

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 5 of 2021
File Title:	RMSANZ APPLICATION FOR REVIEW OF AUTHORISATION AA1000542 DETERMINATION MADE ON 21 SEPTEMBER 2021
Registry:	VICTORIA – AUSTRALIAN COMPETITION TRIBUNAL



REGISTRAR

Dated: 16/05/2022 3:04 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.



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Lodgement and Details

Document Lodged: Statement of Dr Stephen de Graaff, Member of Rehabilitation Medicine Society of Australia and New Zealand.

File Number: Act 5 of 2021

File Title: Application for review of Authorisation Determination made on 21 September 2021

Registry: VICTORIA – AUSTRALIAN COMPETITION TRIBUNAL

Dated: Friday 13 May, 2022

Statement

No: ACT 5 of 2021

IN THE AUSTRALIAN COMPETITION TRIBUNAL

Re: Application for review of Authorisation Determination made on 21 September 2021

Applicant: Rehabilitation Medicine Society of Australia and New Zealand

Statement of: Dr Stephen de Graaff, Member of Rehabilitation Medicine Society of Australia and New Zealand.

Address: Suite 103, 3-5 West St, North Sydney, NSW, Australia

I, Dr Stephen de Graaff say as follows:

I am a member of the Rehabilitation Medicine Society of Australia and New Zealand (RMSANZ) and am authorised to make this statement on RMSANZ's behalf.

Except where otherwise stated, I make this statement from my own knowledge.

1. Credentials and Experience –
 - a. Past President Australasian Faculty of Rehabilitation Medicine (AFRM) of the Royal Australasian College of Physicians (RACP) May 2014-May 2016
 - b. Australian Government Department of Health Committees
 - c. Member, Improved Models of Care Working Group: March 2017- Sept 2018
 - d. Member, Private Health Ministerial Advisory Committee, Rehabilitation Sub-group: May 2018-Sept 2018
 - e. Member, Specialist and Consultant Physician Consultation Clinical Committee (SCPCCC): March 2018- Sept 2019
 - f. Member, RACP National Disability Insurance Scheme Working Party (NDIS) Working Party July 2015-
 - g. I was on the committee that drew up the standards document 2014 for ambulatory rehabilitation¹
2. Experience as a rehabilitation physician in the private sector
 - a. Years worked- 31 years as a Consultant Physician in Rehabilitation Medicine
 - b. Chair, Epworth Rehabilitation Camberwell Medical Advisory Committee: Feb 2010-
 - c. Chair, Epworth RMAC: Feb 2019-
3. National representation - Australian Government Department of Health
 - a. Member, Improved Models of Care Working Group: March 2017- Sept 2018
 - b. Member, Private Health Ministerial Advisory Committee, Rehabilitation Sub-group: May 2018-Sept 2018
 - c. Member, Specialist and Consultant Physician Consultation Clinical Committee (SCPCCC): March 2018- Sept 2019

4. As a past president of the AFRM, a faculty of the Royal Australasian College of Physicians (RACP), I am very familiar with its 4 year training program. It meets standards set by the Royal Australian College of Physicians for training programs of consultant physicians in adult and paediatric medicine. Those individuals who satisfying assessment criteria as set by the AFRM (RACP) can be registered with the Australian Health Practitioner Regulatory Agency (APHRA) as consultant physicians in Australia and New Zealand. Only on recognition as consultant physicians by APHRA can Australian consultant physicians have access to physician item numbers in Australia's Medicare Schedule.

5. The AFRM training program is accredited by the Australian Medical Council and the Medical Council of New Zealand and is supported by is supported by the Training Provider Standards, Training Network Principles and the Accreditation Requirements for Adult Internal Medicine and Paediatrics & Child Health Basic Training Programs². As such it is the only training program in rehabilitation medicine nationally.

6. In my experience, a focus on rehabilitation is critical to patient flow, as effective rehabilitation planning and delivery dramatically affects patient length of stay and hospital efficiency and/or capacity.

7. Recent studies show that – uncontroversially – improved access to rehabilitation improves recovery, independence and quality of life. However, they also show that early assessment and intervention by rehabilitation medicine services following injury illness of complex surgery /treatment identify patient needs facilitates early discharge from hospital. It shows that without early assessment by rehabilitation medicine services, many patients have prolonged lengths of stay in both acute and then later rehabilitation hospitals. For those who do not have access to early assessments by rehabilitation medicine services be they face to face or through screening tools, many are discharged with poor pain management, poor management of comorbidities including mental health (or indeed missed diagnoses) and have a higher rate of readmission to hospital³

8. In my experience, rehabilitation physicians are expert in determining the safest pathway home for people temporarily or permanently disabled through illness accident or as a result of major surgery. Subacute beds (rehabilitation, palliative care, geriatric evaluation and management (GEM) and mental health) occupy more than 10% of the Australian hospital bed base. The RMSANZ and the AFRM also produces documents and guidelines to advise rehabilitation physicians and those requiring the expertise of rehabilitation physicians with advice in a number of clinical areas including joint replacement, the management of spasticity, stroke early management etc.⁴

Scope of Practice

9. The authorisation applicants state in 78 of the Authorisation Applicants' SOFIC that the surgeon has options not to refer to rehabilitation or to discharge the patient home and use a rehabilitation in the home provider to provide rehabilitation in the home, among other options. Further they have stated that the surgeon will be responsible for escalation

of medical care as part of “post-surgical recovery”. In my experience surgeons are responsible for post-surgical recovery and manage patients as part of after care.

10. However the authorisation applicants also state that the rehabilitation in the home will be provided as part of “hospital substitution care” or a chronic care program and is therefore not outpatient care. In my experience, hospital substitution care represents a new episode of care as surgery requires inpatient facilities and chronic care arrangements refer to the prevention of chronic disease which is intended to address lifestyle issues rather than post-operative recovery.⁵

11. In the event that a new episode of care is initiated as a new episode of care, by the treating doctor with the main aim of providing rehabilitation in the setting of rehabilitation in the home then established models of care for rehabilitation in the home provide that the doctor leading this new episode of care be a rehabilitation physician.⁶

In the event that no rehabilitation physician is available (rural or remote settings or lack of available staff) then a specialist with extensive experience in rehabilitation medicine and multidisciplinary rehabilitation medicine may take that role.

12. Documents used by NSW health⁷ indicate the scope of practice undertaken in public hospitals for rehabilitation medicine in NSW includes rehabilitation in the home. The scope of practice for orthopaedic surgeons does not. In my experience I have never come across an orthopaedic surgeon who has led and coordinated a rehabilitation in the home programs along the recommended standards for rehabilitation in the home as indicated by the AFRM (RACP). I have never seen an orthopaedic surgeon conduct a rehabilitation case conference either inpatient or outpatient, nor have I seen him/her enter data into the national data registry AROC nor coordinate and lead the rehabilitation in the home team by writing out a rehabilitation plan.

13. In my experience and understanding orthopaedic surgeons do not have access to the medicare item numbers 880, 830, 832 or 820 which allows rehabilitation physicians to claim for time spent coordinating and leading conferences for the purposes of providing rehabilitation.⁸ These item numbers are reserved for consultant physicians.

Hospital substitution programs

14. In my experience working in the private sector, and in my understanding of the structure of the healthcare in the private sector, rehabilitation represents a separate episode of care to orthopaedic surgery. In that event then, Hospital substitution programs (which have been proposed to fund Rehabilitation in the Home) can be applied as there is a new episode of care (rehabilitation).

15. If ongoing care (such as aftercare) is offered as part of post-surgical recovery and is not a new episode of care then the patient remains under the medical supervision of the surgeon who is responsible for the ongoing treatment in the home. A hospital substitution program is difficult to apply here as the core of the admission is surgery which would be impossible to undertake within the home.

16. In my experience, I have never seen the operating surgeon undertaking a home visit to conduct aftercare following surgery nor have I seen him/her conducting a home visit to manage a complication that occurred during a rehabilitation in the home episode of care.

MPPAs

17. It is the usual practice of rehabilitation physicians, when taking referrals for rehabilitation, to assess the clinical and rehabilitation needs of the patient.

18. A detailed history and examination take place before a comprehensive rehabilitation plan is decided upon in consultation with the patient.

19. It is not usual to ask whether the patient is covered by a particular health fund or indeed to undertake a fund check to ensure that they have access to their Private Health Industry entitlements. This is usually done after the consultation by administrative staff and typically involves contact with the insurer.

20. It is usual practice for the surgeon's and the anaesthetist's administrative staff to undertake inquiries relating to the patient's private health fund inclusions and provision of benefits. This is done at the point of undertaking informed financial consent where the costs of surgery and anaesthesia and the benefits provided by the health fund are germane and explained.

21. As a result of the fact that rehabilitation physicians become involved in the patient's treatment after the choice of insurer has already occurred, it is common practice for rehabilitation physicians who work in the private sector to be registered with all funds and Department of Veteran's Affairs (DVA). By this, I mean that they will have entered into a form of no-gap or known-gap agreement with each PHI and that it is impractical to suggest that a rehabilitation physician could choose not to enter into such agreements with one or more PHIs.

22. This is even more the case in the event that a buying group represented PHIs accounting for up to 20% of the PHI market. This has been the case with the AHSA group, which commands approximately 19% of the market. There have been no cases, that I am aware of, where a rehabilitation physician has refused to register with one or more PHIs – it is simply not practical given the structure of private rehabilitation practice.

23. In the event that an MPPA was offered by a buying group that paid higher fees for control of clinical independence, many rehabilitation physicians particularly those commencing their careers with large overheads would face a difficult moral and ethical decision, regarding financial advantage and independent clinical decision making.

24. There would be a greater incentive to sign MPPAs should existing contracts for no gap fees be varied in any way by the PHI so as to entice specialist to sign the MPPAs. In the event that fees provided by the current no gap arrangements are reduced or not increased with the CPI or inflation, then specialists would be financially compelled to consider signing the MPPAs, thereby relinquishing their independent clinical decision making. While the

authorisation applicants have committed to retaining no gap fee contracts per se, there is nothing in that commitment that prevents the PHIs from reducing the reimbursement levels under those contracts. In that case, in order to maintain their incomes, specialists may have limited options but to sign the MPPAs.

25. In the Authorisation Applicants' SOFIC (43c) they refer to the public benefits associated with a billing group operating as a countervailing power to hospital bargaining power. That may be true. However, specialists operate as sole traders and very few are in group practices (apart from some anaesthetists). As such, the issue of countervailing bargaining power simply does not apply.

26. In fact, the opposite is true for individual medical specialists, who would be faced with negotiating with a buying group and its substantial buying power. This situation could lead to the medical specialist have very little room to negotiate terms that were seen, for example, as being inconsistent with best practice or in the best interests of all patients.

Clinical Guidelines included in the MPPAs

27. In the authorisation applicants' SOFIC point 80 they explain that the clinical guidelines pertain simply to the PHIs' funding agreements for hospital substitution policies that support rehabilitation in the home.

28. I am of the opinion that the use of the term "clinical guidelines" implies the wish to have licence to move beyond mere funding arrangements.

29. Rehabilitation Physicians are familiar with the development of clinical guidelines and have participated in guideline development in Brain Injury, Stroke, Spasticity management and Fractured Hip management. Evidence-based guidelines or standards must be independent and lack bias.

30. In my experience, rehabilitation physicians have often been asked to comply with or to inappropriate or biased guidelines. For example, I have been asked to follow the NICE guidelines from the UK in managing ME/Chronic Fatigue Syndrome by advocates for ME/CFS, which applies to the English environment where treatment teams are funded by the NHS and are not available in the Australian health environment. I have been asked to adhere to clinical guidelines for the use of Botulinum Toxin from a US pharmaceutical company: however, these do not apply to the current PBS rules regarding the funding of that drug in Australia. I have also been asked to follow guidelines for the use of blood thinners for Atrial Fibrillation by drug companies, which incur higher drug costs for patients.

31. However, where clinical guidelines are appropriate, such as those developed by august academic bodies as exemplified in the living guidelines committee of the National Stroke Foundation, the guidelines are followed by practising specialists without any financial incentive to do so. Further, there is confidence in applying these guidelines by the practising specialists who are aware of the independence of the research groups involved in the guidelines.

32. NIB has correctly stated it is not a health professional or practice but indicates that it may require the practitioner to follow clinical guidelines as NIB might reasonably require. As clinical guidelines are developed by clinicians, medical researchers and public health experts, I am of the opinion that the terms used are intentionally vague so that it would allow NIB to develop its own guidelines or sponsor guideline development or use guidelines from other countries with disparate health systems. I would advocate against following such guidelines.

Working toward targets

33. In my experience, clinical targets are often used to improve outcomes in the hospital setting – these often relate to clinicians' behaviour, such as handwashing, but are not tied to financial incentives such as enhanced fees. They are mainly used to achieve accreditation for hospitals, practices in patient safety or enhanced patient outcomes.

34. In my experience, I have never seen clinical targets used to affect specialist clinical decisions regarding referrals for consultations with rehabilitation physicians. In my experience consultation with other specialists is a medical practice that enhances care and safety for patients and acknowledges limitations in experience and training of the referring clinician. Understanding one's own limitations in skill knowledge and experience is a hallmark competency that physicians and surgeons are trained to respect and understand. The curriculum of training in rehabilitation medicine focuses on this as a way of encouraging further medical education.⁹

Risk of behaviour inconsistent with patients' best interests

I) Medical supervision of a patient receiving rehabilitation in the home

35. In my experience, when there is no clarity regarding medical supervision of a rehabilitation in the home and no direct medical communication point for the patient or allied health staff, patient safety is at risk. In the public sector hospital, substitution programs have specific models of care that integrate medical supervision of the patient with the rehabilitation in the home service provision. This involves home visits, telehealth consultation, outpatient review and coordination of care through case conferences¹⁰. In my experience, the private sector does not offer this the medical oversight provided by rehabilitation physicians, nor do they involve rehabilitation physicians in delivery of any rehabilitation in the home products that are subcontracted to companies that employ allied health staff. There are no details in the MPPAs about models of care, escalation pathways for medical illness or failure to progress in rehabilitation. The harms are likely to be caused by the proposed conduct in the private sector and would not arise should rehabilitation physicians develop models of care and lead rehabilitation in the home programs.

36. In my experience, surgeons are often not as accessible as other doctors as they spend time in the operating theatre and the patient and allied health team are reluctant to contact them unless there is an obvious surgery related event occurring (eg wound breakdown, dislocation, fracture).

37. When GPs are involved, there is no protection of the patient from paying out of pocket expenses, and the insurer is not able to pay the GP when the patient is in the community, irrespective of whether the patient is in a hospital substitution model.

38. In my experience and that of many of my colleagues, we are regularly referred patients regarding mishaps or inadequate therapy occurring during medically unsupervised rehabilitation in the home. I have had to admit patients to either inpatient rehabilitation or day rehabilitation to institute the correct rehabilitation plan and improve joint range of motion to maximise the independence of the patient.

39. In my experience it is not unusual to be referred patients from an orthopaedic surgeon who was required to perform a manipulation under anaesthesia due to poor patient outcomes following a rehabilitation in the home program. This occurs not uncommonly when rehabilitation physicians are not consulted to select the appropriate patient for rehabilitation in the home programs.

ii) Patient selection for rehabilitation in the home

40. In 2014 I was part of a committee of The Australasian Faculty of Rehabilitation Medicine (RACP) who wrote up a standards document for ambulatory rehabilitation, including rehabilitation in the home. In this document, the diagnosis planning and selection of appropriate patient was a paramount consideration. Much of the document is dedicated to the selection criteria and planning of the rehabilitation in the home episode. It needs to be done carefully as many patients who are surgically appropriate would have poorer outcomes if rehabilitation took place in the home setting due to factors not explored outside of rehabilitation medicine consultation. These include drug and alcohol issues, motivation, psychosocial issues (housing, mental health, poverty, family, violence etc) and environmental issues.¹¹ This detail is not addressed in the template MPPA and it is unclear how patients will be selected for rehabilitation in the home (or to what extent the targets can take these factors into account).

41. The rehabilitation in the home program suggested by the MPPA does not appear adhere to international standards, particularly in its selection process which is financially incentivised.

42. In my experience, when assessing patients for rehabilitation in the home, it is critical to be honest and transparent. The requirement in this MPPA to keep details of the relationship between the practitioner and the PHI confidential, will affect that transparency and put the practitioner in an unethical position. The patient has right to know that the practitioner is being paid a higher fee in order to assist meeting targets regarding patient selection for rehabilitation in the home.

43. As an ex-president of the AFRM, it is my opinion that the assessment of a patient for appropriate rehabilitation setting is at risk of being ethically corrupted by the PHI paying a higher fee to practitioners that meet a rehabilitation in the home target.

iii) Lack of patient choice

44. In my experience, when assessing patients for post joint replacement rehabilitation in the private sector, the patient has the choice to:

- a. have medically supervised rehabilitation in the home through the rehabilitation physician;
- b. go home and receive their own physiotherapy services as they wish, with access to the rehabilitation service at any stage but no oversight of rehabilitation;
- c. attend the hospital 2–3 times a week for day rehabilitation; or
- d. be admitted for inpatient rehabilitation for a brief inpatient period where appropriate.

45. These choices are informed by the clinical assessment by the rehabilitation physician and for those patients with capacity, it is a decision arrived at jointly between rehabilitation physician and patient, with full transparency of all details of service provision.

46. The MPPA suggested by NIB/HH mitigates against these choices by offering assessing practitioners' financial incentives to meet targets in medically unsupervised rehabilitation in the home and referring all patients for same. Further, the patient cannot be advised of the financial arrangement between the PHI and the contracted practitioner, which might assist the patient in understanding the competing considerations confronting the practitioner. These incentives would apply equally to any surgeon considering the appropriateness of home-based or in-patient rehabilitation.

Benchmarking and value

47. The Australasian Faculty of Rehabilitation Medicine was instrumental in establishing the Australian Rehabilitation Outcomes Centre (AROC) in 2002, which is housed and administered by health academics at Wollongong University. This was done with partners from government and the private sector including health insurers.

48. Clinicians enter data for the purposes of improving their services and they are neither reimbursed nor financially incentivized to do so. AROC collects the clinical outcome data on all inpatient rehabilitation episodes and a significant number of ambulatory rehabilitation episodes nationally and has over 1 million data sets.

49. The data is owned by individual hospitals and is used for quality improvement which focuses on patient outcomes and hospital efficiencies. Hospitals have the right to utilise their data in any way that they wish including providing it to a third party. Almost all hospitals in Australia undertake benchmarking exercises. Indeed, all individual hospital AROC reports (provided twice a year) match hospital outcome measure to other hospitals benchmarked through case mix, geographical location and public or private sectors.

50. These outcome measures can be data linked to other data sets and have been successfully matched by researchers in Sydney and Melbourne. In my experience, those with data analytic skills could match data held by hospitals to data kept by insurers or government agencies. Health insurers frequently conduct audits of hospital records and

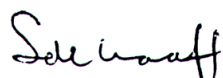
receive some data regarding the patients' clinical courses in hospitals. As the PHI's are likely to have this data and the capacity to data match, to assess performance and outcomes, RMSANZ is concerned that the PHI may require further confidential data and a broader access to patient data that may challenge the patient's privacy.

51. "Value based contracting" is referred to by the authorisation applicants (Authorisation applicants SOFIC 43 (b) (iii)) as based on limiting what NIB/HH believes to be low value care, This is referred to in, economic terms, and related to achieving the same clinical outcome at a lower cost. In my experience, patients have a different view of value. For many value lies in their ability to access their entitlements including access to hotel services while undergoing rehabilitation and recovering from illness.¹² For many other patients, time in hospital for elective surgery with or without inpatient rehabilitation represents a time that can access value from their investment in private health insurance by reducing travel costs, and other costs of living, during their illness or surgery. This is particularly true for the elderly and those living in rural and remote areas.

Dr Stephen de Graaff MBBS FAFRM(RACP)

Date: 13th May 2022

Signed:

A handwritten signature in black ink, appearing to read 'S de Graaff', written in a cursive style.

Dr Stephen De Graaff

References

- 1 – https://www.racp.edu.au/docs/default-source/advocacy-library/ambulatory-standards.pdf?sfvrsn=26a32f1a_8
- 2 - <https://www.racp.edu.au/about/accreditation/accreditation-renewal>
- 3 - <https://www.semanticscholar.org/paper/Targeted-rehabilitation-may-improve-patient-flow-of-Wu-Misa/8892c2b31052938151a5352b9893f19af6dff2b4> AND <https://www.tandfonline.com/doi/full/10.1080/09638288.2021.1887377> AND <https://www.mendeley.com/catalogue/0d94a722-a682-39d3-9770-e38544c2448d/>
- 4 – Appendix A AND https://www.racp.edu.au/docs/default-source/advocacy-library/rehabilitation-medicine-physicians-delivering-integrated-care-in-the-community.pdf?sfvrsn=8fb8091a_8 AND <https://www.racp.edu.au/docs/default-source/advocacy-library/the-therapeutic-use-of-botulinum-toxin-in-rehabilitation-medicine.pdf>
- 5 - <https://www.legislation.gov.au/Details/F2017L00504>
- 6 - <https://www.privatehealthcareaustralia.org.au/wp-content/uploads/Guidelines-for-Recognition-of-Private-Hospital-Based-Rehabilitation-Services-AUGUST-2016-FINAL.pdf>
- 7 - <https://www.health.nsw.gov.au/services/Pages/role-delineation-of-clinical-services.aspx>
- 8 - <http://www9.health.gov.au/mbs/fullDisplay.cfm?type=item&qt=ItemID&q=820> AND <http://www9.health.gov.au/mbs/fullDisplay.cfm?type=item&qt=ItemID&q=880> AND <http://www9.health.gov.au/mbs/fullDisplay.cfm?type=item&qt=ItemID&q=830>
- 9 - https://www.racp.edu.au/docs/default-source/trainees/advanced-training/rehabilitation-medicine/rehabilitation-medicine-general-advanced-training-curriculum.pdf?sfvrsn=86212c1a_4
- 10 – [Appendix B - service level agreement between St Vincent's Sydney and Prince of Wales Hospital's Rehabilitation Departments 2011](#)
- 11 - https://www.racp.edu.au/docs/default-source/advocacy-library/ambulatory-standards.pdf?sfvrsn=26a32f1a_8
- 12 - As noted in Bahagiar et al https://www.academia.edu/59844618/Understanding_consumer_and_clinician_preferences_and_decision_making_for_rehabilitation_following_arthroplasty_in_the_private_sector

Appendix A

REHABILITATION MEDICINE SOCIETY OF AUSTRALIA AND NEW ZEALAND

RMSANZ Private Practice Special Interest Group

Position Statement on Rehabilitation following Total Knee Replacement

Introduction:

Data from the previous 10 years in Australia and the USA have shown that there are significant numbers of patients being referred for inpatient rehabilitation following total joint arthroplasty. Currently in Australia, 40% of privately insured and 20% of patients from public hospitals are referred for inpatient rehabilitation [1]. The US health system with its managed care policies and the 2007 changes to the US Medicare rules, has deliberately affected referrals so that smaller numbers receive inpatient rehabilitation and larger numbers are being referred for home based rehabilitation [2]. From 1998-2009 the numbers being referred for inpatient rehabilitation halved to 13% of TKR in 2009 and the number of those referred to home based rehabilitation doubled to 30% [2].

Notwithstanding, there is an increase in numbers of TKRs being undertaken globally with a growth rate of 5-17% pa quoted in international literature [3]. Of concern, 25% of those having knee arthroplasty do not make minimally important clinical gains by 6 months [4]. A further 15% of patients report moderate to severe pain 2 years after surgery [5], while 20% of patients report moderate-to-severe activity limitations at 24 months post TKR [6], which suggests the need to offer better clinical and patient reported outcomes through appropriate referred post-operative rehabilitation courses of treatment.

Due to the rising number of total knee replacements being performed and improvements in the quality of surgical care and prosthetics [7], together with a downward pressure on costs in the private health sector (where much of the private arthroplasty surgery is taking place), many patients are being transferred for rehabilitation in the home following surgery without review of the clinical indications for post joint arthroplasty rehabilitation. Indeed the available evidence to date indicates that rehabilitation physicians are rarely consulted to identify the clinically appropriate setting for rehabilitation. In an environment where non-clinical drivers such as commercial interests, business models, consumerism and transport costs will often dictate the settings for rehabilitation care, the RMSANZ feel that there is a need to state the clinical indicators and minimum safety standards for rehabilitation settings post-TKR.

The RMSANZ and its Private Practice Special Interest Group have undertaken a review of the literature and discussed the clinical indicators and safety standards for rehabilitation across 4 settings of rehabilitation [8]: in-reach; inpatient; outpatient; and ambulatory settings. The document below presents clinical indicators for rehabilitation following joint replacement in the ambulatory setting.

Further, in relation to the constitution and mission of the RMSANZ to both “advocate for our patients” and “promote professional education”, the following position statement is offered to clarify clinical need for services and minimum safety standards for care in post knee replacement rehabilitation.

Clinical indicators for home-based rehabilitation:

All patients and clinicians who wish to refer patients for ambulatory rehabilitation following TKR need to have a rehabilitation assessment post-operatively. This assessment needs to be undertaken by a rehabilitation physician or on behalf of a rehabilitation physician who will take responsibility for the decision being made.

Current evidence suggests that clinical indicators for home-based rehabilitation should include all of the following:

- a. 71 years of age or younger [9]
- b. Have no post-operative complications
- c. Have adequate social supports
- d. Have someone living at home with them
- e. Less than 5 comorbidities, with no comorbidity affecting the ability to undertake aerobic exercise [10, 11]
- f. Able to walk >35% of the expected final 6 Minute Walk Test distance, at 2-weeks post-operation [12]

Minimum safety standards for home-based rehabilitation:

In studies of home-based rehabilitation following joint replacement, patients who have one or more of the following criteria are typically excluded from trials of home-based rehabilitation, or noted to have poorer outcomes:

- a. Over the age of 72 years
- b. More than 5 comorbidities
- c. Obese
- d. Poor social supports
- e. Living alone
- f. Complicated surgery
- g. Poverty/low socioeconomic status
- h. TKR revision
- i. Bilateral joint replacements
- j. Not being able to ambulate prior to surgery
- k. At high risk of referral to a nursing home or respite care
- l. Inflammatory arthritis, septic arthritis or traumatic arthritis as a cause

(see [11, 13-17])

Therefore it is recommended that patients be assessed post-operatively to ensure that they do not have any of the indicators for inpatient admission stated above as the safety of these patients being managed at home by allied health or nursing staff have not been tested and may result in poorer clinical outcomes, and/or higher readmission rates for conditions such as wound infection and joint stiffness requiring manipulation under anaesthesia.

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As home-based rehabilitation may be associated with a higher infection rate [14] or joint stiffness rate at risk of requiring manipulation under anaesthesia [18, 19], it is recommended that therapists and/or nurses delivering home-based rehabilitation have an ability to contact and coordinate care with doctors who are trained in or have experience in post-surgical rehabilitation including a rehabilitation physician, a general physician or a general practitioner.

Further, the RMSANZ do not recommend that those patients at higher risk of MUA [20-22] are referred for ambulatory rehabilitation as their risks of readmission for MUA are higher than the standard population. From literature to date [22], these risk factors include:

- a. low socioeconomic status
- b. poor pre-operative knee range of movement
- c. diabetes, and
- d. hypothyroidism

Decision making for post-TKR rehabilitation:

While RMSANZ acknowledges that there may be non-clinical drivers to select inpatient rehabilitation for many patients [1], including patient drivers (such as previous experience, insurance entitlements, concepts of improved safety); surgical drivers (such as surgeon preference and location of rehabilitation facilities); and economic drivers (such as cost of transportation, private hospital business models and private health fund insurance product structures); it is primarily the clinical indicators that should determine the need for a clinically relevant service delivered in a setting that is safe for patients. As such RMSANZ recommends that all patients undergoing TKR have a rehabilitation assessment post-operatively to determine whether they have clinical indicators that allow for safe and effective ambulatory rehabilitation.

Telemedicine for post TKR rehabilitation:

The RMANZ notes the relevance and importance of telemedicine as an alternative to face-to-face care for those living remotely or for those who cannot receive other forms of ambulatory or inpatient rehabilitation. However the RMSANZ recommends further research in this area over and beyond currently published patient satisfaction, non-inferiority and cost effectiveness studies [23-26]. Larger studies are needed to ensure safety of patients and ensure that outcomes are maintained over time.

Summary of Recommendations:

1. That all patients undergoing TKR have a rehabilitation assessment post-operatively to determine whether they have clinical indicators that allow for safe and effective ambulatory rehabilitation.
2. That no patient be referred for home based rehabilitation until their safety for rehabilitation in this setting is assessed post operatively by a rehabilitation physician or another physician qualified in prescribing home based rehabilitation programs.

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3. That therapists and/or nurses delivering home-based rehabilitation have an ability to contact and coordinate care with doctors who are trained and qualified in managing patients during post-surgical rehabilitation including a rehabilitation physician, a general physician or a general practitioner.
4. That those patients at higher risk of Manipulation Under Anaesthesia (lower socioeconomic status, diabetic, those with hyperthyroidism and those with poor range of movement post-operative) are not referred for ambulatory rehabilitation as their risks of readmission for MUA are higher than the standard population.
5. That further research in tele-rehabilitation service delivery be undertaken in the area of post joint arthroplasty rehabilitation.

References:

1. Buhagiar MA, Naylor JM, Simpson G, Harris IA, Kohler F. Understanding consumer and clinician preferences and decision making for rehabilitation following arthroplasty in the private sector. *BMC health services research* 2017;**17**:415.
2. Ong KL, Lotke PA, Lau E, Manley MT, Kurtz SM. Prevalence and Costs of Rehabilitation and Physical Therapy After Primary TJA. *The Journal of arthroplasty* 2015;**30**:1121-6.
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Appendix B



St Vincent's Hospital

Charity, Care & Compassion

SERVICE LEVEL AGREEMENT
BETWEEN

ST VINCENT'S HOSPITAL REHABILITATION DEPT
AND

PRINCE OF WALES HOSPITAL REHABILITATION DEPT
FOR

A facility of
St. Vincents & Mater Health Sydney

St. Vincent's Hospital Sydney Ltd
ABN 77 054 038 872
390 Victoria Street
Darlinghurst NSW 2010 Australia

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THE REHAB IN THE HOME PROJECT 2011-13

Background

Prince of Wales and St Vincent's are collaborating in order to execute and run a rehab in the home program which is being funded by a COAG grant in 2011/12 and, 2012/13. A total grant of \$571,164 is available for 2011/12, \$740,088 is available for 2012/13. This is the combined grant for the two hospitals added together. The program will be run from St Vincent's Hospital under the governance of a combined hospital committee. St Vincent's Hospital will be the employer of all the allied health and nursing staff and will offer a maximum 20 rehab in the home packages in 2011/12 and maximum 30 rehab in the home packages 2012/13. This document represents a service level agreement regarding the administration and execution of this service.

Purpose

Rehab in the home packages will be offered to patients for the purposes of early discharge from the inpatient rehab setting and early discharge from the mobile rehab team (also known as Acute Rehab Team) setting (i.e from the acute hospital). It would also be utilised to assist those identified in outpatient clinics or by rehabilitation physicians as living in the community in a parlous state so as to avoid readmission to hospital.

Scope

The program will involve up to 20 packages of 6 weeks each. Each package will offer the patient a home visit of up to 1 hour by either or a rehab physician, RN, physiotherapist, social worker or an occupational therapist per day. They will be seen 5 days a week for a 6 week period. A total of up to 160 packages will be offered in the first year. Patients will be seen at addresses from Millers Point to La Perouse, Watsons's Bay to Surry Hills/Redfern (RPA and SGH boundaries). No packages will be offered over the southern side of the Cooks River or west of Elizabeth Street Redfern.

Hours of operation

Staff will be employed from 8.30 – 5pm Monday to Friday and patients will be seen between 10 – 4pm Monday to Friday. The program is expected to start in mid October 2011.

Service expectation

1. It is expected that there will be equal equity of access with 50% of packages being available to Prince of Wales patients over each 12 month periods, and 50% available to St Vincent's Hospital patients over each 12 month periods.

Continuing the Mission of the
Sisters of Charity

2. That a Rehab Physicians at St Vincent's will lead the rehab in the home team of St Vincent's patients and provide a discharge summary for the medical notes at St Vincent's and the rehab physician at Prince of Wales hospital will lead the rehab in the home team for the POW patients. Patients' medical records will be managed in the community using the existing CHIME system of electronic medical records.
3. There be a transparency of booking procedure and intake criteria and electronic systems (a password protected de-identified website) will be developed to facilitate this transparency.
4. There will be a consensus of admission criteria.
5. That communication is clear and comprehensive both verbally and in written/electronic form.
6. That the packages will in all good will commence by October 15th 2011.

Working assumptions

1. That Rehabilitation Physicians will lead the team, one rehab physician from St Vincent's will lead the packages available to St Vincent's hospital patients and one rehabilitation physician from Prince of Wales will lead the team for the packages available to Prince of Wales patients. This means that the rehab physician will undertake regular case conference that can be performed either face to face or via phone and this will occur on a weekly basis.
2. That evidence based therapies be undertaken and delivered in patients homes.
3. That data regarding the outcomes, quality improvement and the demographics of patients be shared.
4. That discharge summaries from each of the packages be sent to the appropriate hospital for inclusion in each institution's medical records. That medical record of each of the patients will be kept via the CHIME system during the execution of the package.
5. Budget holding and the operational administration of the program will be undertaken by St Vincent's Hospital Department of Rehabilitation Medicine (operational managers) and quarterly reports will be provided to the governing committee (overall supervisory committee) who will oversee the program and advise on management decisions.

Constraints

1. In the event that there is no patient ready for a package at one hospital and there are a number of packages available for patients at that hospital, the alternative hospital will be offered an extra package. This will be undertaken so that waiting lists for packages are kept to a minimum. This redistribution will be undertaken in discussion between the appropriate rehabilitation physicians at both St Vincent's and Prince of Wales. That in good faith equity of access to packages will be preserved over each 12 month period
2. The cost of cars for this program may be prohibitive and an agreement will be undertaken with a car sharing organisation such as "Go Get" in order to utilise hire cars to both decrease the carbon foot print of this program and also to minimise costs.

3. When leave is undertaken there may be some difficulty in finding relieving staff to replace allied health therapists and nurses. All efforts will be made by the operational managers at St Vincent's to avoid this occurrence.

Structure

1. A senior Registered Nurse (RN8) will be employed, who will undertake services in the home, as well as be the administrative service leader for the team, managing intake and coordinating associated community services such as COMPACS, community nursing, general practice liaison and other care packages.
2. Two and a half physiotherapist, one of whom will be a Grade 3, will be employed
3. Two occupational therapists, one of whom will be a Grade 3 will be employed.
4. A half time Social worker will be employed at a level 3 position.
5. An allocation of \$15,000 will be available for episodic treatments by speech pathology, psychology, dietician, and neuropsychology who will be paid sessional rates as overtime to do extra work outside of their usual employment at St Vincent's.
6. Staff specialist will be employed through the revenue generated by Medicare only and will see patients from the outpatient department or their private rooms using Medicare item numbers and in so doing will fund their positions independently. All patients will be referred by their admitting acute physician or surgeon or rehabilitation physicians.

Admission and Governance

1. Program will run for 12 months and then be reviewed before extension for the 2nd 12 months.
2. A governance committee will be appointed; the members will be Dr Greg Bowring (Director POW Rehab), Dr Steven Faux (Director St Vincent's Rehab), both of the appointed rehabilitation physicians from Prince of Wales and St Vincent's, 1 allied health member representative and the administrative team leader (RN), a member of the Quality Improvement unit at St Vincent's will also attend. This committee will meet quarterly and assess outcomes of the program and will review the entire program at the 12 month mark.
3. The Rehab physicians managing clinical care for the packages will be accountable directly for the patient's medical care; the governance committee will be accountable for the program administration.
4. Benchmark for this program will be undertaken with St George Hospital. In terms of outcome measures the Lawton's Outcome Measures scale will be utilised as well as Allied Health occasions of service, readmission rate, FIM and the utilisation of the case review system already in place at St Vincent's as part of the quarterly mortality and morbidity meetings..

Maintenance of Service level agreement

1. The maintenance of the service level agreement will be undertaken on a quarterly basis and will form the agenda of the governance committee.

Dispute Resolution

The committee will appoint Dr Phil Conroy the Representative of Rehabilitation Medicine Departments on the Subacute Governance Committee in the Southern Local Health Network to be an external arbiter if a dispute escalates and is unable to be resolved internally.

Funding methodology

Revenue for 2011/2012.....\$571,164.00

Costs

Staff

Clin Nurse Specialist gd 1 with 2.....	\$ 94,788.72
PT gde 3 yr 1 with 20% on costs.....	\$ 86,184.00
PT gde 2 yr 3 with 20% on costs.....	\$ 77,622.00
0.5 PT gde 2 yr 3 with 20% on costs.....	\$ 38,811.00
0.5 SW gde 3 yr 1 with 20% on costs.....	\$ 43,092.00
OT gde 3 yr 1 with 20% on costs.....	\$ 86,184.00
OT gde 2 yr 3 with 20% on costs.....	\$ 77,622.00

Allocation for sessional locum services SP,DT,PSYCH.....\$ 1,395.28

Subtotal (\$506,418 = 88% of budget)

Vehicles

Contract with GoGet for 4 cars & 2 wagons 9 hrs per day 5 days a week for 48 weeks of the year over 12 months @ \$5/hr incl.petrol/insur/rego.....\$ 57,600.00

Computers/Phones /paper etc.....\$ 7,865.00

Total.....\$ 571,164.00

A new budget will be reviewed for the 2011/12 and there will be plans regarding on going maintenance or a division of service at that time. Quarterly financial reports will be provided to the governing committee.

Logistics

Each full-time therapists will have one car and be expected to see 3- 4 patients per day. The RN team leader will be expected to see 2 patient per day and administer the program for the remainder. He/she will be cross accredited and as such will be able to introduce patients to the program and help arrange outpatient consultations and transport home. This corresponds to 18 – 24 packages which is likely to result in 20 packages regularly.

The start of the program will be staggered as the remainder of the staff complete admission and operational documents and policies.

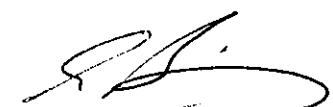
The Doctors will see the patients in their outpatient rooms and have access to the Medicare system only as all patients will be referred by their original treating acute specialist or rehab specialists. Patients will be seen at outset by the doctors, the doctors will undertake one home visit, attend all community case conferences and follow up the patient on discharge to ensure that GPs and referring doctors are informed of the patient progress and handed back to them for long-term community care. GP's will be invited to attend all case conferences.

Allied Health Staff will be housed in the current offices of the Mobile Rehab Team at St Vincent's and all HR will be undertaken at St Vincent's. The doctors will operate from their outpatient rooms at both hospitals and will make themselves available once a week for case conference and quarterly for administration meetings.

Conclusion

This programs design is based on research including review of TACP, EACH and COMPACS packages, administration of these programs at a variety of area health services in Sydney and has been done in consultation with Dr Bowring at Prince of Wales. On signing of this Service level agreement and the provision of COAG funds to St Vincent's recruitment for staff can commence in July 2011.

Signatures:



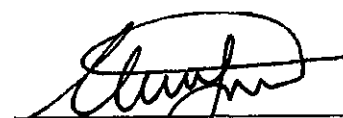
A/Prof Greg Bowring
Director Rehab Service
Prince of Wales

Date...19.7.11.....



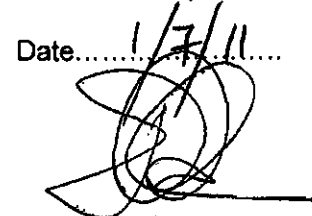
Andrew Bernard
Director of Operations, POW

Date...21/7/11.....



A/Prof Steven Faux
Director Rehab Service
Sacred Heart (St Vincent's Health Aust)

Date...1/7/11.....



Jonathan Anderson
EP St Vincent Public Hospital

Date...7/7/11.....

CURRICULUM VITAE

CURRICULUM VITAE

NAME: Stephen Peter de Graaff

DATE OF BIRTH: 10/08/1958

ADDRESS: 37 Woolcock Avenue, Kew East 3102

PHONE/email: 0437000866/ steve.degraaff@epworth.org.au

HEALTH: Excellent

QUALIFICATIONS: MBBS – Monash University 1982
Medical School – Prince Henry’s Hospital
FACRM – Part 1 – August 1988
FACRM – Part 2 – August 1990
FAFRM (RACP) – 19/2/1993

HOSPITAL POSITIONS:

1983-1984 **Intern Year** – Western General Hospital
JRMO Year – Western General Hospital

1985 **Family Medicine Program:**
Casualty – PANCH – 4/2/85 – 5/5/85
General Practice – Lalor – 6/5/85 – 2/8/85
Royal Children’s Hospital – Paediatrics – 3/8/85 – 3/2/86

1986 Psychiatry: Wingrove Cottage Community Clinic
4/2/86 -3/8/86
Geriatric Registrar – Caulfield Hospital – 4/8/86 – 1/2/87

1987 **Trainee in Community Practice** – Caulfield Hospital

1988-1990 **Registrar in Rehabilitation**
Caulfield Hospital : Orthopaedic Rehab. 1/2/88 – 31/7/88
Cardiac Rehab. 1/8/88 – 29/1/89

Austin Hospital : Spinal Rehab. 30/1/89 – 30/7/89
Bethesda Hospital : Head Injury Rehab. 31/7/89 – 4/2/90
Caulfield Hospital: Amputee Rehab. 5/2/90 – 4/8/90
Vocational Rehabilitation Service: Vocational Rehab. 5/8/90 – 4/2/91

1991 **Specialist in Rehabilitation Medicine Positions:**

1. Director of Rehabilitation Services,
Cedar Court Rehabilitation Hospital,
888 Toorak Road, Camberwell, Victoria 3124
2. Assistant Director Neurological Rehabilitation Services,
Caulfield General Medical Centre,
294 Kooyong Road, Caulfield, Victoria 3162

1/10/92 – 30/9/93

Specialist in Physical Medicine & Rehabilitation

G.F. Strong Center,
Vancouver, B.C. Canada.

- Stroke Rehabilitation Program
- Head Injury Program
- Staff Physician, Driver Rehabilitation Program

15/11/93

1. Senior Staff Specialist in Rehabilitation

Cedar Court Rehabilitation Hospital,
888 Toorak Road, Camberwell 3124

2. Assistant Director Neurological Rehabilitation Service

Caulfield General Medical Centre,
294 Kooyong Road, Caulfield 3162

1/1/96

1. Senior Staff Specialist in Rehabilitation

Cedar Court Rehabilitation Hospital,
888 Toorak Road, Camberwell 3124

2. Director Neurological Rehabilitation Service

Caulfield General Medical Centre,
294 Kooyong Road, Caulfield 3162

1/1/98

1. Chief of Rehabilitation Medicine

Cedar Court Rehabilitation Hospital,
888 Toorak Road, Camberwell 3124

2. Director, Neurological Rehabilitation Service

Caulfield General Medical Centre,
294 Kooyong Road, Caulfield 3162

3. Visiting Rehabilitation Physician,

Cabrini Hospital,
Isabella Street, Malvern 3144

18/2/02

1. Medical Director

Cedar Court Rehabilitation Hospital,
888 Toorak Road, Camberwell 3124

2. Director, Neurological Rehabilitation Service

Caulfield General Medical Centre,
294 Kooyong Road, Caulfield 3162

3. Visiting Rehabilitation Physician,

Cabrini Hospital,
Isabella Street, Malvern 3144

30/10/06

1. **Senior Rehabilitation Physician**
Epworth Rehabilitation Camberwell
888 Toorak Road, Camberwell 3124
2. **Director, Neurological Rehabilitation Service**
Caulfield General Medical Centre,
294 Kooyong Road, Caulfield 3162
3. **Visiting Rehabilitation Physician,**
Cabrini Hospital,
Isabella Street, Malvern 3144

13/03/07

1. **Senior Rehabilitation Physician**
Epworth Rehabilitation Camberwell
888 Toorak Road, Camberwell 3124
2. **Director, Pain Services**
Epworth Healthcare
2.4/32 Erin Street, Richmond 3121
3. **Honorary Rehabilitation Physician**
Caulfield Hospital
294 Kooyong Road, Caulfield, 3162.

REFEREES:

1. Dr. Mithu Palit
Caulfield General Medical Centre,
260-294 Kooyong Road, Caulfield 3162
2. Dr. Judith Frayne,
Suite 53, Cabrini Medical Centre,
183 Wattletree Road, Malvern 3144
3. Professor John Olver
Epworth HealthCare
Suite 2.4
32 Erin Street Richmond, 3121

PUBLICATIONS IN PROCEEDINGS OF SCIENTIFIC MEETINGS:

1. ACRM X11th ASM Melbourne, April 1992.
Assessment of FIM in Predicting Discharge Outcome Following Stroke.
R. Hunter, H.B. Rawicki & S. de Graaff
2. Stroke Society of Australasia 1995 Annual Scientific Meeting, Melbourne, October 1995
Neuropsychological Outcomes in Carbon Monoxide Poisoning
S. de Graaff, P. New & H.B. Rawicki
3. Royal Australasian College of Physicians Annual Scientific Meeting, Canberra
7-10 May 1996
Neuropsychological Outcomes After Carbon Monoxide Poisoning
P. New, K. Jones, S. de Graaff, & H.B. Rawicki
4. Stroke Society of Australasia 1997 Annual Scientific Meeting, Singapore October 1997
Neurorehabilitation.
S. de Graaff, W. Chan
5. Cedar Court HealthSouth Neurorehabilitation Symposium, Melbourne, November 16 1998
The Australian National Sub-acute and Non-Acute Patient Casemix Classification
(AN-SNAP): its application and value in a Stroke Rehabilitation Programme.
P. Lowthian, P. Disler, S. Ma, K. Eager, J. Green, S. de Graaff
6. National Stroke Foundation Stroke Care Australia Forum November 16-18, 1999
Royal Australasian College of Surgeons, Melbourne
Post-Acute Rehabilitation & Selection for Rehabilitation
S. de Graaff
7. 11th Annual Perception for Action Conference 1998
La Trobe University, Bundoora, Victoria
Form and Colour Processing in a Patient with a Striate Lesion:
Action without Perception.
J. Danckert, P. Maruff, G. Kinsella, S. de Graaff & J. Currie.
8. 11th Annual ASM of the Australasian Faculty of Rehabilitation Medicine
Hobart 25-28 May 2003
Maintenance of Professional Standards for Rehabilitation Physicians
S. de Graaff, S. Lahz & K. Fong.
9. 11th Annual ASM of the Australasian Faculty of Rehabilitation Medicine
Hobart 25-28 May 2003
The Victorian Workcover Strains & Sprains Pilot Project
S. de Graaff, L. Boyd, M. McGuire.
10. 11th Annual ASM of the Australasian Faculty of Rehabilitation Medicine
Hobart 25-28 May 2003
Management of Post-Stroke Spasticity.
S. de Graaff.
11. 12th Annual ASM of the Australasian Faculty of Rehabilitation Medicine
Fremantle 27-30 April, 2004.
Continuing Your Professional Development.
S. de Graaff, R. Lee & M. Pollack.

12. 12th Annual ASM of the Australasian Faculty of Rehabilitation Medicine
Fremantle 27-30 April, 2004.
Stroke: Issues in Rural and Remote Australia.
M. Pollack & S. de Graaff.
13. 12th Annual ASM of the Australasian Faculty of Rehabilitation Medicine
Fremantle 27-30 April, 2004.
Clinical Pathways for Stroke Rehabilitation – An Evaluation.
K. Boyle, A. Winter, S. de Graaff & J. Olver.
14. 13th Annual ASM of the Australasian Faculty of Rehabilitation Medicine
Melbourne, 4-8 May, 2005
Practice Quality Reviews – An Evaluation.
S. de Graaff & K.Fong.
15. 8th Annual ASM of COCA
Melbourne, 8-9 October, 2005
Management of Low Back Pain
S. de Graaff
16. New Zealand Rehabilitation Association Conference
Auckland, 17-19 November 2005
Overview of Spasticity Management
S. de Graaff
17. 14th Annual ASM of the Australasian Faculty of Rehabilitation Medicine
Cairns, 2-5 May, 2006
PQRs- Where to now?
S. de Graaff, D. Murphy, G. Chin.
18. Melbourne GPCE Primary Care- The General Practitioner Conference
Melbourne, 17-19 November, 2006
Pain Management for Osteoarthritis and Back Pain
S. de Graaff.
19. ROAST- Rural Specialists Conference
Melbourne 30 November 2006
Spasticity – Medical Management
S. de Graaff.
20. Australian Pain Society Conference QLD 2010
Treatment Outcomes For Chronic Pain Management Using a Multidisciplinary Approach
Katrina Malin, Stephen de Graaff
21. Epworth HealthCare Pain Symposium 1 June 2012
Multidisciplinary Pain Management
Stephen de Graaff
22. Australian Pain Society ASM March 2013
Improving Back Pain with Motion Sensing Technology
A.Prof T. Haines, S. Jensen, S de Graaff, R. Laird

23. 21st Annual ASM of The Australasian Faculty of Rehabilitation Medicine
Sydney, 17-20 September, 2013
The application of motion sensing technology in back rehabilitation.
R. Laird, S de Graaff, T. Haines & S. Jensen.
24. 48th Annual Academic Sessions of the Ceylon College of Physicians- 2015
Colombo, Sri Lanka, 16-19th September 2015
There is no “I” in Team- Sharing the Load
S de Graaff.
25. 48th Annual Academic Sessions of the Ceylon College of Physicians- 2015
Colombo, Sri Lanka, 16-19th September 2015
Non-Operative Management of Chronic Low Back Pain
S de Graaff.
26. 1st Australasia-Pacific Post –Polio Conference: Polio – Life Stage Matters
Sydney, 20-22 September 2016
The Challenges of managing Pain in the Polio Survivor
S de Graaff
27. 1st Australasia-Pacific Post –Polio Conference: Polio – Life Stage Matters
Sydney, 20-22 September 2016
Pre-habilitation: preparing for surgery
S de Graaff
28. 1st Australasia-Pacific Post –Polio Conference: Polio – Life Stage Matters
Sydney, 20-22 September 2016
Polio and Pain Medications
S de Graaff
29. Integrated Emergency Care for Older Persons Summit
Melbourne, 26-28 October 2016
Geriatric Trauma: Rehab and Beyond
S de Graaff, F. Shannon
30. Leaps and Bounds: Virtual ANZCA ASM
27 April- 4 May 2021
Procedural Update: Where I use interventions in my sociopsychobiomedical approach
2 May 2021
The Middle Ground
S. de Graaff
31. 2021 ANZCoS ASM: Paddling Our Waka Together
27-29 October 2021
The Treatment of Lower Limb Adult Spasticity in a Spinal Cord Injury Patient
28 October 2021
S de Graaff

PAPERS PUBLISHED:

1. Attentional modulation of implicit processing of information in spatial neglect
Neuro Report 10, 1077-1083 (1999)
James Danckert, Paul Maruff, Glynda Kinsella, Stephen de Graaff & John Currie.
2. The Australian National Sub-Acute & Non-Acute Patient Casemix Classification: Its Application & Value in a Stroke Rehabilitation Programme
Clinical Rehabil. 2000 Oct; 14(5):532-7
Peter Lowthian, Stephen de Graaff, Sam Ma, Kathy Eager & Peter Disler.
3. Goal attainment scaling in the evaluation of treatment of upper limb spasticity with botulinum toxin: A secondary analysis from a double-blind placebo-controlled randomized clinical trial
Lynne Turner-Stokes, Ian J. Baguley, Stephen De Graaff, Pesi Katrak, Leo Davies, Paul McCrory, Andrew Hughes J Rehabil Med 2010; 42:81-89
4. Botulinum toxin A for treatment of upper limb spasticity following stroke: a multi-centre randomised placebo-controlled study of the effects on quality of life and other person-centred outcomes.
McCrory P, Turner-Stokes L, Baguley IJ, De Graaff S, Katrak P, Sandanam J, et al. J Rehabil Med 2009; 41: 536–544.
5. Investigating muscle selection for botulinum toxin-A injections in adults with post-stroke upper limb spasticity. Baguley IJ, Nott MT, Turner-Stokes L, De Graaff S, Katrak P, McCrory P, de Abadal M, Hughes A. J Rehabil Med. 2011 Nov;43(11):1032-7.
6. The use of botulinum toxin A in the management of adult-onset focal spasticity: A survey of Australian allied health professionals. Williams, G., Olver, J., de Graaff, S. & Singer, B.J.
Australian Occupational Therapy Journal, Vol 59, no. 10, pp. 1165-1176.
7. Are gait and mobility measures responsive to change following botulinum toxin injections in adults with lower limb spasticity? Chan, J., Winter, A., Palit, M., Sturt, R., de Graaff, S., and Holland, A.E. Disability and Rehabilitation, June 2013, Vol 35, no. 12, pp. 959-967.

AREAS OF INTEREST:

1. Gait Assessment & Retraining.
2. Neurological Rehabilitation.
3. Driver Retraining.
4. Rehabilitation Outcome Measures.
5. Hemiplegic Shoulder.

6. Carbon Monoxide Poisoning.
7. Undergraduate & Postgraduate Teaching
8. Maintenance of Professional Standings.
9. Management of Spasticity.
10. Pain Management.
11. Slow to Recover Acquired Brain Injury.
12. Polio & It's Late Effects.

PROFESSIONAL ROLES & COMMITTEE MEMBERSHIPS:

1. Committee Member, AFRM Federal Council December 1998 – May 2018
 Committee Member, AFRM Federal Executive August 2000 – August 2018
 Member, RACP Fellowship Committee, May 2012- May 2018
 President, AFRM, May 2014- May 2016
 Immediate Past President, AFRM, May 2016- May 2018
 Member, RACP Board, May 2014- May 2016
 Chair, RACP International Strategy Working Group, January 2015- October 2021
 Member, RACP Consumer Engagement Committee, April 2015- April 2017
 Member, RACP Educational Governance Implementation Working Group, Jan 2015- December 2015
 Member, RACP Awards Review Working Group, Sept 2014- December 2016
 Member, RACP National Disability Insurance Scheme Working Party (NDIS) Working Party
 July 2015-
 Member, RACP Model of Collaboration Working Group, August 2015- May 2017
 Chair, RACP Fellowship Committee Election Group, October 2015- April 2016
 Member, RACP Internal Medicine Journal Working Group, September 2015- April 2016
2. Committee Member, Stroke Society of Australasia, Oct. 1995 – Oct. 1998
3. Committee Member, AFRM (Victorian Branch), Dec. 1993 – Dec 2013
 Chairman, AFRM (Victorian Branch), Dec. 1998 – Feb. 2001
 Committee Member, Board of Continuing Education AFRM July 1995 – January 2007
 Honorary Secretary, Board of Continuing Education AFRM July 1997 – Aug 2000
 MOPS Coordinator, Board of Continuing Education AFRM May 1998-Aug 2000
 Chairman, Board of Continuing Education AFRM August 2000 – January 2007
 Chairman, Board of Education and Standards AFRM May 2006- May 2007
 Chairman, Education Committee, AFRM(RACP), May 2007- May 2012
 President Elect, AFRM, May 2012- May 2014
 Chair, Policy and Advocacy Committee, AFRM, 2012-May 2014
 AFRM Representative, Consultative Committee on Private Rehabilitation 1996-2016
4. Convener, AFRM Registrar Training Program, Victoria, Jan. 1994 – Dec. 1998
5. Honorary Lecturer, Department of Medicine, Monash University, 1 March 1996 -
6. Rehabilitation Medicine Examiner, Board of Examiners, Monash University,
 15 November 1996-

7. Examiner, AFRM Examinations, 1997 -
8. Member, Clinical Indicators Committee, ACHS/AFRM, 1998 - 2004
9. AFRM Representative, AMA, Vic. Branch, 1994 –
10. Member, Polio Consultative Committee, Victoria, 1998 - 2004
11. Section 112 Independent Medical Examiner, Victorian Workcover Authority, 1 January 2004 – 1 July 2006
12. Chairman, Scientific Program Committee, AFRM, August 2001 – November 2006
13. Member, Clinical Advisory Committee, VWA Strains & Sprains Project, August 2001 - 2005
14. Member, AMA/VWA/TAC Advisory Committee, July 2001 -
15. Clinical Consultant to Dysport Advisory Panel, Ipsen Pty. Ltd. February 2004 –
16. Clinical Consultant to Norspan Advisory Panel, Mundipharma Pty. Ltd. February 2007- December 2018
17. Board Member, Australian Institute of Neurological Rehabilitation, November 2014-
18. Convenor, 2016 Australasia-Pacific Post-Polio Conference, July 2014- October 2016
19. Epworth HealthCare:
Chair, Epworth Rehabilitation Camberwell Medical Advisory Committee: Feb 2010-
Member, Epworth Rehabilitation Medical Advisory Committee (RMAC): Feb 2010-
Chair, Epworth RMAC: Feb 2019-
Member, Epworth General Medical Advisory Committee: Feb 2019-
Member, Epworth Rehabilitation, Mental and Chronic Pain Institute: Feb 2016-
Member. Epworth HealthCare Specialist Appointments Standing Committee: Feb 2019
20. Rehabilitation Medicine Society of Australia and New Zealand (RMSANZ)
Member, RMANZ Botulinum Toxin Expert Working Party: Feb 2015-
Chair, RMSANZ Botulinum Toxin Expert Working Party: Feb 2020-
Member, RMSANZ Advisory Council: Feb 2021-
21. Australian Government Department of Health
Member, Improved Models of Care Working Group: March 2017- Sept 2018
Member, Private Health Ministerial Advisory Committee, Rehabilitation Sub-group: May 2018-Sept 2018
Member, Specialist and Consultant Physician Consultation Clinical Committee (SCPCCC): March 2018- Sept 2019

MEMBERSHIPS:

1. Australian Medical Association.
2. International Society for Prosthetics & Orthotics.
3. Arthritis Foundation of Victoria.
4. Monash University Medical Postgraduate Society.
5. Fellow of the Australasian Faculty of Rehabilitation Medicine (Subfaculty of the Royal Australian College of Physicians).
6. The Australian Association of Rehabilitation Specialists/Consultant Physicians.
7. Monash University Alumni.
8. Stroke Society of Australasia.
9. International Stroke Society.
10. International Society of Practitioners in Rehabilitation Medicine (ISPRM).
11. Australian Pain Society (APS).
12. Australian Brain Foundation.
13. Post Polio Foundation, Victoria.
14. International Society for the Study of Pain
15. Rehabilitation Medicine Society of Australia and New Zealand.
16. World Federation of Neurological Rehabilitation.