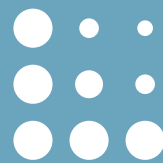


Continuity of Care Benefits Patients and the System



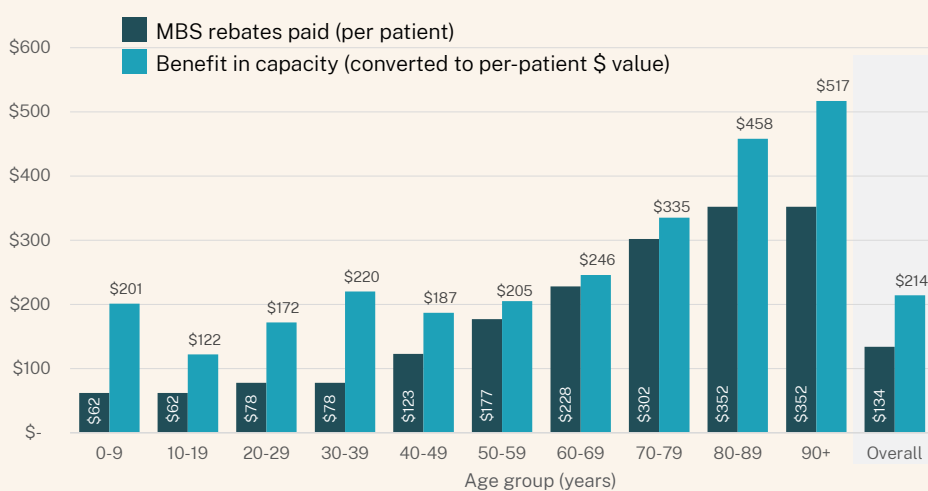
The health system benefits outweigh additional costs for general practices to see their patients more often

Previous analysis using Lumos data found that patients who attended high-connectivity GP practices had reduced risk of ED presentations and unplanned hospital admissions. High-connectivity practices account for 1 in 5 practices and are defined as having over 30% of patients visiting at least 12 times in 2 years.

A **cost benefit analysis** was undertaken to examine the benefits and costs of patients attending a high-connectivity practice.

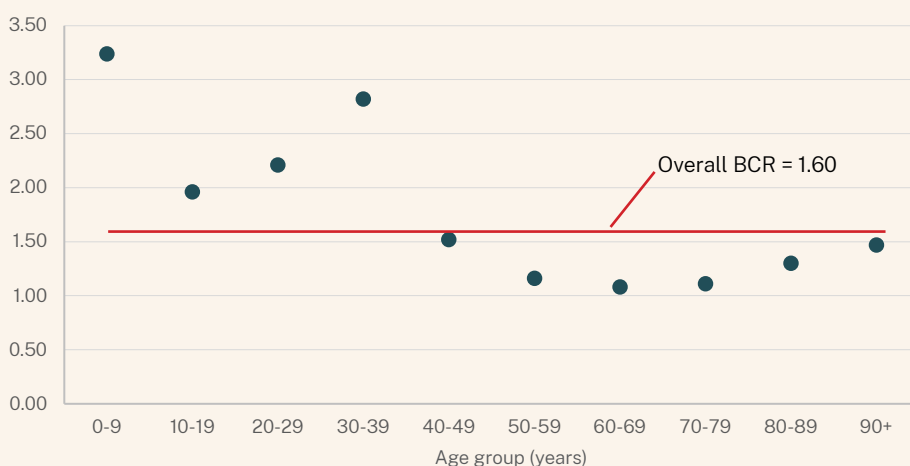
Findings

High-connectivity practices produce benefits that outweigh the additional primary care costs for a practice of seeing their patients more frequently. This graph shows the average additional cost of a high-connectivity general practice alongside the value of benefits in capacity* through reduced demand on hospital services. The graph illustrates that for all age groups, the benefits outweigh the costs.



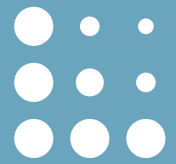
The benefit to cost ratio (BCR) is shown below. This compares general practice costs and health system benefits. A BCR greater than 1 means that the benefits are greater than the costs. Overall the BCR was 1.6, indicating that there was \$1.60 in healthcare system benefits estimated for every \$1 spent in the primary care system. This suggests that it may be more cost efficient to allocate resources to support having high-connectivity practices, and that these additional resources can target patient need with not every patient having high GP visit rates for benefits to be realised.

At all age groups, the BCR is greater than 1. The greatest benefit of attendance at a high-connectivity practice was estimated for children aged between 0 and 9 years (\$3.24 of health system benefits for every \$1 spent in the primary care setting). Among younger age groups (0-9 through to 30-39), it is relatively higher compared to the overall BCR, while it is relatively lower for 50-59 through to 70-79 age groups and has increasing benefits for age groups 80-89 and older.



* The term 'benefits in capacity' is used to acknowledge that reduced hospital demand does not directly translate into reduced financial costs, but increases the hospital capacity for care which can be converted to a dollar value.





The health system benefits outweigh additional costs for general practices to see their patients more often

Background

There have long been aspirations to understand the impact of primary care and its interactions with other health services. However, up until recently, attempts to assemble this information have been small scale.

The Lumos program links de-identified records from participating NSW general practices (GPs) to records held by NSW Health such as hospital admissions, emergency department and outpatient visits, and mortality.

The program is continually growing and in April 2023, more than 650 practices (approximately 25% of NSW general practices) were enrolled in the Lumos program. This includes the patient journeys of over 50% of the NSW Population (as patients can attend multiple practices, and some of the practices participating in Lumos are relatively large). Analyses have shown that Lumos patient demographics are representative of the NSW population (ABS Australian Census).¹

About the study

What practices were included in this study

This study included 198 practices, representing 7.5% of all NSW general practices.

High connectivity practices were defined as those where >30% of patients visited at least 12 times in 2 years.

Of the 198 practices in this study, 43 (or 22%) were defined as high-connectivity.

Who was included ?

De-identified health care records of 1,066,203 patients from Lumos participating general practices (representing approximately 13% of the NSW population) over the period January 2018 to December 2019.

¹ <https://access.portico.org/Portico/auView?auld=ark%253A%252F27927%252Fphznswb6zd4&auViewType1=PDF>