Deloitte Access Economics

Economic analysis of the implications of physiotherapists prescribing medication

Australian Physiotherapy Association

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Deloitte.

Contents

Charts

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Glossary

APA	Australian Physiotherapy Association
DAE	Deloitte Access Economics
ED	Emergency Department
GP	General Practitioner
HWA	Health Workforce Australia
MBS	Medical Benefits Schedule
MRI/CT	Magnetic Resonance Imaging/ Computed Tomography
MW	Midwife
NHCDC	National Hospital Cost Data Collection
NIMC	National Inpatient Medication Chart
NP	Nurse practitioner
PBS	Pharmaceutical Benefits Scheme
RPBS	Repatriation Pharmaceutical Benefits Scheme
UK	United Kingdom

Executive Summary

The Australian Physiotherapy Association (APA) commissioned Deloitte Access Economics to conduct economic analysis of the implications for government expenditure (including Australian, State and Territory Governments) of giving physiotherapists the legal entitlement to prescribe medications. The analysis considers four high-level practice settings: public hospital Emergency Department (ED); public hospital inpatient departments; community health care (including public outpatient departments); and private practice.

The rationale for extended prescribing rights

Traditionally, prescription medication has been the domain of medical practitioners. However, recent years have seen prescribing rights for specific formularies extended to other health care professionals including optometrists, nurse practitioners and podiatrists. These changes enable the skills and expertise of these professionals to be better utilised, reduce duplication of effort, improve access to medication (particularly in remote and other areas where access to medical care may be limited) and contribute to the longer term sustainability of healthcare expenditure.

Enabling the physiotherapist to prescribe directly presents an opportunity to improve efficiency – i.e. reduce the time and cost that goes into providing care to the patient. Furthermore, there is a potential to *improve* quality of care, where this may be derived from better care continuity – that is, because the patient's care is delivered by a single health care professional, who has a holistic understanding of the patient's needs and treatment path.[1]

Physiotherapist prescribing rights

Registered physiotherapists working across all Australian settings are currently restricted from issuing prescriptions to their patients by state and territory legislation in all Australian jurisdictions[2]. Australian Government legislation also prevents physiotherapists from issuing prescriptions for medications that are subsidised under the Pharmaceutical Benefits Scheme (PBS).

Due to these restrictions, if a physiotherapist considers that a patient requires medication, the patient must be referred to a medical practitioner or non-medical prescriber.

In some circumstances, it may not be possible to continue physiotherapy treatment until an effective medication regime has been established. This may create a 'prescription, treatment loop', where the patient is moved between the physiotherapist, prescriber and, potentially back to the physiotherapist for further treatment. For example, a patient seen by a private practice physiotherapist for a knee injury and requires anti-inflammatory medications would be referred to a general practitioner (GP) for a prescription, before returning to the physiotherapist to complete their treatment. In some cases, the loop may be repeated in order to refine the appropriate medication or dosage. This loop may be particularly pronounced in rural and remote regions, where people may experience delays in access to

[1] Australian Physiotherapy Association (2013) 'APA welcomes prescribing path', accessed online: http://www.physiotherapy.asn.au/APAWCM/The_APA/news/Nov2013/PrescribingPathway.aspx

[2] Some exceptions have been made for hospital-based trials, including those led by Health Workforce Australia (HWA) for the Health Professionals Prescribing Pathway (HPPP) Project (HWA 2013, Health Professionals Prescribing Pathway (HPPP) Project – Final Report, http://www.hwa.gov.au/sites/uploads/HPPP-Final-Report-November-2013.pdf).

GP or physiotherapist treatment due to high demand, or seeking treatment may involve significant personal travel time and costs.

Key findings

Total potential savings of approximately $9.22 million in 2015 were estimated to arise from physiotherapy prescribing. This includes savings of approximately $6.61 million to governments ($1.66 million to the Australian Government MBS and the remaining $4.95 million split between the Australian, state and territory governments through hospital efficiency gains). Potential private savings are estimated to be $2.61 million in 2015, including more than $250,000 in avoided GP co-payments and a proportion of the $2.35 million in avoided physiotherapy treatment (for which private health insurance and other schemes, such as workers' compensation, may contribute a significant portion). These findings are summarised in Table i.

Public hospital savings reflect estimated efficiency gains[3] valued at approximately $3.2 million in 2015. This is based on:

- *In ED*, 6,280 hours of avoided time spent by physiotherapists, doctors and nurse practitioners to arrange prescriptions
- *In inpatient departments*, 41,812 hours of avoided time spent by physiotherapists, doctors and nurse practitioners to arrange prescriptions.

Total savings to the MBS of approximately $1.66 million in 2015 are based on more than 41,000 avoided GP visits due to avoided referrals for prescriptions from private practice, outpatient departments and community health care. A further 5,100 ED presentations were estimated to be avoided, representing total savings of $1.71 million in 2015.

The key data source for all estimates of potential time savings and the proportions of patients who require a prescription is a survey of APA members, which received 1,548 responses from physiotherapists across Australia, working across a range of healthcare settings.

Key qualitative findings from the APA member survey include:

- There is strong support among physiotherapists for the introduction of prescribing for physiotherapists, noting that physiotherapists are often the most appropriate health professional available – given their specialised knowledge and relationship with the patient – to provide assessment, diagnosis and treatment advice.
    - Support for the proposal is typically contingent on the provision of appropriate pharmacological training for physiotherapists. This is aligned with the proposition of the APA, which proposes that the policy should be introduced for physiotherapists who have undertaken a predefined set of pharmacology subjects and further, specialised clinical training in prescribing.
- Physiotherapists noted that the current prescribing restrictions have the propensity to contribute to delays in patient treatment as well as compromise patient outcomes.

[3] Estimates for savings in public hospitals relate to efficiency gains in an ED or inpatient setting – i.e. the avoided time spent by a prescriber to attend to a patient, who might otherwise be issued a prescription by the physiotherapist providing primary treatment. This saving is estimated as the value of the prescriber's time which could have been spent with another patient (noting that public hospital clinicians are typically very busy and even if their workload was lightened somewhat, this would not generate "cashable" savings for the hospital, or government). Adding to this is the cost of physiotherapist time spent during handover or waiting for the prescriber to attend the patient. Savings are reported as avoided opportunity cost.

- Physiotherapists operating in hospital settings noted that there can be delays and duplication in the hand-over of patient history for the purpose of obtaining a prescription from another medical professional.
- Physiotherapists operating in private settings noted that the discontinuity between the provider of treatment and the prescriber could at times compromise patient outcomes.
- Physiotherapists operating in private settings further noted that delays in patient treatment associated with moving between prescribers and physiotherapists may at times compromise patient outcomes.
- Reports of patient outcomes and delays in treatment were particularly pronounced among physiotherapists operating in a rural/remote location.

Table i: Summary of potential savings to government and patients (private costs) through extended prescribing rights for physiotherapists in Australia, 2015 ($)

Practice setting	Description of potential saving	Potential savings to government*)	Potential private savings (to patients and PHI)†	Total potential savings
Public hospital EDs	Avoided time spent by physiotherapists, doctors and nurse practitioners to handover and re-assess patients	422,588	-	422,588
Public hospital inpatient departments		2,823,506	-	2,823,506
Public outpatient departments and community health care	Avoided GP visits and ED attendances# by patients who are referred solely for a prescription	396,705	29,875	426,580
Private practice		2,972,534	223,877	3,196,411
	Additional physiotherapy consultations in private practice§	-	2,354,917	2,354,917
Total savings		**6,615,333**	**2,608,669**	**9,224,002**

Notes: *Public hospital savings, which would accrue to State, Territory and Australian Governments, are considered efficiency gains and may not be directly monetisable due to demand pressures on public hospitals. No potential impacts on states' and territories' performance in relation to the NEAT were estimated. Community health care and private practice savings would accrue to the Australian Government (through avoided payment of Medicare benefits to GPs) patients, where co-payments are charged by GPs, and state and territory governments, where ED visits are avoided. † Non-financial costs that may be avoided by patients have not been estimated – these include additional time in discomfort, both in the hospital setting and in visiting a GP. Patient time and travel costs are not included. #Avoided private practice costs include an estimate that 10% of patients would go to ED rather than a GP – this is a conservative estimate and may be particularly important in a rural setting. §Additional physiotherapy consultations may be required where a patient enters a 'treatment loop' as a result of current prescribing arrangements – these are valued at $78 per session (Millward Brown 2014). Private Health Insurance (PHI) which would incur some of these costs.

Source: APA member survey; NHCDC 2015, *National Hospital Cost Data Collection Australian Public Hospitals Cost Report 2011-2012, Round 16,* http://www.ihpa.gov.au/internet/ihpa/publishing.nsf/Content/nhcdc-cost-report-2011-2012-round16-html; Medicare Australia 2015, *Annual Medicare Statistics*, http://www.health.gov.au/internet/main/publishing.nsf/Content/Annual-Medicare-Statistics.; Millward Brown 2014, *2014 Assessment of Market Rates for Physiotherapy Services*.

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1 Background

1.1 Physiotherapy prescribing

Physiotherapists provide assessment and treatment for people with physical problems caused by injury, illness, disease and ageing. Physiotherapists use treatments including mobilisation and manipulation of joints, massage, therapeutic exercise, electrotherapy and hydrotherapy to reduce pain and restore function. They work in settings including hospitals, community health centres, GP clinics, centres for disabled people, mental health services, rehabilitation centres, sports clinics and fitness centres, government departments and universities.

In 2013 there were 25,545 registered physiotherapists, 82% of whom were employed in the field[4]. The vast majority of physiotherapists (91%) are employed in a clinical role, 67% of employed physiotherapists are female, and 35% of physiotherapists are employed on a part-time basis. The industry has grown strongly over the past five years, and this is projected to continue to 2018 as demand for health services continues to increase. Table 1.1 provides a summary of high level growth measures for the industry in 2013.

Table 1.1: Physiotherapy services market characteristics 2013

Measures	Outputs
Revenue	$1.5bn (up from $1.2bn in 2009/10)
Profit	$293.7m (up from $224.3m in 2009/10)
% of national health expenditure	1.0% p.a.
Forecast annual growth rate 2013/18	4.8% p.a.
Businesses	4,245 (up from 3,927 in June 2010)

Source: IBISWorld 2012, *Physiotherapy Services in Australia*; Australian Bureau of Statistics 2011, *Health Care Services 2009-10*, cat. no. 8570.0.

Physiotherapists must be registered with the Physiotherapy Board of Australia in order to practice as a physiotherapist, which requires significant clinical training, including supervised practice in a clinical setting.[5]

At present physiotherapists are restricted in Australia from issuing prescriptions to their patients in all states and territories and may not prescribe medications that will be subsidised by the PBS.[6] Further to this, physiotherapists are unable to inject medication, perform minor surgical procedures, refer for most diagnostic imaging that will be fully covered by the Medicare Benefits Schedule (MBS), order pathology tests, or provide referrals to specialists that will be eligible for MBS rebates.

[4] AIHW National Health Workforce Data Set 2013.

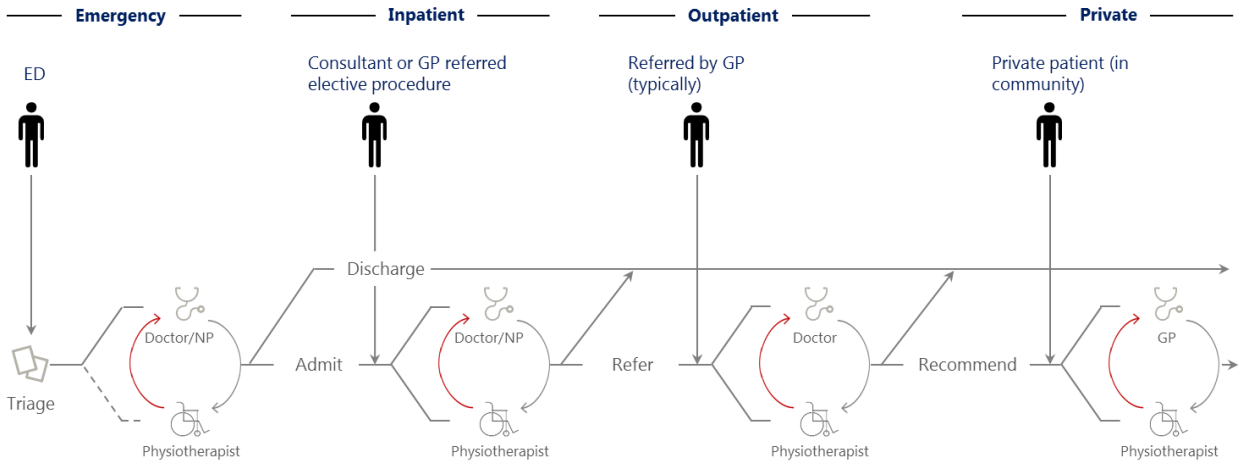
[5] Study required to become a physiotherapist can either be a four-year full time equivalent program at Bachelor or Honours level, or a two-year FTE program at graduate entry Masters Level. Only graduates of specific Bachelor degree programs (such as Health Sciences) may be eligible to undertake entry-level masters or doctoral programs of physiotherapy studies leading to eligibility for general registration.

[6] Note that there are exceptions to these restrictions, for example, see following link for detail on a trial currently underway in Queensland http://www.health.qld.gov.au/ahwac/docs/min-taskforce/prescribing-fwork.pdf

As Figure 1.1 illustrates, there may be a 'prescription, treatment loop', where the patient is moved between the physiotherapist for treatment and recommendations, to a prescriber and, potentially back to the physiotherapist for further treatment. For example, consider a patient who is seen by a private practice physiotherapist for a shoulder injury. If the physiotherapist determines a need for anti-inflammatory medications, the patient will be referred to a GP for a prescription, before returning to the physiotherapist to complete their treatment. In some cases, the loop may be repeated in order to refine the appropriate medication or dosage.

In ED settings, physiotherapists contribute to reducing the time taken to discharge low acuity patients – a role that could be enhanced with the ability to prescribe. In 2014, total PBS prescription volumes increased by 6.3% to a total of 209.8 million, compared to 197.3 million for the previous year. This could have important flow-on benefits for public hospitals' reported patient wait times, and states and territories' abilities to meet the National Emergency Access Target (NEAT), which requires that 90% of patients who present to EDs are seen within four hours. An evaluation of eight Health Workforce Australia *Expanded Scopes of Practice* physiotherapy projects (including limited prescribing rights) in eleven Australian EDs found that these had contributed to an improvement in NEAT by providing more flexible treatment options for triage category three, four and five patients.[7]

Figure 1.1 Patient pathways – the prescribing and treatment loop



Enabling the physiotherapist to prescribe directly presents an opportunity to improve efficiency – i.e. reduce the time and cost that goes into providing care to the patient. Furthermore, there is a potential to *improve* quality of care, where this may be derived from better care continuity – that is, because the patient's care is delivered by a single health care professional, who has a holistic understanding of the patient's needs and treatment path.[8]

[7] Centre for Health Service Development (2014) 'HWA Expanded Scopes of Practice Program Evaluation: Physiotherapists in the Emergency Department Sub-Project', accessed online: http://www.hwa.gov.au/sites/default/files/ESOP_Physios_in_ED_Final_Report.pdf

[8] Australian Physiotherapy Association (2013) 'APA welcomes prescribing path', accessed online: http://www.physiotherapy.asn.au/APAWCM/The_APA/news/Nov2013/PrescribingPathway.aspx

1.2 Context

Medicines are, arguably, one of the most significant interventions of modern healthcare. Access to many medicines is confined to that which is prescribed by professionals – the act of selecting appropriate medication for a patient and recording this decision (writing a prescription).

Legislation in Australia regarding drugs, poisons and other controlled substances is made individually by the State and Territory Governments. The various state and territory drugs and poisons legislation, as well as professional registration legislation, restricts the scope of practice and ability to prescribe medication for particular professions or groups within professions.[9] Access to medicines subsidised under the Australian Government Pharmaceutical Benefits Scheme (PBS) is subject to a prescription provided by a health care professional with a valid prescriber number, regulated nationally by the Department of Human Services.

Traditionally, prescription medication has been the domain of medical practitioners. Medical practitioners are able to prescribe medicines upon registration with the Medical Board of Australia. However, recent years have seen prescribing abilities extended to other health care professionals including optometrists, nurse practitioners and podiatrists. The ability to prescribe for these "non-medical prescribers" is determined by endorsement from national professional boards and is subject to individual state and territory legislation. These endorsements define the additional requirements that must be met to gain the ability to prescribe. Midwives, podiatrists and optometrists currently have the ability to prescribe defined by their national boards.[10]

Still, the majority of medication prescription in Australia continues to be performed by medical practitioners, largely due to historical roles and access to the PBS for patient medication subsidies. A review of Health Professionals Prescribing Pathways conducted a survey of 1,033 health care consumers in Australia to understand attitudes towards prescribing practices. A low proportion of surveyed consumers (30%) were aware that health professionals other than doctors could prescribe medicine. A high percentage of surveyed consumers (81%), however, were supportive of health professionals other than doctors prescribing, provided that appropriate safe guards were put in place. These safe guards include assurances of practitioner competence and communication between health professionals – particularly with general practitioners (GPs) – to ensure continuity of care.[11]

1.3 The case for reform

Australians are generally considered to have high standards of health and well-being by international standards. Australians typically enjoy high levels of access to medications – supported by the longstanding Australian Government agenda that Australians are assured timely access to quality medicines. This, however, may be compromised where there are barriers to accessing primary care, such as GPs, across the community. A 2012 patient survey found that one in four respondents (27%)

[9] National Health Workforce (2010)," Non-Medical Prescribing" accessed online: http://www.ahwo.gov.au/documents/NHWT/Non%20Medical%20Prescribing%20Final%20Report.pdf

[10] Morris, S, Coombes, I (2011) 'The right to prescribe', *Australian Prescriber,* 34 accessed online: http://www.australianprescriber.com/magazine/34/5/126/7

[11] Health Workforce Australia (2013) "Health Professionals Prescribing Pathway< Final Report. Accessed online: http://www.hwa.gov.au/sites/default/files/HWA%20HPPP%20final%20report_LR.pdf

reported that they felt they had to wait too long for a GP appointment. Over a third of survey respondents (38%) delayed their visit or didn't see a GP because of cost or another access barrier.[12]

Access barriers may be particularly pronounced in regional and remote areas. There are barely half the GP services per person in very remote areas as there are in major cities. A 2013 Grattan Institute Report found that access barriers may be exacerbated by the costs of accessing care, as areas that have fewer GP services per person are associated with lower rates of bulk-billing. On average, the Grattan Institute found that the people in the worst-served areas pay out-of-pocket costs more than twice as often as people in the best-served areas.[13]

Access to GPs is expected to worsen as demographic and disease trends emerge, such as increasing prevalence of chronic disease, the ageing population, and increasing propensity for older Australians to move out of major city centres. In the absence of policy change, these demand factors may create issues with timely access to prescriptions and medications in the community.

A related argument can be mounted for hospital-based care. Hospitals face increasing budget pressures to manage demand as new technologies are introduced and in response to swiftly growing demand as the population ages. This highlights the importance of driving improvements in efficiency, such as through workforce reforms.[14] Greater flexibility in the prescribing workforce would allow hospitals and health services to reallocate tasks and redesign roles to improve efficiency, without compromising the quality of service delivery. Among these tasks that may be reallocated is the provision of routine or specialised prescriptions, to other, appropriately trained, providers of healthcare.

Efficiency gains, through reducing treatment time and cost, and quality of care improvement, by delivering care through a single health care professional, may be particular relevant in a compensable injury setting. WorkCover WA found that on average between 2009/10 and 2013/14, individuals received 25 physiotherapy sessions per claim. In WA, standard physiotherapist consultations cost WorkCover $64.45. Given the potential efficiency and quality benefits associated with physiotherapists being able to prescribe medicines, it is likely that compensable costs associated with general practice and physiotherapy consultations will decrease.

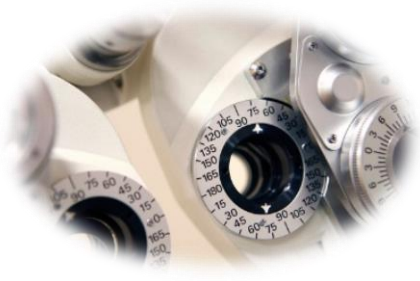
Enabling the physiotherapist to prescribe directly presents an opportunity to improve efficiency – i.e. reduce the time and cost that goes into providing care to the patient. Further, there is a potential to *improve* quality of care, where this may be derived from better care continuity – that is, because the patient's care is delivered by a single health care professional, who has a holistic understanding of the patient's needs and treatment path.[15]

1.4 Examples of extended prescribing

Today, non-medical prescribing in Australia is undertaken by a range of health professionals including dentists, midwives, nurse practitioners, optometrists, paramedics and podiatrists. The brief case studies below provide details of some examples of effective prescribing available in Australia.

[12] ABS (2012) *Patient Experiences in Australia, Summary of Findings 2011-12,* catalogue number 4839.0
[13] Duckett, S, Breadon, P and Ginnivan, L (2013) 'Access all areas: new solutions for GP shortages in rural Australia', Grattan Institute, Melbourne, accessed online: http://grattan.edu.au/wp-content/uploads/2014/04/196-Access-All-Areas.pdf
[14] Duckett, S., Breadon, P and Farmer, J(2014), ' Unlocking skills in hospitals: better jobs, more care', Grattan Institute, Melbourne. Accessed online: http://grattan.edu.au/wp-content/uploads/2014/05/810-unlocking-skills-in-hospitals.pdf.
[15] Australian Physiotherapy Association (2013) 'APA welcomes prescribing path', accessed online: http://www.physiotherapy.asn.au/APAWCM/The_APA/news/Nov2013/PrescribingPathway.aspx

Case study 1. Optometrists



Optometrists are able to prescribe a subset of prescription only drugs, with the formulary set by individual state/territory legislation/regulation. Further, optometrists are afforded access to a limited number of drugs subsidised to patients via the PBS. The PBS optometrist formulary is an agreed; evidence based national formulary for optometrists. Note that owing to differences in state/territory legislation, not all drugs available to optometrists via the national formulary (PBS) are authorised to be prescribed by optometrists in each state/territory.

Source. http://www.ahwo.gov.au/documents/NHWT/Non%20Medical%20Prescribing%20Final%20Report.pdf

Case study 2. Nurse practitioners and midwives

In recent years, nurse practitioners (NP) and eligible midwives have been granted prescribing privileges in most states and territories across Australia. NPs are registered nurses who have been endorsed by the Nursing and Midwifery Board of Australia to function autonomously and collaboratively in an advanced and extended clinical role, on the basis of advanced practice nursing experience and approved educational qualifications at a master's level or equivalent. All Australian NPs have the right to prescribe Schedule 2, 3, 4 and 8 medicines.

Eligible midwives are authorised to prescribe and/or supply Board approved Schedule 2, 3, 4 and 9 medicines for the management of women and their infants in the prenatal, inter-partum and post-natal stages of pregnancy and birth.

PBS prescribing by midwives and Nurse Practitioners are limited to items that are specifically identified by MW (Midwife) or NP (Nurse Practitioner) on the PBS Schedule. The medicines which can be prescribed differ between states and territories.

Source. http://acnp.org.au/sites/default/files/imported/images/stories/pdfs/NP_Prescribers_12.pdf

Case study 3. Physician's assistants

Recently introduced in select universities, physician assistant training produces individuals with the capabilities to practice medicine under the direct supervision of a doctor. Their role is agreed with the supervising doctor and can develop with experience and training. In 2014, Queensland became the first state to allow physician assistants to prescribe, refer to medical specialists or order diagnostic tests within the Queensland public health system.

The introduction of physician assistants into Australian primary care, however, has not been accompanied by coordinated action across Australian, State and Territory governments. Prescriptions written by physician's assistants are not subsidised in a manner equivalent to prescriptions written by medical or nurse practitioners.

Source: http://www.aspa-australianpas.org/

Case study 4. Podiatrists

In each State and Territory, the scheduled medicines that can be prescribed, supplied or used by a podiatrist or podiatric surgeon are clearly stipulated in relevant drugs and poisons legislation. The list of scheduled medicines varies from one jurisdiction to the next.

The Podiatry Board of Australia has a role in ensuring that podiatrists with an endorsement for scheduled medicines are appropriately qualified to prescribe or supply Schedule 2, 3, 4 or 8 medicines to patients for the treatment of podiatric conditions. In order to be approved, the Podiatry Board of Australia requires the qualified podiatrist to have undertaken an approved program of study in podiatric therapeutics; have clinical experience in a setting where prescribing is occurring; complete web-based case studies or have two confirmatory references.

Source: http://www.podiatryboard.gov.au/Registration-Endorsement/Endorsement-Scheduled-Medicines.aspx

1.5 United Kingdom

In 2012, Physiotherapists in the United Kingdom (UK) became the first in the world to be able to prescribe medication without needing authorisation from a doctor. Prior to this decision, Physiotherapists were allowed to be supplementary prescribers – that is, provide prescription with the co-signature of a doctor – from 2005.

The decision was announced by Earl Howe, the Department of Health's undersecretary for quality, who noted that the decision had been made to benefit patients, due to the fact that it allowed them faster access to painkillers and anti-inflammatory medicines:

> *"Physiotherapists are highly trained clinicians who play a vital role in ensuring patients receive integrated care that helps them recover after treatment or to manage a long-term condition successfully. By introducing these changes, we aim to make the best use of their skills and allow patients to benefit from a faster and more effective service."*[16]

The decision was made following a decade of campaigning. Aside from being able to treat chronic pain, specially trained UK physiotherapists are now able to provide treatments for conditions such as asthma, rheumatological conditions, neurological disorders and women's health issues.

The first handful of physiotherapists to pass through the appropriate training commenced prescribing at the end of 2013. No formal evaluations of the impacts of the measure have been finalised to date as the full impact will only become apparent as a critical mass of physiotherapists become accredited and begin prescribing when allowed to under the law.

1.6 This paper

This paper seeks to quantify the direct, public, economic savings that may flow from the introduction of an autonomous prescribing model for physiotherapists with appropriate training to access medications under the PBS.[17]

Specifically, the analysis seeks to quantify public savings that could be achieved if physiotherapists could prescribe medications across four, high-level practice settings:

- Public hospital ED
- Public hospital inpatient department
- Community health care (includes public outpatient departments)
- Private practice.

For each setting, the analysis considers instances where the capacity for physiotherapists to prescribe could avoid the involvement of another health professional (typically a doctor) who would not otherwise be required in the treatment regime. Further, the analysis considers savings from the potential reduction of repeat visits and reduction of the time required by a physiotherapist to hand over a patient to a prescriber.

Section 2 outlines the methodology and data collection processes that were employed to prepare the analysis for this paper. Section 3 presents the qualitative and quantitative findings of this piece of work. Section 4 draws together key conclusions.

[16] Medical News Today (2012) Physios can now prescribe drugs without a doctor's signature UK, accessed online: http://www.medicalnewstoday.com/articles/248467.php

[17] Autonomous prescribing refers to a model in which the practitioner is responsible for the clinical assessment of the patient and diagnosis of the condition before prescribing therapy, without the requirement for supervision by another healthcare professional.

2 Methodology

2.1 Economic cost savings

The objective of the analysis is to determine economic cost savings to government that could potentially be realised, should physiotherapists with appropriate training be granted the ability to prescribe medication under the PBS.

The analysis considers both accounting costs and opportunity costs:

- An example of an *accounting cost* is an avoided GP visit, which reduces the MBS rebate paid by the Australian Government
- Efficiency gains in a public hospital setting are considered an *opportunity cost*. Where a salaried doctor working in an ED does not consult with a patient in order to prescribe medication, the doctor's time is still charged to the public system which pays his/her salary. However, the doctor is as a consequence free to utilise this saved time for another (potentially more valuable) purpose. The cost of time spent with a patient to write a prescription in a hospital setting comes at the *opportunity cost* of time they may spend with another patient.

Both of these costs are of interest in a policy setting to ensure that the allocation of public funds is both effective and efficient. The proxy measure of opportunity cost – that is, of foregone value – is the cost of paying the resource for the time (their wage).

2.2 Modelling logic

As noted in Section 1, the analysis considers public and private savings that could be achieved if physiotherapists could prescribe medications across four, high-level practice settings:

- Public hospital ED
- Public hospital inpatient department
- Community health care (includes public outpatient departments)
- Private practice.

The approach to modelling savings in each of these settings is described in the remainder of this section.

2.2.1 Public Hospital ED

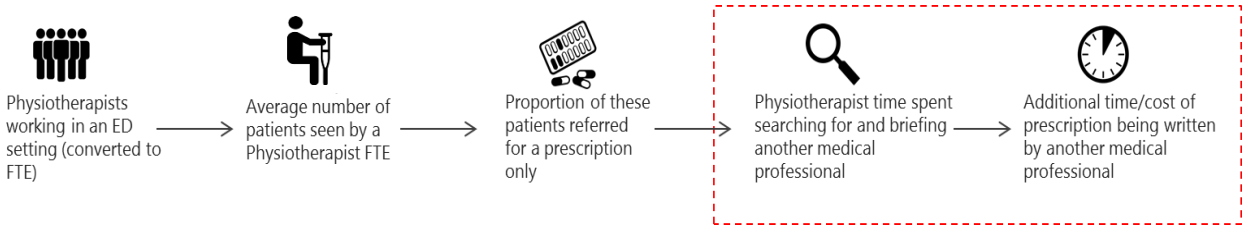
The model does not differentiate between primary contact physiotherapists and secondary contact physiotherapists as this is not considered to impact the analysis. A 'primary contact' physiotherapist is defined as the first person the patient sees for treatment in ED. A 'secondary contact' physiotherapist is defined as the second point of contact for the patient. This may occur when a doctor or other clinician conducts an initial consult, and then refers the patient to a physiotherapist working in ED.

Rather, the model simply considers any situation in which a physiotherapist sees a patient in an ED setting and requires the engagement of another medical professional – a nurse practitioner or a doctor – to *only* provide a prescription.

The model is built to follow the logic provided in Figure 2.1 and reports the following avoided costs (within the red box in Figure 2.1):

- Public cost of additional physiotherapist time – cost of the time spent by the physiotherapist handing over to a doctor/nurse practitioner for a prescription as well as the time they spent waiting for or seeking out a suitable medical professional for assistance
- Public cost of doctor's time – the time cost of the doctor's time spent writing the prescription (including any time spent duplicating patient history/treatment requirements)
- Public cost of nurse practitioner time – the time cost of the nurse practitioner's time spent writing the prescription (including any time spent duplicating patient history/treatment requirements)

Figure 2.1 Model logic – Emergency Department



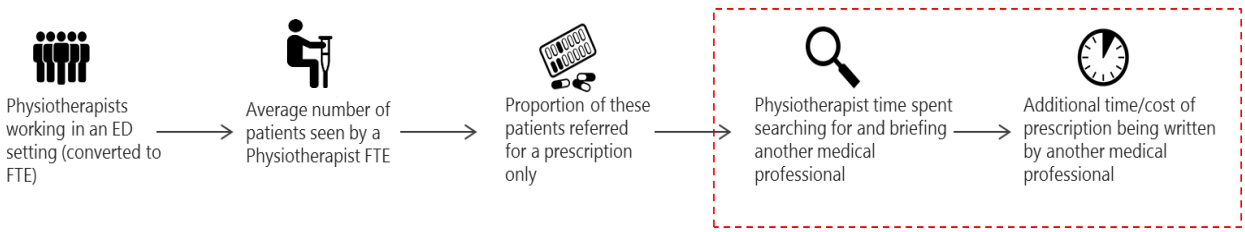
2.2.2 Public hospital inpatient department

The analysis considers any circumstance where a patient is seen in an inpatient ward by a physiotherapist, who subsequently must contact another medical professional for the sole purpose of providing a prescription. Physiotherapists in public inpatient wards work across a number of specialities, however modelling takes a high-level approach and does not differentiate between the specialities.

Similar to modelling the cost estimate within the ED setting, the model for the inpatient setting is built in accordance with the logic provided in Figure 2.2 and reports on the following costs (within the red box in Figure 2.2):

- Public cost of additional physiotherapist time – cost of the time spent by the physiotherapist handing over to a doctor/nurse practitioner for a prescription as well as the time they spent waiting for or seeking out a suitable medical professional for assistance
- Public cost of doctor's time – the time cost of the doctor's time spent writing the prescription (including any time spent duplicating patient history/treatment requirements)
- Public cost of nurse practitioner time – the time cost of the nurse practitioner's time spent writing the prescription (including any time spent duplicating patient history/treatment requirements)

Figure 2.2 Model logic -- Inpatients

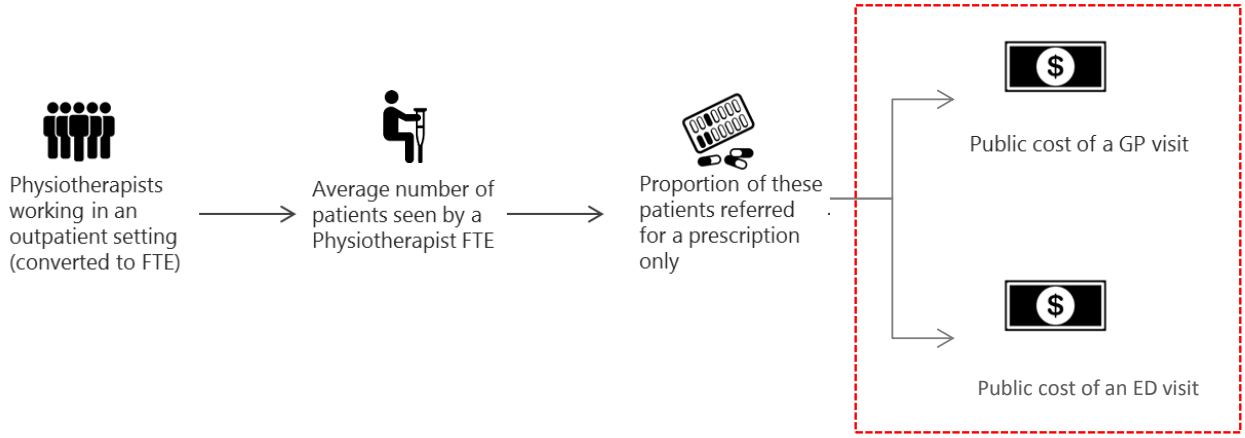


2.2.3 Community health care (includes public outpatient departments)

For modelling purposes, it is assumed that if a patient who is seeing a physiotherapist in a community health or outpatient setting requires a prescription; the patient would be referred back to their GP for that prescription.

The model is built to follow the logic provided in Figure 2.3 and reports the cost of GP visits that could be avoided in the event of policy change.

Figure 2.3 Model logic -- Outpatients

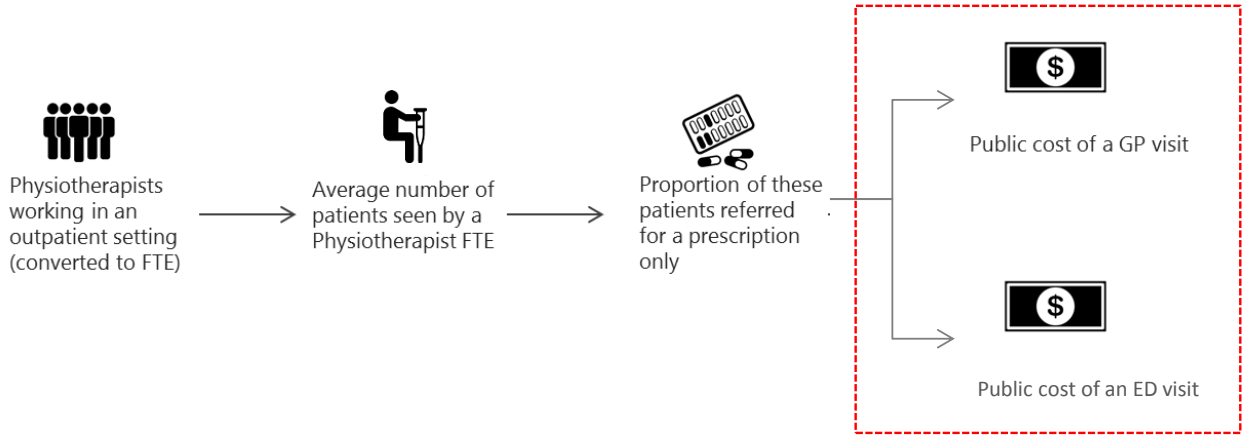


2.2.4 Private practice

For modelling purposes, it is assumed that if a patient requires a prescription for a physiotherapist seen in a private practice setting; the patient will be referred back to their GP for that prescription. It is possible that the physiotherapist may refer the patient to a specialist rather than a GP. However, this scenario is not modelled as the patient would not receive an MBS rebate for their specialist visit if referred by a physiotherapist and as such is considered more likely to visit a GP first. This assumption accords with discussions with physiotherapists through the piloting phase of surveying.

The model is built to follow the logic provided in Figure 2.4 and reports the cost of GP visits that could be avoided in the event of policy change.

Figure 2.4 Model logic – Private Practice



2.3 Data collection

2.3.1 Survey of Australian Physiotherapy Association Members

The primary mode of data collection employed for this piece of work was an online survey, distributed to 17,000 members of the Australian Physiotherapy Association (APA). There were 7,775 unique opens of the emailed invitation to participate. The APA is a national peak body which seeks to represent the interests of Australian physiotherapists and physiotherapy patients.

The survey provided a brief overview of the policy change in question, noting that the change would only be made if sufficient training were provided. Definitions were provided for the terms 'prescribing rights' and 'extended scope of practice' to ensure consistency. Respondents were assured that all responses would remain anonymous. Contact details were provided if the survey respondent required clarification on the questions or operation of the survey.

Basic demographic data on the location (state and level of remoteness of their residence) was collected. The survey then required the respondent to answer questions dependent upon the physiotherapy setting (ED, inpatient, outpatient or private practice) that best described their work environment. If they worked across multiple settings, they were permitted to respond to questions pertaining to several settings.

Respondents were required to list the amount of time spent within a specified period of time working in each setting in order to normalise responses to a Full Time Equivalent (FTE) count of physiotherapists working in each setting. The number of patients seen by the respondent within that setting in the 14 day period, and the proportion referred on to another medical professional for a prescription only during that time, was also collected.

Finally, respondents were given an opportunity to provide a free text comment on their thoughts about the proposed policy change.

2.3.1.1 Descriptive statistics

The survey elicited a strong response with 1,548 APA members responding to the survey. Figure 2.5 provides an overview of which State/Territory respondents indicated they were working within. Chart 2.1 then provides the spread of respondents by remoteness. The spread of physiotherapist respondents appears aligned with the general spread of population.

Figure 2.5 Respondents, by state

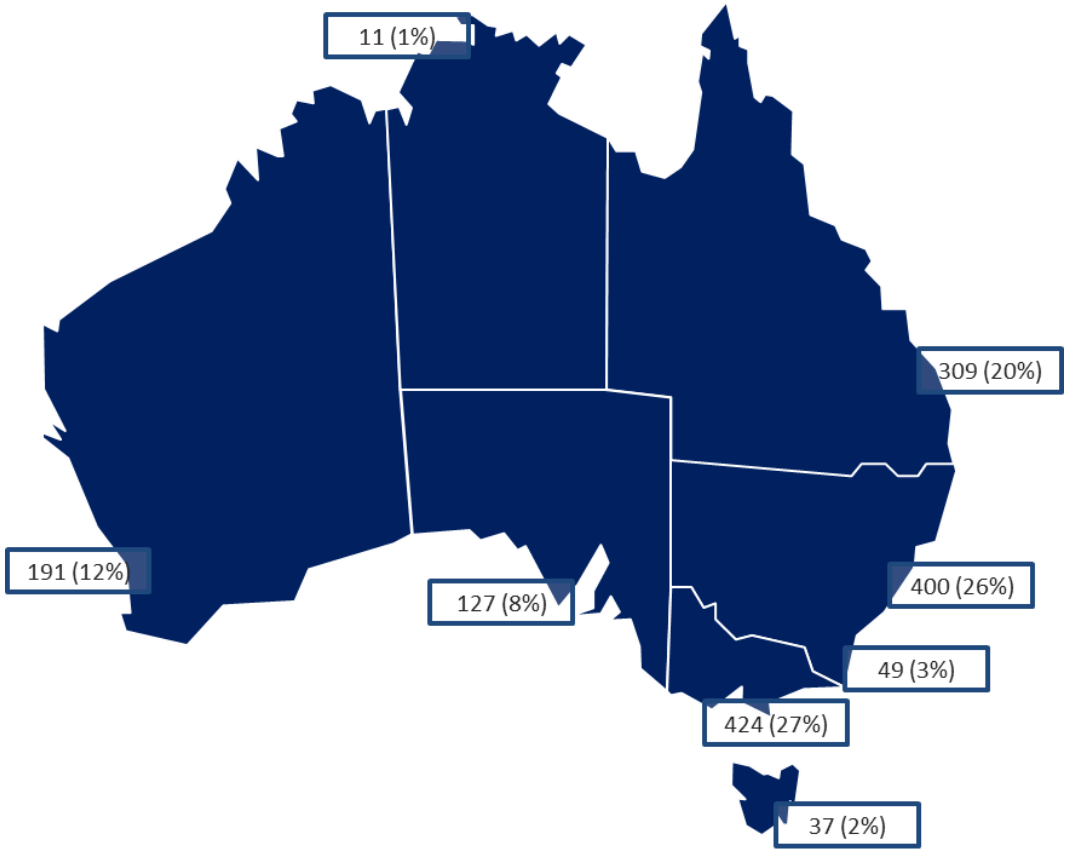
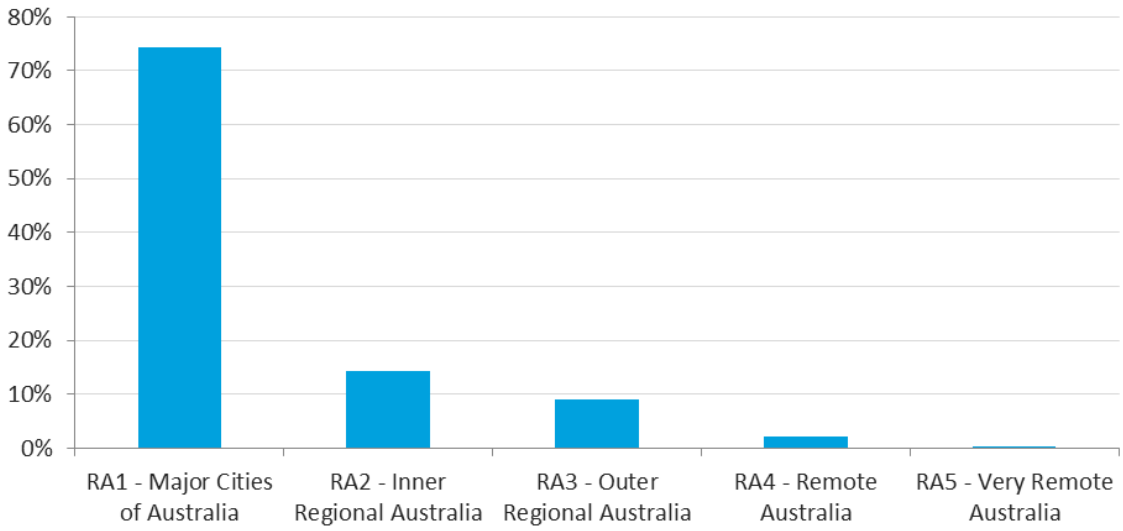
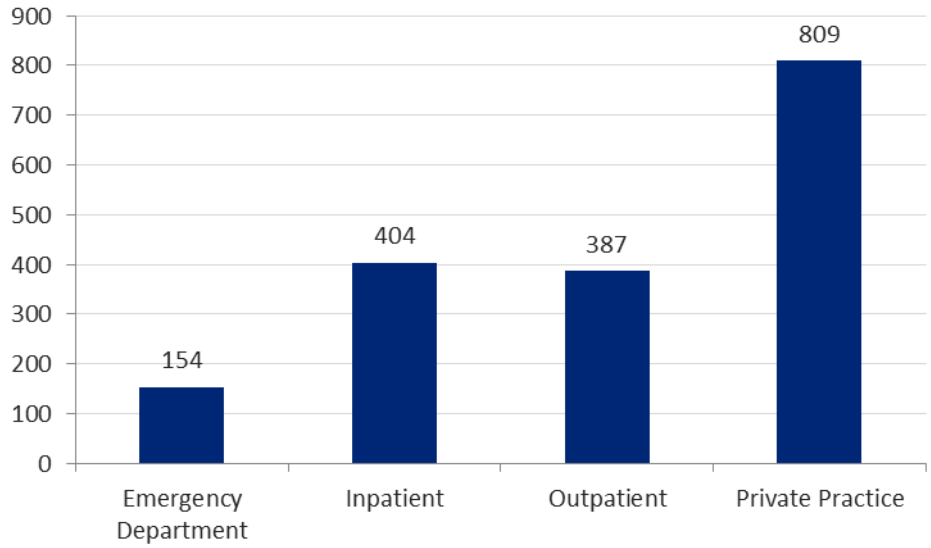


Chart 2.1 Respondents, by measure of remoteness



Respondents were able to answer for multiple settings depending on where they had worked over the past fortnight. Chart 2.2 below provides an overview of the number of respondents who provided answers against each setting.

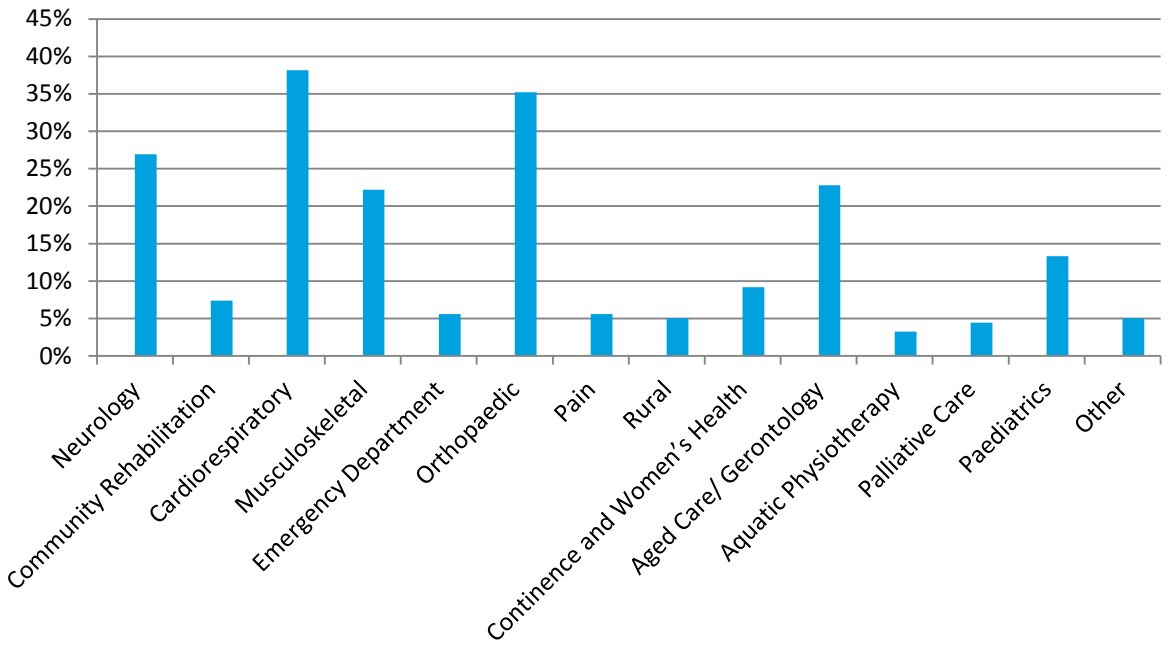
Chart 2.2 Respondents, by work setting



Of the physiotherapists who responded that they worked in a hospital ED, only one reported having worked in a private ED setting. Of those who worked within the ED setting, the median number of hours worked within a seven day working week was between five and ten hours. The small number of respondents working in ED is reflective of current workforce arrangements, in which few physiotherapists are employed in this setting.

Of physiotherapist respondents who reported having worked in an inpatient setting in the fortnight preceding their survey response, the two most common areas of reported specialisation were cardiorespiratory and orthopaedic (Chart 2.3). The median number of hours worked within the inpatient setting for respondents was 76-80 hours (25%) per fortnight.

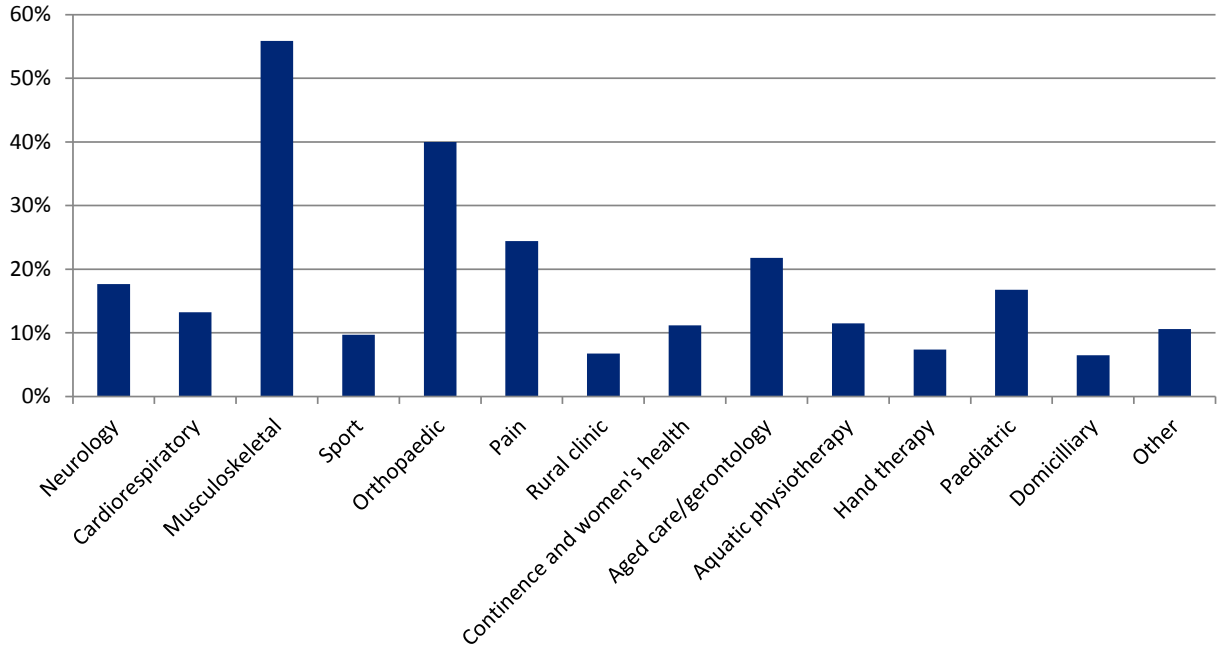
Chart 2.3 Inpatient physiotherapists, by specialisation



Note: 'other' includes sports, hand therapy, animal, mental health/learning disabilities, lymphoedema and occupational health

Within the outpatient setting, the most common clinic or service within which respondents worked was a musculoskeletal clinic (Chart 2.4). The median number of hours worked within this setting, by respondents who indicated having worked in it, was between 76 and 80 hours per fortnight (16%).

Chart 2.4 Outpatient physiotherapists, by clinic/specialisation type



Note: 'other' includes occupational health, palliative care, lymphoedema, mental health and learning disabilities

It was most common to work in a group clinic in the private setting (49%) followed by private practice co-located with other primary care physicians (23%). Less than 3% of respondents reported working in an aged care facility. Of those who worked in a private practice setting, the median number of hours worked within that setting in a 14 day period was between 76 and 80 hours (18%).

2.3.2 Other data

The data gathered through the survey was supplemented as required with publically available data pertaining to fees/wages and total workforce numbers. Details of all data sources and assumptions are provided in Appendix C.

2.3.2.1 Workforce numbers

In 2014, Health Workforce Australia (HWA) published *Australia's Health Workforce Series – Physiotherapists in Focus*. This document provided the number of employed physiotherapists by work setting on main job in 2011 and 2012. The total percentage change in physiotherapist numbers between 2011 and 2012 was applied annually to estimate the number of physiotherapists working in each setting in 2015.

This report provided clear figures for private practice and outpatient care, but hospital-based care was not divided by emergency and inpatient care. The proportion of survey respondents in each of these categories was used to divide the total number of physiotherapists working in hospitals into these two groups. Physiotherapists who were classified as working in 'other' or 'inadequately described/not stated' in the HWA report were not included in any of the aggregated workforce types[18].

2.3.2.2 Wages

In an emergency and inpatient setting, the modelling used physiotherapist, doctor and nurse practitioner hourly wages to determine the value of their time. The wages for each group were multiplied by a wage loading derived from ABS statistics to account for overtime[19].

- **Physiotherapists** – wages were published by the APA in 2013 in a document called *Career structures and pathways for physiotherapists.* This document provides wages for physiotherapists from entry to senior positions for each state and territory. The mean of the hourly rate earned in senior roles for each state and territory was applied to the physiotherapist additional time calculation derived from the survey.
- **Doctors** – medical wages are published in state-based Awards. The mean of the first four pay points for medical specialists was applied across the doctor additional time calculation derived from the survey.
- **Nurse practitioners** – based on wage levels published in state-based nursing Awards. The mean of the first four pay points (where available) was applied across the nurse practitioner additional time calculation derived from the survey.

[18] That is, emergency department, inpatient care, private practice and outpatients/community care.

[19] ABS (2014), Employee Earnings and Hours, Australia, May 2014, available at: http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6306.0May%202014?OpenDocument

2.3.2.3 Health service costs

Savings estimates for the private practice and outpatient department and community health settings are derived from avoided referrals from the physiotherapist to a medical practitioner to obtain a prescription. It is assumed that 90% of these referrals would go to a GP and that 10% would go to a public hospital ED, for example where access to a GP is limited or unaffordable. The costs of these avoided services were estimated as follows:

- Avoided GP visits were modelled at the rate of an MBS Level B GP attendance, $37.05 per visit, a cost incurred by the Australian Government
- The mean patient co-payment for GP visits in 2015 is estimated at $5.51 (including bulk-billed services, based on MBS data from 2013-14[20], inflated at the average annual growth in co-payments to a 2015 value)
- Avoided ED presentations were modelled at the mean cost of the National Hospital Cost Data Collection (NHCDC) Round 16[21] costs for triage four and five ED presentations for injury.

2.4 Limitations of the methodology

The methodology was designed to provide rigorous economic estimates. However, model outputs must be interpreted with reference to the following limitations:

- To the extent that private costs are also incurred they have not been modelled – for example out-of-pocket contributions to care costs, travel costs, time away from work and private health insurance premiums – the model would underestimate the total benefits that may flow from the policy change.
- The potential impacts on patient health outcomes (i.e. avoided attrition due to delays in care) were out of scope and were not modelled. As such, the potential for early return to work and avoided productivity losses were also not able to be modelled.
- Avoided private practice costs include an estimate that 10% of patients would go to ED rather than a GP – this is a conservative estimate and may be particularly important in a rural setting.
- Potential ED savings are estimated based on current practice, which is constrained by the number of FTE physiotherapists currently working in Australian EDs, with 22% of all FTE physiotherapists working in hospitals. There may be scope for larger annual savings in the future, should physiotherapists become more common in Australian EDs.
- The model is designed only to consider cost savings and therefore, does not net out the costs associated with policy implementation or additional training.
- No potential impacts on states' and territories' performance in relation to the NEAT were estimated.

[20] Medicare Australia 2015, *Annual Medicare Statistics*, accessed online: http://www.health.gov.au/internet/main/publishing.nsf/Content/Annual-Medicare-Statistics.

[21] NHCDC 2015, *National Hospital Cost Data Collection Australian Public Hospitals Cost Report 2011-2012, Round 16,* http://www.ihpa.gov.au/internet/ihpa/publishing.nsf/Content/nhcdc-cost-report-2011-2012-round16-html. The national average cost of hospital admissions are reported in rounds, which correspond to years. Round 16 considers costs in 2011/12. This was the most recent period for which emergency data by triage and injury or illness type is available. Prices have been adjusted to 2015 dollars.

- The model focuses exclusively on direct cost savings to the health system spanning from changes in practice and does not estimate any impacts on the health system of improvements in health outcomes for patients.
- Physiotherapist prescribing may result in reductions in the volume of prescriptions for medications and analgesia, which may deliver savings to the PBS and RPBS. This was not included in the model to be conservative, given limited evidence from the UK at this stage.
- The model does not consider the practice of physiotherapists in *all* settings. For example, physiotherapists operating in a private hospital setting are not included in the model. For this reason, even the sum of all economic cost savings of the policy provided in this paper does not represent *total* potential cost savings.
- The model relies upon self-reports of surveyed physiotherapists. Deloitte Access Economics did not verify the time and patient number estimates provided within the survey. However, the large sample size is considered to be representative and mitigates the effects of any individual estimation errors.

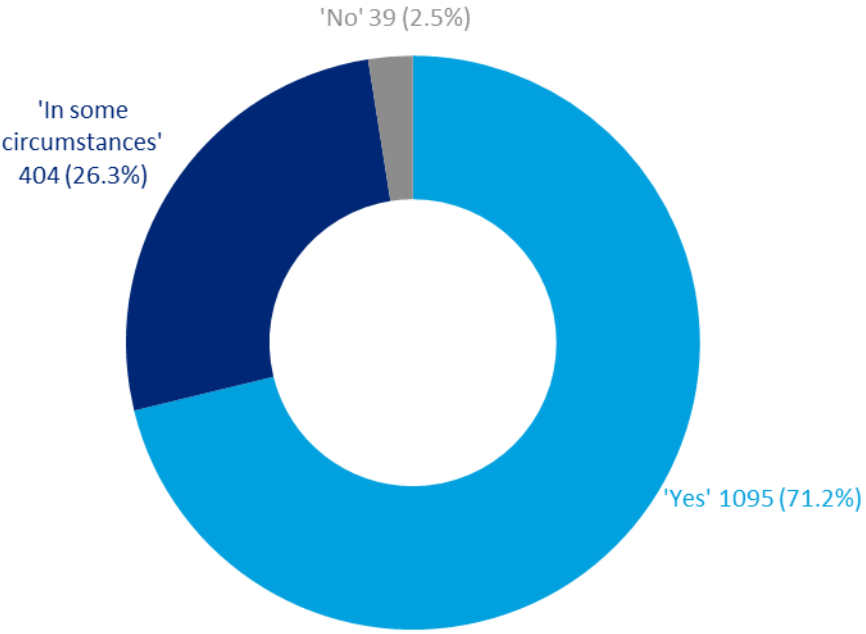
3 Findings

3.1 Qualitative findings

3.1.1 In principle support

At the start of the survey, each survey respondent was asked, "In principle, do you support the proposal to extend prescribing rights to physiotherapists?" As Chart 3.1 shows, the response was overwhelmingly positive, with 71% responding that they supported it in all circumstances and a further 26% indicating that they supported it in some circumstances. Only 3% of respondents – 39 individuals – responded that they did not support the proposal at all.

Chart 3.1 In principle, do you support the proposal to extend prescribing rights to physiotherapists?



Reasoning varied substantially across those who did not support the proposal. A small number of respondents indicated that pharmacological treatment was not central to their practice of physiotherapy. A few respondents indicated that there would need to be substantial training to become a prescriber and feared the risks associated with prescribing added too much pressure to the role of the physiotherapist – for example:

> *"No database [is] used by physiotherapists to track what current medications patients are on. Not enough training regarding drug reactions and interactions with other drugs and medical problems. Too much scope for liability"*

Among those who supported the proposal in 'some circumstances', most followed with a comment that highlighted the importance of training and experience in implementing the policy. Many also supported restricting the medications available for prescription.

> *"I think prescribing rights can be very valuable, particularly to physiotherapists that have further qualifications; however I think the rules governing what can be prescribed by whom is important. Very clear guidelines and procedures would need to exist for further pharmaceutical training / continuing education / understanding medication interactions. Perhaps to start with approval for specialist physiotherapists only"*

> *"Physiotherapist would need to have a clear understanding on the pharmacokinetics and pharmacodynamics of drugs to be prescribed, and essentially would require extra training in pharmacology and understanding of pathophysiology and pathways the drugs affect. Opiates and Antidepressant drugs commonly used in pain management should be referred to the medical doctors."*

Some respondents suggested that there should be controlled trials to test the policy ahead of widespread introduction. A handful noted that this policy might be applied exclusively in rural/remote settings, where access to GPs was particularly strained. There are plans for trials of physiotherapist prescribing programs in Victoria and Queensland.

Finally, among respondents indicating that they supported the proposal in all circumstances, many noted that physiotherapists are often in a better position to assess the need for medication for their patient – for example:

> *"Some physiotherapists have better musculoskeletal diagnostic skills than medical practitioners and are probably better placed to determine appropriateness of medication"*

Many also noted that there were potential cost savings that may span from the introduction of the measure – for example:

> *"Prescribing will provide physiotherapists the opportunity to care for patients in a timely and evidence based manner. It will reduce patient anxiety, stress and financial concern. It also can reduce the burden on the already overcrowded and under resourced medical profession"*

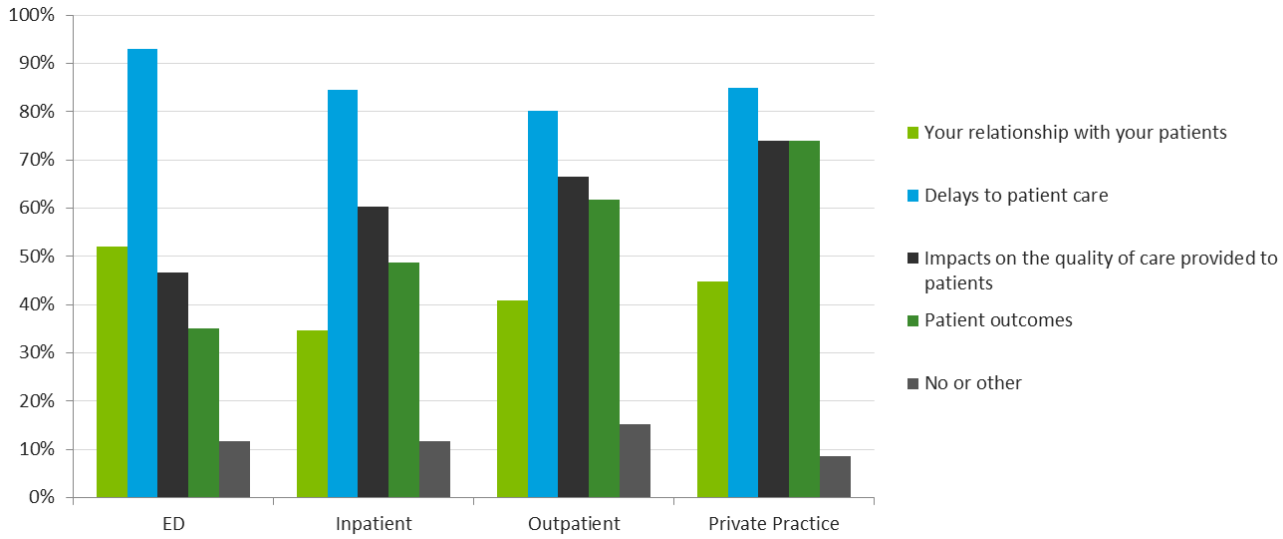
3.1.2 Impacts of the inability to prescribe

Respondents were asked, by setting, to describe the impacts of not being able to prescribe under the current legislative environment. They were given four response options and were allowed to select as many as they believed applied in that setting. Respondents were further given the chance to provide a free text response if they wished to elaborate.

Chart 3.2 provides a summary of responses by setting. The most common response to the question was to indicate that the inability of physiotherapists to prescribe resulted in delays to patient care. The response was strongest among physiotherapists who worked in an ED setting – with 93% indicating delays in patient care – for example:

"As an example I will have taken a complete history from a patient (including allergies and regular medications), assessed the patient, performed appropriate interventions and have the patient ready for discharge, however if they require a script I then need to go and find a senior doctor or endorsed nurse practitioner (which takes time as they too are really busy) to write the script. In almost all cases they will not then go and see the patient but will rely on my assessment. I have to wait for them to write the script (usually with multiple interruptions), print the script and then finally I can give it to the patient as they can go home (often the script is then given to the pharmacist who will dispense the meds and provide education if required). It takes a significant amount of time to get this done; it would be far more efficient for me to be able to prescribe"

Chart 3.2 Do you think current prescribing arrangements have an impact on factors such as:



Physiotherapists working in an outpatient and private practice setting more commonly noted that there were potential impacts that flowed through to patient outcomes. Many indicated that delays in accessing GP care alone could compromise patient outcomes or could lead to attrition, where patients are reluctant to follow through and see a GP to obtain a prescription. Additional attrition may occur through a failure to attend follow up physiotherapy consultations.

Concerns of delays in patient care and compromised patient outcomes were the highest among physiotherapists located rural and remote areas (67% noted these concerns in outer regional, remote and very remote locations while 63% noted these concerns in major cities and inner regional Australia).

"Living remotely it is common the referral to specialists and MRI/CT are delayed to avoid patient travel costs. Many scans are delayed because a minimum 1 hr flight is required to get to it."

"As I work in a rural area GP appointments are often full so a delay to refer, then to be seen by the GP and then to get the script or required test all adds up."

3.1.3 "Work around"

Respondents were given the opportunity to provide examples of ways in which the system was 'worked around' to avoid impacts on patient care if necessary.

In the hospital setting, some physiotherapists noted that there were 'trust' relationships with prescribers who relied on the physiotherapists to take an appropriate medical history and relay this to the physician who could prescribe the medication without undergoing the whole process themselves. In some instances it was indicated that the prescriber simply receives a verbal account of the patient's situation and signs the prescription without seeing the patient, reflecting a high level of trust in the physiotherapist's clinical decision making process and assessment

> *"The doctor is not required to perform a subjective or objective examination of the patient. They take my examination as accurate and ask me what I would like prescribed."*
>
> *"ED registrars within our ED are accustomed to working with the primary contact physiotherapists and will happily prescribe analgesic medication on verbal request from the physiotherapist without physically assessing the patient themselves"*
>
> *"I write most up most prescriptions on the NIMC [National Inpatient Medication Chart] and get a doctor to sign it and provide them with a brief medical history"*

In private and outpatient settings, 'work around measures' included suggesting that the patient try over the counter medication (even as a temporary measure while waiting for a GP appointment), and providing GPs with very clear advice on the prescription required. A handful of respondents further noted that at times they had relied on past prescriptions the patient had received for pain management (for other injuries) or adjusting the dosage of over-the-counter medication to align with the dosage of prescription medication.

Finally, depending upon the clinical setting, some private physiotherapists and physiotherapists working in an outpatient setting personally requested others within their clinic who could prescribe to provide a prescription without consulting the patient. This included podiatrists working within the same clinic as well as specialists and GPs.

3.2 Direct economic impact estimates

Estimates of the direct economic impact of the policy are derived from the model described in section 2.

This section presents estimates of the direct, public, economic savings that may flow from the introduction of an autonomous prescribing model for physiotherapists (with appropriate training) and access to subsidised medications under the PBS: in public hospital ED; public hospital inpatient departments; outpatient departments and community health care; and private practice.

- Estimates for private practice, outpatient departments and community health care are determined from avoided referrals to GPs and ED presentations (where patients opt to attend ED for a prescription, which is estimated at 10% of all referrals – this may be more pronounced in rural areas with limited access to GPs).
- Estimates for savings in public hospitals relate to efficiency gains in an ED or inpatient setting – i.e. the avoided time spent by a prescriber to attend to a patient, who might otherwise be issued a

prescription by the physiotherapist providing primary treatment[22]. Adding to this is the cost of physiotherapist time spent during handover or waiting for the prescriber to attend the patient. Savings are reported as avoided opportunity cost.

The key data source for all estimates of potential time savings and the proportions of patients who require a prescription is the APA member survey (see section 2.3.1). A full list of model assumptions is provided in Appendix C. Findings are presented under each of the in scope practice settings in the remainder of this section.

3.2.1 Public hospital ED

Potential savings are estimated from: the number of patients in 2015-16 who see a physiotherapist in a public ED and require a prescription (derived from the survey of APA members); the estimated value of avoided time for a physiotherapist facilitating this process; and the estimated value of avoided time for another medical professional (a prescriber) to attend to this request. The value of prescriber time is assumed to be equivalent to relevant state and territory awards for an ED physician and practice nurse, with a loading applied to reflect any overtime and penalty rates (see section 2.3.2.2).

The saving estimate is based on current practice and is therefore constrained by the number of FTE physiotherapists currently working in Australian EDs (see section 2.3.2.1). There may be scope for larger annual savings in the future, should physiotherapists become more common in Australian EDs.

The estimated total value of efficiency gains in public hospital EDs in 2015 is over $422,500, which would accrue to state, territory and Australian governments. This is based on potential savings of 6,280 hours of clinician time in public EDs per annum, which could be redirected to other activities. Table 3.1 shows key model outputs.

Table 3.1 Estimated savings due to physiotherapy prescribing, Public Hospital EDs, 2015

Variable	Model output – ED
Patients requiring a prescription	14,357
Avoided physiotherapist time (hours)	3,626
Avoided cost of physiotherapist time	$215,170
Avoided nurse practitioner time (hours)	232
Avoided cost of nurse practitioner time	$11,724
Avoided doctor time (hours)	2,422
Avoided cost of doctor time	$195,694
Total avoided time (hours)	6,280
Total avoided cost to governments	$422,588

Note: Public hospital savings, which would accrue to State, Territory and Australian Governments, are considered efficiency gains and may not be directly monetisable due to demand pressures on public hospitals. No potential impacts on states' and territories' performance in relation to the NEAT were estimated.

Source: APA member survey; State and Territory awards (see Appendix C); ABS 2015.

Potential savings are estimated from: the number of public hospital inpatients in 2015 who see a physiotherapist and require a prescription; the estimated value of avoided time for a physiotherapist for

[22] This saving is estimated as the value of the prescriber's time which could have been spent with another patient (noting that public hospital clinicians are typically very busy and even if their workload was lightened somewhat, this would not generate "cashable" savings for the hospital, or government)

facilitating this process; and the estimated value of avoided time for another medical professional (a prescriber) to attend to this request. The value of prescriber time is assumed to be equivalent to relevant state and territory awards for an inpatient physician and practice nurse, with a loading applied to reflect any overtime and penalty rates (see section 2.3.2.2).

The estimated total value of efficiency gains in public hospital inpatient departments in 2015 is $2.83 million to State, Territory and Australian governments. This is based on potential savings of 41,812 hours of prescribers' time in public inpatient departments per annum, which could be redirected to other activities. Table 3.2 shows key model outputs.

Table 3.2 Estimated savings due to physiotherapy prescribing, public hospital inpatient departments, 2015

Variable	Model output – inpatient departments
Patients requiring a prescription	92,383
Avoided physiotherapist time (hours)	24,732
Avoided cost of physiotherapist time	$1,488,794
Avoided nurse practitioner time (hours)	1,493
Avoided cost of nurse practitioner time	$78,944
Avoided doctor time (hours)	15,586
Avoided cost of doctor time	$1,259,271
Total avoided time (hours)	41,812
Total avoided cost to governments	$2,827,008

Note: Public hospital savings, which would accrue to State, Territory and Australian Governments, are considered efficiency gains and may not be directly monetisable due to demand pressures on public hospitals.

Source: APA member survey; State and Territory awards (see Appendix C); ABS 2015.

3.2.2 Public outpatient departments and community health care

3.2.2.1 Government savings

Potential savings are estimated from: the number of patients in 2015 who see a physiotherapist in a public outpatient or community health setting and require a prescription; and the number of these who would attend a GP (90%) or ED (10%) to obtain the prescription. Avoided costs for GP services are based on the MBS rate for a Level 2 standard consultation ($37.05 in 2015); and ED attendances based on the mean cost of the NHCDC Round 16[23] costs for triage four and five ED presentations for injury (inflated to a 2015 value).

The estimated total potential savings arising from physiotherapists prescribing in outpatients departments and community health care in 2015 is approximately $400,000 to state, territory and Australian, Governments. This is based on avoidance of 5,422 GP visits and 602 ED presentations per annum. Table 3.3 shows key model outputs.

[23] The national average cost of hospital admissions are reported in rounds, which correspond to years. Round 16 considers costs in 2011/12. This was the most recent period for which emergency data by triage and injury or illness type is available. Prices have been adjusted to 2015 dollars.

Table 3.3 Estimated savings due to physiotherapy prescribing, outpatient and community health care, 2015

Variable	Model output – outpatients setting
Avoided ED attendances for a prescription	602
Avoided cost to governments of ED presentation	$325
Avoided GP visits for a prescription	5,422
Avoided cost to MBS of additional GP visit	$37.05
Total avoided costs to governments	$396,705

Note: Savings would accrue to the Australian Government (through avoided payment of Medicare benefits to GPs) patients, where co-payments are charged by GPs, and state and territory governments, where ED visits are avoided.

Source: APA member survey; NHCDC 2015, *National Hospital Cost Data Collection Australian Public Hospitals Cost Report 2011-2012, Round 16,* http://www.ihpa.gov.au/internet/ihpa/publishing.nsf/Content/nhcdc-cost-report-2011-2012-round16-html; Medicare Australia 2015, *Annual Medicare Statistics*, http://www.health.gov.au/internet/main/publishing.nsf/Content/Annual-Medicare-Statistics.

3.2.2.2 Private savings

Patients frequently pay a co-payment to access GP services. The average co-payment in Australia in 2015 is estimated to be $5.51 (including bulk-billed services, based on Medicare data from 2013-14, inflated at the average annual growth in co-payments to a 2015 value). Based on 5,422 avoided GP visits, as indicated in Table 3.3, this would result in **potential private savings arising from physiotherapy prescribing in outpatient departments and community health care of approximately $29,875 in 2015.**

3.2.3 Private practice

3.2.3.1 Government savings

Potential savings are estimated from: the number of patients in 2015 who see a physiotherapist in a private practice setting and the number of these who would attend a GP (90%) or ED (10%) to obtain the prescription. The approach is similar to that used for outpatient departments and community health care, described in section 3.2.2.1.

The estimated total potential savings arising from physiotherapists prescribing in private practice in 2015 is $2.97 million to state, territory and Australian Governments. This is based on avoidance of 40,631 GP visits and 4,515 ED presentations per annum. Table 3.4 shows key model outputs.

Table 3.4 Estimated savings due to physiotherapy prescribing, private practice, 2015

Variable	Model output – outpatients setting
Avoided ED attendances for a prescription	4,515
Avoided cost to governments of ED presentation	$325
Avoided GP visits for a prescription	40,631
Avoided cost to MBS of additional GP visit	$37.05
Total avoided costs to governments	$2,972,534

Note: Savings would accrue to the Australian Government (through avoided payment of Medicare benefits to GPs) patients, where co-payments are charged by GPs, and state and territory governments, where ED visits are avoided.

Source: APA member survey; NHCDC 2015, *National Hospital Cost Data Collection Australian Public Hospitals Cost Report 2011-2012, Round 16,* http://www.ihpa.gov.au/internet/ihpa/publishing.nsf/Content/nhcdc-cost-report-2011-2012-round16-html; Medicare Australia 2015, *Annual Medicare Statistics*, http://www.health.gov.au/internet/main/publishing.nsf/Content/Annual-Medicare-Statistics.

3.2.3.2 Private savings

Potential private savings in private practice from 40,631 avoided GP visits are estimated at $223,877 in 2015. This estimate is derived from the average private saving per avoided GP visit discussed in section3.2.2.2.

Additional private costs for accessing physiotherapy may be borne where the patient enters a 'prescription, treatment loop', where the patient is moved between the physiotherapist, prescriber and, potentially back to the physiotherapist for further treatment. For example, a patient seen by a private practice physiotherapist for an ankle injury and requires anti-inflammatory medications would be referred to a GP for a prescription, before returning to the physiotherapist to complete their treatment. In some cases, the loop may be repeated in order to refine the appropriate medication or dosage.

The APA member survey asked physiotherapists whether the need to consult a GP for prescriptions would increase physiotherapy sessions required. One third of respondents working in private practice indicated that an additional 10-20% of physiotherapy sessions may be required. If the average number of physiotherapy sessions required for a given condition is six, each patient may incur one additional physiotherapy session due to current prescribing arrangements. This would result in an additional private (private health insurance or out-of-pocket) cost of approximately $78 per patient.[24]

[24] Millward Brown 2014, 2014 Assessment of Market Rates for Physiotherapy Services.

4 Key conclusions

This report estimates the direct, public, economic savings that may flow from the introduction of an autonomous prescribing model for physiotherapists (with appropriate training) and access to subsidised medications under the PBS – In public hospital ED, public hospital inpatient departments, community health care and private practice.

- Estimates for private practice and outpatient and community health care are determined from avoided referrals to GPs
- Estimates for public hospitals relate to the efficiency gains from reducing the time spent by a prescriber to attend a patient, who would otherwise be issued a prescription by the physiotherapist providing primary treatment[25]. Adding to this is the cost of physiotherapist time spent during handover or waiting for the prescriber to attend the patient. Savings are reported as avoided opportunity cost.

The key data source for all estimates of potential time savings and the proportions of patients who require a prescription is a survey of APA members, which received 1,548 responses from physiotherapists across Australia, working across a range of healthcare settings.

Total potential savings of approximately $9.22 million in 2015 were estimated to arise from physiotherapy prescribing. This includes savings of approximately $6.61 million to governments ($1.66 million to the Australian Government MBS and the remaining $4.95 million split between the Australian, state and territory governments through hospital efficiency gains). Potential private savings are estimated to be $2.61 million in 2015, including more than $250,000 in avoided GP co-payments and a proportion of the $2.35 million in avoided physiotherapy treatment (for which private health insurance and other schemes, such as workers' compensation, may contribute a significant portion). These findings are summarised in Table ii.

Public hospital savings reflect estimated efficiency gains valued at approximately $3.2 million in 2015. This is based on:

- *In ED*, 6,280 hours of avoided time spent by physiotherapists, doctors and nurse practitioners to arrange prescriptions
- *In inpatient departments*, 41,812 hours of avoided time spent by physiotherapists, doctors and nurse practitioners to arrange prescriptions.

Total savings to the MBS of approximately $1.66 million in 2015 are based on more than 41,000 avoided GP visits due to avoided referrals for prescriptions from private practice, outpatient departments and community health care. A further 5,100 ED presentations were estimated to be avoided, representing total savings of $1.71 million in 2015.

[25] This saving is estimated as the value of the prescriber's time which could have been spent with another patient (noting that public hospital clinicians are typically very busy and even if their workload was lightened somewhat, this would not generate "cashable" savings for the hospital, or government)

Table ii: Summary of potential savings to government and patients (private costs) through extended prescribing rights for physiotherapists in Australia, 2015 ($)

Practice setting	Description of potential saving	Potential savings to government*)	Potential private savings (to patients and PHI)†	Total potential savings
Public hospital EDs	Avoided time spent by physiotherapists, doctors and nurse practitioners to handover and re-assess patients	422,588	-	422,588
Public hospital inpatient departments		2,823,506	-	2,823,506
Public outpatient departments and community health care	Avoided GP visits and ED attendances# by patients who are referred solely for a prescription	396,705	29,875	426,580
Private practice		2,972,534	223,877	3,196,411
	Additional physiotherapy consultations in private practice§	-	2,354,917	2,354,917
Total savings		**6,615,333**	**2,608,669**	**9,224,002**

Notes: *Public hospital savings, which would accrue to State, Territory and Australian Governments, are considered efficiency gains and may not be directly monetisable due to demand pressures on public hospitals. No potential impacts on states' and territories' performance in relation to the NEAT were estimated. Community health care and private practice savings would accrue to the Australian Government (through avoided payment of Medicare benefits to GPs) patients, where co-payments are charged by GPs, and state and territory governments, where ED visits are avoided. † Non-financial costs that may be avoided by patients have not been estimated – these include additional time in discomfort, both in the hospital setting and in visiting a GP. Patient time and travel costs are not included. #Avoided private practice costs include an estimate that 10% of patients would go to ED rather than a GP – this is a conservative estimate and may be particularly important in a rural setting. §Additional physiotherapy consultations may be required where a patient enters a 'treatment loop' as a result of current prescribing arrangements – these are valued at $78 per session (Millward Brown 2014). Private Health Insurance (PHI) which would incur some of these costs.

Source: APA member survey; NHCDC 2015, *National Hospital Cost Data Collection Australian Public Hospitals Cost Report 2011-2012, Round 16,* http://www.ihpa.gov.au/internet/ihpa/publishing.nsf/Content/nhcdc-cost-report-2011-2012-round16-html; Medicare Australia 2015, *Annual Medicare Statistics*, http://www.health.gov.au/internet/main/publishing.nsf/Content/Annual-Medicare-Statistics.; Millward Brown 2014, *2014 Assessment of Market Rates for Physiotherapy Services*.

Key qualitative findings from the APA member survey include:

- There is strong support among physiotherapists for the introduction of prescribing for physiotherapists, noting that physiotherapists are often the most appropriate health professional available – given their specialised knowledge and relationship with the patient – to provide assessment, diagnosis and treatment advice.
    - Support for the proposal is typically contingent on the provision of appropriate pharmacological training for physiotherapists. This is aligned with the proposition of the APA, which proposes that the policy should be introduced for physiotherapists who have undertaken a predefined set of pharmacology subjects and further, specialised clinical training in prescribing.
- Physiotherapists noted that the current prescribing restrictions have the propensity to contribute to delays in patient treatment as well as compromise patient outcomes.
    - Physiotherapists operating in hospital settings noted that there can be delays and duplication in the hand-over of patient history for the purpose of obtaining a prescription from another medical professional.
    - Physiotherapists operating in private settings noted that the discontinuity between the provider of treatment and the prescriber could at times compromise patient outcomes.

- Physiotherapists operating in private settings further noted that delays in patient treatment associated with moving between prescribers and physiotherapists may at times compromise patient outcomes.
- Reports of patient outcomes and delays in treatment were particularly pronounced among physiotherapists operating in a rural/remote location.

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Appendix A Costs by state and practitioner

Table A.1 Emergency Department total cost by state and territory

State	Total cost
New South Wales	$129,256.83
Victoria	$119,631.35
Queensland	$91,727.14
South Australia	$2,614.11
Western Australia	$47,707.24
Tasmania	$959.34
Northern Territory	$966.72
Australian Capital Territory	$29,725.46
Total	**$422,588.19**

Table A.2 Emergency Department total cost by practitioner

State	Total cost
Doctor	$195,693.88
Nurse practitioner	$11,723.82
Physiotherapist	$215,170.49
Total	**$422,588.19**

Table A.3 Inpatients total cost by state and territory

State	Total cost
New South Wales	$657,798.55
Victoria	$684,787.19
Queensland	$827,856.35
South Australia	$99,221.84
Western Australia	$373,662.11
Tasmania	$79,888.41
Northern Territory	$6,776.53
Australian Capital Territory	$93,514.97
Total	**$2,823,505.96**

Table A.4 Inpatients total cost by practitioner

State	Total cost
Doctor	$1,259,270.68
Nurse practitioner	$75,441.60
Physiotherapist	$1,488,793.68
Total	**$2,823,505.96**

Table A.5 Private practice costs by state and territory

State	Total cost
New South Wales	$836,353.52
Victoria	$605,929.59
Queensland	$657,134.91
South Australia	$359,750.18
Western Australia	$396,512.97
Tasmania	$64,334.89
Northern Territory	$19,037.87
Australian Capital Territory	$33,480.40
Total	$2,972,534.32

Table A.6 Outpatients costs by state and territory

State	Total cost
New South Wales	$129,079.89
Victoria	$116,243.22
Queensland	$53,081.86
South Australia	$31,735.11
Western Australia	$29,481.21
Tasmania	$17,115.57
Northern Territory	$1,069.72
Australian Capital Territory	$18,898.44
Total	$396,705.02

Appendix B Survey

Information

This survey

The Australian Physiotherapy Association (APA) has commissioned Deloitte Access Economics to investigate the financial implications for governments and patients of extending prescribing rights to appropriately qualified and credentialed physiotherapists in Australia.

The purpose of this survey is to understand current practice across the various clinical settings and specialties, and how extending prescribing rights might affect this. While we understand that maintaining appropriate levels of quality and patient safety are critical to this proposal, for the purposes of this survey, we are primarily interested in any potential time and cost savings to the health system.

Thank you for taking the time to complete this survey. We anticipate that it will take approximately 10-30 minutes for you to complete, depending on how many clinical settings you wish to enter information for (10 minutes per setting). Where possible, please draw on records rather than your memory.

This survey has been reviewed and piloted with the APA. If you have any questions or if you're having difficulty responding, please do not hesitate to contact Sruthi Srikanthan on (03) 9671 7000 or at ssrikanthan@deloitte.com.au.

Please note that all responses are anonymous and respondents will not be identified in any way.

What do we mean by "prescribing rights"?

The right for physiotherapists to prescribe medicines has been a feature of the United Kingdom's health system since 2012. In Australia, non-medical prescribing currently covers dentists, midwifes, nurse practitioners and podiatrists. Hospital-based pilot programs have experimented with limited prescribing rights for physiotherapists.

Some of the potential benefits that have been suggested include: saving time and money for patients; and better utilising physiotherapists' skills and education, which would be augmented by specific training in prescribing. Becoming a prescriber would be voluntary and subject to similar requirements as are placed on other prescribers under the relevant State/Territory and Commonwealth legislation.

For the purpose of this survey, the term "prescribing rights" refers to all medications on the Pharmaceutical Benefits Scheme. Prescribing is meant broadly - it includes medications that may be dispensed from a pharmacy as well as medication dispensed in a hospital setting.

Extended scope of practice

Some of the questions refer to "extended scope of practice" because we are interested in whether these would be barriers to achieving the potential time and cost savings of extending prescribing rights to physiotherapists. The following areas were identified by the APA through a national survey of its members, conducted in 2006. These may deliver even greater benefit where access to medical care is more difficult, such as in rural and remote areas.

- *Injecting* - e.g. in the management of spasticity and chronic bursitis with Botox and corticosteroids.
- *Minor surgical procedures or removal of sutures*
- *Diagnostic imaging* with full access to patient rebates under the Australian Government Medicare Benefits Scheme (MBS).
- *Pathology* with full access to patient rebates under the MBS.
- *Specialist referral* and/or follow up with full access to patient rebates under the MBS.

***1. Which state or territory do you currently work in? If multiple, select the state or territory that you spent the most hours working in during the last 14 days.**

- ○ Australian Capital Territory
- ○ New South Wales
- ○ Northern Territory
- ○ Queensland
- ○ South Australia
- ○ Tasmania
- ○ Victoria
- ○ Western Australia

***2. Do you work in a metropolitan or rural area? Please choose the most appropriate option and if multiple, select the area that you spent the most hours working in during the last 14 days. Refer to http://www.doctorconnect.gov.au/internet/otd/publishing.nsf/Content/locator if you are unsure.**

- ○ RA1 - Major Cities of Australia
- ○ RA2 - Inner Regional Australia
- ○ RA3 - Outer Regional Australia
- ○ RA4 - Remote Australia
- ○ RA5 - Very Remote Australia

3. In principle, do you support the proposal to extend prescribing rights to physiotherapists?

No	In some circumstances	Yes
○	○	○

If you wish to provide further comment, please do so below

Private practice filter

Questions relate to four clinical settings: private practice, hospital emergency department, hospital inpatient and outpatients/community health clinics. These pages direct you to sets of questions in each setting. Please enter information for each of the settings that you worked in during the last 14 days, choosing the setting(s) that best describe your workplace(s).

***4. Did you work in private practice (including private services provided to residential aged care, or if you work as an elite sport physiotherapist in settings such as sporting institutes, sports clubs or other sports organisations) in the last 14 days?**

- yes
- no

Physiotherapists in Private Practice

The following questions are for physiotherapists working in private practice. Please refer to your patient records when responding, where possible.

***5. Please describe the private practice setting where you spent most of your time working in the last 14 days (If not a typical fortnight, please describe your usual practice setting). If your practice setting is not listed below, please select other.**

- ○ Private clinic (sole physiotherapist)
- ○ Group private clinic
- ○ Private practice co-located with other primary care or allied health
- ○ Locum
- ○ Domiciliary/Home Visit
- ○ Residential aged care facility

Other (please specify)

***6. How many hours did you work as a physiotherapist in private practice in the last 14 days? (Please report a typical fortnight).**

***7. How many patients did you see in the last 14 days? (Please report a typical fortnight).**

***8. What proportion of the patients you saw in the last 14 days were new patients? (Please report a typical fortnight)**

<10%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
○	○	○	○	○	○	○	○	○	○	○

***9. Did any of the patients you saw in the last 14 days require and were referred to a General Practitioner (GP) or other medical practitioner (OMP) for any of the following extended scope of practice areas?**

	Required	Referred to GP or OMP	Not required for any patients
Prescription	☐	☐	☐
Injection	☐	☐	☐
Minor surgical procedure or removal of sutures	☐	☐	☐
Other surgery	☐	☐	☐
Diagnostic imaging	☐	☐	☐
Pathology	☐	☐	☐
Specialist referral and/or follow up	☐	☐	☐

***10. Of the patients you saw in the last 14 days, how many required and were referred to a GP or OMP for a prescription? Please include new patients and those who you had previously referred to a GP or OMP.**

Number of patients who required a prescription	
Number of patients who were referred for a prescription only (no other reason to see GP)	
Number of patients who were referred for a prescription plus any of the extended scope practice areas (see above)	
Number of patients who were referred on by the GP to a specialist for medication only (e.g. to a pain clinic)	

11. Delays in patient care may occur when patients are referred by the physiotherapist to a GP or OMP to prescribe a medication. This may be due to refining the prescription, communication issues or increased risk of patient chronicity caused by cycling between clinicians.

For the patients that you have referred to a GP or OMP for a prescription, on average, has the number of physiotherapy treatments they require been greater than you would expect if you were able to provide the prescription directly to the patient? Please choose an option below.

	No or little impact	10-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91-100%
Estimated impact (increase) on number of physiotherapy sessions required	○	○	○	○	○	○	○	○	○	○

If you wish to provide further comment, please do so below

***12. Do you think current prescribing arrangements have an impact on factors such as:**

- ☐ Your relationship with your patients
- ☐ Delays to patient care
- ☐ Impacts on the quality of care provided to patients
- ☐ Patient outcomes
- ☐ No or other impact (describe below)

If you wish to provide further comment, please do so below

13. Are you aware of any work practices within your workplace to "work around" the restrictions on physiotherapist prescribing? Please describe below. Please note that all responses are anonymous and respondents will not be identified in any way.

14. If you have any further comments, please enter below.

Hospital Emergency Department filter

Questions relate to four clinical settings: private practice, hospital emergency department, hospital inpatient and outpatients/community health clinics. These pages direct you to sets of questions in each setting. Please enter information for each of the settings that you worked in during the last 14 days, choosing the setting(s) that best describe your workplace(s).

*15. Did you work in a hospital emergency department in the last 7 days?

- yes
- no

Physiotherapists in Hospital Emergency Departments

The following questions are for physiotherapists working in Hospital Emergency Departments (ED). Please refer to your patient records when responding, where possible.

*16. During the last 7 days, did you spend the majority of your time in a public or private hospital ED?

- Public Hospital ED
- Private Hospital ED

*17. How many hours did you work as a physiotherapist in a hospital ED in the last 7 days? (Please report a typical week)

*18. How many patients in ED did you see during the last 7 days? (Please report a typical week)

*19. Did any of the patients you saw in the last 7 days require and were they referred directly, or referred to a doctor, nurse practitioner (NP) or other medical practitioner (OMP) for any of the following extended scope of practice areas? (Whether you were the primary or secondary contact in ED.)

	Required	Referred to Doctor, NP or OMP	Not required
Prescription	☐	☐	☐
Injection	☐	☐	☐
Minor surgical procedure or removal of sutures	☐	☐	☐
Other surgery	☐	☐	☐
Diagnostic imaging	☐	☐	☐
Pathology	☐	☐	☐
Specialist referral and/or follow up	☐	☐	☐

20. If your ED patient required a prescription, who would you typically refer to?

	Never	Sometimes	Always
ED Doctor (junior)	○	○	○
ED Doctor (senior)	○	○	○
Nurse Practitioner	○	○	○

Other (please specify)

*21. Of the ED patients you saw in the last 7 days, how many required a prescription?

Number of patients that required a prescription

***22. Of those ED patients in the last 7 days who required a prescription, how many (number of patients) were:**

Referred to a non-medical prescriber for a prescription only

Referred to a medical prescriber for a prescription only

Referred to a prescriber for a prescription plus one or more other services from the extended scope of practice (see list of services above)

***23. When you refer a patient for a prescription, how much of your time (for an "average" patient) is spent coordinating, waiting with the patient and handing over the patient to the prescriber?**

Other (please specify)

***24. How long does the prescriber spend (on average) with the patient to provide the prescription?**

Other (please specify)

***25. Do you think current prescribing arrangements have an impact on factors such as:**

- [ ] Your relationship with your patients
- [ ] Delays to patient care
- [ ] Impacts on the quality of care provided to patients
- [ ] Patient outcomes
- [ ] No or other impact (describe below)

If you wish to provide further comment, please do so below

26. Are you aware of any work practices within your ED to "work around" the restrictions on physiotherapist prescribing? Please describe below. Please note that all responses are anonymous and respondents will not be identified in any way.

27. If you have any further comments, please enter below.

Hospital inpatient filter

Questions relate to four clinical settings: private practice, hospital emergency department, hospital inpatient and outpatients/community health clinics. These pages direct you to sets of questions in each setting. Please enter information for each of the settings that you worked in during the last 14 days, choosing the setting(s) that best describe your workplace(s).

*28. Did you work in a hospital inpatient department in the last 14 days?

- yes
- no

Physiotherapists in Hospital Inpatient Departments

The following questions are for physiotherapists working in Hospital Inpatient Departments. Please refer to your patient records when responding, where possible.

***29. Did you spend the majority of your time in the last 14 days working in a public or private hospital ED?**

- ○ Public Hospital inpatient department
- ○ Private Hospital inpatient department

***30. What is your area of clinical specialisation? Please enter the most appropriate response, based on where you spent your time working during the last 14 days (or in a typical fortnight). You may choose multiple areas.**

- ☐ Neurology
- ☐ Community Rehabilitation
- ☐ Cardiorespiratory
- ☐ Musculoskeletal
- ☐ Sports
- ☐ Emergency Department
- ☐ Orthopaedic
- ☐ Pain
- ☐ Rural
- ☐ Continence and Women's Health
- ☐ Aged Care/ Gerontology
- ☐ Aquatic Physiotherapy
- ☐ Hand therapy
- ☐ Animal
- ☐ Mental Health/Learning disabilities
- ☐ Lymphoedema
- ☐ Palliative Care
- ☐ Occupational Health
- ☐ Paediatrics

Other (please specify)

***31. How many hours did you work as a physiotherapist in a hospital inpatient department in the last 14 days? (Please report a typical fortnight)**

***32. How many patients did you see in the last 14 days? (Please report a typical fortnight)**

***33. What proportion of the patients you saw in the last 14 days were new patients? (Please report a typical fortnight)**

<10%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
○	○	○	○	○	○	○	○	○	○	○

*34. Did any of the patients you saw in the last 14 days require and were they referred to a medical or non-medical prescriber for any of the following extended scope of practice areas?

	Required	Referred to prescriber	Not required for any patients
Prescription	☐	☐	☐
Injection	☐	☐	☐
Minor surgical procedure or removal of sutures	☐	☐	☐
Other surgery	☐	☐	☐
Diagnostic imaging	☐	☐	☐
Pathology	☐	☐	☐
Specialist referral and/or follow up	☐	☐	☐

*35. Of the patients you saw in the last 14 days, how many required and were referred to a prescriber (medical or non-medical) for a new or changed prescription? Please include new patients and those who you had previously referred.

Number of patients who required a prescription

Number of patients who were referred to a medical prescriber for a prescription only

Number of patients who were referred to a non-medical prescriber for a prescription only

Number of patients who were referred to a prescriber for a prescription plus one or more of the extended scope activities (refer to list above)

36. What medications do your patients require prescriptions for that relate to the condition for which they are receiving physiotherapy treatment?

- ☐ Oxygen
- ☐ Oral medications for spasticity
- ☐ Botulinum toxin
- ☐ Bronchodilators
- ☐ Prescription Pain Medications (not controlled)
- ☐ Controlled prescription pain medications (Schedule 8, eg. Morphine)

Other (please specify)

37. If your patient required a prescription, who would you typically refer to?

	Never	Sometimes	Always
Doctor (junior)	○	○	○
Doctor (senior)	○	○	○
Nurse Practitioner	○	○	○

Other (please specify)

***38. When you refer a patient for a prescription, how much of your time (for an "average" patient) is spent coordinating, waiting with the patient and handing over the patient to the prescriber?**

Other (please specify)

***39. How long does the prescriber spend (on average) with the patient to provide the prescription?**

Other (please specify)

***40. Do you think current prescribing arrangements have an impact on factors such as:**

- [ ] Your relationship with your patients
- [ ] Delays to patient care
- [ ] Impacts on the quality of care provided to patients
- [ ] Patient outcomes
- [ ] No or other impact (describe below)

If you wish to provide further comment, please do so below

41. Are you aware of any work practices within your hospital department to "work around" the restrictions on physiotherapist prescribing? Please describe below. Please note that all responses are anonymous and respondents will not be identified in any way.

42. If you have any further comments, please enter below.

Outpatient/community health filter

Questions relate to four clinical settings: private practice, hospital emergency department, hospital inpatient and outpatients/community health clinics. These pages direct you to sets of questions in each setting. Please enter information for each of the settings that you worked in during the last 14 days, choosing the setting(s) that best describe your workplace(s).

*43. Did you work in a public outpatient or community health service (including public aged care services) in the last 14 days?

- yes
- no

Physiotherapists in Outpatient Departments and Community Health Services (P...

The following questions are for physiotherapists working in public Outpatient Departments and Community Health Services. Please refer to your patient records when responding, where possible.

*44. What type of clinic or service did you work in during the last 14 days (or in a typical fortnight)? You may select multiple answers.

- ☐ Neurology
- ☐ Cardiorespiratory
- ☐ Musculoskeletal
- ☐ Sport
- ☐ Orthopaedic
- ☐ Pain
- ☐ Rural clinic
- ☐ Continence and women's health
- ☐ Aged care/gerontology
- ☐ Aquatic physiotherapy
- ☐ Hand therapy
- ☐ Mental health/learning disabilities
- ☐ Lymphodema
- ☐ Palliative care
- ☐ Occupational health
- ☐ Paediatric
- ☐ Domicilliary

Other (please specify)

*45. How many hours did you work as a physiotherapist in an outpatient or community health setting in the last 14 days? (Please report a typical fortnight)

*46. How many patients did you see in an outpatient/community health clinical setting in the last 14 days? (Please report a typical fortnight)

*47. What proportion of the patients you saw in the last 14 days (or in a typical fortnight) were new patients?

<10%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
○	○	○	○	○	○	○	○	○	○	○

***48. Did any of the patients you saw in the last 14 days require and were they referred to a General Practitioner (GP) or Other Medical Practitioner (OMP) for any of the following extended scope of practice areas?**

	Required	Referred to GP or OMP	Not required for any patients
Prescription	☐	☐	☐
Injection	☐	☐	☐
Minor surgical procedure or removal of sutures	☐	☐	☐
Other surgery	☐	☐	☐
Diagnostic imaging	☐	☐	☐
Pathology	☐	☐	☐
Specialist referral and/or follow up	☐	☐	☐

***49. Of the patients you saw in the last 14 days, how many required and were referred to a GP or OMP for a prescription? Please include new patients and those who you had previously referred to a GP or OMP.**

Number of patients who required a prescription

Number of patients who were referred for a prescription only (no other reason to see GP)

Number of patients who were referred for a prescription plus any of the extended scope practice areas (see list above)

Number of patients who were referred on by the GP to a specialist for medication only (e.g. to a pain clinic)

50. Delays in patient care may occur when patients are referred by the physiotherapist to a GP or OMP to prescribe a medication. This may be due to refining the prescription, communication issues or increased risk of patient chronicity caused by cycling between clinicians.

For the patients that you have referred to a GP or OMP for a prescription, on average, has the number of physiotherapy treatments they require been greater than you would expect if you were able to provide the prescription directly to the patient? Please choose an option below.

	No or little impact	10-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91-100%
Estimated impact (increase) on number of physiotherapy sessions required	○	○	○	○	○	○	○	○	○	○

If you wish to provide further comment, please do so below

***51. Do you think current prescribing arrangements have an impact on factors such as:**

- [ ] Your relationship with your patients
- [ ] Delays to patient care
- [ ] Impacts on the quality of care provided to patients
- [ ] Patient outcomes
- [ ] No or other impact (describe below)

If you wish to provide further comment, please do so below

52. Are you aware of any work practices within your workplace to "work around" the restrictions on physiotherapist prescribing? Please note that all responses are anonymous and respondents will not be identified in any way. Please describe below.

53. If you have any further comments, please enter below.

Appendix C Model assumptions and sources

Table C.1Summary of model inputs, values and sources

Input	Value	Source
Emergency Department		
Total FTE	58	Total physiotherapist numbers - *Australia's Health Workforce Series – Physiotherapists in Focus* Hours worked - survey data
Sum of patients per FTE	291	Survey data
Proportion of patients who require a prescription	48.89%	Survey data
Prescriber time (minutes)	7.87	Survey data
Doctor hourly wage	$80.79	State based awards
Nurse hourly wage	$54.83	State based awards
Physiotherapist time (minutes)	15.16	Survey data
Physiotherapist hourly wage	$61.00	*Career structures and pathways for physiotherapists*
Private practice		
Total FTE	433	Total physiotherapist numbers - *Australia's Health Workforce Series – Physiotherapists in Focus* Hours worked - survey data
Sum of patients per FTE	943	Survey data
Proportion of patients who require a prescription	11.21%	Survey data
Proportion of patients who require a prescription only	44.86%	Survey data
Cost of GP attendance	$37.05	Medicare Benefits Schedule fee summary
Inpatients		
Total FTE	199	Total physiotherapist numbers - *Australia's Health Workforce Series –Physiotherapists in Focus* Hours worked - survey data
Sum of patients per FTE	769	Survey data
Proportion of patients who require a prescription	13.39%	Survey data
Prescriber time (minutes)	11.09	Survey data
Doctor hourly wage	$80.79	State based awards
Nurse hourly wage	$54.83	State based awards
Physiotherapist time (minutes)	16.06	Survey data

Input	Value	Source
Physiotherapist hourly wage	$61.00	*Career structures and pathways for physiotherapists*
Outpatients		
Total FTE	173	Total physiotherapist numbers - *Australia's Health Workforce Series – Physiotherapists in Focus* Hours worked - survey data
Sum of patients per FTE	777	Survey data
Proportion of patients who require a prescription	7.26%	Survey data
Proportion of patients who require a prescription only	41.51%	Survey data
Cost of GP attendance	$37.05	Medicare Benefits Schedule fee summary

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