

The case for paediatric rehabilitation outreach in NSW

December 2022

The Agency for Clinical Innovation (ACI) is the lead agency for innovation in clinical care.

We bring consumers, clinicians and healthcare managers together to support the design, assessment and implementation of clinical innovations across the NSW public health system to change the way that care is delivered.

The ACI's clinical networks, institutes and taskforces are chaired by senior clinicians and consumers who have a keen interest and track record in innovative clinical care.

We also work closely with the Ministry of Health and the four other pillars of NSW Health to pilot, scale and spread solutions to healthcare system-wide challenges. We seek to improve the care and outcomes for patients by re-designing and transforming the NSW public health system.

Our innovations are:

- person-centred
- clinically-led
- evidence-based
- value-driven.

aci.health.nsw.gov.au

AGENCY FOR CLINICAL INNOVATION

1 Reserve Road St Leonards NSW 2065

Locked Bag 2030, St Leonards NSW 1590

Phone +61 2 9464 4666

Email aci-info@health.nsw.gov.au | aci.health.nsw.gov.au

(ACI) 221114, ISBN 978-1-76023-395-2

Produced by: Paediatric and Rehabilitation Networks

Further copies of this publication can be obtained from the Agency for Clinical Innovation website at aci.health.nsw.gov.au

Disclaimer: Content within this publication was accurate at the time of publication. This work is copyright. It may be reproduced in whole or part for study or training purposes subject to the inclusion of an acknowledgment of the source. It may not be reproduced for commercial usage or sale. Reproduction for purposes other than those indicated above, requires written permission from the Agency for Clinical Innovation.

Version: 1 **Trim:** ACI/D22/2815

Date amended: December 2022

© **Agency for Clinical Innovation 2022**

Contents

Benefits of outreach	2
Strategic background	3
Minimum standards for coordinated delivery of paediatric rehabilitation in NSW Health.....	3
NSW policy documents and reports	3
Consumer experiences	4
Case for change	5
Current service arrangements and patient data	5
Comparison across Australia	9
References	10

Benefits of outreach

Outreach provides several benefits, for both clinicians and consumers, which should be carefully considered when planning services.

Outreach has been found to be equally effective in achieving clinical outcomes compared with regular clinics, for children with complex health conditions.¹

Outreach can:

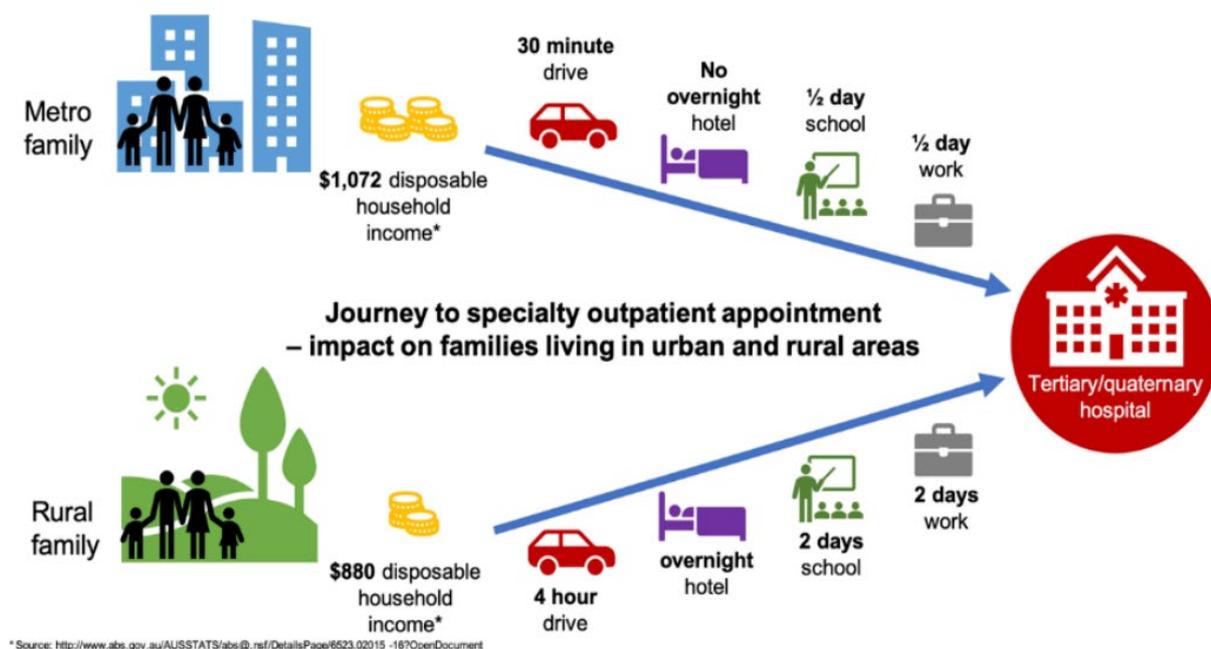
- assist in overcoming local workforce challenges
- reduce waiting time for services
- provide opportunity to build capacity of local services.²

Funding outreach has also been found to be more cost-effective than compensating families for travel and/or accommodation in metropolitan centres.³

The benefits for consumers include reduced time and costs associated with travel. An example of the impacts on rural and urban consumers when attending outpatient clinics is outlined in Figure 1.

Anecdotally, clinicians have described attending outreach in rural and regional areas as ‘eye-opening’ to the challenges faced by people living in those areas when accessing healthcare.

Figure 1: Journey to specialty outpatient appointments – impact on families living in urban and rural areas



Source: This figure has been provided by the RuralKidsGPS service, Sydney Children’s Hospitals Network.

Strategic background

Minimum standards for coordinated delivery of paediatric rehabilitation in NSW Health

There are 18 [minimum standards for coordinated delivery of paediatric rehabilitation in NSW Health](#). Minimum standard 3.1 relates specifically to the delivery of outreach clinics.

The delivery of outreach by the PRS also provides the opportunity to address several other minimum standards.

Table 1: How outreach supports the minimum standards

Minimum standard	How this is supported by outreach
2.2 For all PRS outpatient appointments, it is recommended that families extend the invitation to their local care team. This attendance can be a mix of face-to-face or via virtual care. Ensure the family is aware of any requirements related to National Disability Insurance Scheme (NDIS) therapists' attendance, such as funding.	Provides greater opportunity for local clinicians to attend clinics, learn and collaborate with PRS clinicians regarding complex conditions.
3.2 The PRS provide networked support, clinical advice and professional development support to level 4 and 5 paediatric medicine services.	Provides opportunity for level 4 and 5 clinicians to learn directly during consultations. Provides networking opportunities between teams.
3.4 The PRS start the process of transition to adult rehabilitation services, with appropriate children, from 14 years of age.	Engages clinicians from adult rehabilitation services directly in the transition process and appointments.
3.5 Information about appropriate adult rehabilitation services is documented and provided to families during transition to adult services.	

NSW policy documents and reports

Level 6 paediatric medicine facilities in NSW, from which the PRS operate, are required to offer outreach as part of the NSW Health Role Delineation of Clinical Services.⁴ The provision of outreach for paediatric rehabilitation services supports several facets of health care delivery which are considered important by NSW Health now and into the future.

The regional and rural health report [Health Outcomes and Access to Health and Hospital Services in Rural, Regional and Remote New South Wales](#) identified the challenges faced by both

consumers and clinicians working in non-metropolitan areas of NSW.⁵ Work is underway by the NSW Ministry of Health on the development of a rural and regional health plan.

Provision of paediatric rehabilitation outreach aligns with [Healthy, Safe and Well: A Strategic Health Plan for Children, Young People and Families 2014-24](#), in particular, 'strategic direction five: right care, right place, right time: deliver best-practice care as close to home as possible'.⁶ Outreach allows children and young people to access specialist rehabilitation care, as close to home as possible. It also provides the opportunity to build capacity and skills in the regional and rural healthcare workforce.

Provision of outreach also aligns with other focus areas discussed in the Ministry report, [Future Health: Guiding the Next Decade of Care in NSW 2022-2032](#).⁷ These focus areas include:

- Collaboration and coordination of care teams across all settings, to strengthen the delivery of comprehensive, integrated care
- Provision of care close to home, which is a preference amongst patients, improving accessibility, and removing the impacts of travel, such as cost and time away from school and family
- Moving away from a high concentration of services in acute settings, which has been acknowledged as being unsustainable and not supportive of optimal patient outcomes and experiences.⁷

Consumer experiences

In 2022, HNEKidsRehab, Newcastle, is the only PRS in NSW which offers outreach services. Outreach clinics are conducted within the Hunter New England LHD at Tamworth and Taree. The clinics see patients from the Cerebral Palsy and Brain Injury Services, including those who receive botulinum toxin. From January to September 2022, 152 children accessed HNEKidsRehab outreach services, including children from priority populations.

In 2021, a patient reported experience measure survey was completed with 26 families who attended HNEKidsRehab outreach. The results provide insightful consumer perspective on paediatric rehabilitation outreach.

*"It just saves a lot of stress for the whole family...
thank you we really appreciate it."
– (Consumer, HNEKidsRehab outreach)*

- 77% of consumers would prefer to attend an outreach clinic than travel to a tertiary hospital.
- 88% felt 'it was easy' to attend the outreach clinic.
- Consumers value multidisciplinary services, with medical, occupational therapy, physiotherapy and speech pathology having similar rankings for 'services important to you at outreach'.
- 92% felt outreach allowed for collaboration between the PRS and their local therapy team.
- 100% of surveyed consumers felt heard, understood and respected by the team. They felt satisfied the team responded to issues and concerns they presented.

Case for change

The benefits of outreach, and conversely, the difficulties experienced by children and families unable to access specialist services close to home are well described in the [evidence](#).⁸ In NSW, from July 2020 to June 2022, there were 4,938 children who accessed the PRS. 33% of these children lived in areas of NSW which experience difficulties in accessing a PRS close to home. Currently, paediatric rehabilitation outreach services are available in all other states of Australia, except for the ACT. Within NSW, outreach for children requiring paediatric rehabilitation is only available for those living in Hunter New England LHD.

Current service arrangements and patient data

NSW paediatric rehabilitation services are provided through tertiary services at John Hunter Children's Hospital in Newcastle, Sydney Children's Hospital in Randwick and The Children's Hospital at Westmead. All three sites offer inpatient and ambulatory rehabilitation programs, as well as specialist outpatient clinics. John Hunter Children's Hospital is currently the only service offering an outreach program, and this is limited to Hunter New England LHD.

Between July 2020 and June 2022 4,938 children aged 0 to 16 years attended a PRS and in total received 38,906 service events (Table 2). In the previous two-year period (July 2018 to June 2020), the number of children and service events were similar – 4,719 children and 35,441 service events.

Table 2: Number of children and service events in paediatric rehabilitation services, NSW, July 2020 to June 2022

Service	Number of children	Number of outpatient service events
Newcastle	933 (19%)	8,858 (23%)
Randwick	1,433 (29%)	9,608 (25%)
Westmead	2,572 (52%)	20,440 (53%)
TOTAL	4,938	38,906

Source: Non-admitted patient data accessed via EDWARD, NSW Ministry of Health.
Note: Percentages may not sum to 100% due to rounding.

Children can access PRS in Newcastle, Randwick and Westmead. However, due to differences in available clinic specialities at each PRS, children do not always attend the PRS which is closest to where they live. For example, a child who lives in greater Newcastle may attend the PRS Westmead site for their rehabilitation care.

The data in this report explores those children who access services close to home and those who are required to travel a greater distance for their rehabilitation care. On this basis, the data is classified as follows.

Table 3: Data classification

Classification	Criteria
Greater Sydney	Reside in greater Sydney and access PRS Randwick or Westmead
Greater Newcastle	Reside in greater Newcastle and access PRS Newcastle
Other areas	<p>The children meet any of these criteria:</p> <ul style="list-style-type: none"> • Reside outside greater Sydney or greater Newcastle and access any PRS • Reside in greater Newcastle and access PRS Randwick or Westmead • Reside interstate or overseas and access any PRS

For the purposes of this classification greater Sydney includes the following local health districts:

- Nepean Blue Mountains
- Northern Sydney
- South Eastern Sydney
- South Western Sydney
- Sydney
- Western Sydney

Greater Newcastle includes the following local government areas:

- Cessnock
- Lake Macquarie
- Maitland
- Newcastle
- Port Stephens

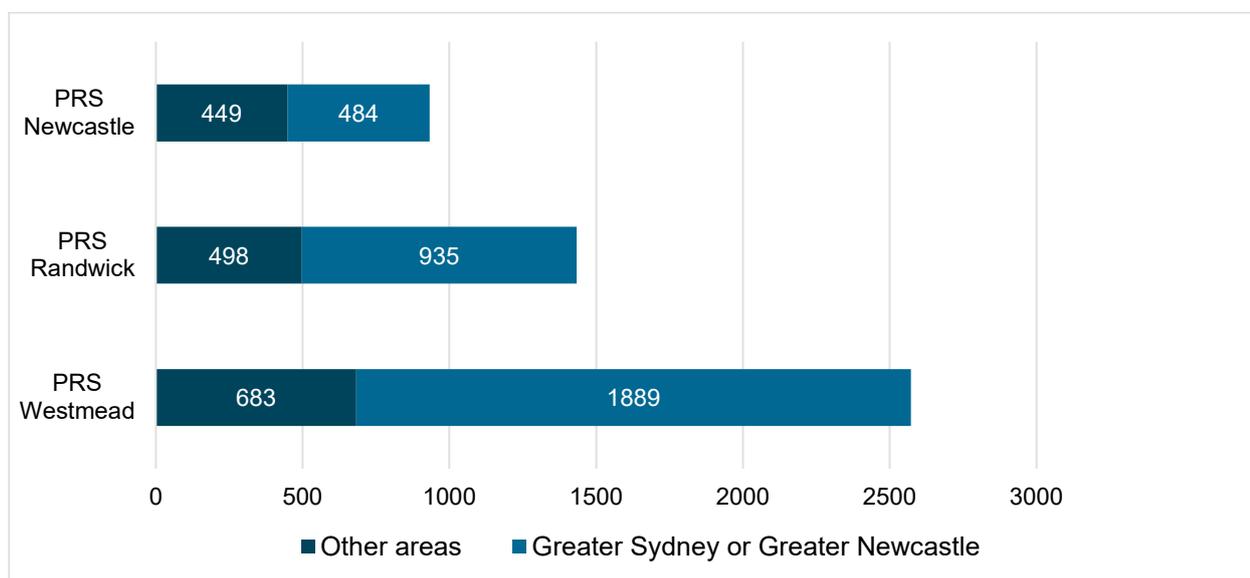
As at June 2022, of the 4,938 children requiring specialist paediatric rehabilitation services in NSW, 1,630 (33.0%) reside in other areas. These accounted for 11,908 (30.6%) outpatient service events.

The number of children attending a PRS who reside in other areas (Figure 2) are:

- 449 (48%) for Newcastle
- 498 (35%) for Randwick
- 683 (27%) for Westmead.

Note: Figures 2-4 should be interpreted based on the classifications outlined above.

Figure 2: Number of children attending PRS by location of residence, NSW, July 2020 to June 2022

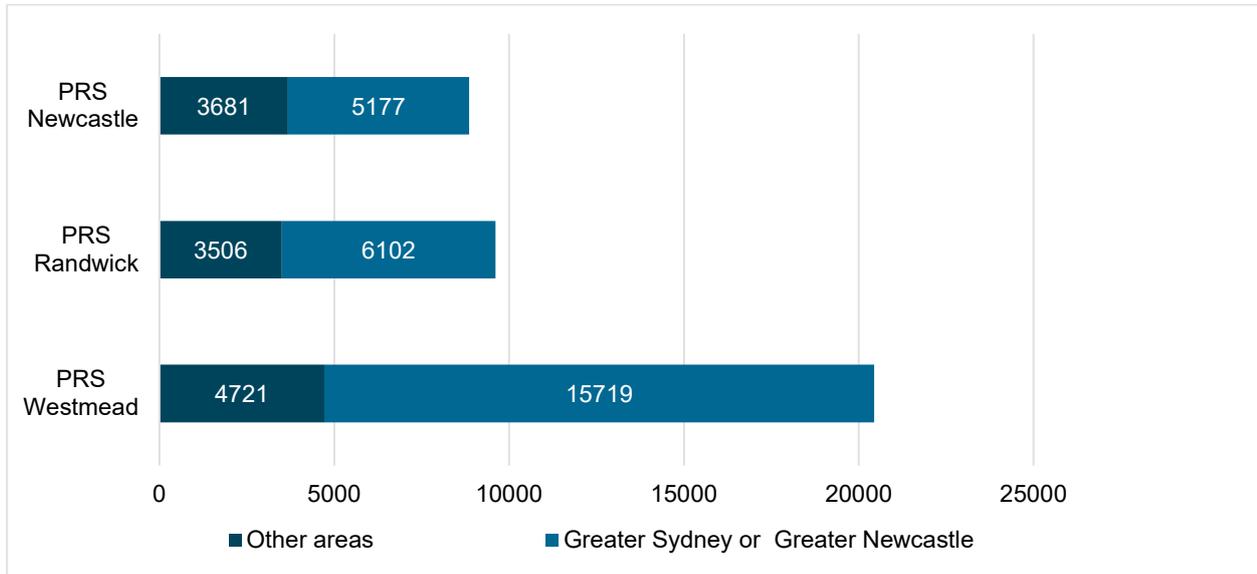


Note: Each child is only counted once in the two-year period and is assigned to the first service attended.

Children from other areas (Figure 3).accounted for:

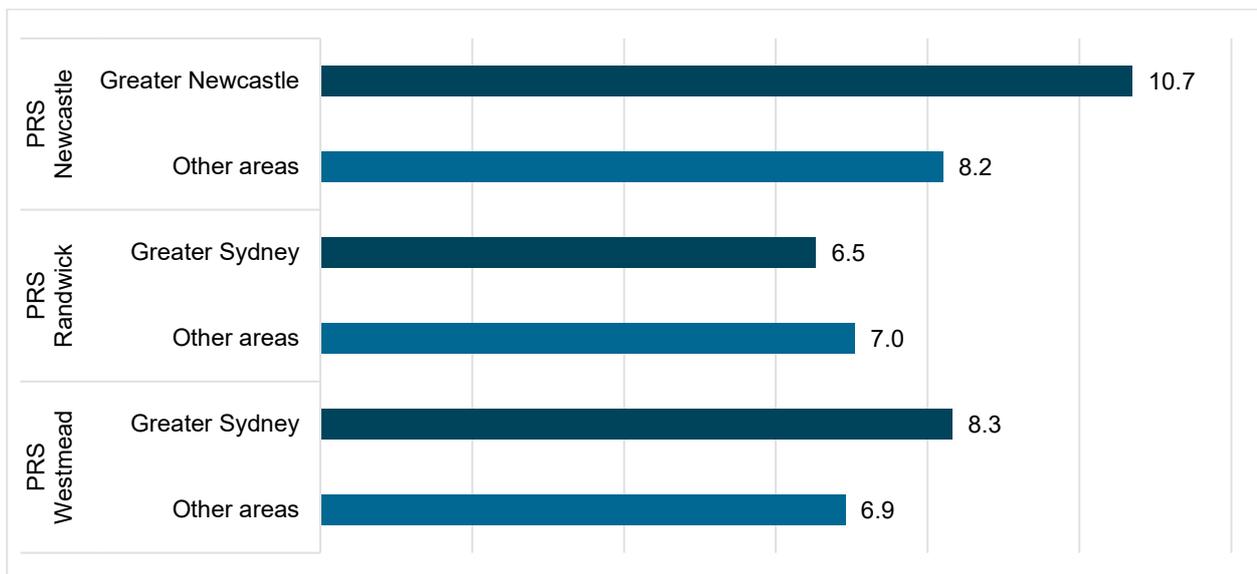
- 3,681 (42%) service events at Newcastle
- 3,506 (36%) at Randwick
- 4,721 (23%) at Westmead.

Figure 3: Number of service events for children attending paediatric rehabilitation services by location of residence, NSW, July 2020 to June 2022



Children from other areas had fewer service events per child attending compared with children from greater Sydney or Newcastle at Newcastle (8.2 versus 10.7) and Westmead (6.9 versus 8.3), but more at Randwick (7.0 versus 6.5) (Figure 4).

Figure 4: Average number of paediatric rehabilitation service events per child attending by location of residence, NSW, July 2020 to June 2022



Comparison across Australia

The PRS conducts benchmarking with other tertiary paediatric rehabilitation services across Australia and New Zealand. At present, all tertiary paediatric rehabilitation services across Australia offer outreach services. Table 4 is a summary of the available services as at September 2022. Common characteristics of these services include:

- multidisciplinary care
- a mixture of virtual and face-to-face clinics
- high demand on outreach services.

Table 4: Available paediatric outreach services in Australia, September 2022

State	Locations	Total clinics per year	Total days per year	Total patients per year
Queensland	Bundaberg Cairns Gold Coast Hervey Bay Mackay Mount Isa Rockhampton Toowoomba Townsville	19	46	464
South Australia	Alice Springs Darwin Regional SA	15	40	232
Tasmania	Burnie Latrobe Launceston	24	30	480
Victoria	Ballarat Bendigo Ferntree Gully Geelong Latrobe Shepparton	63	63	600
Western Australia	Midland	4	4	32

Note: Data provided by medical directors and/or service managers from each paediatric rehabilitation service.

References

1. Weber HC, Robinson PF, Saxby N, et al. [Do children with cystic fibrosis receiving outreach care have poorer clinical outcomes than those treated at a specialist cystic fibrosis centre?](#) *Aust J Rural Health* . 2017;25(1):34-41. DOI: 10.1111/ajr.12334
2. Royal Far West. [Supporting childhood development in regional, rural and remote Australia](#). Australia: Royal Far West; 2017 [cited 15 Aug 2022].
3. Reid JN, Ethans KD, Chan BC. Outreach psychiatry clinics in remote Manitoba communities: an economic cost analysis. *CMAJ Open*. 2021 Jul-Sep;9(3):E818-e25. DOI: 10.9778/cmajo.20200234
4. NSW Ministry of Health. [Guide to the Role Delineation of Clinical Services \(2021\)](#). 5th ed. Sydney: NSW Ministry of Health; 2021.
5. Legislative Council Portfolio Committee No. 2 - Health. [Health outcomes and access to health and hospital services in rural, regional and remote New South Wales](#). Report no. 57. Sydney: NSW Parliament; 2022 [cited 16 Sep 2022].
6. NSW Kids and Families. [Health Safe and Well: A Strategic Health Plan for Children, Young People and Families 2014-24](#). Sydney: NSW Ministry of Health; 2014 [cited 16 Sep 2022].
7. NSW Ministry of Health. Future Health: [Guiding the next decade of care in NSW 2022-2032](#). Sydney: NSW Ministry of Health; 2022 [cited 16 Sep 2022].
8. NSW Agency for Clinical Innovation. [Paediatric rehabilitation outreach models: Evidence check](#). Sydney: ACI; 2022 [cited 16 Sep 2022].