NOTICE OF LODGMENT

AUSTRALIAN COMPETITION TRIBUNAL

This document was lodged electronically in the AUSTRALIAN COMPETITION TRIBUNAL and has been accepted for lodgment pursuant to the Practice Direction dated 3 April 2019. Filing details follow and important additional information about these are set out below.

Lodgment and Details

Document Lodged:	Statement
File Number:	ACT 4 of 2021
File Title:	APPLICATION FOR REVIEW OF AUTHORISATION AA1000542 DETERMINATION MADE ON 21 SEPTEMBER 2021
Registry:	VICTORIA – AUSTRALIAN COMPETITION TRIBUNAL

REGISTRAR

Dated: 28/06/2022 3:38 PM

Important information

This Notice has been inserted as the first page of the document which has been accepted for electronic filing. It is now taken to be part of that document for the purposes of the proceeding in the Tribunal and contains important information for all parties to that proceeding. It must be included in the document served on each of those parties.

Commonwealth of Australia

Competition and Consumer Act 2010 (Cth)

In the Australian Competition Tribunal

File Number:	ACT 4 of 2021
File Title:	APPLICATION FOR REVIEW OF AUTHORISATION A1000542 DETERMINATION MADE ON 21 SEPTEMBER 2021
Applicant:	National Association of Practising Psychiatrists

AND

File Number:	ACT 5 of 2021
File Title:	APPLICATION FOR REVIEW OF AUTHORISATION A1000542 DETERMINATION MADE ON 21 SEPTEMBER 2021
Applicant:	Rehabilitation Medicine Society of Australia and New Zealand Ltd

Statement

Statement of:	Dr Zoe Adey-Wakeling
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Occupation:	Head of Unit, Rehabilitation Senior Rehabilitation Consultant Division of Rehabilitation, Aged Care & Palliative Care Flinders Medical Centre
Date:	28 June 2022

Filed on behalf of Rehabilitation Medicine Society of Australia and New Zealand, Applicant

Prepared by Simon Uthmeyer Ref JGW/JGW/446381/1/AUM/1226690409.1

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I, Zoe Adey-Wakeling, say as follows:

1 I am Head of the Rehabilitation Unit at Flinders Medical Centre, Southern Adelaide Local Health Network (**SALHN**), and the President of the Rehabilitation Medicine Society of Australia and New Zealand (**RMSANZ**).

2 I am authorised to make this statement on behalf of RMSANZ and, except where otherwise stated, make this statement from my own knowledge.

3 This statement is in addition to the statement I gave on 16 May 2022 (**Primary Statement**).

4 I make this statement for the purpose of direction 9 of the directions made by the Tribunal on 12 May 2022.

5 To the extent that I do not address a statement or allegation from the Authorisation Applicant's witnesses, this does not mean that I agree with it.

6 In preparing this responsive statement, I have reviewed my Primary Statement and the Affidavit of David Malcolm Du Plessis affirmed on 13 June 2022 and filed by the Authorisation Applicants on 14 June 2022 (**Du Plessis Affidavit**).

7 In this statement, I will not attempt to respond to or correct each and every point made in the Du Plessis Affidavit.

Professional Background

8 My Primary Statement lists details pertaining to my professional background (see "Credentials", paragraphs [1] to [5]). Further, I highlight the following matters.

9 I obtained a medical degree at Flinders University, South Australia in 2004, following which I was awarded Fellowship of the Australasian Faculty of Rehabilitation in 2011. I was subsequently awarded a Doctor of Philosophy (PhD) in Medicine in 2016, and Associate Fellowship of the Royal Australasian Faculty of Medical Administrators. I am a member of the Australian Institute of Company Directors. I hold full academic status at Flinders University.

10 I have worked in the Rehabilitation Unit at SALHN since 2005. I was appointed Head of Unit earlier this year. I act as the deputy to the SALHN Executive Director of Medical Services. The unit is now

comprised of 75 physical patient beds, up to 55 ambulatory (i.e., outside of an inpatient setting) and virtual beds, 7 outpatient clinics, 2 country clinics, an outreach country service, a research program and a teaching program for trainees in rehabilitation medicine. As Head of Unit, I am responsible for the oversight of the administrative, clinical and teaching aspects of our Unit.

11 I continue to practice as a rehabilitation medicine physician, specialising in stroke and neurological rehabilitation and the management of medical fitness for driving.

12 Because of my role as President of the RMSANZ, and experience as a rehabilitation physician, medical administrator and academic, I have specialised knowledge and represent those with specialised knowledge of:

12.1 the provision of rehabilitation medicine services in the public and private healthcare systems, including to patients recovering from joint replacement surgery;

12.2 payment arrangements between medical payers, including private health insurers (**PHIs**), and medical specialists;

12.3 the relationship between rehabilitation physicians and other medical specialists and allied health professionals; and

12.4 the use of clinical targets and guidelines in medical practice.

Affidavit of David Du Plessis

13 The purpose of this Statement is to reply to the following matters contained in the Du Plessis Affidavit:

13.1 value based healthcare and contracting (Part C of the Du Plessis Affidavit);

13.2 the proposed inclusion of clinical targets in medical purchaser provider agreements (**MPPAs**) (paragraphs [257] to [263] of the Du Plessis Affidavit);

13.3 the proposed requirement for medical specialists to comply with clinical guidelines in MPPAs (paragraphs [264] to [272] of the Du Plessis Affidavit); and

13.4 clinical independence of practitioners (paragraphs [113] to [116] and [252] to [256] of the Du Plessis Affidavit).

Value based health care and contracting

Required infrastructure for value based health care

14 The position of RMSANZ is supportive of the steps already being taken (largely in public health settings) to move towards value based healthcare. In particular, RMSANZ supports the adoption of lower-cost interventions and treatment where supported by research, clinical experience and consumer acceptability.

15 However, I support the position of RMSANZ that any transition away from existing models of providing medical services to a value based model first requires the right infrastructure to be in place.

16 The Australian Commission on Safety and Quality in Health Care (**ACSQHC**), in its 2019 Report, *'The State of Patient Safety and Quality in Australian Hospitals* (**2019 ACSQHC Report**) outlined the broad components of a successful transition to value based care. They were:

16.1 measuring patient outcomes (particularly patient reported outcomes) and related costs;

16.2 a system of guidelines and standards for best practice;

16.3 identifying payment methods focusing on the outcome of care; and

16.4 an enabling information technology platform.

A copy of the 2019 ACSQHC Report is contained at Annexure DD-27 to the Du Plessis Affidavit.

17 I consider that these first two components are essential to any transition away from existing models of paying for medical care.

18 While I personally practice medicine in South Australia, RMSANZ has looked at examples of successful value based programs in other Australian jurisdictions. The 2019 ACSQHC Report identifies NSW Health's "leading better value care program" as an example of a developed system aimed at delivering care that improves patient outcomes, patient experiences in receiving care and effectiveness and efficiencies of care. NSW Health has done so through commissioning for better value in which they have developed a state-wide program which involves:

18.1 analysing service needs and outcomes;

18.2 designing evidence-based service models; and

18.3 implementing service models and reviewing and evaluating outcomes for continuous improvement (the so called ‘virtuous cycle’).

19 In order to commission for better value care, a program of collaborative commissioning has been established in New South Wales which there are joint responsibilities between provider and organisations, strong consumer engagement, local design of care pathways, funding reforms, the use of data analytics and the encouragement of continuous learning and support. Once the commissioning groups are established there are phases required for the development of better value care including, joint development, feasibility implementation and then full implementation and review. Copies of print-outs from the ‘Value based healthcare’ section of the NSW Health website are marked "**ZAW-1**" and attached to this statement.

20 Another example of a successful value based program is Hip Fracture care in NSW. This program is based on an evidence-based model of care being applied for the management of hip fracture. It aims to reduce time spent in hospitals, provide clinicians with resources and skills to deliver “high value care” and reduce unwarranted clinical variation. This program required the commissioning of a number of expert clinical committees (orthopaedic surgery, pain management, geriatric care and rehabilitation) who wrote documents of standards of care, utilised Australian and New Zealand Guidelines for hip fracture, developed instructional tools for pain relieving nerve blocks and commissioned liaison with the Australian and New Zealand Hip Fracture registry. This process of refining the model of care to ensure better value care took a number of years and collaboration with large numbers of consumers, clinicians and academics. Copies of print-outs from the ‘Hip fracture care’ section of the NSW Health and Agency for Clinical Innovation websites are marked "**ZAW-2**” and attached to this statement. A copy of the Hip Fracture Care Clinical Standard is marked "**ZAW-3**” and attached to this statement.

21 In the Du Plessis Affidavit there is only limited evidence of any of the commissioning stages that would be undertaken, the involvement of consumers or clinicians in the joint development of the value based care model and no reference to the use of a continuous improvement cycle. Rather there is evidence of financial incentives that apply a complex system of care without the infrastructure necessary to ensure successful delivery or review of a system of care (see, for example, paragraphs [155] and [156] of the Du Plessis Affidavit).

22 To the best of my knowledge, outcome measures for value based healthcare have only been developed in Australia in respect of acute medical and surgical services. They have been tied to

diagnostic related groups, which reflect acute diagnoses. There are no properly established value based measures available as yet for sub-acute areas of medicine, including rehabilitation medicine. These would have to be tied to AN-SNAP coding (the Australian National Subacute and Non- Acute Patients classification) which is a system of identifying people referred for rehabilitation and other subacute care.

23 Value based approaches to health care will often require models of care that follow evidence-based guidelines or standards of care. An example is the Australian and New Zealand *Clinical Guidelines for Stroke Management* which inform models of care for stroke rehabilitation. In their study published in *Archives of Physical Medicine and Rehabilitation*, Hubbard et al. (2012) concluded that a hospital that followed the guidelines most closely had more people discharged home and better improvements in disability. A copy of that article is marked "**ZAW-4**" and attached to this statement. This is an example of where guidelines that are established and independent can drive improvements in care. The Du Plessis Affidavit provides examples of the adoption of value based healthcare in the public sector (see for example, paragraphs [121] and [129]). I note that:

23.1 these examples are not neatly or meaningly transferrable to the provision of health care in the private health system, including the provision of care by rehabilitation specialists. For example, Project Evolve (referred to at [121] and Annexure DD-28 of the Du Plessis Affidavit) was undertaken by the Royal Australasian College of Physicians to identify models of care that were obsolete or harmful. In this process expert committees of clinicians were engaged to review care techniques and processes that were no longer useful due to scientific discovery, technical advance or superseded processes of care. This project predated the work of the Medicare Review committee which changed Medicare item numbers accordingly. This process was driven by scientific discovery and clinical experience aimed at modernising current systems of care. It was driven by the colleges and clinicians and was not financially incentivised by vested interests; and

23.2 the models implemented in the public sector have been developed through years of work of academics and consumers, where the primary focus is improving clinical outcomes based on medical expertise and rigorous research. An example is a program aimed at those admitted to hospital with a fracture. The project aims to improve diagnosis of osteoporosis (bone thinning which increases risk of fracture) in those with a fracture, treating the condition and thereby preventing second fractures. Osteoporosis re-fracture prevention builds on work in the community of researchers such as the southern NSW group STOP who continued to produce research until the federal government developed the national strategic action plan

for osteoporosis 2019 which encourages health departments and the private sector to change the way they manage people who are admitted to hospital with a fracture to ensure that osteoporosis is treated, and second fractures occur less commonly. This is now commonplace in public and private hospitals, taught to clinicians and is included in established care pathways.

24 The risks of transitioning to value based models of healthcare without the above infrastructure being in place are that:

24.1 rather than focusing on the 'value' delivered to patients by medical interventions, the focus is placed on cost reduction for healthcare payers and/or other non-clinical drivers; and

24.2 clinical independence (and thus medical decision-making in the best interests of patients) may be overridden by the financial 'levers' contained in value based contracts. I discuss this further below.

The role of rehabilitation specialists in the private health system

25 I refer to my Primary Statement which outlines:

25.1 the clinical guidelines published by RMSANZ to assist with assessment of patient suitability for rehabilitation care following joint replacement (at paragraphs [18] to [20]); and

25.2 the relationship between rehabilitation specialists and orthopaedic surgeons, who are a common source of referrals for rehabilitation physicians (at paragraphs [22] to [26]).

The value based healthcare model proposed by the Authorisation Applicants

26 I understand that presently, nib's Broad Clinical Partners Program (**BCPP**) model only covers medical specialists who provide services for hip and knee joint replacement surgery – surgeons, anaesthetists and assistant surgeons. I have reviewed the nib 'Short Stay No Gap' MPPA, which is a template MPPA for the specialists participating in the BCPP (**nib BCPP MPPA**).

27 I also understand that the Authorisation Applicants propose to expand the BCPP model to cover a greater number of specialists and treatments (Du Plessis Affidavit, [226]). The model is also proposed to involve a greater number of PHIs. I am not aware of the terms of any MPPAs that might be negotiated between the Authorisation Applicants and other medical specialists if the BCPP model is expanded.

28 I understand the Authorisation Applicants to contend that the nib BCPP model is an example of a value based contracting model because one of its objects is to establish a post-surgery 'at-home' patient rehabilitation and support program (Du Plessis Affidavit paragraph [133]).

29 That object is said by the Authorisation Applicants to be reflected in the following components of the nib BCPP model, including:

29.1 certain terms of the nib BCPP MPPA which:

(a) [redacted]

(b) [redacted]

(c) [redacted]

29.2 nib has provided BCPP providers with access to certain technologies (Du Plessis Affidavit paragraph [136]);

29.3 data analytics services which allow benchmarking across medical specialists and identification of areas of low or no-value care (Du Plessis Affidavit,[148] to [157]); and

29.4 through use of these data capabilities, nib:

(a) identifies providers that are referring patients to care that is not improving patient outcomes;

(b) assesses the relative value of those specialists against other specialists; and

(c) adjusts funding to medical specialists to encourage them to provide care that improves patient outcomes (Du Plessis Affidavit, [154] to [155]).

30 The effect of the nib BCPP MPPA is to require surgeons to refer all clinically appropriate eligible patients for rehabilitation in the home following joint replacement.

31 In my experience, the assessment of the appropriateness of at-home rehabilitation is usually (and properly) made by rehabilitation physicians (individually or in conjunction with their team). Whether at-home (or alternatively, inpatient) rehabilitation is an appropriate pathway for a patient must take account of that patient's clinical indicators, their home setting, and other psychosocial determinants of likely rehabilitation outcomes. The nib BCPP MPPA has the effect of restraining surgeons from referring their patients to rehabilitation physicians to make the necessary assessment.

32 I believe that the nib BCPP model is unlikely to deliver better health outcomes (and therefore, value) for patients for the following reasons:

32.1 the model presumes that certain types of rehabilitation services are inherently 'low value' despite there being no established, independent, 'level 1' evidence base to support this presumption. By a 'level 1' evidence base, I mean an evidence base that the National Health and Medical Research Council (**NHMRC**) deems as suitable to guide clinical practice;

32.2 the clinical targets contained at subclauses 7.1(e) and 7.1(g) of the nib BCPP MPPA appear to be arbitrary and are not selected on the basis of best clinical practice; and

32.3 the requirement to comply with clinical guidelines contained at clause 10.3 of the nib BCPP MPPA may not be appropriate, depending on the specific circumstances of individual patients.

33 I explain each of these shortcomings in the BCPP scheme in greater detail below.

Assessing the value of rehabilitation services

34 The Du Plessis Affidavit cites the following material as supporting its objective of moving a greater number of private hospital patients into the post-surgery 'at-home' patient rehabilitation and support program:

34.1 at subparagraph [134(a)], a 2017 study by Schilling et al. which concluded that rehabilitation pathways following total knee replacements that incorporated inpatient rehabilitation were significantly more expensive but did not achieve patient-reported recovery superior to that of pathways not including inpatient rehabilitation (attached at Annexures DD-29 and DD-40 to the Du Plessis Affidavit) (**Schilling Article**);

34.2 at subparagraph [134(b)], the Independent Hospital Pricing Authority *National Efficient Price Determination 2021-22* (Annexure DD-41 to the Du Plessis Affidavit) (**IHPA Price Determination**); and

34.3 at paragraph [135], announcements of budget commitments by the Victorian and Commonwealth governments to support the greater delivery of rehabilitation services in the home (Annexures DD-42 and DD-43 to the Du Plessis Affidavit) (the **government announcements**).

35 None of the above material amounts to a determination by a properly constituted academic institute that inpatient rehabilitation is a form of 'low-value' healthcare. In my opinion, the material cited by the Authorisation Applicants provides an insufficient basis for such a conclusion.

36 The analysis discussed in the Schilling Article was funded by Medibank Private, one of the major PHIs. Following its publication, the article was subject to the following criticism in replies published in the Medical Journal of Australia:

36.1 in a reply to the article by Laycock et al., it was observed that the study failed to consider clinically relevant factors (such as obesity and function after total knee replacement) that determine the appropriateness of referring a patient to inpatient rehabilitation. A copy of the Laycock et al response is marked "**ZAW-5**" and attached to this statement;

36.2 Geraghty et al. observed in reply that 'despite widely proclaimed opinions, there is limited high level [i.e. 'level 1'] evidence regarding outcomes for inpatient rehabilitation versus ambulatory rehabilitation. In research examining the benefits of [Rehabilitation in the home (**RITH**)], higher complexity patients are often excluded from the studies' and 'to achieve the best outcome for patients, decisions must be individualised and patient-centred and they should start with a referral to a rehabilitation medicine physician, who can determine the right rehabilitation program, at the right time and in the right place'. A copy of the Geraghty et al. response is marked "**ZAW-6**" and attached to this statement; and

36.3 Simmonds and Olver noted that the Schilling Article contained various factual inaccuracies about the collection of data by the Australasian Rehabilitation Outcomes Centre (**AROC**) — the national rehabilitation clinical quality registry for Australia and New Zealand. A copy of the Simmonds and Olver response is marked "**ZAW-7**" and attached to this statement.

37 The IHPA Price Determination only applies to health care services provided in the public sector. In public hospital settings, RITH programs, hospital in the home programs and other hospital substitution programs are well established because they are physician-led and adequately funded under the National Health Reform Agreement. Analogous arrangements are not in place in the private sector. Public hospital rehabilitation services provide rehabilitation care for the more complex and dependent client cohort. As such, comparison of public and private length of stay is not a like for like comparison.

38 In respect of the government announcements, RMSANZ has been instrumental in encouraging and advocating for the development of ambulatory rehabilitation options in both the public and private sector. (for example, NSW ACI Models of Care and AFRM standards for ambulatory care). It is my view that rehabilitation needs to be delivered in an integrated manner and as such needs to be led and coordinated by rehabilitation physicians. This is essential to not compromising the clinical independence of rehabilitation physicians, which relies upon them having at their disposal, a variety of settings in which to deliver rehabilitation most appropriate to each patient's individual circumstances. These settings are the in-reach setting (rehabilitation delivered while the patient is in ICU, acute medical or acute surgical care), the inpatient setting (when the patient is residing in a rehabilitation ward), the outpatient setting (where the patient can come into the hospital gym or hydrotherapy pool for therapy) and the RITH setting (where rehabilitation physician, nurse and therapist visit patients in the home). These various settings allow individualised treatment programs which put the patient in the centre of the care, and also allows the patient to be moved from one setting to another for patient safety reasons or improved independence reasons, if required. RMSANZ has always advocated for a variety of settings to deliver rehabilitation including the RITH setting. The government announcements are simply increasing the options available in the integrated system of care and are by no means meant to be interpreted as dissuading patients from attending inpatient rehabilitation. In my opinion, the requirement that all patients covered by the nib BCPP MPPA be referred to rehabilitation in the home is not supported by sound evidence and does not represent a patient centred-approach and therefore could impact patient experiences and outcomes. The requirement appears to be driven by a need to reduce expenditure by nib on the provision of inpatient rehabilitation services. It is not an apt example of value based healthcare.

Clinical targets

Clinical targets at present

39 I agree with the statement at paragraph [262] of the Du Plessis Affidavit that clinical targets are commonly imposed on hospitals and medical specialists.

40 However, it is also important to note that, in my experience, such targets:

40.1 are not commonly accompanied by financial incentives or penalties (but instead, there will often be a requirement to explain why the relevant target was not met);

40.2 are mainly used for the purpose of hospital accreditation and benchmarking, rather than being used to influence the clinical decision-making of specialists;

40.3 are most often related to specific clinician behaviours (like handwashing, as is identified in paragraph [262] of the Du Plessis Affidavit); and

40.4 rarely require clinical decisions to be made by specialists in respect of patient populations without regard to the individual characteristics of patients.

Clinical targets proposed under the nib BCPP MPPA

41 As I have observed above, the nib BCPP MPPA requires providers to:

41.1 [redacted]

41.2 [redacted].

42 Paragraph [258] of the Du Plessis Affidavit states that the "target" rate for overnight inpatient rehabilitation was 'set [by the Authorisation Applicants] below the average rate of 33%'. I am not aware of any other basis for the chosen target rate, nor do I know of any publication or direction by an academic or research institute that supports this chosen target.

43 I understand that the Authorisation Applicants propose to include similar clinical targets in MPPAs that they negotiate with medical specialists as part of an expanded BCPP.

Risks of arbitrary clinical targets

44 Medical specialists, who are trusted to act in the best interests of patients, should not be required to comply with targets like those contained in the nib BCPP MPPA.

45 The targets in the nib BCPP MPPA do not appear to me to have been developed with input from academics, consumers, researchers, or practitioners. Rather, it appears that the Authorisation Applicants have chosen targets with the primary purpose of reducing the incidence of referral to inpatient rehabilitation following joint replacement surgery.

46 As I have explained above, there is not a sufficient evidentiary basis to restrict the use of inpatient rehabilitation for patients recovering from joint replacement surgery where it is the clinically appropriate option for a patient. Targets, like those in the nib BCPP MPPA, may therefore risk patient outcomes and safety.

47 Given that the targets in the nib BCPP MPPA are accompanied by financial incentives and penalties, it is my opinion that making the targets subject to 'clinical appropriateness' does not sufficiently protect clinical independence. I discuss this in greater detail below.

Requirement to comply with clinical guidelines

48 The nib BCPP MPPA also requires specialists to follow clinical guidelines for the purpose of nib administering and paying claims.

49 I agree with the statement at paragraph [265] of the Du Plessis Affidavit that clinical guidelines are a standard feature of medical specialist practice.

50 However, it is also important to note that, in my experience:

50.1 medical guidelines have never bound medical practitioners to certain courses of action. The NHMRC *Guidelines for Guidelines* Handbook adopts the following definition: medical guidelines as 'statements that include recommendations intended to optimise patient care that are informed by a systematic review of evidence and an assessment of the benefits and harms of alternative care options'. A copy of the 'Background' section of the NHMRC *Guidelines for Guidelines* is marked "**ZAW-8**" and attached to this statement;

50.2 all guidelines must be interpreted by a clinician taking into account the specific circumstances of their patient. Medical guidelines cannot be applied in a 'one size fits all' fashion to patients; and

50.3 the independence of the guidelines is paramount, including their process for development and the research supporting their recommendations.

Impact on clinical independence

51 I have explained above (at paragraphs 29 and 41) the terms that specialists party to a nib BCPP MPPA must adhere to. I have also explained why those terms, if adhered to, may increase the risk of patients being denied the best possible post-operative rehabilitation services.

52 Paragraphs [113] to [116] and [252] to [256] of the Du Plessis Affidavit cite the following obligations, in order to establish that the nib BCPP MPPA will not interfere with clinical decision making by specialists:

52.1 section 172-5(1) of the *Private Health Insurance Act 2007*, which requires that agreements between PHIs and medical practitioners do not limit medical practitioner's clinical autonomy and independence; and

52.2 the terms of the nib BCPP MPPA which purport to protect the ability of a medical practitioner to act only in accordance with their clinical judgment (summarised at paragraph [253] of the Du Plessis Affidavit).

53 In my experience, almost all medical professionals treat their obligation to act in their patients' best interests with utmost seriousness.

54 However, it must also be appreciated that medical specialists working in the private health sector are operating businesses, and in my opinion, like other small business owners, they are influenced by financial imperatives, including:

54.1 the amount of revenue they receive from health care payers, including PHIs;

54.2 the desire for certainty of revenue from the provision of health services; and

54.3 the need to remain attractive to as many privately insured patients as possible.

55 I believe that the MPPAs modelled on the nib BCPP MPPA will be attractive to medical specialists because:

55.1 under the agreement, the specialist is provided a greater level of funding to provide services, relative to other available funding arrangements (e.g., under another MPPA, a gap cover scheme or an out of pocket arrangement) (Du Plessis Affidavit paragraph [260]);

55.2 because a BCPP MPPA has attractive features for patients (in that it offers a no gap experience for all patients treated under the BCPP), a patient is more likely to choose a specialist who has entered into a BCPP MPPA rather than one who has not;

55.3 for junior specialists, who do not have established referral networks, I believe the temptation to sign up to a BCPP MPPA will be particularly attractive – the BCPP scheme will provide the practitioner with a large potential client base, particularly if one or more major PHIs is party to the agreement;

55.4 a BCPP MPPA will provide certainty of income for specialists in respect of each service they provide; and

55.5 there is no obligation upon PHIs (particularly those represented by the Authorisation Applicants) to maintain existing MPPAs and gap cover schemes following the expansion of the BCPP. This may mean that specialists are forced to decide between charging patients out of pocket fees or entering into a BCPP MPPA.

56 A feature of the nib BCPP MPPA (and presumably any other MPPA negotiated as part of the expanded BCPP) is that specialists will have no discretion to treat a patient covered by the MPPA under an alternative arrangement, such as a gap cover scheme (Du Plessis Affidavit paragraph [84]).

57 The Du Plessis Affidavit outlines the various actions that the Authorisation Applicants can take where a practitioner does not comply with the terms of the nib BCPP MPPA, including:

57.1 at paragraph [156], targeting negotiations and spending more in respect of providers that are providing higher quality services; and

57.2 at paragraph [260], terminating the MPPA with a provider that failed to comply with the target rate for rehabilitation.

58 Notwithstanding the obligations placed upon PHIs and medical specialists to preserve clinical independence, I believe that the terms of the nib BCPP MPPA may influence practitioners to make decisions that are not in the best interests of their patients. This is because:

58.1 participation by a specialist in the nib BCPP MPPA necessitates that specialist being bound by the clinical targets contained in the agreement;

58.2 given the overriding presumption of the BCPP scheme appears to be that inpatient rehabilitation is 'low value' care, it may be difficult for a specialist to establish that any referrals in excess of the nib BCPP MPPA target are "clinically appropriate";

58.3 a practitioner that fails to meet the clinical targets contained in the nib BCPP MPPA is likely to be excluded from the BCPP scheme (see, for example, paragraph [260] of the Du Plessis Affidavit); and

58.4 in order to continue realising the financial benefits of the BCPP scheme, a practitioner who would otherwise refer a patient to inpatient rehabilitation is required to adapt their decision-making to comply with targets in the agreement.

Dated: 28 June 2022

Signed……..

Zoe Adey-Wakeling

Commonwealth of Australia

Competition and Consumer Act 2010 (Cth)

In the Australian Competition Tribunal

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Applicant:	Rehabilitation Medicine Society of Australia and New Zealand Ltd

Annexure Certificate

ZAW-1

This is the Annexure marked "ZAW-1" referred to in the statement of Zoe Adey-Wakeling dated 28 June 2022.

About value based healthcare

NSW Health is committed to delivering outcomes and experiences that matter to patients and the community. A value based healthcare approach will help us to achieve this.

In NSW, value based healthcare means continually striving to deliver care that improves:

- health outcomes that matter to patients
- experiences of receiving care
- experiences of providing care
- effectiveness and efficiency of care.

These four essentials of value are also known as the quadruple aim.

Value based healthcare should be driven by patients, clinicians and the community

Value based healthcare requires engagement from patients, the community, clinicians and organisations across NSW. A collaborative approach will ensure that we are delivering the best outcomes for patients and the best value for the system.

Value based healthcare needs to be considered at all levels of healthcare.

Individual

Am I providing care that delivers the outcomes and experiences that matter most to the patient?

Service

Are we using available resources optimally to improve outcomes?

System

Are we allocating resources and creating the environment that enables the best outcomes?

Hear what value based healthcare means for patients, staff and the health system

Value based healthcare in NSW [https://www.youtube.com/watch?app=desktop&v=CWmbu3fgn6I]
Transcript: Value based healthcare in NSW [https://www.health.nsw.gov.au/Value/Pages/Transcript-Value-based-healthcare-in-nsw.aspx]

Hear what value based healthcare means to patients and clinicians [https://www.youtube.com/watch?v=ERmGj365ZFQ]
Transcript: Hear what value based healthcare means to patients and clinicians [https://www.health.nsw.gov.au/Value/Pages/transcript-vbhc-compilation.aspx]

NSW Health programs

We are accelerating the move towards value based healthcare by piloting, scaling and embedding statewide priority programs and developing a range of system wide enablers.

The statewide priority programs currently accelerating our move to value based healthcare are:

- **Leading Better Value Care** [https://www.health.nsw.gov.au/Value/Pages/leading-better-value-care.aspx] - identifying and scaling evidence based initiatives statewide for specific conditions.
- **Integrated Care** [https://www.health.nsw.gov.au/integratedcare/Pages/default.aspx] - statewide strategies to coordinate care and processes within the health system and with other service providers.
- **Commissioning for Better Value** [https://www.health.nsw.gov.au/Value/Pages/commissioning-for-better-value.aspx] - shifting focus on non-clinical and clinical support projects from outputs to outcomes.
- **Collaborative Commissioning** [https://www.health.nsw.gov.au/Value/Pages/collaborative-commissioning.aspx] - whole-of-system approach to incentivise local autonomy and accountability for delivering patient-centred and outcome-focused care in the community.

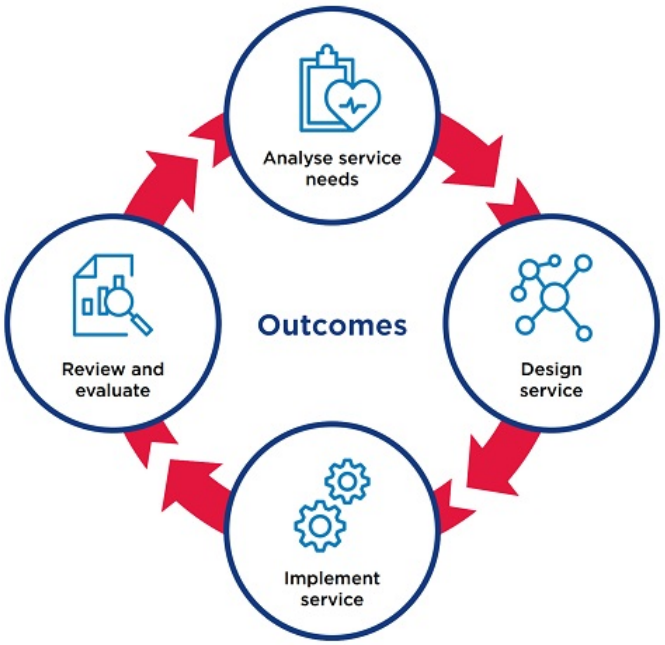
Value based healthcare in NSW framework

We have developed a **framework** [https://www.health.nsw.gov.au/Value/Pages/value-based-healthcare-in-nsw.aspx] to support healthcare professionals' understanding of value based healthcare in NSW. It provides an overview of NSW Health's approach to value - including the vision and the accelerating programs and enablers.

Current as at: Thursday 20 January 2022
Contact page owner: **Strategic Reform and Planning** [https://www.health.nsw.gov.au/pages/feedback.aspx]

Commissioning for Better Value

Commissioning for Better Value (CBV) is one of the state-wide programs accelerating the move to **value based healthcare** [https://www.health.nsw.gov.au/Value/Pages/default.aspx] in NSW.



In NSW Health, commissioning involves:

- analysing service needs and identifying desired outcomes
- designing evidence-based service models
- implementing the selected service model
- reviewing and evaluating outcomes for continuous improvement.

Shifting the focus from outputs to outcomes

Outputs are designed around the amount of activity being provided, whereas outcomes focus on the person receiving the service.

CBV provides a structure that puts the patient at the centre of service design, with a focus on measuring and achieving outcomes.

Providing services that deliver improved outcomes for patients, clinicians and other end-users drives value within the health system.

A focus on outcomes can contribute to value based care by improving:

- health outcomes that matter to patients and the community
- experiences of receiving care
- experiences of providing care
- effectiveness and efficiency of care.

Introduction to Commissioning for Better Value

CBV for medical imaging services in Northern NSW Local Health District

More information

- **Commissioning for Better Value Strategy 2021-24** [https://www.health.nsw.gov.au/Value/Pages/cbv-strategy.aspx]
- **Commissioning for Better Value booklet** [https://www.health.nsw.gov.au/Value/Pages/commissioning-for-better-value-booklet.aspx]
- Contact the team at **MOH-VBHC@health.nsw.gov.au** [mailto:MOH-VBHC@health.nsw.gov.au]

Current as at: Friday 30 July 2021
Contact page owner: **Strategic Reform and Planning** [https://www.health.nsw.gov.au/pages/feedback.aspx]

Collaborative Commissioning

Collaborative Commissioning is one of the programs accelerating **value based healthcare** [https://www.health.nsw.gov.au/Value/Pages/default.aspx] in NSW. It partners local health districts and primary health networks in Patient Centred Co-commissioning Groups (PCCGs). PCCGs focus on local health needs and develop interventions to improve patient and community outcomes.

Guiding principles of Collaborative Commissioning

There are six principles that guide Collaborative Commissioning and PCCGs:
Joint responsibility between providers and organisations.
Strong consumer engagement, embedding accountability to the community served.
Local design of care pathways for improved outcomes for patients.
Funding reform, including flexible purchasing and provider arrangements, realignment of resources and outcome-based payments.
Use of data analytics, business analytics, implementation support, and digital technologies supported by **Lumos** [https://www.health.nsw.gov.au/lumos/Pages/default.aspx] .
Encouraging continuous learning to support improvement and innovation.

More information

- **Role of Patient Centred Co-commissioning Groups** [https://www.health.nsw.gov.au/Value/Pages/collab-commissioning-pccgs.aspx] (PCCGs)
- **Phases of Collaborative Commissioning** [https://www.health.nsw.gov.au/Value/Pages/collab-commissioning-phases.aspx]
- **Current models of care** [https://www.health.nsw.gov.au/Value/Pages/collab-commissioning-models.aspx]
- **Lumos** [https://www.health.nsw.gov.au/lumos/Pages/default.aspx]

Contacts

- **Collaborative Commissioning team** [mailto:MOH-CollaborativeCommissioning@health.nsw.gov.au]
- **Lumos team** [mailto:Lumos@health.nsw.gov.au]

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Contact page owner: **Strategic Reform and Planning** [https://www.health.nsw.gov.au/pages/feedback.aspx]

Phases of Collaborative Commisioning

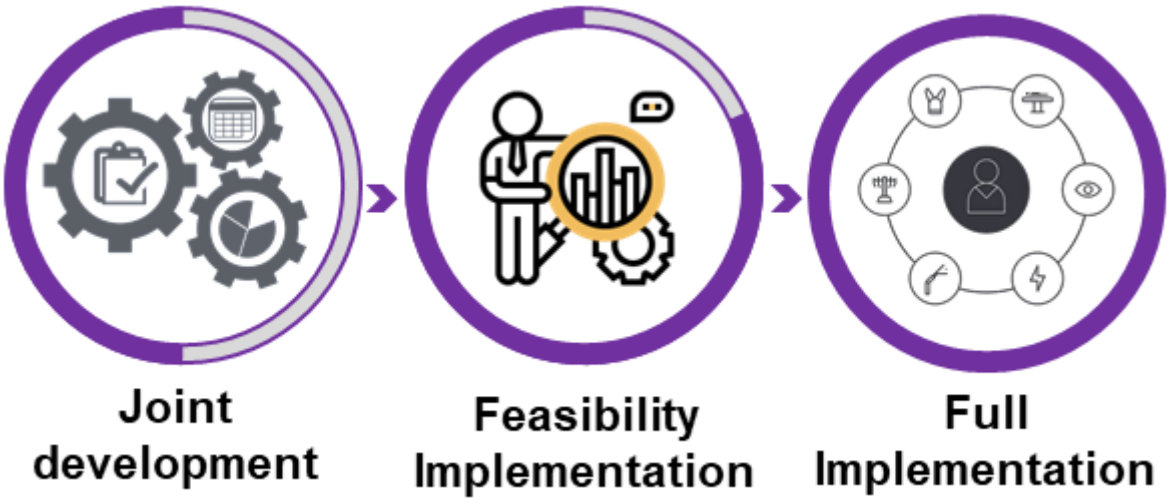

Figure: Phases of establishing Collaborative Commissioning

Phase one: Joint development

Patient Centred Co-commissioning Groups (PCCGs) start Collaborative Commissioning by entering into a joint development phase. This phase allows local health districts and primary health networks to test, modify and refine their initial model of care.

NSW Ministry of Health provides financial, legal and analytical modelling support during this phase.

Phase two: Feasibility implementation

During this phase, groups implement models of care developed in the first phase and assess them for sustainability.

Data is collected, monitored and evaluated in this phase. The data underpinning Collaborative Commissioning comes from the **Lumos** [https://www.health.nsw.gov.au/lumos/Pages/default.aspx] program.

Phase three: Full implementation

Models of care that demonstrate improved outcomes for patients and the community during the feasibility implementation phase, continue to full implementation. In this phase, all model components and contractual elements of the Head Agreement are applied.

The Head Agreement is where districts, speciality networks, primary health networks and Ministry of Health enter into a contractual agreement. This recognises the mutual interest and investment of all parties in a holistic Collaborative Commissioning approach. For more

information contact the **Collaborative Commissioning team** [mailto:MOH-CollaborativeCommissioning@health.nsw.gov.au] .

More information

- **Collaborative Commissioning** [https://www.health.nsw.gov.au/Value/Pages/collaborative-commissioning.aspx]
- **Role of Patient Centred Co-commissioning Groups** [https://www.health.nsw.gov.au/Value/Pages/collab-commissioning-pccgs.aspx] (PCCGs)
- **Current models of care** [https://www.health.nsw.gov.au/Value/Pages/collab-commissioning-models.aspx]
- **Lumos** [https://www.health.nsw.gov.au/lumos/Pages/default.aspx]

Contacts

- **Collaborative Commissioning team** [mailto:MOH-CollaborativeCommissioning@health.nsw.gov.au]
- **Lumos team** [mailto:Lumos@health.nsw.gov.au]

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Contact page owner: **Strategic Reform and Planning** [https://www.health.nsw.gov.au/pages/feedback.aspx]

Commonwealth of Australia

Competition and Consumer Act 2010 (Cth)

In the Australian Competition Tribunal

File Number:	ACT 4 of 2021
File Title:	APPLICATION FOR REVIEW OF AUTHORISATION A1000542 DETERMINATION MADE ON 21 SEPTEMBER 2021
Applicant:	National Association of Practising Psychiatrists

AND

File Number:	ACT 5 of 2021
File Title:	APPLICATION FOR REVIEW OF AUTHORISATION A1000542 DETERMINATION MADE ON 21 SEPTEMBER 2021
Applicant:	Rehabilitation Medicine Society of Australia and New Zealand Ltd

Annexure Certificate

ZAW-2

This is the Annexure marked "ZAW-2" referred to in the statement of Zoe Adey-Wakeling dated 28 June 2022.

Hip fracture care

As the NSW population ages, the number of people admitted to hospital with a hip fracture is expected to rise. Surgery, post-operative rehabilitation and discharge from hospital can be delayed if medical complications are not recognised, prevented or managed effectively.

An evidence based model of care has been developed to:

- reduce waiting times and time spent in hospital
- provide clinicians with the resources, tools and skills they require to deliver high quality care
- reduce unwarranted clinical variation.

Visit the Agency for Clinical Innovation [http://www.eih.health.nsw.gov.au/lbvc/projects/hip-fracture-care] for more information.

Current as at: Tuesday 30 November 2021
Contact page owner: **Strategic Reform and Planning**
[https://www.health.nsw.gov.au/pages/feedback.aspx]

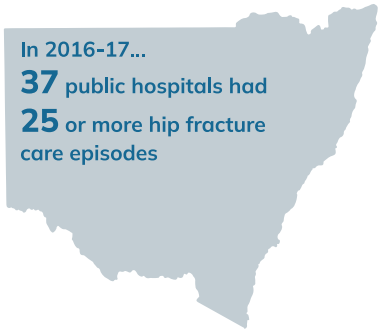
Hip fracture care

A hip fracture is a break occurring at the top of the thigh bone (femur), near the pelvis. It is a significant injury in an older person and is associated with significant morbidity, loss of function and mortality. Sub-optimal management can result in avoidable complications, prolonged hospitalisation and poorer patient outcomes.

The aims of the initiatives are to:

- reduce unwarranted clinical variation
- improve patient assessment, management and experience
- ensure effective and efficient care.

Snapshot of hip fracture in NSW



+174,800
bed days

10.2 days
average length of stay for surgical episodes

+5,700
surgical episodes for people aged +50

Standards

Hip Fracture Care Clinical Care Standard 2016

Standards outlining the delivery of appropriate hip fracture care, produced by the Australian Commission on Safety and Quality in Health Care.

View standards (https://aci.health.nsw.gov.au/__data/assets/pdf_file/0011/459704/Hip-Fracture-Care-Clinical-Care-Standard.pdf)

For clinicians and services

What to improve

Read about the four clinical priority areas for hip fracture care:

1. timely assessment and treatment of pain
2. surgery within 48-hours of arriving at hospital (if appropriate)
3. coordinated orthopaedic and geriatric services
4. patients getting back on their feet within a day if possible

How to improve

Explore options for different organisational models to tailor clinical services for your local requirements:

- structured orthogeriatric service
- coordinated care applying orthogeriatric principles

Download clinical priorities brief

Download clinical priorities brief (https://aci.health.nsw.gov.au/__data/assets/pdf_file/0010/508609/Hip-Fracture-Care_Clinical-Priorities.pdf)

Download organisational models (https://aci.health.nsw.gov.au/__data/assets/pdf_file/0005/553577/LBVC_Hip_Organ

Additional resources

- Australian and New Zealand Guideline for Hip Fracture Care (https://anzhfr.org/wp-content/uploads/sites/1164/2021/12/ANZ-Guideline-for-Hip-Fracture-Care.pdf)
- Australian and New Zealand Hip Fracture Registry (https://anzhfr.org)
- Fascia Iliaca Block (https://aci.health.nsw.gov.au/resources/pain-management/acute-sub-acute-pain/fascia-iliaca-block)

Resources for clinicians and their patients

- Consumer fact sheet: Hip fracture care (https://www.safetyandquality.gov.au/sites/default/files/migrated/Hip-Fracture-Care-CCS-Fact-Sheet-Consumer_tagged.pdf)
- Clinician fact sheet: Hip fracture care (https://www.safetyandquality.gov.au/sites/default/files/migrated/Hip-Fracture-Care-CCS-Fact-Sheet-Clinician_tagged.pdf)

Contact the hip fracture care team

Email the team at ACI-LBVC-HipFractureCare@health.nsw.gov.au (mailto:ACI-LBVC-HipFractureCare@health.nsw.gov.au)

Commonwealth of Australia

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Applicant:	Rehabilitation Medicine Society of Australia and New Zealand Ltd

Annexure Certificate

ZAW-3

This is the Annexure marked "ZAW-3" referred to in the statement of Zoe Adey-Wakeling dated 28 June 2022.

Hip Fracture Care Clinical Care Standard

September 2016

Clinical Care Standards

AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

Health Quality & Safety Commission New Zealand
Kupu Taurangi Hauora o Aotearoa

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Members of the Hip Fracture Care Clinical Care Standard Topic Working Group include Dr Laura Ahmad, Ms Lou-Anne Blunden, Associate Professor Mellick Chehade, Professor Jacqueline Close, Professor Peter Ebeling AO, Professor Ian Harris, Ms Debbie Healey, Dr Beres Joyner, Dr Jennefer Love, Ms Helen Mikolaj, Mr Neville Millen, Mr Tim Noblet, Dr Chrys Pulle, Dr Shankar Sankaran, Dr Hannah Seymour, Dr Joanne Sutherland and Ms Anita Taylor.

Disclaimer

The Australian Commission on Safety and Quality in Health Care has produced this Clinical Care Standard to support the delivery of appropriate care for a defined condition. The Clinical Care Standard is based on the best evidence available at the time of development. Healthcare professionals are advised to use clinical discretion and consideration of the circumstances of the individual patient, in consultation with the patient and their carer or guardian when applying information contained within the Clinical Care Standard. Consumers should use the information in the Clinical Care Standard as a guide to inform discussions with their healthcare professional about the applicability of the Clinical Care Standard to their individual condition.

Contents

Clinical Care Standards

Hip Fracture Care Clinical Care Standard

1 A patient presenting to hospital with a suspected hip fracture receives care guided by timely assessment and management of medical conditions, including diagnostic imaging, pain assessment and cognitive assessment.

2 A patient with a hip fracture is assessed for pain at the time of presentation and regularly throughout their hospital stay, and receives pain management including the use of multimodal analgesia, if clinically appropriate.

3 A patient with a hip fracture is offered treatment based on an orthogeriatric model of care as defined in the *Australian and New Zealand Guideline for Hip Fracture Care*.[1]

4 A patient presenting to hospital with a hip fracture, or sustaining a hip fracture while in hospital, receives surgery within 48 hours, if no clinical contraindication exists and the patient prefers surgery.

5 A patient with a hip fracture is offered mobilisation without restrictions on weight-bearing the day after surgery and at least once a day thereafter, depending on the patient's clinical condition and agreed goals of care.

6 Before a patient with a hip fracture leaves hospital, they are offered a falls and bone health assessment, and a management plan based on this assessment, to reduce the risk of another fracture.

7 Before a patient leaves hospital, the patient and their carer are involved in the development of an individualised care plan that describes the patient's ongoing care and goals of care after they leave hospital. The plan is developed collaboratively with the patient's general practitioner. The plan identifies any changes in medicines, any new medicines, and equipment and contact details for rehabilitation services they may require. It also describes mobilisation activities, wound care and function post-injury. This plan is provided to the patient before discharge and to their general practitioner and other ongoing clinical providers within 48 hours of discharge.

Introduction

Clinical Care Standards aim to support the delivery of appropriate clinical care, reduce unwarranted variation in care, and promote shared decision making between patients, carers and clinicians.

A Clinical Care Standard is a small number of quality statements that describe the clinical care that a patient should be offered for a specific clinical condition. It differs from a clinical practice guideline; rather than describing all the components of care for managing a clinical condition, a Clinical Care Standard addresses priority areas for quality improvement.

The Clinical Care Standard supports:

- people to know what care should be offered by their healthcare system, and to make informed treatment decisions in partnership with their clinician
- clinicians to make decisions about appropriate care
- health services to examine the performance of their organisation and make improvements in the care they provide.

This Clinical Care Standard was developed by the Australian Commission on Safety and Quality in Health Care (the Commission) in collaboration with consumers, clinicians, researchers and health organisations.[a] It complements existing efforts that support hip fracture care, such as the Australian and New Zealand Hip Fracture Registry, and state and territory-based initiatives.

For more information about the development of this Clinical Care Standard, visit: **www.safetyandquality.gov.au/ccs**

Context

A hip fracture is a break occurring at the top of the thigh bone (femur), near the pelvis. In Australia, an estimated 19 000 people over the age of 50 are hospitalised with a hip fracture each year[2], an event that often signifies underlying ill health.[3] The majority of hip fractures occur in people aged 65 years and over[3], mostly associated with a fall.[4] There is a higher and increasing rate of hip fracture in the Aboriginal and Torres Strait Islander peoples. Indigenous Australians are also more likely to fracture their hip at a younger age than non-Indigenous Australians.[3] As the Australian population continues to age, the number, and associated burden of people admitted to hospital with a hip fracture, is expected to increase.[5]

In New Zealand, approximately 3 500 people aged 50 and over were hospitalised with a hip fracture in 2013, with the majority being falls related. The rate of hip fracture increased significantly with age, with nearly half of hip fractures occurring in those aged 85 years or older.[6]

Key markers of quality of care such as time to surgery, complication rates, hospital readmission rates and length of stay can vary considerably between hospitals.[7] The quality of care is influenced by, among other factors, the configuration of orthopaedic and geriatric medicine services, hospital protocols and processes, and the degree to which a multidisciplinary approach to care is taken.[8]

The Hip Fracture Care Clinical Care Standard aims to ensure that a patient with a hip fracture receives optimal treatment from presentation to hospital through to the completion of treatment in hospital. This includes timely assessment and management of a hip fracture, timely surgery if indicated, and the early initiation of a tailored care plan aimed at restoring movement and function and minimising the risk of another fracture. Clinicians and health services can use the Clinical Care Standard to support the delivery of high-quality care.

A key reference for this Clinical Care Standard is the *Australian and New Zealand Guideline for Hip Fracture Care*.[1]

Central to the delivery of patient-centred care identified in this Clinical Care Standard is an integrated, systems-based approach supported by health services and networks of services.

a The evidence base for these statements is available at **www.safetyandquality.gov.au/ccs**

Clinical Care Standards

Key elements of this approach include:

- an understanding of the capacity and limitations of each component of the health system across metropolitan, regional and remote settings, including pre-hospital, within and across hospitals, through to community and other support services
- clear lines of communication across components of the healthcare system
- appropriate coordination so that patients receive timely access to optimal care regardless of how or where they enter the system.

Scope

This Clinical Care Standard relates to the care that patients with a suspected hip fracture should be offered from presentation to hospital through to completion of treatment in hospital. This also includes patients who sustain a hip fracture while in hospital. The target age for the Clinical Care Standard is 50 years and over.

The care described in this Clinical Care Standard is also appropriate for patients under 50 years with a suspected hip fracture judged to be due to osteoporosis or osteopenia.

Goal

To improve the assessment and management of patients with a hip fracture to optimise outcomes and reduce their risk of another fracture.

Patient-centred care

Patient-centred care is health care that is respectful of, and responsive to, the preferences, needs and values of patients and consumers.[9]

Clinical Care Standards support the key principles of patient-centred care, namely[10]:

- treating patients with dignity and respect
- encouraging and supporting patient participation in decision making
- communicating and sharing information with patients about clinical conditions and treatment options
- providing patients with information in a format that they understand so they can participate in decision making.

Carers and family members

Carers and family members have a central role in the prevention, early recognition, assessment and recovery relating to patients' health conditions. They know the patient very well, and can provide detailed information about the patient's history, routines or symptoms, which may assist in determining treatment and ongoing support.[9]

Each quality statement in the Clinical Care Standard should be understood to mean that carers and family members are involved in clinicians' discussions with patients about their care, if the patient prefers carer involvement.

Local monitoring

The Commission's work program is driven by the *Australian Safety and Quality Framework for Health Care* principles, which state that health care delivery should be consumer-centred, driven by information and organised for safety.

The Commission has developed a set of indicators to assist in the optimal local implementation of the Clinical Care Standard. The indicators can be used by health services to monitor the implementation of the quality statements, and to identify and address areas that require improvement. Monitoring the implementation of the Clinical Care Standards will assist in meeting some of the requirements of the National Safety and Quality Health Service (NSQHS) Standards. Information about the NSQHS Standards is available at: **www.safetyandquality.gov.au/accreditation**

The specification of the indicators aims to support consistent local collection of data related to the implementation of this Clinical Care Standard. The name for each indicator is set out, along with the rationale, computation, numerator, denominator, relevant inclusion and exclusion criteria and associated references.

Full specification of these indicators can be found in the Indicator Specification: Hip Fracture Care Clinical Care Standard available at: **http://meteor.aihw.gov.au/content/index.phtml/itemId/628043**

Supporting documents

The following resources supporting this Clinical Care Standard are available from the Commission's website at: **www.safetyandquality.gov.au/ccs**

- a consumer fact sheet
- a clinician fact sheet
- an indicator specification.

Clinical Care Standards

Quality statement 1
Care at presentation

A patient presenting to hospital with a suspected hip fracture receives care guided by timely assessment and management of medical conditions, including diagnostic imaging, pain assessment and cognitive assessment.

Purpose

To ensure patients presenting with a suspected hip fracture receive timely diagnostic imaging, effective pain management and cognitive assessment.

What the quality statement means

- **For patients.** When you arrive at hospital, the clinical team assesses you to see if you have a hip fracture, so that there is no delay in having an operation if clinically needed. They also ensure your pain is controlled, and identify any underlying reasons for your fall or difficulties with your memory, thinking and communication.
- **For clinicians.** Undertake timely diagnostic imaging on all patients with a suspected hip fracture. Provide pain relief, assess medical reasons for the fall and exclude other injuries. In addition, screen for cognitive impairment and risk factors for delirium and put in place interventions to prevent delirium based on this assessment.
- **For health services.** Ensure systems are in place to support clinicians to provide timely and effective management for pain, diagnostic imaging and cognitive assessment for patients with a suspected hip fracture.

Indicators: Quality statement 1

- **1a:** Evidence of local arrangements for the management of patients with hip fracture in the emergency department.
- **1b:** Proportion of patients with a hip fracture who have had their preoperative cognitive status assessed.

Quality statement 2
Pain management

A patient with a hip fracture is assessed for pain at the time of presentation and regularly throughout their hospital stay, and receives pain management including the use of multimodal analgesia, if clinically appropriate.

Purpose

To provide patients with a hip fracture effective and timely pain management throughout their hospital stay.

What the quality statement means

- **For patients.** If you are in pain on arrival to the hospital as a result of a hip fracture, a doctor, nurse or other clinician assesses your pain immediately and then regularly throughout your hospital stay. You receive the medicines you need to relieve pain at all times, based on these assessments.
- **For clinicians.** Assess the level of pain in patients with a hip fracture on presentation to hospital and regularly throughout their stay, and provide pain management, which may include the use of multimodal analgesia. Assess patients' pain:
  - immediately upon presentation to hospital, and
  - within 30 minutes of administering initial analgesia, and
  - hourly until the patient is settled on the ward, and
  - regularly as part of routine nursing and other clinicians' observations throughout the admission.[1]
- **For health services.** Ensure pain management protocols, aligned with current guidelines[1], are in place and that clinicians use them to provide pain assessment and management for patients with a hip fracture.

Indicators: Quality statement 2

- **2a:** Evidence of local arrangements for timely and effective pain management for hip fracture.
- **2b:** Proportion of patients with a hip fracture who have documented assessment of pain within 30 minutes of presentation to the emergency department and either receive analgesia within this time or do not require it according to the assessment.

Clinical Care Standards

Quality statement 3
Orthogeriatric model of care

A patient with a hip fracture is offered treatment based on an orthogeriatric model of care as defined in the *Australian and New Zealand Guideline for Hip Fracture Care*.[1]

Purpose

To ensure that from the time of admission, the care of patients with a hip fracture includes a shared care approach, and that the goals of care are agreed by patients and clinicians and informed by patient preferences.

What the quality statement means

- **For patients.** If you have a hip fracture, you are involved in important decisions about your care from the time you are admitted to hospital. This includes working out what you would like the care to achieve, and the best way to get there. Your care is shared between clinicians with different areas of expertise. This will ensure all your health issues are taken into account, and give you the best chance of recovery.
- **For clinicians.** From the time of admission, offer patients with a hip fracture a formal orthogeriatric model of care that includes:
  - regular orthogeriatrician assessment including medication review
  - managing patient comorbidities
  - optimisation for surgery
  - early identification of the patient's goals and care coordination. If appropriate and clinically indicated, provide multidisciplinary rehabilitation aimed at increasing mobility and independence, facilitating return to pre-fracture residence and supporting long-term wellbeing
  - early identification of most appropriate service to deliver rehabilitation, if indicated
  - ongoing orthogeriatric and multidisciplinary review including reassessment of cognition after surgery[11], and discharge planning liaison with primary care, including falls prevention and secondary fracture prevention.[1]
- **For health services.** Ensure systems are in place to offer patients with a hip fracture care that is based on an orthogeriatric model of care as recommended in the *Australian and New Zealand Guideline for Hip Fracture Care*.[1] For hospitals that do not have a geriatric medicine service available, care should be undertaken by an orthopaedic surgeon, an anaesthetist and a physician or, if unavailable in rural and remote settings, another medical practitioner, using the orthogeriatric model of care.

Indicator: Quality statement 3

- **3a:** Evidence of orthogeriatric (or alternative physician or medical practitioner) management during an admitted patient's hip fracture episode of care.

Quality statement 4
Timing of surgery

A patient presenting to hospital with a hip fracture, or sustaining a hip fracture while in hospital, receives surgery within 48 hours, if no clinical contraindication exists and the patient prefers surgery.

Purpose

To ensure patients with a hip fracture undergo surgery, if clinically indicated, in a timely manner. While surgery for patients who sustain a hip fracture in some remote areas may not be feasible within 48 hours of presentation, networks and systems should be in place to ensure patients receive coordinated transfer and timely surgery.

What the quality statement means

- **For patients.** If you go to hospital with a hip fracture or sustain a hip fracture while in hospital, you have surgery within 48 hours. The exceptions are if you do not want to have surgery, or if your doctor advises you that it is better for you to wait or not have surgery at all. If you are in a remote location, you are transferred and receive surgery in a timely manner.
- **For clinicians.** Discuss treatment options with all patients. Explain the goals, benefits, risks and limitations of treatment options, taking into account the patient's medical conditions and prior level of function. If clinically indicated and in accordance with patient preferences, perform surgery within 48 hours of the patient presenting to hospital. If a patient sustains a fracture in hospital, perform surgery within 48 hours of the fracture occurring. For everyone undergoing hip fracture surgery, prescribe surgical antibiotic prophylaxis and thromboprophylaxis according to current guidelines.[12,13]
- **For health services.** Ensure systems are in place for clinicians to perform hip fracture surgery within 48 hours of presentation. Surgery within 48 hours of presentation may not be feasible for health services covering some remote areas, however, networks and systems should be in place to ensure coordinated transfer and timely surgery of patients who sustain a hip fracture in these areas.

Indicator: Quality statement 4

- **4a:** Proportion of patients with a hip fracture receiving surgery within 48 hours of presentation with the hip fracture.

Clinical Care Standards

Quality statement 5
Mobilisation and weight-bearing

A patient with a hip fracture is offered mobilisation without restrictions on weight-bearing the day after surgery and at least once a day thereafter, depending on the patient's clinical condition and agreed goals of care.

Purpose

To restore movement and function following injury and to reduce post-operative complications.

What the quality statement means

- **For patients.** The day after hip fracture surgery, you are encouraged to sit out of bed and start to walk using your full weight, unless there are good reasons for this not to occur.
- **For clinicians.** Mobilise patients the day after hip fracture surgery and at least once a day thereafter unless contraindicated. Allow patients to bear weight as tolerated, but avoid weight-bearing if there is a clinical concern about the fracture, the fixation or the likelihood of healing. Mobilisation can include re-establishing:
  - movement between postures (e.g. moving from lying to sitting and sitting to standing)
  - the ability to maintain the upright posture
  - ambulation with increasing levels of complexity (e.g. speed, direction change and multi-tasking).[14]
- **For health services.** Ensure systems are in place for patients to be mobilised the day after hip fracture surgery and at least once a day thereafter, unless contraindicated.

Indicators: Quality statement 5

- **5a:** Proportion of patients with a hip fracture who are mobilised on day one post hip fracture surgery.
- **5b:** Proportion of patients with a hip fracture with unrestricted weight-bearing status immediately post hip fracture surgery.
- **5c:** Proportion of patients with a hip fracture experiencing a new Stage II or higher pressure injury during their hospital stay.
- **5d:** Proportion of patients with a hip fracture returning to pre-fracture mobility.

Quality statement 6
Minimising risk of another fracture

Before a patient with a hip fracture leaves hospital, they are offered a falls and bone health assessment, and a management plan based on this assessment, to reduce the risk of another fracture.

Purpose

To reduce the risk of another fracture for patients who have sustained a hip fracture.

What the quality statement means

- **For patients.** Before you leave hospital, you are assessed for your risk of having another fracture. This assessment will help to identify anything that might make you more likely to fall, and to see if there are things that can be done to help you avoid falling or having another fracture. You are offered bone protection medicines if they benefit you, and are provided with written information and advice on how to reduce your risk of another fracture. You can use this information to help you discuss your care with your general practitioner or ongoing clinical provider.
- **For clinicians.** Assess patients with a hip fracture for their risk of another fracture. Educate them by discussing risk factors for falls and providing written information on specific exercises to improve muscle strength and balance. Provide treatment, such as prescribing medicines for osteoporosis, if clinically indicated.
- **For health services.** Ensure systems are in place so that clinicians can assess patients' risk of another fracture and then educate and treat them, as indicated.

Indicators: Quality statement 6

- **6a:** Proportion of patients with a hip fracture receiving bone protection medicine prior to separation from the hospital at which they underwent hip fracture surgery.
- **6b:** Proportion of patients with a hip fracture readmitted to hospital with another femoral fracture within 12 months of admission from initial hip fracture.

Clinical Care Standards

Quality statement 7
Transition from hospital care

Before a patient leaves hospital, the patient and their carer are involved in the development of an individualised care plan that describes the patient's ongoing care and goals of care after they leave hospital. The plan is developed collaboratively with the patient's general practitioner. The plan identifies any changes in medicines, any new medicines, and equipment and contact details for rehabilitation services they may require. It also describes mobilisation activities, wound care and function post-injury. This plan is provided to the patient before discharge and to their general practitioner and other ongoing clinical providers within 48 hours of discharge.

Purpose

To ensure patients have an individualised care plan before they leave the hospital after a hip fracture.

What the quality statement means

- **For patients.** Before you leave hospital, your doctor discusses with you your recovery and the ongoing care you will need when you leave hospital. They help develop a plan with you in a format that you understand. The plan describes the ongoing treatment you may need, such as the medicines you may need to take, information on how to prevent future fractures, and any rehabilitation services and equipment you may need. You get a copy of this plan before you leave hospital. Your general practitioner and other ongoing clinical providers get a copy within two days of you leaving hospital.
- **For clinicians.** Develop an individualised care plan with the patient before they leave hospital. The plan should identify any changes in medicines, any new medicines, and equipment and contact details for rehabilitation services they may require. It should describe mobilisation activities, wound care and function post-injury. It should also include information and recommendations for secondary fracture prevention, including the contact details of support services available in the community, as appropriate. Provide the care plan to the patient before they leave hospital, and to their general practitioner and other ongoing clinical providers, within 48 hours of the patient leaving hospital.
- **For health services.** Ensure systems are in place so clinicians can develop an individualised care plan with patients prior to discharge, and refer patients to the relevant services as required. Ensure systems support clinicians in providing the plan to the patient's general practitioner and other ongoing clinical providers within 48 hours of discharge.

Indicators: Quality statement 7

- **7a:** Evidence of local arrangements for the development of an individualised care plan for hip fracture patients prior to the patient's separation from hospital.
- **7b:** Proportion of patients with a hip fracture living in a private residence prior to their hip fracture returning to private residence within 120 days post separation from hospital.

Indicators of effectiveness

Indicators of effectiveness, also known as outcome indicators, provide markers of how close care is to recommended care, support the monitoring and achievement of outcomes, and provide signals to patients and clinicians on quality of care.

Ongoing monitoring and review of a set of indicators can detect significant variance in clinical practice, highlight issues of quality of care, and show how the delivery of care is improving in line with best evidence as outlined in the Clinical Care Standard. High outlier rates should be seen as a prompt to further detailed investigation.

Where routine access to linked hospitalisation and mortality datasets is available, or where individual patient follow-up is authorised for studies and registries, the following endpoints are sometimes used in monitoring patient outcomes:

- 30-day mortality following hip fracture
- discharge to usual place of residence
- 3-month outcome indicators based on survival status, place of residence, living alone status, quality of life. Three-month outcome indicators are best collected via manual case follow-up, or for death and readmission, state-wide or nationally linked datasets.

Indicators of effectiveness

- **8a:** Re-operation of hip fracture patients within 30-day follow-up.
- **8b:** Survival at 30 days post-admission for hip fracture surgery.

Clinical Care Standards

Glossary

Assessment: A clinician's evaluation of the disease or condition based on the patient's subjective report of the symptoms and course of the illness or condition and the clinician's objective findings, including data obtained through tests, physical examination, medical history, and information reported by family members and other healthcare team members.[15]

Care plan (individualised): A written agreement between a consumer and health professional (and/or social services) to help manage day-to-day health.[16] This information is identified in a health record.

Carers: People who provide care and support to family members and friends who have a disease, disability, mental illness, chronic condition, terminal illness or general frailty. Carers include parents and guardians caring for children.[17]

Clinical team: See Clinician.

Clinician: A healthcare provider, trained as a health professional. Clinicians include registered and non-registered practitioners and teams of health professionals, who provide direct clinical care. They can be doctors, nurses, allied health professionals, nurses' assistants, Aboriginal health workers and other people who provide direct clinical care.[17,18]

Cognition: The mental activities associated with thinking, learning and memory.[19]

Cognitive impairment: Deficits in one or more of the areas of memory, communication, attention, thinking and judgement. Dementia and delirium are common forms of cognitive impairment seen in hospitalised older patients.[20]

Comorbidities: Coexisting diseases (other than that being studied or treated) in an individual.[1]

Delirium: A disturbance of consciousness, attention, cognition and perception that develops over a short period of time (usually hours or days) and tends to fluctuate during the course of the day.[21]

Fall: An event that results in a person coming to rest inadvertently on the ground or floor or another lower level.[22]

Health record: Information about a patient held in paper or electronic copy. The health record may comprise clinical records (such as medical history, treatment notes, observations, correspondence, investigations, test results, photographs, prescription records and medication charts), administrative records (such as contact and demographic information, legal and occupational health and safety records) and financial records (such as invoices, payments and insurance information).[22]

Health service: A service responsible for the clinical governance, administration and financial management of unit(s) providing health care. A service unit involves a grouping of clinicians and others working in a systematic way to deliver health care to patients and can be in any location or setting, including pharmacies, clinics, outpatient facilities, hospitals, patients' homes, community settings, practices and clinicians' rooms.[17]

Hospital: A licensed facility providing healthcare services to patients for short periods of acute illness, injury or recovery.[23]

Individualised care plan: See Care plan.

Medical practitioner: A person whose primary employment role is to diagnose physical and mental illnesses, disorders and injuries and prescribe medications and treatments that promote or restore good health.[24] This could include medical specialists, non-specialists and general practitioners.

Medication review: A critical review of all prescribed, over-the-counter and complementary medications undertaken to optimise therapy and minimise medication-related problems.[25]

Medicine: A chemical substance given with the intention of preventing, curing, controlling or alleviating disease, or otherwise improving the physical or mental welfare of people. Prescription, non-prescription and complementary medicines, irrespective of their administration route, are included.[17]

Mobilisation: Mobilisation is the process of re-establishing the ability to move between postures (for example, moving from seated to standing), maintain an upright posture, and to ambulate with increasing levels of complexity (speed, changes of direction, dual and multi-tasking).[1]

Model of care: A configuration of services and staff designed to provide care for a particular health issue. A model of care takes into account the evidence to support an approach to care as well as context in relation to delivery of a service.[1]

Multimodal analgesia: Balanced or multimodal analgesia involves the selective use of specific drugs in combination. The concept relies on using multiple analgesic drugs with different modes of action (for example, non-opioid combined with opioid) or by different routes of administration (for example, local anaesthetic block combined with a systemic analgesic).[26] The rationale for this strategy is making use of additive or synergistic effects of different analgesics to achieve sufficient pain control, while minimising dose-related side effects.[27]

Orthogeriatric model of care: In Australia and New Zealand, this involves a shared care arrangement of hip fracture patients between the specialties of orthopaedics and geriatric medicine. The geriatrician is involved in the pre-operative optimisation of the patient in preparation for surgery and then takes a lead in the post-operative medical care and coordinates the discharge planning process. Implicit in this role are many of the aspects of basic care including nutrition, hydration, pressure care, bowel and bladder management and monitoring of cognition.[1]

Risk factor: A characteristic, condition or behaviour that increases the possibility of disease or injury.[28]

Pain management: The use of pain-controlling agents (e.g. long-acting local anaesthetic agents, opiates and other pain-modulating drug stratagems) to normalise pre-operative, post-operative and ongoing pain states.[29]

Presentation to hospital: Care received by patients on entry to the hospital system, including the emergency department, pre-admission clinic, acute assessment unit, ward, or day surgery. For some remote areas, this may include primary health clinics.

Protocol: A set of rules for the completion of tasks or a set of tasks.[17]

Shared care: See Orthogeriatric model of care.

System: The resources, policies, processes and procedures that are organised, integrated, regulated and administered to accomplish the objective of a standard. The system:

- interfaces risk management, governance, operational processes and procedures, including education, training and orientation
- deploys an active implementation plan and feedback mechanisms
- includes agreed protocols and guidelines, decision-support tools and other resource material
- employs a range of incentives and sanctions to influence behaviours and encourage compliance with policy, protocol, regulation and procedures.[17]

Unrestricted weight-bearing: When a patient can mobilise with full use of the affected limb to bear weight as pain allows.[30]

Clinical Care Standards

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Commonwealth of Australia

Competition and Consumer Act 2010 (Cth)

In the Australian Competition Tribunal

File Number:	ACT 4 of 2021
File Title:	APPLICATION FOR REVIEW OF AUTHORISATION A1000542 DETERMINATION MADE ON 21 SEPTEMBER 2021
Applicant:	National Association of Practising Psychiatrists

AND

File Number:	ACT 5 of 2021
File Title:	APPLICATION FOR REVIEW OF AUTHORISATION A1000542 DETERMINATION MADE ON 21 SEPTEMBER 2021
Applicant:	Rehabilitation Medicine Society of Australia and New Zealand Ltd

Annexure Certificate

ZAW-4

This is the Annexure marked "ZAW-4" referred to in the statement of Zoe Adey-Wakeling dated 28 June 2022.

ORIGINAL ARTICLE

Adherence to Clinical Guidelines Improves Patient Outcomes in Australian Audit of Stroke Rehabilitation Practice

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An audio podcast accompanies this article.
Listen at www.archives-pmr.org.

ABSTRACT. Hubbard IJ, Harris D, Kilkenny MF, Faux SG, Pollack MR, Cadilhac DA. Adherence to clinical guidelines improves patient outcomes in Australian audit of stroke rehabilitation practice. Arch Phys Med Rehabil 2012;93:965-71.

Objective: To study the correlation between adherence to recommended management and good recovery outcomes in an Australian cohort of inpatients receiving rehabilitation.

Design: Processes of care were audited and included those recommended in the Australian Clinical Guidelines for Stroke Rehabilitation and Recovery.

Setting: National audit data from 68 rehabilitation units were used, with each hospital contributing up to 40 consecutive cases.

Participants: Not applicable.

Interventions: Not applicable.

Main Outcome Measures: Discharged home or an increase of greater than or equal to 22 in FIM scores between admission and discharge. Multivariable logistic regression models controlling for patient clustering were used to assess the associations between adherence to recommended management and recovery outcomes (dependent variables).

Results: Hospitals contributed 2119 patients (median age 75y, 53% men). We found that rehabilitation units providing evidence-based management (eg, treatment for sensorimotor impairment 38%, hypertonicity 56%, mobility 94%, and home assessments 71%) were more likely to provide better recovery outcomes for people with stroke. A discharge FIM score of 100 was clinically relevant and was strongly correlated with whether or not a patient was discharged home. We found very good correlation between admission and discharge FIM scores in stroke rehabilitation.

Conclusions: This is one of the first study comparing adherence to recommended management in Australian rehabilitation units and stroke recovery outcomes based on national audit data. Novel findings include the significance of an FIM score between 80 and 100 and the clinical significance of various management processes.

Key Words: Delivery of health care; Stroke; Rehabilitation.

ASSOCIATIONS BETWEEN adherence to recommended acute stroke management and health outcomes has been well documented,[1] but the same cannot be said for stroke rehabilitation. Rehabilitation is an important "intervention" after stroke, and a "change or gain in function is a fundamental concern" to patients.[2(p2541)] There is evidence to demonstrate that early more intensive rehabilitation after stroke is associated with functional improvement, with "time is function" a recent catch-cry.[3] However, researchers have highlighted the fact that we know very little about what service delivery processes constitute stroke rehabilitation,[4] who receives rehabilitation and why,[5] and how the processes of clinical care delivered impact on stroke recovery outcomes.[6,7]

Worldwide, stroke is a leading cause of permanent adult disability and a leading cause of death.[8] In Australia (population 22 million), most patients with acute stroke will be treated in a public hospital and after 7 to 10 days about a third will go on to receive inpatient rehabilitation, which is often provided in a different setting.[9] Little was known about Australian stroke rehabilitation units until 2008 when the National Stroke Foundation of Australia, in conjunction with a national advisory committee, developed and undertook a national audit to measure adherence to recommended management, as outlined in the Clinical Guidelines for Stroke Rehabilitation and Recovery.[10] These guidelines summarize the evidence and provide recommendations for rehabilitation practices in stroke. International experience has shown that audits can be used to effectively monitor, influence, and change clinical practice.[11,12] The Australian audit was modeled on the Sentinel Stroke Audit Program run in the United Kingdom[13] and composed of an organizational survey and a clinical audit.[14] The organizational survey described characteristics of inpatient stroke rehabilitation units including the number of beds and staff resources. The clinical audit measured adherence to recommended management for specific impairments as described in the national clinical guidelines. Each rehabilitation unit reviewed up to 40 consecutive stroke patients per hospital. Participation in this national stroke audit of rehabilitation units was voluntary.

This study hypothesized a correlation between adherence to recommended management as described in the nationally agreed clinical guidelines and better recovery outcomes for people with stroke. For the purposes of this study, *adherence to recommended management* describes a rehabilitation unit that delivered patient care in accordance with the nationally agreed 2005 stroke clinical guidelines[10] and *better recovery outcomes* (dependent variables) are defined as discharge home or an increase of greater than or equal to 22 points in FIM score

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from admission to discharge from the inpatient rehabilitation services. This study will also describe current clinical practice for inpatient rehabilitation of stroke patients as reported in the 2008 Australian stroke rehabilitation audit.[14] It will use the audit data to investigate associations between adherence to recommended management and stroke recovery outcomes.

METHODS

Data collected for the National Stroke Audit Post Acute Services were interrogated to explore the associations between specific stroke management interventions and stroke recovery outcomes. Stroke recovery outcomes defined as discharged to home (with or without formal services) and an increase of greater than or equal to 22 points in the FIM score from admission-to-rehabilitation time to discharge-from-inpatient-services time have been considered by other researchers as clinically significant.[15] The FIM is the most widely used functional assessment in the rehabilitation community, but in contrast to other countries, it is not used as a reimbursement indicator by Australian health service funders. The FIM score ranges between 18 (worst function) and 126 (best). A shift of 22 points (ΔFIM score$\geq$22) was selected by the Australasian Rehabilitation Outcomes Centre[16] as an evidence-based, clinically significant difference and has been considered an Australasian benchmark for clinicians to measure meaningful gains from stroke rehabilitation.

Audit Study Design

Between November 1, 2007, and July 16, 2008, all rehabilitation units in public hospitals (n=108; eligible to be involved) were invited to participate in the national post acute stroke audit. Private hospitals were indirectly informed of the audit through an advertisement in the Australian Council on Healthcare Standards newsletter that gets circulated to all hospitals each quarter. Although private services were not actively recruited, they made up 1% of the participating rehabilitation units. Of the 108 rehabilitation units invited to participate in the audit, 29 completed the organizational survey component only and a further 68 completed the organizational survey and the clinical audit. The organizational survey had 5 sections and collected information on the type of rehabilitation service (eg, colocated with an acute service or freestanding), number of beds, assessment tool preferences, and resource levels such as staffing and equipment. The 68 hospitals that completed both components of the audit tended to admit similar numbers of patients in the last year (median of 50 patients vs 55 patients at the 29 hospitals who completed the survey only). The clinical audit was conducted by retrospectively reviewing the medical records of consecutively admitted patients (median, 35 per hospital; interquartile range, 22–40) diagnosed with ischemic stroke or intracerebral hemorrhage, who were admitted to the participating hospitals between January 1, 2007, and December 31, 2007, until the sample size was met. All audited patients had to be discharged by December 31, 2007. Some hospitals did not discharge 40 patients in the auditing period (January 1, 2007, to December 31, 2007) and therefore their final sample size was less than 40. There were no differences between the number of cases audited by location of hospital (rural or urban), but hospitals that admitted fewer patients with strokes were more likely to audit fewer than 40 cases. Patients were excluded if they were diagnosed with either transient ischemic attack (because these patients are not usually prescribed stroke rehabilitation) or subarachnoid hemorrhage (because these patients are usually managed on a neurosurgical ward as opposed to a neurology ward). In total 68 rehabilitation units provided data on 2119 people with stroke. Australian health records collect information on Indigenous status with the purpose of monitoring health trends among Indigenous people. Among the 2119 cases audited, the Indigenous status was recorded for 2086 people, 35 of which were from either an Aboriginal or a Torres Strait Islander background. Eighteen patients (1%) died during the audit period. To find out more about the design of the national stroke audit data collection, readers are directed to the National Stroke Audit Post Acute Services Report (2008) at www.strokefoundation.com.au.

Data Analysis

The denominator for the calculation of adherence was impairment present known and the numerator was whether the patient received management. Adherence to recommended management was identified as positive only if the impairment was present plus the intervention was provided. For example, if a patient had a sensory impairment, then adherence was identified as positive if the recommended management as outlined in the Clinical Guidelines for Stroke Rehabilitation and Recovery[10] was documented as being provided. Adherence was identified as negative if the impairment was present and no management was provided, or if the management that had been provided was not specified as one of the recommendations in the clinical guidelines.

To reduce the number of variables required for the regression modeling, the authors grouped together interventions targeting similar impairment/function. For example, interventions targeting "balance" included adherence to recommended management for people "unable to stand from chair independently," "unable to sit independently," "unable to stand independently," and "at risk of falls." Descriptive analysis was used to investigate this data and is reported in table 1.

Data were analyzed by using Stata software (version 10.1).[a] Chi-square tests were used for categorical variables, Fisher exact test for dichotomous variables, and the Wilcoxon Mann–Whitney Rank Sum test for continuous variables. Correlations between the admission and discharge FIM scores were undertaken by using the Spearman's rank correlation coefficient and are presented as a scatter plot. The Spearman statistic is denoted by an r score that indicates a strong positive correlation if it falls between 0.5 and 1.0 (and a weak positive correlation if it falls between 0 and 0.5).

Bivariate statistics were used to determine which factors were associated with the 2 recovery outcomes (dependant variables): patients achieving ΔFIM score of $\geq$22 at discharge and patients being discharged home as reported in table 2. Only those variables with a significance of $P<.01$ were included in multivariate logistic regression models to predict the probability of specific factors being associated with the study outcomes while controlling for the other variables including demographics and stroke severity as reported in table 3. The dependant variable for logistic regression model (column 1, table 3) was discharged home and for logistic regression model (column 2, table 3) was ΔFIM score $\geq$22 at discharge. The independent variables were the other factors listed in table 3. We also controlled for patient clustering within hospitals because certain types of patients may cluster within settings and are, therefore, more likely to respond in a similar manner.[17] In addition, adjustment for patient case-mix was based on a validated prognostic model when comparing patient outcomes after

Table 1: Adherence to Recommended Management

Management Issue Identified	Impairment Present Known (n)	Received Management (n)	Adherence to Indicator* (%)
Physical			
Sensorimotor impairment	681	261	38
Hypertonicity	230	129	56
Upper limb function			
Shoulder subluxation/pain	375	211	56
Functional deficit	1490	887	60
Balance			
Unable to stand from chair independently	1025	690	67
Unable to sit independently	338	226	67
Unable to stand independently	1000	684	68
At risk of falls	1583	1315	83
Mobility			
Unable to ambulate independently	1885	1764	94
Continence			
Urge incontinence	389	307	79
Activities of daily living			
Difficulties with activities of daily living	1921	1839	96
Perception			
Unilateral spatial neglect	418	206	49
Apraxia	315	154	49
Communication			
Dysarthria	655	346	53
Severe dysarthria	78	42	54
Aphasia	631	364	58
Dysphagia	828	689	83
Vision			
Visual field impairment	447	307	67
Cognition			
Memory impairment	809	310	38
Attention and concentration impairment	858	359	42
Psychological			
Mood impairment	1163	458	39
Secondary prevention			
Deep vein thrombosis prophylaxis	941	688	73
Discharged on lipid-lowering medication	1635	1253	77
Discharged on blood-pressure–lowering medication	2052	1599	78
Discharged on antithrombotics	1662	1552	93
Education			
Received lifestyle advice	2101	975	46
Received information on sexuality poststroke	2101	264	13
Offered information about peer support	2101	720	34
Informed of self-management programs	1818	725	40
Received carer training	763	511	67
Contact provided to patient	1866	1079	58
Home assessment	1736	1232	71
Residence			
Discharged home	2101	1318	63
Community reintegration			
Return-to-driving assistance	311	252	81
Return-to-work assistance	160	137	86
Postdischarge			
Needs discussed with patient	2011	1797	89
Needs discussed with carer	861	783	91
General practitioner: sent a discharge summary	2063	1942	94

*The denominator for the calculation of adherence was impairment present known and the numerator was whether the patient received the recommended management.

stroke.[18] These variables included stroke severity and stroke subtype. Therefore, statistical adjustment for patient clustering within hospitals in addition to individual patient factors provided a measure against overstating differences in study outcomes where the location of treatment may be important. We defined a mild stroke as one that achieved an

Table 2: Factors Associated With Adherence to Recommended Management and Discharge Home and Clinically Important Change in the FIM Score

Patient Characteristics	n (%) Home (n=1318)	Other (n=801)	P	n (%) ΔFIM Score<22 (n=780)	ΔFIM Score≥22 (n=656)	P
Age ≥75y	560 (43)	471 (59)	<.001	395 (51)	289 (45)	.016
Sex: man	730 (55)	399 (50)	.01	420 (54)	343 (52)	.56
Stroke subtype: hemorrhagic	195 (15)	145 (18)	.044	109 (14)	121 (19)	.021
Stroke severity: mild: FIM score≥100	262 (28)	60 (11)	<.001	305 (39)	5 (1)	<.001
Adherence to recommended management						
Physical: sensorimotor impairment	166 (42)	95 (34)	.04	90 (40)	108 (45)	.26
Visual: field impairment	41 (35)	28 (31)	.61	28 (35)	28 (42)	.39
Psychological: mood impairment	236 (77)	222 (79)	.53	157 (78)	174 (82)	.36
Physical: hypertonicity	75 (60)	54 (51)	.19	46 (60)	57 (63)	.70
Communication: dysphagia	355 (83)	334 (83)	.95	217 (80)	240 (84)	.24
Preadmission: unable to walk independently	1074 (94)	690 (92)	.08	615 (94)	610 (96)	.08
Continence: urge incontinence	149 (83)	158 (75)	.05	103 (73)	110 (85)	.02
ADLs	1118 (97)	721 (94)	.001	625 (94)	618 (98)	.001
Patient-centered: discussed management with team	1131 (87)	666 (86)	.51	647 (85)	571 (88)	.08
Secondary prevention: DVT prophylaxis	390 (29)	298 (37)	<.001	192 (25)	249 (38)	<.001
Residence: home assessment	970 (81)	262 (50)	<.001	390 (65)	489 (84)	<.001
GP: sent discharge summary	1234 (94)	708 (94)	.73	713 (95)	628 (97)	.03
Cognition	276 (50)	203 (44)	.09	171 (46)	146 (47)	.64
Perception	166 (51)	138 (50)	.82	104 (50)	119 (60)	.043
Communication: dysarthria and aphasia	357 (59)	255 (57)	.59	225 (61)	231 (62)	.79
Upper limb	494 (66)	351 (60)	.04	245 (61)	350 (72)	.001
Balance	893 (68)	628 (78)	<.001	502 (64)	526 (80)	<.001
Secondary prevention	1236 (95)	713 (92)	.016	724 (94)	603 (93)	.49
Education	1123 (85)	477 (60)	<.001	561 (72)	541 (83)	<.001
Community reintegration	246 (82)	53 (86)	.451	113 (85)	100 (82)	.52
Postdischarge: needs discussed with patient	1190 (92)	645 (87)	.002	651 (87)	597 (92)	.001

Abbreviations: ADLs, activities of daily living; DVT, deep vein thrombosis; GP, general practitioner.

FIM score of greater than or equal to 100 on admission. We present adjusted odds ratios and 95% confidence intervals.

RESULTS

Table 4 presents demographic information about the audited patients. The majority of patients were managed in urban sites (94%), the median length of stay was 26 days (interquartile range, 14–44d) for the 2101 patients discharged from hospital, the mean FIM score on admission was 75 (SD, 27) and, interestingly, the mean shift in FIM score was 22 (SD, 18).

Adherence to Recommended Management

Using descriptive analysis, adherence to recommended management based on the presence of relevant impairments or general measures applicable to most patients is described in table 1. Column 1 indicates whether an impairment was present, and column 2 indicates whether recommended management was provided by the rehabilitation unit. Column 3 shows the percentage of patients receiving recommended management in each subcategory; for example, 60% of patients with an upper limb functional deficit were provided with recommended management. We found that rehabilitation units providing evidence-based management, for example, treatment for sensorimotor impairment, hypertonicity, mobility, and home assessments, were more likely to elicit better recovery outcomes for people with stroke. Table 2 shows the recommended management that was associated with better recovery outcomes: discharged home or achieving a change upward of 22 points in the FIM score. For example, adherence of rehabilitation units to the recommended management in relation to activities of daily living, balance, and secondary prevention was significantly associated with good recovery outcomes ($P \leq .001$). Table 3 shows the association between recommended care and better recovery outcomes defined as discharged home and ΔFIM score ≥22 during admission.

Results indicate that an FIM score of 100 is clinically significant in relation to discharge destination. Patients with an FIM score of less than 100 were not being discharged home and those with an FIM score of greater than 100 were being discharged home. The mean total discharge FIM score for patients discharged home was 106 (SD, 18), and the median was 111 (interquartile

Table 3: Factors Associated With Adherence to Recommended Management and Measures of Good Outcome

Patient Characteristics	Adjusted Odds Ratio* (95% CI)	
	Discharge Home	ΔFIM Score≥22
Age ≥75y	0.77 (0.53–1.11)	0.58 (0.39–0.85)
Sex: man	1.09 (0.84–1.41)	1.19 (0.69–2.08)
Stroke severity: mild: FIM score≥100	1.60 (0.93–2.78)	0.01 (0.00–0.06)
Adherence to recommended management		
ADLs	1.01 (0.33–3.13)	1.57 (0.58–4.19)
Secondary prevention: DVT	0.58 (0.41–0.81)	1.09 (0.73–1.62)
Home assessment	6.15 (3.70–10.22)	3.37 (2.14–5.28)
Upper limb function	NT	1.42 (0.89–2.25)
Balance	0.54 (0.35–0.83)	0.78 (0.41–1.46)
Secondary prevention: on discharge	1.99 (1.12–3.53)	NT
Education	2.37 (1.30–4.29)	1.47 (0.95–2.26)
Postdischarge: needs discussed with patient	1.27 (0.66–2.43)	1.17 (0.68–2.02)

Abbreviations: ADLs, activities of daily living; CI, confidence interval; DVT, deep vein thrombosis; NT, not tested.
*Adjusted for all factors in this table and clustering of patients by individual hospitals.

range, 99–119). When admission and discharge FIM scores were compared, results identified a very positive correlation between scores (Spearman's rank correlation=.78).

DISCUSSION

This is the first time that the clinical management in Australian rehabilitation units has been correlated against stroke recovery outcomes using data from a national stroke audit. These findings provide evidence of an association between rehabilitation units that deliver clinical management according to recommendations in the nationally agreed clinical guidelines and better recovery outcomes for people with stroke when defined as discharge home and an increase of greater than or equal to 22 in the FIM score. The findings suggest that adherence to nationally agreed upon clinical guidelines is associated with better recovery outcomes in a stroke rehabilitation cohort. We acknowledge that the resources available at each hospital may impact on the ability to provide adherence to certain processes of care. When we adjusted for the number of stroke admissions per year as a proxy for availability of resources, this made no difference to the results reported. A future article will address the organizational features of hospitals and the association with adherence to processes of care.

Discharge home was significantly associated with lipid-lowering and/or blood-pressure–lowering discharge medication and the provision of educational advice and information such as lifestyle advice and self-management programs. These findings support evidence that carer training,[19] integrated secondary prevention,[20] and provision of education and support to patients and their carers[21] are related to stroke recovery outcomes. Furthermore, these findings suggest that units providing these aspects of care are more likely to adhere to guidelines and, therefore, more likely to offer evidence-based rehabilitation and that units providing evidence-based rehabilitation may have a better chance of achieving optimal outcomes. However, there is still much that is unclear; for example, the results showing low rates of adherence in the management of memory impairment, mood impairment, attention, and concentration may be associated with a lack of specialists services available to stroke patients, particularly in clinical psychology as identified by the national audit, but the low rates of adherence to providing patients with information on peer support and sexuality are more difficult to explain and may reflect the fact that providers are simply not remembering to address these issues or do not consider that they are of high priority. Overall what remains unclear is whether this is just an association or a direct result of strict adherence to recommended guidelines.

We found that an FIM discharge score of greater than or equal to 100 was the benchmark for discharge home and an FIM discharge score of less than or equal to 80 indicated discharge elsewhere, although these findings do not take into account whether formal and/or informal support was provided. Bottemiller et al[22] in their study of American stroke survivors found that a midrange FIM score of between 40 and 79 on admission was associated with discharge to home, but a midrange score on discharge was associated with discharge to a facility. These authors also reported that 80% of stroke survivors with a high range score (>80) were discharged home. Lutz[23] reported a mean discharge FIM score of 69.1 in those who were discharged home as opposed to 59.07 in those discharged to supported accommodation. Our findings appear to be higher than those reported to date, which may be reflective of regional and geographical differences in the amount of support and/or services available to stroke survivors discharged home. Suffice it to say, in an Australian stroke survivor cohort, a discharge FIM score of greater than or equal to 100 was a clinically significant predictor of discharge home.

We found that discharge elsewhere (not home) was significantly associated with prescription of deep vein thrombosis prophylaxis and problems with sit-to-stand transfers and standing balance. This suggests that patients who have reduced mobility, lower limb dysfunction, and increased dependence at the time of

Table 4: Baseline (Admission) Characteristics of Audited Patients

Characteristic	n (%)
Sex	
Man	1129 (53)
Age (n=2101),* y	
<65	572 (27)
65–74	498 (24)
75–84	693 (33)
>85	338 (16)
Median (IQR)	75 (64–82)
Indigenous status (n=2086)*	35 (2)
Stroke subtype	
Ischemic stroke	1671 (79)
Intracerebral hemorrhage	340 (16)
Unknown stroke type	108 (5)
Stroke severity on admission for for rehabilitation (n=2059)	
Mild 100–126 FIM†	297 (20)
Median (IQR)	75 (53–96)
Mean (SD)	75 (27)
Mean FIM change (SD)	22 (18)

Abbreviation: IQR, interquartile range.
*The sample size has been provided to show that there were missing data for this variable.
†FIM score>100 is equivalent to none or minor impairments (score ranges between 18 and 126).

discharge following stroke rehabilitation[23] are less likely to be discharged home. Several studies have reported similar associations.[24,25] Langhorne et al[26] found deep vein thrombosis to be a complication in only 2% of patients but falls resulting from balance problems to be present in 25% of their cohort. Perry et al[27] showed that sit-to-stand transfer was an important factor in stroke outcomes, particularly in relation to levels of caregiver assistance. Our findings suggest that balance and transfer training may be clinically important to increasing a stroke survivor's potential to be discharged home and that there may be inadequate support services available to allow Australian stroke survivors with persistent balance and transfer impairments to be managed within their own homes. This may not be the case in other countries such as the United States where patients with lower discharge FIM scores are discharged home, but further research is required to investigate these discrepancies.

We found that a positive improvement in function, defined as ΔFIM score ≥22, was more likely to occur in patients younger than 75 years and in those with a moderate to severe stroke. It is not surprising that positive shifts were associated with a moderate to severe stroke because there is more potential to achieve a changed score and, in turn, more potential to improve, and although younger stroke survivors may have better outcomes,[23] there is evidence that those aged older than 75 years can regain and retain their independence.[28] The findings suggest an FIM ceiling effect indicating that a full score does not necessarily correlate with full recovery. Black-Schaffer and Winston[29] found that age significantly affected outcome for those with an admission FIM score of less than 40, had a more variable impact on those with a score between 40 and 80, and had no impact at all on those with an admission FIM score of greater than 80. Future research could investigate outcomes by using the FIM in predictive rehabilitation modeling within limited health resources.

The home assessment was identified as having a significant association with both recovery outcomes: discharge home and ΔFIM score ≥22. Patients with functional improvement were more likely to receive a home assessment, and a home assessment occurred more often in those who were discharged home. To date, evidence concerning home assessments has been reported only in orthopedic cohorts[30] and in those at risk of falls.[31] The significant intercorrelation between home assessments, functional improvement (ΔFIM score ≥22), and discharge home poststroke has not been reported before. The audit was not designed to collect data on readmission rates and therefore our ability to review and analyze the efficacy of home assessments was limited. This study found that 77% of those discharged home had achieved functional improvement during their admission, indicating the predictive value of changes in a patient's FIM score.

We found good correlations between admission and discharge FIM scores. The predictive potential of the admission FIM score has been reported in other studies.[32] Luk et al[28] found the admission FIM score to be a good predictor of stroke outcomes and a 14.8±0.4 mean changed FIM score during admission across all ages. Inouye et al[33] found the FIM to be a good predictor of stroke outcomes in first ischemic stroke survivors, finding that those with an admission FIM score of between 37 and 72 had a significantly greater shift in scores following intensive rehabilitation. Several studies[24,32] have reported a high correlation between motor impairment and recovery outcomes, with researchers often using subsets of the FIM as a predictive recovery variable.

Given that the recommendations in the clinical guidelines are evidence based or based on expert consensus, we expected that adherence to relevant recommendations would be associated with improved outcomes. Does this mean that this association is the "strongest" influence on improvement? Not necessarily. Discharge home, while a "good" outcome, is strongly dependent on a range of social, political, and economic variables, which are beyond the influence of rehabilitation units.[34] However, it can be argued that rehabilitation units that adhere to the recommendations are more likely to be providing an evidence-based standard of care and, in turn, more likely to achieve an FIM gain of 22. At this stage, although it is not possible to identify direct correlations between adherence and good outcomes, this study identifies important factors worthy of further consideration, particularly the correlation between adherence to clinical guidelines and improved patient outcomes.

This study provides early evidence that will eventually assist clinicians to more correctly identify those patients who are most likely to benefit from stroke rehabilitation. For example, by more accurately determining the baseline characteristics of those most likely to achieve a clinically significant change in FIM scores, clinicians can be more confident about providing recommended care to those who are most likely to benefit, or as Muir Gray[35] so aptly describes it, providing the right care to the right patient at the right time and in the right way. These findings also have the potential to spur rehabilitation units into incorporating clinical guidelines to direct clinical practice and to guide them in achieving worthwhile quality improvement initiatives.

Study Limitations

The limitations of this study include a potential ceiling effect with the FIM score that could have impacted on the findings and the conservative method of defining adherence that may have resulted in an underestimation of outcome. Also, adherence to recommended management may have been underreported because data were retrospectively abstracted from medical records and subject to reporting biases. A further limitation is the fact that because adherence to recommended care has been defined as either receiving recommended care or the care provided was not specified as recommended care, this may have meant that recommended care was considered, but an alternative was provided, perhaps on the basis of a patient's preference, for example. The authors agree that personalizing care does not always comply with nonadherence.

Another limitation is the fact that the clinical guidelines underpinning this study include very few recommendations relating to the team process. A multiprofessional team approach has been linked to improved patient outcomes,[15,36] and the lack of specificity in measuring care processes related to teams, teamwork, communication, coordination, and leadership may explain why these factors were not statistically significant. There could be an intervening relation between the team approach and caregiver training, secondary stroke prevention, and the support patients and carers receive.[7] The team approach could also be linked to underlying social, psychological, and organizational characteristics. Research is recommended to investigate these relations and increase the utility of clinical guidelines.

CONCLUSIONS

This is the first study comparing adherence to recommended management in Australian rehabilitation units with stroke recovery outcomes. There is evidence of an association between adherence to recommended management and good recovery. Whether the association reflects direct influence, implies a certain "standard of care," or has some other indirect influence is yet to be identified.

Other novel findings include demonstrating the significance of an FIM score between 80 and 100 and the clinical significance of various management processes such as home assessment. This study highlights the value of nationally agreed clinical guidelines in relation to undertaking national audits and, in turn, researching evidence-based practice. Analysis of future stroke audits may allow more definitive associations; however, this study provides new evidence on the factors that may predict outcomes in a stroke rehabilitation cohort.

Acknowledgments: We gratefully acknowledge the significant input of the National Advisory Committee and all the clinicians who contributed data. Input from Chris Price, BSc, BSW, (National Stroke Foundation) on early drafts of this article is also acknowledged.

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a. Stata, version 10.1; StataCorp, 4905 Lakeway Dr, College Station, TX 77845.

Commonwealth of Australia

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In the Australian Competition Tribunal

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Annexure Certificate

ZAW-5

This is the Annexure marked "ZAW-5" referred to in the statement of Zoe Adey-Wakeling dated 28 June 2022.

Predictors of inpatient rehabilitation after total knee replacement: an analysis of private hospital claims data

To the Editor: In reply to Shilling and colleagues,[1] the Rehabilitation Medicine Society of Australia and New Zealand refers the authors and readers to our position statement regarding referral for rehabilitation in the home after total knee replacement (TKR).[2]

Shilling and colleagues[1] state that the most important determinant for referral to inpatient rehabilitation was the hospital where the TKR took place. Independent researchers might be more circumspect, considering there is no acknowledgement that Medibank Private did not fund rehabilitation in the home nationally during the study period nor whether their data included outpatient rehabilitation carried out as "same day rehabilitation", usually coded as inpatient.

Also, disturbingly, some of the literature is misrepresented. The unblinded Canadian randomised controlled trial[3] comparing a publicly funded combination of rehabilitation in the home and hospital-based outpatient therapy with inpatient rehabilitation is not generalisable to privately insured Australian patients. Moreover, the Australian randomised controlled trial[4] showing equivalent outcomes for the same two groups excluded patients who were appropriately referred for inpatient rehabilitation on the basis of numerous patient factors. The present study included few patient factors and not clinically relevant factors, such as obesity, ability to walk after TKR, or complications.[1]

Finally, while no patient safety or outcome data were included, the choice to include the dollar value of the previous year's private hospital claims seems gratuitous — are those patients with higher cost to insurers more likely to use inpatient rehabilitation, or perhaps they were just sicker? It is interesting that no reference is made to the 2017 study that found that referrals to inpatient rehabilitation were directly influenced by preferences of the patient, the surgeon, therapists, discharge planners, insurers and others.[5]

Competing interests: No relevant disclosures. ■

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Annexure Certificate

ZAW-6

This is the Annexure marked "ZAW-6" referred to in the statement of Zoe Adey-Wakeling dated 28 June 2022.

Predictors of inpatient rehabilitation after total knee replacement: an analysis of private hospital claims data

To the Editor: In their recent article and media release, Schilling and colleagues[1] concluded that after total knee replacement (TKR) "some inpatient rehabilitation is low value care". The research was funded by Medibank Private.

The article comes at a time of increasing interest in rehabilitation in the home (RITH) for TKR and other rehabilitation problems. Despite widely proclaimed opinions, there is limited high level evidence regarding outcomes for inpatient rehabilitation versus ambulatory rehabilitation. In research examining the benefits of RITH, higher complexity patients are often excluded from the studies.[2] One of the limitations of this article is that important "patient-related factors … including obesity, pre-operative physical and mental health … functional performance" and others, "were not available".

A significant gap in the current debate is an almost total absence of nuanced thinking regarding which patients are clinically indicated and safe to have RITH. The authors' conclusion is only a relatively minor aspect of the real problem, which is to ensure the best outcome for the patient. That is, we must confidently identify the right rehabilitation program, at the right time and in the right place.

The Australasian Faculty of Rehabilitation Medicine[3] is committed to ensuring high quality rehabilitation medicine services. We believe that:

- while many patients with uncomplicated TKR may be appropriate for RITH, there are many others for whom RITH is inappropriate or unsafe;
- the appropriate setting for TKR rehabilitation should be determined on evidence-based clinical indicators and minimum safety standards;[4]
- all patients with TKR (apart from the most uncomplicated cases) require referral to and assessment by or on behalf of a rehabilitation medicine physician (or other appropriately trained physician); and
- some ambulatory rehabilitation programs may be appropriate for TKR and other rehabilitation, but they must be evidence-based, interdisciplinary, led by a rehabilitation medicine physician and adequately resourced, and not simply seen as a cheaper panacea for a struggling system.

To achieve the best outcome for patients, decisions must be individualised and patient-centred and they should start with a referral to a rehabilitation medicine physician, who can determine the right rehabilitation program, at the right time and in the right place.

There are circumstances in which RITH is an alternative to inpatient rehabilitation for appropriately selected patients.[4]

Let's ensure, however, that we do not throw the baby out with the bathwater.

Competing interests: All authors are consultant physicians in rehabilitation medicine and office bearers in the Australasian Faculty of Rehabilitation Medicine, Royal Australasian College of Physicians. ■

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Annexure Certificate

ZAW-7

This is the Annexure marked "ZAW-7" referred to in the statement of Zoe Adey-Wakeling dated 28 June 2022.

Predictors of inpatient rehabilitation after total knee replacement: an analysis of private hospital claims data

To the Editor: Schilling and colleagues[1] state that the Australasian Rehabilitation Outcomes Centre (AROC) — the national rehabilitation clinical quality registry for Australia and New Zealand — does not routinely collect data on post-surgery outcomes for private total knee replacement (TKR) recipients. This statement is factually incorrect. All private inpatient rehabilitation services in Australia are members of AROC and routinely submit data (including functional outcomes as assessed by a functional independence measure) describing all episodes of rehabilitation they provide. More specifically, over the period described by Schilling and colleagues,[1] AROC received data on outcomes for 93 278 TKRs receiving private rehabilitation. If we restrict the AROC data to match the study data (patients aged 40–89, single TKR, first admission), AROC received data describing 76 847 privately rehabilitated TKRs.

In rehabilitation, the Australian National Subacute and Non-Acute Patient Classification[2] is routinely used to classify episodes into resource-homogeneous groups. In interrogating the AROC TKR data, we concur with Schilling et al[1] that the average length of stay in rehabilitation has been declining, with this decline accelerating over the past 5 years. Concurrent with the decline in length of stay, the functional change achieved (both absolute and relative) during rehabilitation has been increasing, and has in fact accelerated over the past 5 years. Achieving more functional change in a shorter length of stay shows that services are becoming more efficient while also continuing to produce positive outcomes for their patients.

Moreover, it is also factually incorrect that AROC does not collect data outside of the inpatient setting. In fact, AROC also runs an ambulatory benchmarking initiative, and while coverage is not 100%, it is growing. There are currently 35 private ambulatory rehabilitation services that participate and routinely provide data describing their ambulatory rehabilitation outcomes.

In conclusion, we suggest that while the authors provide an interesting analysis, it is incomplete, given that they did not include function — the key driver of cost and outcomes in rehabilitation — as one of the variables they used.

Competing interests: No relevant disclosures. ■

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1 Schilling C, Keating C, Barker A, et al. Predictors of inpatient rehabilitation after total knee replacement: an analysis of private hospital claims data. *Med J Aust* 2018; 209: 222–227. https://www.mja.com.au/journal/2018/209/5/predictors-inpatient-rehabilitation-after-total-knee-replacement-analysis

2 Independent Hospital Pricing Authority. Subacute and non-acute care. https://www.ihpa.gov.au/what-we-do/subacute-and-non-acute-care (viewed Nov 2018). ■

Commonwealth of Australia

Competition and Consumer Act 2010 (Cth)

In the Australian Competition Tribunal

File Number:	ACT 4 of 2021
File Title:	APPLICATION FOR REVIEW OF AUTHORISATION A1000542 DETERMINATION MADE ON 21 SEPTEMBER 2021
Applicant:	National Association of Practising Psychiatrists

AND

File Number:	ACT 5 of 2021
File Title:	APPLICATION FOR REVIEW OF AUTHORISATION A1000542 DETERMINATION MADE ON 21 SEPTEMBER 2021
Applicant:	Rehabilitation Medicine Society of Australia and New Zealand Ltd

Annexure Certificate

ZAW-8

This is the Annexure marked "ZAW-8" referred to in the statement of Zoe Adey-Wakeling dated 28 June 2022.

Australian Government
National Health and Medical Research Council

NHMRC

BUILDING A HEALTHY AUSTRALIA

Guidelines for Guidelines <https://nhmrc.gov.au/guidelinesforguidelines>

The *Guidelines for Guidelines* Handbook is designed to help guideline developers produce high quality guidelines that meet the *NHMRC Standards for Guidelines*

What is a guideline?

Guidelines advise people on how something could be done or what course of action can be taken in a particular circumstance.

The Oxford English Dictionary defines a guideline as a '*general rule, principle, or piece of advice*.' By definition they are not mandatory, but instead they advise people on how something could be done or what course of action can be taken in a particular circumstance. In the context of healthcare, the former Institute of Medicine defined guidelines as '*statements that include recommendations intended to optimise patient care that are informed by a systematic review of evidence and an assessment of the benefits and harms of alternative care options*' (IOM 2011).

High quality guidelines are based on systematic reviews of evidence, transparent development processes and decision making and the judgement of evidence by experts, consumers and other end users.

NHMRC and guidelines

NHMRC has a long history of developing guidelines and supporting others to do so.

Guidelines developed by NHMRC are termed 'issued' guidelines under the *National Health and Medical Research Council Act (1992)*. They cover issues that broadly impact on the Australian population such as the Australian Dietary Guidelines and the Australian Drinking Water Guidelines.

National guidelines developed by groups that are independent of NHMRC and that meet the NHMRC guideline development standards may be approved by the NHMRC CEO. These are known as NHMRC 'approved' guidelines. In order to be approved guidelines must be of high quality, be based on the best available scientific evidence and be developed according to rigorous standards.

NHMRC also plays a role in monitoring guideline activity in Australia through the Clinical Practice Guidelines Portal <http://www.clinicalguidelines.gov.au> . Developed as a service for the Australian clinical community, the portal serves as a single access point for Australian clinical practice guidelines.

NHMRC Standards for guidelines

The NHMRC Standards for Externally Developed Guidelines were first published in 1999 as an appendix to *A guide to the development, implementation and evaluation of clinical practice guidelines*. Later in 2007 the *NHMRC standards and procedures for externally developed guidelines* was published. Based on the 1999 Standards, its purpose was to inform third party guideline developers of the requirements needed to obtain NHMRC approval.

In 2014 NHMRC established its Synthesis and Translation of Research Evidence (SToRE) advisory group. It was first tasked with reviewing and updating these standards to ensure they aligned with current international best practice. The resulting *2016 NHMRC Standards for Guidelines* are applicable to all guidelines containing recommendations for clinical practice, public and environmental health.

'Guidelines for Guidelines' Handbook

The *Guidelines for Guidelines* Handbook is designed to help guideline developers produce high quality guidelines that meet the *2016 NHMRC Standards for Guidelines*. It covers all stages of guideline development and is equally relevant to clinical, public and environmental health guidelines.

SToRE has overseen the development of the Handbook with input from Australian guideline developers, methods experts, funders of guidelines, NHMRC Principal Committees and content experts. The Handbook is available through the NHMRC website and will be updated as required when new evidence becomes available. It is expected that the first version of the Handbook will be completed in 2021 when the constituent modules have been written and submitted for public consultation. Modules or chapters will be published under the ISBN 978-1-86496-024-2. Each page lists the appropriate citation of the chapter and acknowledges those who were directly involved in the chapter's development.

To cite the full Handbook please use:

NHMRC. Guidelines for Guidelines Handbook. www.nhmrc.gov.au/guidelinesforguidelines. National Health and Medical Research Council

The Handbook replaces NHMRC's *A guide to the development, implementation and evaluation of clinical practice guidelines*, all associated handbooks and the *NHMRC additional levels of evidence and grades for recommendations for developers of guidelines <https://nhmrc.gov.au/sites/default/files/images/NHMRC%20Levels%20and%20Grades%20(2009).pdf> (2009)*.

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Workshops

NHMRC would like to thank participants of the following workshops who helped scope the ideas in this Handbook.

- NHMRC Guideline Reform Methods workshop: 14 April 2016
- Guideline Developers Meeting: 29 June 2016
- Making Your Guideline Implementable workshop: 17 March 2017
- Making Evidence-Based Recommendations in Public and Environmental Health: 17 April 2018

Public consultation

In 2016 NHMRC released a discussion paper titled *Better informed health care through better clinical guidelines*, which highlighted the key challenges facing guideline development in Australia. Part of this discussion paper included the draft Standards for Guidelines. Many of the responses were used to prioritise the scope and structure of *Guidelines for Guidelines*.

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Institute of Medicine (2011). Clinical Practice Guidelines We Can Trust. Committee on Standards for Developing Trustworthy Clinical Practice Guidelines, National Academies Press. <https://doi.org/10.17226/13058>

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