perform functional capacity evaluation, musculoskeletal assessment or psychological assessment in order to sign-off for capacity to return to work and/or level of restrictive duties	Legislation
Audiology	Manage otorrhoea by performing aural toilet	Nil
	Prepare provisional diagnosis following otoscopy related to middle ear disease/diagnosis	Nil
	Prescribe antibiotics for discharging ears	Legislation
	Provide non-surgical management of discharging grommets based on ear nose and throat (ENT) protocol	Nil
	Provide non-surgical treatment of middle ear dysfunction e.g. ear popper, otovent, dietary supplements	Nil
	Receive criteria-based referrals from community screening programs, self, parent/guardian or teachers	Nil
	Refer directly to Queensland Health magnetic resonance imaging (MRI) and computerised tomography (CT) scan for retrocochlear pathology	Funding
	Refer directly to medical specialists e.g. ENT, genetics, neurology, ophthalmology or paediatrics	Funding
	Refer infants newly diagnosed with permanent hearing loss for electrocardiography (ECG)	Nil
	Remove wax and foreign body either manually or by suction	Nil
	Skill-share with physiotherapists to provide balance protocols for vertigo e.g. vertebrobasilar insufficiency, gait tests, rehabilitation exercises	Nil
	Skill-share with speech pathologist to: • provide aural rehabilitation following cochlear implant • provide screening assessment in paediatrics	Nil
	Skill-share with psychologists to perform screening intelligence quotient (IQ) assessments in paediatrics	Nil

Allied health workforce	Task	Change required
Clinical measurements	Administer schedule 2 medications as well as Special Access Scheme drugs where applicable	Legislation
	Prescribe and administer medications as part of investigations/measurements e.g. bronchodilators for spirometry	Legislation
	Prescribe basic cardiac medications e.g. nitrates, oxygen, Schedule 2 medications	Legislation
	Initiate and perform non-invasive ventilation e.g. continuous positive airways pressure (CPAP)	Nil
	Modify assessment procedure based on history from patient or study findings e.g. adding additional nerves to nerve conduction studies based on history; adding lower limb studies when upper limb studies suggest peripheral neuropathy	Nil
	Neurophysiology scientists request further clinical measurement tests e.g. cardiac, sleep, respiratory tests	Nil
	Perform bronchial challenge and cardio-pulmonary exercise testing with a nurse	Nil
	Perform cannulation for dobutamine stress echocardiography (DSE) or exercise stress echocardiography (ESE) test and arterial blood gas sampling	Nil
	Produce final report on investigations	Funding
	Recommend additional investigations e.g. sleep-deprived electroencephalogram (EEG) when routine EEG is negative or inconclusive before patient sees neurologist	Nil
Dietetics	Adjust dosage of phosphate binders for patients with renal disease and insulin dosage in diabetes clinic	Nil
	Make adjustments to other medications in renal clinic	Legislation
	Measure blood pressure and fluid retention (i.e. pitting oedema, shortness of breath etc) in cardiac clinic—provide appropriate referral onwards and advice on weighing for fluid balance	Nil
	Perform investigative assessment requiring finger prick sample e.g. blood glucose testing, serum lipids in chronic conditions	Nil
	Prescribe anti-emetics for patients on enteral feeds/nutrition support	Legislation
	Prescribe nutritional supplements in acute care	Nil
	Prescribe specialist formula (including infant)	Funding
	Prescribe vitamin and mineral supplements and enzyme replacement therapy for patients with gut insufficiency e.g. cystic fibrosis	Nil
	Provide basic advice regarding foot care, lipid management, exercise, smoking cessation, pregnancy in chronic conditions	Nil
	Refer directly to medical specialists	Funding
	Skill-share with speech pathologists swallow screening and assessment	Nil
Exercise physiology	Perform lung function testing	Nil
	Provide exercise training during renal dialysis	Nil
	Provide pre-rehabilitation for patients on orthopaedic waiting list	Nil

Allied health workforce	Task	Change required
Medical radiation profession	Mammographers act as second film readers for screening mammograms	Legislation and funding
	Modify referral to correct modality where medical officer has requested an inappropriate procedure e.g. plain X-ray instead of CT scan	Legislation
	Nuclear medicine technologists administer medications as part of nuclear medicine scans	Legislation
	Nuclear medicine technologists perform electrocardiography (ECG) and monitor blood pressure and blood gas levels	Nil
	Nuclear medicine technologists perform routine diagnostic CT scan examinations at the same time as positron emission tomography (PET)/CT scan	Legislation and funding
	Nuclear medicine technologists prescribe medications required for nuclear medicine scans e.g. lasix, biamox	Legislation
	Provide sterile assistance for specialist procedural work with specialist medical staff	Nil
	Radiation therapists dress skin rashes	Nil
	Radiographers perform venepuncture and administer radiology contrast media for CT, MRI, angiography	Nil
	Radiographers or sonographers insert peripherally inserted central catheter (PICC)	Policy
	Radiographers perform basic CT, ultrasound (US) or MRI guided procedures e.g. shoulder injections (steroids), nerve root injections, facet joints, epidurals	Legislation
	Radiographers perform focussed assessment with sonography for trauma (FAST) scanning	Nil
	Radiographers perform limited scope sonography in rural areas	Nil
	Radiographers perform protocol driven morgue radiography without medical officer referral	Nil
	Radiographers provide final report on plain film images	Funding
	Radiographers refer directly to ultrasound when CT scan findings need clarification	Funding
	Radiographers request imaging on protocol e.g. clearance of orbits prior to MRI	Nil
	Sonographers perform ultrasound-guided procedures including biopsies, injections, vascular access, collection drainage/aspirate	Legislation
	Sonographers provide final report on ultrasound images	Funding
Mental health allied health	Allied health professionals provide definitive diagnosis in child and youth mental health services	Legislation and funding
	Allied health professionals provide profession-specific assessment and intervention in mental health	Nil
	Psychologists provide assessment for Mental Health Court	Nil
	Psychologists provide diagnosis of mental illness	Legislation and funding

Allied health workforce	Task	Change required
Occupational therapy	Apply plaster casts post-botox injection	Nil
	Clinical evaluation of wounds with application of prescribed cream to maintain skin integrity and reduce infection risk and/or application of dressing	Nil
	Diagnose and provide conservative management of basic hand presentations e.g.mallet fingers, fractures, sprains, ligament injuries, carpel tunnel syndrome, Dequervains, trigger finger, arthritis	Nil
	Perform non-complex wound debridement and simple wound management in hand clinic e.g. suturing, removal of stitches and staples	Nil
	Prescribe medications e.g. mental health, over-the-counter stool softeners	Legislation
	Provide a provisional mental health diagnosis in the emergency department	Nil
	Provide authorisation for capacity to drive	Legislation
	Provide comprehensive management of pressure wounds including non-complex wound debridement	Nil
	Refer directly to surgical list e.g. rotator cuff repair, acromioplasty, carpal tunnel release	Nil
	Refer patients for ankle brachial pressure index or doppler in vascular clinic	Nil
	Refer patients for CT scan and MRI e.g. if cardiovascular accident (CVA) is suspected	Funding
	Refer patients for limited scope musculoskeletal ultrasound and interpret results to guide clinical decision-making	Nil
	Refer patients for lymphoscintigraphy	Nil
	Refer patients for nerve conduction studies	Nil
	Skill-share with physiotherapists to: • manage lymphoedema, burns and vascular conditions (compression bandages and garments, manual muscle release, laser) • perform neurological screening e.g. head injury, concussion • provide basic exercise programs • assess mobility and provide equipment	Nil
Orthotics/ prosthetics	Conduct simple wound management	Nil
	Provide post-surgical review for amputees	Nil
Pharmacy	Adjust medication orders or treatments under specific protocols and procedures e.g. alteration of timing of medication administration, specification of maximum PRN doses	Legislation
	Administer a vaccine under an immunisation program	Legislation
	Initiate criteria-led discharge in alcohol, tobacco and other drugs services (ATODS) including medication review (if none on admission), medication counselling and medication information to GP prior to discharge	Nil
	Initiate medications or treatments under protocols and procedures e.g. supply of emergency nitrates on discharge, nicotine replacement therapy	Funding
	Issue an instruction for the supply and administration of medication e.g. schedule 2 and 3 for inpatients	Legislation
	Optimise medication regime to achieve specific clinical treatment target e.g. in chronic disease, agreed targets for blood pressure and list of agreed medications with specification of escalation points for cardiology, hypertension, hyperlipidaemia; in mental health, agreed targets and list of medications with specification of escalation points, clozapine; in respiratory clinics, agreed targets and list of medications with specification of escalation points for asthma and chronic obstructive pulmonary disease (COPD)	Legislation
	Perform simple wound management	Nil
	Prescribe common 'as required' medications e.g. laxatives for clozapine induced constipation, anti-histamines, bronchodilators	Legislation
	Prescribe for repeat prescriptions e.g. antipsychotic depots for stabilised patients, antidepressant medication, contraception, other medications for chronic disease management	Legislation
	Prescribe inpatient medication charts in pre-admission clinic	Legislation
	Provide full reconciliation of medication and conduct relevant counselling prior to discharge	Nil

Allied health workforce	Task	Change required
Pharmacy	Provide medical history taking, medicines reconciliation, liaison with outside professionals, patient education and counselling in surgical and medical pre-admission clinics and emergency department	Nil
	Refer directly to diabetic educators	Nil
	Refer directly to infectious diseases service	Nil
	Request observations on inpatients related to medication management	Nil
	Take phone or verbal orders and write the order on the medication chart	Legislation
	Write on a chart a dose adjustment instruction for another health professional to administer e.g. for aminoglycosides, vancomycin, warfarin	Legislation
Physiotherapy	Administer pain relief medication e.g. lignocaine for ring blocks, corticosteroids for shoulder pain and entonox for fracture reduction	Legislation
	Alteration of dosage for drugs already prescribed (warfarin, bronchodilators, rheumatology drugs, selective serotonin reuptake inhibitors (SSRIs), analgesia, baclofen, Parkinson's disease (PD) medications, heart failure medications e.g. diuretics	Legislation
	Clinical evaluation of wounds with application of prescribed cream to maintain skin integrity and reduce infection risk and/or application of dressing	Nil
	Perform bronchoscopies on patients with sputum retention in the intensive care unit	Legislation
	Perform actuation of a ventilated patient: changing tracheostomies, criteria-led weaning from ventilation, extubations and decannulations, changing ventilation settings, conducting recruitment manoeuvres on a ventilator, arterial blood gases in the intensive care unit	Nil
	Perform aspiration of joints	Nil
	Perform botox and phenol motor point blocks, administer botox injections for spasticity management	Legislation
	Perform insertion of equipment e.g. pessaries, catheters	Nil
	Perform manipulation under anaesthesia in theatre e.g. patients post-total knee replacement who are not progressing. May be extended to shoulder	Legislation
	Initiate non-invasive ventilation e.g. CPAP, bi-level positive airway pressure (BiPAP)	Nil
	Perform simple wound management in hand clinic e.g. suturing, removal of stitches and staples and non-complex wound debridement and wound management	Nil
	Perform simple fracture management, plastering and application of splints (e.g. moon boots, range of motion brace) on orthopaedic wards and the emergency department	Nil
	Prescribe medications for respiratory conditions (e.g. bronchodilator), pain management (e.g. analgesics, non-steroidal anti-inflammatories), incontinence (e.g. laxatives, topical oestrogen) and vestibular conditions	Legislation
	Refer directly for image-guided injection e.g. CT scan-guided spinal nerve injections	Funding
	Refer directly for surgical list e.g. rotator cuff repair, acromioplasty, carpal tunnel release	Nil
	Refer patients for bone scans	Funding
	Refer patients for musculoskeletal ultrasound, limited scope CT scan or MRI and interpret findings to guide clinical decision-making	Funding
	Refer infants in neonatal and paediatric intensive care units for ultrasound assessment of the lungs e.g. meconium aspiration, transient tachypnoea, acute respiratory distress syndrome (ARDS)	Nil
	Refer patients in the intensive care unit for ultrasound to determine need for intercostal catheter	Nil
	Skill-share with audiologists to provide balance protocols for vertigo e.g. vertebrobasilar insufficiency (VBI), gait tests, rehabilitation exercises e.g. gaze stabilisation exercises	Nil
	Skill-share with occupational therapists to: • perform mental state examination (MSE) • provide mobility assessments, equipment and assisted technology • provide simple home modifications and home visiting	Nil

Allied health workforce	Task	Change required
Podiatry	Perform lower limb casting for paediatrics	Nil
	Perform non-lower limb wound care/debridement	Nil
	Perform suturing	Nil
	Prescribe antibiotics	Legislation
	Prescribe compression garment/s	Nil
	Provide management of venous wounds and compression therapy	Nil
	Refer patients for specialised vascular imaging including angiography or duplex ultrasonography and interpret findings to guide clinical decision-making	Funding
	Refer patients for ultrasound, CT, Integrated CT Positron Emission Tomography (CTPet) scan or MRI and interpret findings to guide clinical decision-making	Legislation
Psychology	Perform dementia screening and assessment in rural setting	Nil
	Prescribe psychotropic drugs e.g. for mood and anxiety disorders	Legislation
	Refer directly to mental health services	Nil
	Refer patients for medical imaging of the brain in neuropsychology e.g. stroke, dementia	Legislation
	Skill-share with audiologists to perform screening IQ assessments in paediatrics	Nil
	Skill-share with occupational therapists to perform cognitive screening	Policy
	Skill-share with social workers to: • perform aged care assessment team (ACAT) assessment tasks for both inpatients and outpatients • provide competence assessment	Nil
Social work	Criteria-led discharge from the emergency department	Nil
	Criteria-led discharge of child protection cases	Nil
	First contact in emergency department for social presentations	Nil
	Perform capacity assessments and cognitive assessments/basic mental health assessments	Nil
	Perform mental health assessments e.g. MSE, suicide assessment risk	Nil
	Refer directly to community-based psychologist to prevent escalation of social issues	Funding
	Skill-share with psychologists to: • provide competence assessment • perform ACAT assessment tasks for both inpatients and outpatients	Nil
	Social work-led cognitive behaviour therapy (CBT), family therapy, medication education, dietary guidelines in mental health	Nil
Speech pathology	Perform fibreoptic endoscopic evaluation of swallowing without ENT specialist present	Nil
	Perform hearing screening	Nil
	Perform insertion or changing of naso-gastric tube (NGT) or change of percutaneous endoscopic gastrostomy (PEG) feeding tube	Policy
	Perform MSE	Nil
	Perform tracheostomy decannulation, weaning, input re suitability for cuff deflation trials and decannulation in the intensive care unit	Nil
	Perform tracheostomy suctioning in the intensive care unit	Nil
	Prescribe botox for voice disorders.	
	Prescribe medications e.g. anti-fungals, reflux medications, dry mouth medications and analgesics	Legislation
	Refer directly for modified barium swallow and complete final diagnostic report	Legislation
	Skill-share with audiologists to: • provide aural rehabilitation following cochlear implant • perform screening and assessment in paediatrics	Nil
	Skill-share with dietitians to: • provide nutrition assessment and advice on supplements • prescribe NGT and PEG feeds and high energy supplementation	Legislation
	Skill-share with occupational therapists to manage difficulties with self-feeding and cognitive screening	Nil

Appendix C: Taskforce terms of reference

1. Background

The *Health Practitioners' (Queensland Health) Certified Agreement (No. 2) 2011, (HPEB2),* Clause 50[31], indicates that:

> *A ministerial taskforce, including union representation, will be established to identify ways to address the following issues:*
>
> *A. advanced scope of practice areas/ clinics in key occupational areas for health practitioners;*
>
> *B. enabling patients/clients to begin treatments with health practitioners that do not require medical specialist oversight;*
>
> *C. developing a framework to enable assistants to perform appropriate routine tasks to enable a greater proportion of health practitioners' time to be on the upper scope of practice end of the roles and duties within the classification level that they are employed, provided that such duties are in accordance with the relevant classification definitions and safe professional practice.*

On 23 October 2012, the Hon Lawrence Springborg MP, Minister for Health, approved establishment of the Ministerial Taskforce on health practitioner advanced scope of practice and workforce design. This title has been revised to the Ministerial Taskforce on health practitioner expanded scope of practice to allow a broader range of opportunities to be considered.

2. Objectives and deliverables

2.1 Objectives

The objectives of the Ministerial Taskforce are:

- to identify opportunities for health practitioners to work to full scope of practice (including advanced clinical practice) and extend scope in appropriate contexts
- to identify mechanisms to achieve effective delegation and therefore support better use of the health practitioner workforce
- to identify an integrated education, training and clinical governance strategy to support effective introduction and integration of new roles
- to identify the funding implications of implementing the recommendations.

2.2 Deliverables

The Ministerial Taskforce will culminate in a written report with recommendations focussing on each of the taskforce objectives.

More specifically, the deliverables of the Ministerial Taskforce will include identification of:

- evidence-based, patient-centred models regarding expanded scope health practitioner roles, that Hospital and Health Boards can consider for implementation
- a contextually responsive framework of principles and processes to support implementation of expanded scope health practitioner roles in Hospital and Health Services
- the funding implications of implementing expanded scope health practitioner roles in Queensland Health.

[31] Queensland Industrial Relations Commission. (2011). *Health Practitioners' (Queensland Health) Certified Agreement (No. 2) 2011 (HPEB2).*

3. Scope

3.1 Inclusions

3.1.1 Domains of practice

The Ministerial Taskforce will examine issues pertaining to:

- advanced clinical practice[32]
- extended scope of practice[33]
- full scope of practice[34]
- delegated practice.

3.1.2 Health practitioner professions

The *Health Practitioners' (Queensland Health) Certified Agreement (No. 2) 2011 (HPEB2)* includes more than 50 different disciplines. A number of principles have been used to inform the inclusion of the specific disciplines listed below:

- The introduction of expanded scope of clinical practice will contribute significantly to achieving clinical efficiencies that benefit individual clients as well as the broader health service system.
- Existing evidence exists to support the implementation of expanded scope of practice.
- The principles of expanded scope of practice that have been successfully introduced in other professions could potentially be applied and bring similar benefits.
  - audiologists
  - breast imaging radiographers
  - clinical measurement scientists and technicians
  - dietitians/nutritionists
  - exercise physiologists
  - leisure therapists
  - music therapists
  - neurophysiologists
  - nuclear medicine technologists
  - occupational therapists
  - orthoptists
  - orthotists, prosthetists and technicians
  - pharmacists and technicians
  - physicists, including radiation oncology medical physicists, nuclear medical physicists, radiology medical physicists, and health physicists
  - physiotherapists
  - podiatrists
  - psychologists including clinical and neuropsychologists
  - radiation therapists
  - radiographers/medical imaging technologists
  - rehabilitation engineers and technicians
  - social workers
  - sonographers
  - speech pathologists.

3.2 Exclusions

3.2.1 Domains of practice

The taskforce will not examine issues pertaining to:

- specialist health practitioner roles[35]
- specialised health practitioner roles[36].

Part (d) of Clause 50 of the *Health Practitioners' (Queensland Health) Certified Agreement (No. 2) 2011 (HPEB2)* notes that the taskforce will specifically exclude consideration of extending the use of radiation to roles assisting medical radiation professionals.

3.2.2 Health practitioner professions

A range of issues have influenced the decision for specific health practitioner professions, listed below, to not be directly involved in the taskforce. A full rationale is provided in the Ministerial Taskforce on health practitioner expanded scope of practice project plan. It is acknowledged that the principles, strategies and tools arising from the taskforce may benefit these workgroups.

- biomedical engineers and technicians
- cardiac perfusionists
- chemists and/or radio-chemists
- dental prosthetists
- dental technicians
- dental therapists
- environmental health officers
- epidemiologists
- forensic scientists and Technicians
- genetics counsellors

[32] Advanced Clinical Practice (ACP) involves high level clinical skills, knowledge and practice, closely integrated with clinical leadership skills, applied research and evidence based practice capacities, and competence in facilitating education and learning of others. ACP is relevant to: generalist and focussed contexts; profession-specific situations; and situations relating to specific client groups or geographic settings.

[33] Extended scope of practice describes a discrete knowledge and skill base additional to the recognised scope of practice of a profession. Any health practitioner, at any health practitioner level, might undertake tasks that constitute extended scope of practice for their profession.

[34] Working to full scope of practice involves having the opportunity to work to the full extent of a profession's recognised skill base and/or regulatory guidelines. Custom and historical practice in certain settings can result in this not being the case. For example, physiotherapy scope of practice includes referral of clients for certain diagnostic imaging procedures. However, some services exclude this function from a physiotherapist's role.

[35] *Specialist* as the title of a health profession is restricted by national law. Specialist titles must be approved by the Australian Health Ministers' Advisory Council. Professionals using the title 'specialist' must be registered by the Australian Health Professions Regulatory Agency (AHPRA). Podiatric surgeons are the only health practitioner professionals eligible under national law, and recognised by AHPRA, as being entitled to use the term 'specialist'.

[36] Specialised practice describes a focussed area of practice where professionals work with a discrete patient group in a defined clinical setting. Any level of health practitioner might provide focussed/specialised practice.

- health promotion officers
- medical illustrators
- medical laboratory scientists and technicians
- oral health therapists
- oral therapists
- social work associates
- welfare officers.

4. Governance

4.1 Ministerial Taskforce administration

The taskforce will be coordinated by the Allied Health Professions' Office of Queensland, under the direction of the Minister for Health.

4.2 Ministerial Taskforce on health practitioner expanded scope of practice

The Ministerial Taskforce on health practitioner expanded scope of practice will oversee the work of the taskforce until submission of the report to the Minister for Health on 27 September 2013.

Chair

The taskforce will be chaired by the Assistant Minister for Health, Dr Chris Davis, as delegated by the Hon Lawrence Springborg MP, Minister for Health.

Members

Membership of the taskforce will include the following external and internal stakeholders:

External representatives

- Health Consumers Queensland
  - Mr Mark Tucker-Evans, Chief Executive, Council of the Ageing Queensland
- Medical
  - Dr Alexandra Markwell, President, Australian Medical Association Queensland
- Universities
  - Professor Susan Nancarrow, School of Health and Human Services, Southern Cross University
- Health Workforce Australia (HWA)
  - Professor Sandra Capra AM, Board Member, HWA and Professor of Nutrition, University of Queensland
- Together Queensland
  - Mr Alex Scott, Secretary, or delegate
- United Voice Queensland
  - Mr Gary Bullock, Secretary, or delegate
- Queensland Nurses Union
  - Ms Beth Mohle, Secretary, or delegate

Queensland Health representatives

- Statewide clinical networks
  - Dr Elizabeth Whiting, Co-Chair, General Medicine Statewide Clinical Network and Medical Director, Internal Medicine Services, Metro North Hospital and Health Service
  - Dr Bruce Chater, Chair, Rural and Remote Clinical Network and Medical Superintendent, Theodore Hospital, Central Queensland Hospital and Health Service
- Queensland Clinical Senate
  - Dr David Rosengren, Chair, Clinical Senate and Senior Staff Specialist, Department of Emergency Medicine, Royal Brisbane and Women's Hospital, Metro North Hospital and Health Service
- Hospital and Health Services
  - Mr Ian Langdon, Chair, Gold Coast Hospital and Health Service
  - Ms Julia Squire, Chief Executive, Townsville Hospital and Health Service
- Nursing and Midwifery Office Queensland
  - Dr Frances Hughes, Chief Nursing and Midwifery Officer, or delegate
- Executive Directors of Allied Health
  - Ms Judith Catherwood, Executive Director Allied Health Professions, Royal Brisbane and Women's Hospital, Metro North Hospital and Health Service

  - Ms Danielle Hornsby, Executive Director Allied Health Services, Mackay Hospital and Health Service
- Health Service and Clinical Innovation Division
  - Dr Michael Cleary, Deputy Director General
- Human Resource Services Branch
  - Ms Lyn Rowland, Chief Human Resources Officer
- Health Systems Innovation Branch
  - Mr Michael Zanco, Executive Director, Clinical Access and Redesign Unit
- Allied Health Professions' Office of Queensland
  - Ms Julie Hulcombe, Chief Allied Health Officer
  - Ms Gretchen Young, A/Principal Workforce Officer

4.3 Taskforce meetings

The taskforce will meet on three occasions at key points relevant to the project stages outlined above. Details are provided in section 6, below.

5. Role of the taskforce

The taskforce will:

- provide advice on the strategy for achieving the Ministerial Taskforce objectives and deliverables
- oversee progress on and achievement of each of the objectives and deliverables of the Ministerial Taskforce
- ensure successful engagement of the Ministerial Taskforce with internal and external stakeholders
- ensure effective links are made between relevant workforce, education, training and clinical governance initiatives at the national and state level, including assessment of their impact on recommendations made
- oversee preparation of a report to the Minister for Health addressing each of the Ministerial Taskforce objectives and deliverables.

6. Timelines and meetings

The taskforce will oversee the Ministerial Taskforce from the inception meeting in March 2013 until the final report is delivered to the Minister for Health on 27 September 2013.

The taskforce will meet on three occasions, corresponding to key milestones in the project plan.

- Wednesday 13 March 2013 (3 hours)
  - Meeting focus: provide an overview of the Ministerial Taskforce concepts and intent; discuss and refine the Ministerial Taskforce deliverables and project plan
- Wednesday 10 April 2013 (3 hours)
  - Meeting focus: confirm Ministerial Taskforce deliverables; discuss and confirm consultation paper structure and content; discuss and confirm consultation strategy
- Thursday 1 August 2013 (3 hours)
  - Meeting focus: review feedback and draft report

Appendix D: Consultation paper

Clinicians need to work to their full scope of practice. We will challenge the 'myths' of what is possible and be open to new ways of working and models of care. We need to break down traditional barriers between professions, build clinician leadership and promote a culture of respect for each other's knowledge and skills.

Blueprint for better healthcare in Queensland

Background

The *Health Practitioners' (Queensland Health) Certified Agreement (No. 2) 2011, (HPEB2), Clause 50*[37], indicates that:

A ministerial taskforce, including union representation, will be established to identify ways to address the following issues:

- *advanced scope of practice areas/ clinics in key occupational areas for health practitioners;*
- *enabling patients/clients to begin treatments with health practitioners that do not require medical specialist oversight;*
- *developing a framework to enable assistants to perform appropriate routine tasks to enable a greater proportion of health practitioners' time to be on the upper scope of practice end of the roles and duties within the classification level that they are employed, provided that such duties are in accordance with the relevant classification definitions and safe professional practice.*

On 23 October 2012, the Hon Lawrence Springborg MP, Minister for Health, approved establishment of the Ministerial Taskforce on health practitioner expanded scope of practice (the Ministerial Taskforce).

In February 2013, the Queensland Government released the *Blueprint for better healthcare in Queensland* as the action plan to transform the Queensland healthcare system into a model for productivity, care and efficiency. Core to this transformation will be redesign of service delivery and the workforce that delivers care and cultural change to support the new system.

Outcomes of the Ministerial Taskforce

The outcomes of the taskforce will support the four principle themes stated in the *Blueprint for better healthcare in Queensland*[38]*:*

1. Health services focused on patients and people.
2. Empowering the community and our health workforce.
3. Providing Queenslanders with value in health services.
4. Investing, innovating and planning for the future.

Enabling health practitioners in Queensland Health to maximise their scope of practice has been identified by the taskforce as the key focus to deliver outcomes for patients, the community, the workforce and Queensland Health. This is consistent with the blueprint theme of *Providing Queenslanders with value in health services.*

Objectives of the taskforce

The objectives of the Ministerial Taskforce are:

- to identify opportunities for health practitioners to work to full scope of practice (including advanced clinical practice) and extend scope in appropriate contexts
- to identify mechanisms to achieve effective delegation and therefore support better use of the health practitioner workforce
- to identify an integrated education, training and clinical governance strategy to support effective introduction and integration of new roles
- to identify the funding implications of implementing the recommendations.

[37] Queensland Industrial Relations Commission. (2011). *Health Practitioners*' (Queensland Health) Certified Agreement (No. 2) 2011 (HPEB2)

[38] Queensland public health system (2013) '*Blueprint for better healthcare in Queensland*', Queensland Health

Scope

The scope of the taskforce is the Queensland public health system *health practitioner* workforce. The focus of the taskforce has been identified as the traditional allied health professional groups. Pathology, oral health, public health and technical workforces are excluded. See the Ministerial Taskforce Terms of Reference for more information on the background to the scope of the Ministerial Taskforce.

Deliverables

The Ministerial Taskforce will culminate in a written report with recommendations focussing on each of the taskforce objectives.

More specifically, the deliverables of the Ministerial Taskforce will include identification of:

- evidence-based, patient-centred models regarding expanded scope health practitioner roles, that Hospital and Health Boards can consider for implementation
- a contextually responsive framework of principles and processes to support implementation of expanded scope health practitioner roles in Hospital and Health Services
- the funding implications of implementing expanded scope health practitioner roles in Queensland Health.

Timeframes

The taskforce report will be submitted by 27 September 2013. Consultation will occur until 26 July 2013.

Question:
Are there additional principles that should underpin maximising the scope of practice of health practitioners?

Principles to be met

Models and mechanisms for maximising the scope of practice of health practitioners must be:

- safe
- evidence-based
- equitable
- timely
- cost effective
- sustainable
- ethical
- enabling
- collaborative
- compliant with legislation and regulation
- relevant to the demographic and clinical context
- responsive to the multidisciplinary context.

Roles and tasks to maximise scope of practice

Where the above principles are met, opportunities exist to maximise scope of practice for each and every health practitioner; from the time of graduation and at every stage of their career.

Full scope of practice

For many roles and tasks, maximising scope of practice involves enabling the health practitioner workforce to work to the full scope of practice of their specific profession (i.e. having the opportunity to work to the full extent of the profession's recognised skill base and/or regulatory guidelines). Culture and historical practice has meant that working to full scope is not always the case, particularly within the context of Queensland Health. Full scope of practice is relevant across the full continuum of a health practitioner's career, from entry to the workforce through to more advanced practice skills. Advanced clinical practice[39] involves high level clinical skills, knowledge and practice, closely integrated with clinical leadership skills, applied research and evidence-based practice capacities, and competence in facilitating the education and learning of others.

Implementing an appropriate skill mix to deliver services will optimise productivity and sustainability through appropriate utilisation of the health workforce and through developing all members of the multidisciplinary team.

Facilitating change towards full scope of practice is primarily dependent on redefining organisational processes, reviewing team roles and functions, further education and training where necessary, and supporting changes in team culture.

Possible roles and tasks for full scope includes, but is not limited to:

- first contact in the care pathway (e.g. audiologists autonomously receiving and triaging referrals and assessing, diagnosing, treating and discharging patients from their care, within the scope of practice of their profession for patient's referred to ear, nose and throat (ENT), and referring to others as appropriate in the multidisciplinary team)
- patient self-referral with appropriate triage mechanisms in place
- making direct referrals to medical specialists within Queensland Health (e.g. podiatrist to an orthopaedic surgeon, psychologist to a paediatrician)
- requesting investigations (e.g. plain X-ray by podiatrists)
- prescribing equipment and consumables (e.g. home enteral nutrition, medical grade footwear)
- documenting findings by relevant diagnostic health practitioner on investigations they have performed (e.g. cardiac scientist providing provisional report on echocardiogram, radiographer providing written comment on plain X-rays)
- admission decisions (e.g. into subacute care, short stay)
- criteria-led discharge
- other location-specific roles and tasks.

Note: each item in the above list may apply differently to each health practitioner profession.

[39] Queensland Department of Health. (2013). *Advanced Clinical Practice Framework.*

Extended scope of practice

A range of evidence-based roles and tasks that maximise health practitioner scope of practice involve extending the scope of practice of specific professions. Extending scope of practice describes a discrete knowledge and skill base additional to the recognised scope of a profession and/or regulatory context of a particular jurisdiction. These would be tasks usually undertaken by other professions (e.g. doctors, nurses or allied health professionals). Extending scope should be done where it would allow more efficient management and care of the patient and decrease the number of visits or transactions in the patient journey.

Requirements for implementing safe and effective extended scope of practice vary depending on the task, the profession, and the context in question. Examples of possible requirements include formal and informal education and training, credentialing, clinical monitoring and audit systems, changes to legislation and regulation, and changes to funding models. Over time, as extended scope tasks develop into standard practice, evolution of clinical governance processes is also appropriate (e.g. prescribing by optometrists has evolved to form part of their entry level scope of practice).

These roles and tasks include, but are not limited to:

- prescribing (e.g. prescribing by physiotherapists in the emergency department to better manage musculoskeletal presentations)
- requesting investigations (e.g. MRI, plain X-ray, pathology)
- conducting procedures (e.g. simple suturing, percutaneous endoscopic gastrostomy tube care, fibreoptic endoscopic evaluation of swallowing, suctioning by a speech pathologist)
- producing the final report on an investigation (e.g. plain X-ray, ultrasound)
- skill-sharing with other allied health professionals (e.g. either dietitians or speech pathologists assess both nutrition and swallowing ability in the emergency department).

Delegation

Facilitating optimal utilisation of the health practitioner workforce will require effective delegation from health practitioners to the support workforce (i.e. allied health assistants and administrative officers). It has been shown that allied health professionals under-use the allied health assistant workforce to support delivery of services. The reasons for this include a lack of clarity about what tasks could be safely delegated and uncertainty about how to delegate effectively. Strategies to maximise the scope of health practitioners need to consider education and training and other support tools for both the health practitioner and assistant workforces so to fully realise the contribution of the support workforce.

Question:
Are there other roles and tasks that reflect full scope of practice that should be considered for health practitioners?

Question:
Are there other roles and tasks that reflect extended scope of practice that should be considered for health practitioners?

Question:
Are there roles and tasks that could be delegated that would support full scope of practice and/or extended scope of practice described above?

Priority areas

Maximising health practitioner scope of practice will support the achievement of the priorities and performance measures identified in the *Blueprint for better healthcare in Queensland*.

Specific opportunities exist to contribute to the following priorities. Selected examples of initiatives relevant to contributing to these priorities are provided against each priority area. The examples included are illustrative only and a wide range of other initiatives and opportunities exist locally, nationally and internationally.

Reducing waiting times in the emergency department and achievement of the National Emergency Access Target

- ACT Health Directorate introduced an extended scope physiotherapist (ESP) in-training to Canberra Hospital's emergency department, under the supervision and mentorship of an emergency department medical specialist. Patients attending the emergency department with musculoskeletal complaints are assessed and treated by the primary contact ESP-in-training. The role includes tasks supported by the literature (e.g. limited prescribing, independent management of simple fractures and independent interpretation of X-rays). Over four months, 237 patients consulted the emergency department ESP-in-training, falling mainly into emergency department triage categories 4 and 5. The average length of wait was 46 minutes, with 81.9 per cent seen within the national triage target times. The length of stay for 94.5 per cent of patients was within the NEAT of four hours. Further investigation will occur into the benefit of training to undertake local anaesthetic injections[40 41].

[40] Grimmer-Somers K, Hendry K, Morris J, and Murphy K (2012), Extended Scope Physiotherapy (ESP)—the new horizon for musculoskeletal presentations in the Emergency Department?

[41] Morris, J (2011), Extending the scope of physiotherapists

Reducing waiting times for elective surgery and achievement of the National Elective Surgery Target

- Orthopaedic podiatry triage clinics were established at Logan, Ipswich and Townsville hospitals to respond to long wait times to see an orthopaedic surgeon for foot and ankle problems. A podiatrist screened all non-urgent (category 3) patients to determine their suitability for conservative treatment. If these treatments were beneficial, patients were discharged from the surgical wait list. Discharge rates with conservative podiatry treatment alone ranged from 21 per cent to 46 per cent across the sites. Reductions in the wait list ranged from 24 per cent to 50 per cent. At Logan Hospital, rates of conversion to surgery following specialist assessment increased from 29–35 per cent to 41–51 per cent[42].

Reducing waiting times for specialist outpatient clinics

- The Royal National Throat, Nose and Ear Hospital, at Royal Free Hampstead NHS Trust in the UK, established an audiologist-led triage assessment clinic for new outpatient ENT referrals. Seventy-five per cent of ENT otological referrals did not meet 'red flag criteria' and could potentially be managed by the diagnostic audiology department in a direct access service, by staff with appropriate skills and the ability to request MRI scans. In 95 per cent of cases, audiologists and ENT were in agreement on the referral pathway to audiovestibular medicine or ENT. The new model released 45 outpatient appointments with ENT specialists per week[43].

Improving patient flow

- Peninsula Health in Victoria introduced a Pharmacist-initiated E-script Transcription Service (PETS) for experienced pharmacists to generate electronic discharge prescriptions. Medical officers refer patients to the pharmacist 24 hours before discharge. The pharmacist reconciles pre-admission and current medications and consults with the medical officer where needed. Prescriptions are prepared electronically and printed for confirmation and signing by the medical officer. The pharmacist electronically details medication changes and the reasons for changes. The complete medication list is populated into the electronic discharge summary which is sent to the general practitioner once finalised by the medical officer. The changes have resulted in earlier patient discharge, reduced waiting times, improved education of junior medical officers, less prescribing errors and reduced clerical workload for medical officers[44].

Investing in effective sub-acute care

- The Bayside rehabilitation model of care project will focus on an advanced health practitioner providing clinical leadership and guiding multidisciplinary assessment, treatment planning and coordination of care of patients admitted to the rehabilitation beds at Redland and Wynnum hospitals. As well as working at full scope within their profession, it is envisaged the project will explore extended scope tasks. The allied health practitioner will be supervised by the visiting geriatrician. Specific duties are yet to be defined, however it is envisaged they will include playing a key role in identifying, assessing, coordinating and directing clinical management of patients when deemed medically stable. This would include authority to discharge from inpatient care and to ensure appropriate outpatient and community follow-up coordination and referral[45].

Improving health services for regional, rural and remote communities

- The Sir Charles Gairdner Hospital in Perth established a Telehealth initial assessment clinic for regional patients referred to the neurosurgery clinic with spinal pain. Using Telehealth, an advanced physiotherapist guides a regional physiotherapist to perform a physical examination in real time. The initial assessment enables determination of the need for imaging and specialist assessment. Imaging can then be scheduled for the same visit as the specialist appointment, halving both the number of trips to the city and the number of specialist appointments[46].

Improving health outcomes for Aboriginal and Torres Strait Islander people

- The Deadly Ears project (Children's Health Queensland Hospital and Health Service) provides the opportunity for allied health professionals (and other health and community workers) to make direct referrals to ENT specialists in Deadly Ears ENT outreach clinics. Removing the need for children to make a return visit from allied health to a general practitioner to access specialist ENT services removes a number of barriers to service access for this population of children.

Question
Are there other priority areas where maximising health practitioner scope of practice will support achievement of priorities and performance measures?

Question
Please provide details of other existing or possible models involving health practitioner full scope or extended scope of practice?

[42] Queensland Health (2011), Innovations in models of care for the Health Practitioner workforce

[43] NHS Improvement (2010), Audiology Improvement Programme—Pushing the boundaries: Evidence to support the delivery of good practice in audiology

[44] Inventory of Innovation (2013), Pharmacist initiated e-script transcription project,

[45] Queensland Health (2013), Project plan: Bayside rehabilitation model of care project

[46] Inventory of Innovation (2013), Assessment by advanced practice physiotherapists, using telehealth, of patients with spinal pain referred to Department of Neurosurgery

Potential barriers and implementation issues

The following issues have been identified as potential barriers/ implementation issues:

Organisational and cultural

- inadequate focus on client-centred practice
- a history of rigid and/or misconceived professional boundaries
- inadequate leadership from a multidisciplinary perspective
- inadequate application of evidence from other jurisdictions and contexts
- perceptions of legal impediments arising from delegated practice or changes in scopes of practice
- cultures which do not permit full scope and innovation to occur (within and external to the professions)
- perceptions of need for more resources to change
- penalties through redirection of resources when efficiencies are achieved
- lack of understanding of the concept of full scope of practice.

Skills

- deskilling due to not working to full scope
- lack of skills in delegation.

Funding models and regulation

- funding models
- legislation, regulation and accreditation standards.

Question:
Are there any other barriers?

Question:
What are the strategies to overcome these barriers?

Implementation issues

A key outcome of the taskforce is to identify processes that will effectively support maximising the scope of health practitioner roles in Hospital and Health Services.

Question:
What processes and tools would support a Hospital and Health Service to implement models that maximise health practitioner scope of practice?

Appendix E: Consultation strategy summary

Awareness raising

An extensive process of awareness raising was conducted through:

- 19 awareness raising sessions with in-scope allied health disciplines
- two statewide video-teleconferences within Queensland Health
- one meeting with delegates and officers from Together Queensland
- one meeting with delegates and officers from United Voice Queensland
- one meeting with officers from the Queensland Nurses Union
- one breakfast forum with allied health professional associations
- inclusion of information in the monthly Allied Health Professions' Office of Queensland e-news
- inclusion of information in 'What's new' on the Queensland Health intranet
- regular emails with Queensland Health stakeholders to encourage contribution to the consultation process.

Consultation paper

A total of 129 letters of invitation to contribute to the taskforce were distributed to the internal and external stakeholders of the taskforce identified in Table 1. To facilitate access to the consultation paper and other relevant information, the invitation included links to the publicly available taskforce page on the Queensland Health website www.health.qld.gov.au/ahwac/html/hpmintaskforce.asp

Stakeholders were invited to provide feedback through an online survey or written submission.

Written submissions to the taskforce included:

- 14 allied health professional associations
- one specialist medical college.

Table 1

Queensland Health internal stakeholders	External stakeholders
Office of the Director-General	Health Consumers Queensland
Queensland Clinical Senate	Allied health professional associations and committees, Services for Australian Rural and Remote Allied Health (SARRAH), Indigenous Allied Health Australia (IAHA), Allied Health Professions Australia (AHPA), National Allied Health Advisory Committee (NAHAC)
Human Resources Branch	Specialist medical colleges
Clinical Access and Redesign Unit	Queensland universities
Statewide clinical networks	Health Workforce Australia (HWA)
Nursing and Midwifery Office Queensland	Australian Health Practitioner Regulation Agency
Hospital and Health Services	Australian College of Nursing
Directors of Nursing Midwifery Advisory Committee	Australian Medical Association Queensland
Executive directors of allied health	Medicare Locals
Allied health discipline-specific groups	CheckUP
Allied health professionals	Health Quality and Complaints Commission
Mental Health and Alcohol and Other Drugs Directorate	Together Queensland
	United Voice Queensland
	Queensland Nurses Union

A total of 442 survey responses were received.

Respondents by organisational type

Respondent working as/representing	Percentage
Queensland Health (n = 365)	84%
Professional associations	10%
Private allied health professionals	6%
Education providers	5%
Other state/Australian Government departments	3%
Non-government organisations	3%

A proportion of respondents represented more than one context.

Table 1 continued: Respondents by profession

Profession	Number of respondents	Percentage
Allied health	377	94%
Medical	13	3%
Nursing	6	1%
Administration/management	4	1%
Allied health assistants	4	1%

Respondents by geographic area

Geographic area	Percentage
South East Queensland (n = 255)	61%
Rural, regional or remote Queensland	22%
Statewide role	7%
Nationwide role	3%
Mixed areas	7%

- two Queensland universities.

Written submissions to the taskforce included:

- 14 allied health professional associations
- one specialist medical college
- two Queensland universities.

Consultation workshops

A series of consultation workshops were held with internal and external stakeholders to gather additional perspectives on the concepts and issues presented in the consultation paper.

Allied health clinicians

One workshop was held in each of four locations—Bundaberg, Brisbane, Toowoomba and Cairns.

Each workshop group was formed by sending an expression of interest to allied health professionals in each Hospital and Health Service specifically seeking participation of professionals working in clinical roles. A total of 207 expressions of interest were received. Final participant lists were determined on the basis of gaining representation across allied health professions, levels of expertise and experience, clinical context, and geographic location.

In total, 105 allied health professionals participated in the consultations—43 in Brisbane, 26 in Toowoomba, 14 in Bundaberg, and 22 in Cairns. Across the groups, 27 participants were classified at HP3, 49 were HP4, 27 were HP5 and 2 were HP6. Representation across the different professions and Hospital and Health Services are presented in Tables 2 and 3.

Directors of allied health

A single workshop held with directors of allied health from across Queensland included 14 participants.

Allied health discipline directors

A single workshop of 23 participants was held with representatives from allied health discipline directors from both metropolitan and regional areas across Queensland.

Table 2: Representation from each profession

Profession	Number of participants	Profession	Number of participants
Audiology	2	Orthoptics	1
Clinical measurements	3	Occupational therapy	19
Leisure therapist	1	Pharmacy	5
Medical radiation professions	11	Physiotherapy	15
Exercise physiologists	1	Podiatry	4
Nutrition and dietetics	8	Psychology	11
Nuclear medicine technology	1	Social work	12
Orthotics and prosthetics	1	Speech pathology	10

Table 3: Representation from each Hospital and Health Service

Hospital and Health Service	Number of participants	Hospital and Health Service	Number of participants
Cairns	17	Metro South	9
Central Queensland	4	Mount Isa	2
Children's Health Queensland	6	South West	2
Darling Downs	24	Sunshine Coast	2
Gold Coast	7	Townsville	4
Mackay	2	West Moreton	4
Metro North	11	Wide Bay	10

Allied Health Education Standing Committee

One focus group was held with five representatives of the Allied Health Education Standing Committee, representing James Cook University, Southern Cross University, Griffith University and Queensland University of Technology.

Consumers

One consumer workshop was held with 22 consumers. Health Consumers Queensland administered the distribution of expressions of interest and determination of the final group of participants.

Consultation interviews and discussions

Further consultation occurred through a series of individual interviews and discussions with:

- 18 members of the taskforce
- four key university stakeholders
- Department of Health business units, including:
  - Clinical Access and Redesign Unit
  - Queensland Health Renewal Taskforce
  - Contestability Branch
  - Mental Health Alcohol and Other Drugs Directorate
  - Mental Health Allied Health Networks
  - Healthcare Purchasing, Funding and Performance Management Branch
  - Revenue Strategy and Support Unit
- the Principal Allied Health Advisor—ACT Health.

QH36/0514