

**Is establishing a specialist back pain
assessment and management service in
primary care a safe and effective model?
Twelve-month results from the Back pain
Assessment Clinic (BAC) prospective
cohort pilot study *and beyond***

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BAC Development Team

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Development Team

The BAC pilot ran from 22 July 2014 to 30 June 2015, funded by a Workforce Innovation Grant from the Victorian Department of Health and Human Services (DHHS) and analysis was published in BMJ Open.

John H Y Moi et al. BMJ Open 2018;8:e019275

The BAC was a project run by Melbourne Health and Merri Health and has continued as part of the current services from 2015 until current day

Is establishing a specialist back pain assessment and management service in primary care a safe and effective model?

Yes

Hai

Tak

Da

Evet



Si

Ja

Sim

Oui

The Collaborative

working together for better health

cohealth

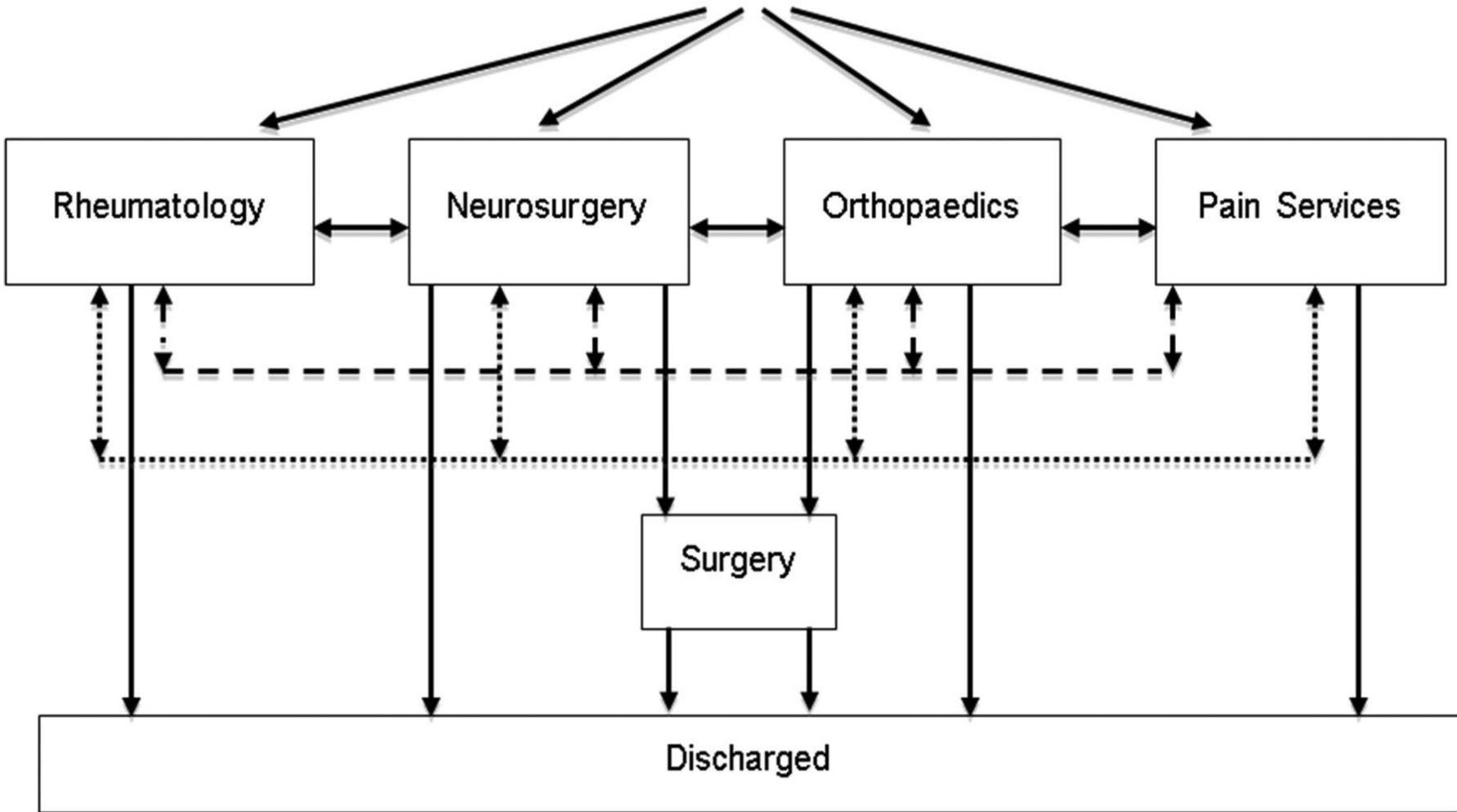
The Royal Melbourne Hospital

Merri Health
Healthcare that moves with you

phn
NORTH WESTERN MELBOURNE
An Australian Government Initiative

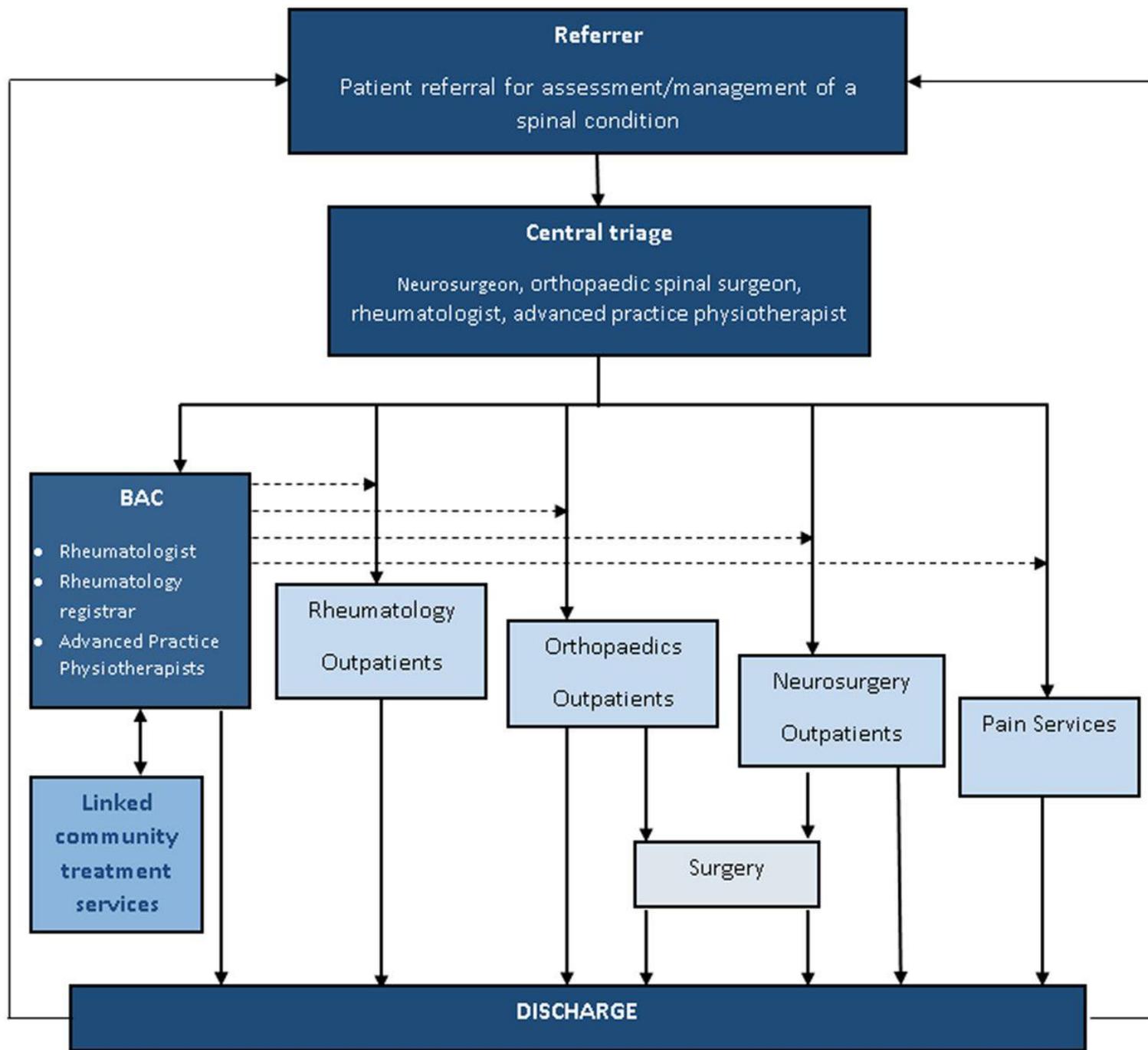
Traditional Model and Introduced Model

Patient referral for assessment/management of a spinal condition



Existing Problems

- 18 month average wait to assessment
- $\geq 90\%$ of patients referred to surgical clinics for spinal pains do not require surgery



Introduction of Central Triage Process

- right clinic at the right time
- prevent duplication
- BAC Service in primary care setting staffed by Consultant Rheumatologist +/- Registrar and 3 Advanced Practice Physiotherapists – 1 being community health based

Assessment

Assessment via the The Victorian Innovation and Reform Impact Assessment Framework (VIRIAF)

Efficiency	Effectiveness	Sustainability
<p>Inputs</p> <ul style="list-style-type: none"> • Salaries • Training costs • Capital costs • Supervision costs • Administration costs • Service provision • In Kind Costs 	<p>Objectives</p> <ul style="list-style-type: none"> • Safety and Quality of Care • Access to Care • Workforce Capacity • Integrated Workforce • Clinician Competency and Optimal Use of Skills • Workforce Satisfaction • Client Satisfaction 	<p>Enablers</p> <ul style="list-style-type: none"> • Engagement of Stakeholders • Clear and Open Communication • Alignment with Victorian and National Health Reforms • Ongoing Supervision Requirements • Incorporating Workforce Project into Standard Practice • Increase Level of Awareness Amongst Key Stakeholders
<p>Outputs</p> <ul style="list-style-type: none"> • Change in workforce • Other workforce costs such as casuals, agency and overtime • Work Structure • Indirect Impacts to other parties 		<p>Barriers</p> <ul style="list-style-type: none"> • Workforce Recruitment and Retention • Workforce Mix • Funding Requirements

Assessment via the The Victorian Innovation and Reform Impact Assessment Framework (VIRIAF)

Assess Appropriateness of Care

Analyse indicators to determine relative gains and significant elements in efficiency, effectiveness and sustainability

This may involve balancing big improvements in one dimension against small or no change in others

Positive consideration should be given to cases where initial implementation costs can be overcome quickly, where there is strong patient and staff feedback and where sustainability is high

Determine level of appropriateness

The VIRIAF also looks at Replicability, Scalability and Risks Associated with Wider Implementation but this was beyond the scope of this project

Assessment

- Quantitative data - auditing the centralised triage process and BAC activity and hospital databases from July 2014 to June 2015.
- Qualitative data - surveys and interviews, March/June 2015
 - patients (n=54),
 - stakeholders (includes neurosurgeons, orthopaedic surgeons, rheumatologists, hospital and community health managers and physiotherapists) (n=14)
 - and referrers (n=26)

Assessment

522 referrals
Triaged to BAC

292 (55.9%)
patients reviewed
in BAC

230 were not seen
in BAC

2015-2019 BAC
received average
of 640 referrals
annually

91 (17.4%) accepted not yet attended

68 (13%) declined all services

61 (11.7%) uncontactable

5 (1%) already attended an outpatient
surgical appointment

3 (0.6%) declined a BAC appointment
to await RMH outpatient review

2 (0.4%) had died

Effectiveness

Access to Care – Pilot Study Wait Times

Mean Wait Times to Access Service – Weeks (SD)

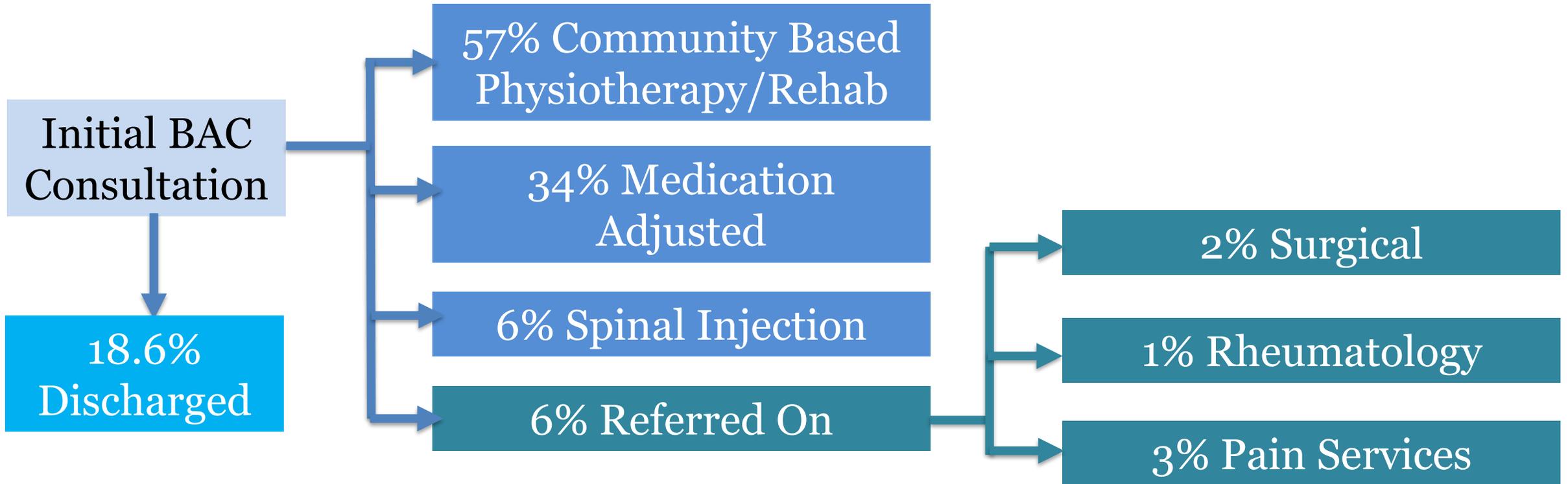
BAC	Neurosurgery	Orthopaedic Spine
9.8 (4.3)	101.3 (42.4)	70.5 (40.1)

Access to Care – Wait Times Beyond The Pilot

	BAC	Neurosurgery	Orthopaedic Spine
2015	9 weeks	23 months	16 months
2017	9 weeks	6 months	6 months
2019	9 weeks	12 months*	6 months

* In 2018 Neurosurgery extended its catchment to encompass a neighboring health service as well

Appropriate and Safe Care



- 2015-2019 - 11.8% onward referral rate, 23.6% discharged after initial consultation and 39.3% referral to community rehabilitation

Appropriate and Safe Care

- No adverse incidents occurred in the pilot period
- No complaints were registered during the pilot.

- 2015-2019 –
 - No adverse incidents
 - 3 complaints regarding Neurosurgery wait times after BAC onward referral for surgical review

Appropriate and Safe Care

- 2014-2019 BAC has identified, and gained timely access to management for, ‘red flag’ cases of
 - incomplete cauda equina (3), myelopathy (3), cord tumour (2)
 - bony tumour (1)
 - atlanto-occipital instability (1)
 - fractures (4)
 - inflammatory arthropathy (5)
- Other cases of note include
 - Parkinson’s Disease (2), cerebellar ataxia (1), prosthetic loosening (1), PVD (3), scoliosis (2), hip OA (too many – remember to assess hips!)

Appropriate and Safe Care

- Analysis of available patient-reported outcomes (ODI/ NDI, BPI-I/BPI-S and GIS) showed improvements in all domains of disability, pain and overall well-being
- Patient-reported satisfaction,
 - 94.4% of respondents recorded very high levels of satisfaction with the service, engagement with clinicians and clinicians' explanations and that their expectations had been met.
- GPs expressed satisfaction with the communication received from BAC

Workforce Optimisation and Integration

- Surveys of stakeholders suggested that BAC promoted more efficient use of surgeons' skills and time.
- Stakeholders and GPs (61.5%) regarded involving a rheumatologist in BAC was important for ensuring medical issues were identified and appropriately managed.
- Stakeholder feedback regarding the role of APP was also positive, although less than 40% of GPs felt they understood their role.

Workforce Optimisation and Integration

Conversation Rates for Spinal Referrals to Surgery
(not including trauma)



Workforce Optimisation and Integration

- An APP role was constructed within primary care community health services, improving expertise within this setting

Efficiency

Costs

- To review 15 patients in a 3.5-hour session, BAC costs \$68.60 per patient, compared with \$44.80 per patient seen in a surgical clinic, meaning a cost differential of \$23.80 per patient.
- Unfortunately this did not include clinic nursing and administration staff. Surgical clinics have 2 nurses and 2 administration staff per session, BAC has 1 administration staff per session
- BAC was associated with substantial cost savings, through reduced MRI usage, of \$180 per patient or total cost-saving of \$52 560 during the pilot compared to traditional model of care.

Costs

- BAC is now under the Neurosciences division and funded under the hospital WASE activity funding

Sustainability

Is the BAC sustainable?

- ***Yes as it is still operational after 5 years***

- Enablers

- Spinal complaints (back and neck pain) sit on top of the disability in the Global Burden of Disease study
- Lengthy waits exist throughout health services nationally
- Only around 10% of spinal complaints require surgical intervention
- Spinal APP role is already established in Victoria, ACT, SA, WA and Queensland with competency/credentialing frameworks.

Is the BAC sustainable?

- Barriers

- **Funding models – no Medicare items for APP**
- Lack of awareness of APP role
- Requires agreement amongst many different specialities on who manages which patients

Thanks For Not Falling Asleep, Well At Least For Not Snoring

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