

## Public Submission Cover Sheet

Please complete this sheet and submit with any attachments to the Sustainable Health Review Secretariat

### Your Personal Details

*This information will be used only for contacting you in relation to this submission*

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### Publication of Submissions

*Please note all Public Submissions will be published unless otherwise selected below*

- I do not want my submission published
- I would like my submission to be published but remain anonymous

### Submission Guidance

**You are encouraged to address the following question:**

**In the context of the Sustainable Health Review Terms of Reference listed below, what is needed to develop a more sustainable, patient centred health system in WA?**

- Leveraging existing investment in Primary, Secondary and Tertiary healthcare, as well as new initiatives to improve patient centred service delivery, pathways and transition;
- The mix of services provided across the system, including gaps in service provision, sub-acute, step-down, community and other out-of-hospital services across WA to deliver care in the most appropriate setting and to maximise health outcomes and value to the public;
- Ways to encourage and drive digital innovation, the use of new technology, research and data to support patient centred care and improved performance;
- Opportunities to drive partnerships across sectors and all levels of government to reduce duplication and to deliver integrated and coordinated care;
- Ways to drive improvements in safety and quality for patients, value and financial sustainability, including cost drivers, allocative and technical efficiencies;
- The key enablers of new efficiencies and change, including, research, productivity, teaching and training, culture, leadership development, procurement and improved performance monitoring;
- Any further opportunities concerning patient centred service delivery and the sustainability of the WA health system.

## Submissions Response Field

*Please type your response into the field below. Alternatively you may provide your submissions as a separate attachment (Suggested Maximum 5 pages).*

**We are addressing two of the Terms of Reference of the Sustainable Health review. Firstly:**

*The mix of services provided across the system, including gaps in service provision, sub-acute, step-down, community and other out-of-hospital services across WA to deliver care in the most appropriate setting and to maximise health outcomes and value to the public;*

*The key enablers of new efficiencies and change, including, research, productivity, teaching and training, culture, leadership development, procurement and improved performance monitoring*

We wish to highlight **a gap in service** across the primary, community and tertiary health sector to children with dysfunctional breathing and propose a solution to **maximise health outcomes** for children with dysfunctional breathing as a primary diagnosis, or co-morbidity with other existing respiratory illness that are failing to respond to medications. Our solution includes processes for evaluating efficiencies, teaching and training to ensure both **sustainability** and to enable the service to be transferred out of the tertiary sector and to eventually be able to be **delivered closer to home**.

Dysfunctional breathing (DB) is a recognised respiratory condition, described in international medical guidelines<sup>2,3</sup>. Until recently, DB has been under acknowledged in Western Australian children, in part because there is currently no avenue for referral for assessment or treatment within the public sector, and only one known physiotherapist in the Western Australian private sector with the relevant expertise.

### **What is dysfunctional breathing?**

DB involves chronic or recurrent changes in breathing pattern, causing respiratory and non-respiratory complaints. It is an umbrella term that includes:

1. Hyperventilation syndrome [HVS] – Breathing in excess of metabolic demands
2. Pattern disordered breathing [PDB] – Inefficient acquired breathing patterns that limit function
3. Vocal cord dysfunction [VCD] – Incorrect vocal cord movement primarily during inspiration

There is a complex relationship seen between the different elements where patients commonly present with aspects of more than one. For example, a young person who competes in high-level sport and presents with vocal cord dysfunction will, on assessment, commonly also show an abnormal breathing pattern.

Patients often present with feelings of shortness of breath, wheezing, throat tightness, excessive sighing, chest pain and difficulty getting the breath in. It can have significant functional impact, impeding physical activity, instrument playing, public speaking, social interaction and confidence. Often it occurs with another condition such as asthma or chronic lung disease, but may be present independent of other respiratory conditions.

Inevitably, DB symptoms that are perceived to be a problem are often attributed to asthma. In PMH respiratory medicine clinics, many patients have been referred to the tertiary clinics with

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'asthma' that is limiting their ability to participate and progress in sport or musical activities. In some cases, these referrals represent a misdiagnosis of asthma. This also occurs with other respiratory conditions where symptoms persist despite treatment, often resulting in an escalation of medication for a perceived worsening respiratory condition.

A recent evaluation of the first dedicated clinic for children and adolescents with this condition established in the U.K, demonstrated improved activity and social participation, decreased symptoms and improved quality of life within 3-5 visits. This was maintained at 6 months post discharge. The magnitude of the improvements noted are similar to those noted on the introduction of effective asthma medication in those with asthma.<sup>1</sup>

### Proposal

We would like to introduce a specialised DB physiotherapy clinic to provide a service for Western Australian children and adolescents which is currently not available to them. The proposed clinic design is based on the established, successful clinic in Sheffield, UK<sup>1</sup>. At present no dedicated outpatient physiotherapy service exists for respiratory patients unless they have a diagnosis of cystic fibrosis. It is estimated that the physiotherapy department at PMH receives approximately 25-30 new referrals for BD per year which are wait listed with other physiotherapy outpatients due to the lack of a dedicated service. The physiotherapy department also receives weekly verbal requests from medical staff to review these young people.

We propose to establish a weekly clinic of 0.1 FTE (3.36 hours) in which:

- Approximately 30 patients (120-150 occasions of service) would be seen over a 12 month period with new and follow up clinic appointments
- Patient resources will be developed
- A data base will be established
- Outcome measures and results of intervention will be collected to determine the ongoing need for and success of the clinic

### Costs

The cost of up skilling staff, developing resources, delivering and evaluating the service for 12 months would be approximately \$20,000. Costed as HSU P3.2 @ 0.1FTE + 24% on costs = \$14558, plus approx. \$5000 for training. We believe that this will result in an overall saving to the health system through a reduction in inappropriate referrals to respiratory clinics and presentations to emergency departments.

This clinic will be the first of its kind to be offered within Western Australia and to the best of our knowledge, any paediatric centre in Australia. No other funding sources have been received for this clinic. A quality improvement project will be lodged for its implementation as a new service and provide evidence for efficiency, and patient outcomes

With experience and development of resources, processes and knowledge, PMH will be able to

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share this clinic model with other hospitals in Western Australia, improving efficiencies and providing effective treatments closer to home for children and their families.

### References

1. Barker NJ, Elphick H, Everard ML. The impact of a dedicated physiotherapist clinic for children with dysfunctional breathing. ERJ open research. 2016 Jul 1;2(3):00103-2015.
2. Keeley D, Osman L. Dysfunctional breathing and asthma. It is important to tell the difference. BMJ. 2001; 322: 1075-6.
3. <http://www.astmahandbook.org.au/diagnosis/adults/alternative-diagnoses>