

# The cost of GP visits for 6-17 year olds in New Zealand



Child Poverty Action Group Policy Monitoring Series Cheyaanthan Haran, Catherine Ruscoe, Nikki Turner & Innes Asher

# **About Child Poverty Action Group**

Child Poverty Action Group (CPAG) is an independent charity working to eliminate child poverty in New Zealand through research, education and advocacy. CPAG believes that New Zealand's high rate of child poverty is not the result of economic necessity, but is due to policy neglect and a flawed ideological emphasis on economic incentives. Through research, CPAG highlights the position of tens of thousands of New Zealand children, and promotes public policies that address the underlying causes of the poverty they live in.

If you would like to support CPAG's work, please visit our website: www.cpag.org.nz

### Acknowledgements

Cheyaanthan Haran and Catherine Ruscoe, CPAG Volunteer Researchers were supervised by Professor Innes Asher and Associate Professor Nikki Turner. CPAG warmly thanks Catherine and Cheyaanthan for their valuable contribution.

We also thank Professor Tony Dowell and Dr Anne Else for contributing to the manuscript preparation.

### **About the Authors**

Cheyaanthan Haran, Medical Student, School of Medicine, Faculty of Medical and Health Sciences, The University of Auckland.

Catherine Ruscoe, Social Work Student, School of Counselling, Human Services and Social Work, Faculty of Education, The University of Auckland.

Nikki Turner, Department of General Practice and Primary Care, Faculty of Medical and Health Sciences, The University of Auckland.

Innes Asher, Department of Paediatrics: Child and Youth Health, Faculty of Medical and Health Sciences, The University of Auckland.

Disclaimer: This publication is intended to provide accurate and adequate information on the matters contained herein and every effort has been made to ensure its accuracy. However, it has been written, edited and published and made available to all persons and entities strictly on the basis that its author, editors and publishers are fully excluded from any liability or responsibility by all or any of them in any way to any person or entity for anything done or omitted to be done by any person or entity in reliance, whether totally or partially, on the contents of this publication for any purpose whatsoever.

#### The cost of GP visits for 6-17 year olds in New Zealand ISBN: 978-0-9941105-3-4 © July 2014 Child Poverty Action Group Inc. PO Box 5611, Wellesley St Auckland 1141 New Zealand www.cpag.org.nz

# Contents

Executive Summary	4
Abstract	6
Introduction	7
Methods	7
Study population	7
Data source	8
Data collection	8
Data analyses	8
Results	9
Discussion	9
Study Limitations1	.0
Conclusion	11
Data Tables	12
Table 1: DHB service populations (February 2013) and practices surveyed1	.2
Table 2: Average DHB costs & ranges of costs for children aged 6-17 to visit a GP1	.3
Table 3: Number of DHBs within each cost range1	.3
Table 4: Number of practices within each cost range 1	.4
References	15

### **Executive Summary**

Poor health in childhood has also been linked to lower educational attainment, lower income and lower socio-economic status in later life. The New Zealand Ministry of Health states that risk factors for ongoing conditions such as heart disease, some mental illness and diabetes often present during childhood.1

The Free Child Health Care Scheme FCHCS was introduced in 1996 for in-hours GP visits for children aged under 6. It was extended to after-hours visits in 2011. This scheme acknowledges the importance of access to primary healthcare services for young children.

Susceptibility to illness and the need to access healthcare continue for children aged 6 and over. Some conditions in fact become more prevalent in older children. The incidence of rheumatic fever, for example, peaks in children around the age of 8.4 Delay in seeking treatment could mean the difference between a short-term, easily treated infection and the long-term cardiac damage of rheumatic heart disease.

Children from families living in socioeconomic hardship in New Zealand (NZ) have particularly high rates of admission to hospital for diseases such as rheumatic fever. More intervention at the primary care level has the potential to reduce some of this burden. However, the cost of a visit can present a significant barrier to access to primary care.

To investigate current costs of GP visits, both in-hours and after-hours, for children aged 6-17 years, 280 practices from the 20 District Health Boards (DHBs) were surveyed in February 2013.

Nationally, the average cost for a child aged 6-17 to visit a GP during the in-hours period (covering 25% of the week) was \$24, with charges ranging from \$0 to \$60. The average cost for an after-hours visit (covering 75% of the week) was \$44, with charges ranging from \$0 to \$89.

The majority of general practices surveyed do charge children aged over 6 to visit a GP for both inhours and after-hours care, with after-hours costs at some general practices exceeding \$80.

Across all 280 practices, 93% (261) charged for in-hours visits for children aged 6-17, and 94% (262) charged for after-hours visits. For in-hours visits, 59% charged between \$20.01 and \$40. For after-hours visits, 40% (113) charged over \$50.

Looking at costs within DHBs, in 45% (9) of the 20 DHBs, there was at least one surveyed practice where in-hours visits for children aged 6-17 were free, and in 45% (9) of the 20 DHBs there was at least one surveyed practice where after-hours visits were free.

In 45% (9) of DHBs, the average cost for in-hours visits for children aged 6-17 ranged from \$20.01 to \$30. For after-hours visits, in 35% (7) of the 20 DHBs, the average cost ranged between \$30.01 and \$40, and in another 35% (7), it was over \$50.

It is commendable that in May 2014, the Minister of Health, announced a plan to extend the voluntary scheme for free visits to 6-12 year olds from 1 July 2015. With continuing high rates of admission for potentially preventable diseases,7 and the cost of care being a part of ongoing health inequalities in New Zealand, it is important that financial barriers to primary care be reduced for all children. This data supports our recommendation for an extension of the FCHCS up to 18 years in order for this to happen.

A government policy change which introduced free GP visits, both in-hours and after-hours, for children aged 6-17 years would reduce costs for children, parents and families, and consequently increase access to primary health care. This would be likely to contribute to a reduction of the burden of preventable disease in New Zealand.

### Abstract

**Introduction:** Children from families living in socioeconomic hardship in New Zealand (NZ) have particularly high rates of admission to hospital for diseases. More intervention at the primary care level has the potential to reduce some of this burden. The current cost of General Practitioner (GP) visits, both in and after-hours, may be a barrier. The Free Child Health Care Scheme (FCHCS) currently does not include children aged 6-17 years, but in May 2014 a plan was announced to extend the voluntary scheme for free visits to a GP to 6-12 year olds, from 1 July 2015.

**Aim:** To investigate current costs for a child aged 6-17 years to visit a General Practitioner in New Zealand.

**Methods:** In February 2013, a cross sectional survey was undertaken of 280 practices from the 20 District Health Boards (DHBs) in NZ, using randomised systematic stratified sampling by service population of each DHB. The costs for in-hours and after-hours visits for children aged 6-17 were obtained for all practices sampled. The average cost per visit and the cost range nationally and for each DHB were calculated. DHBs were compared according to average costs and practices were also compared according to actual costs.

**Results:** Of the 280 practices surveyed, 93% (261) charged children aged 6-17 for in-hours visits and 94% (262) charged them for after-hours visits. The national average costs were \$24 per in-hours visit (range \$0-\$60) and \$44 per after-hours visit (range \$0-\$89).

### Introduction

Child health status forms a crucial part of overall wellbeing, not only in childhood itself, but also throughout adult life. In New Zealand (NZ), the Ministry of Health states that risk factors for ongoing conditions such as heart disease, some mental illness and diabetes often present during childhood.<sup>1</sup> Poor health in childhood has also been linked to lower educational attainment, lower income and lower socio-economic status in later life.<sup>2</sup>

The introduction of the Free Child Health Care Scheme (FCHCS) in 1996 acknowledged the importance of access to primary healthcare services for children through the provision of free in-hours General Practitioner (GP) visits for children aged under 6. In 2011 the scheme was extended to include after-hours visits. While participation in the scheme is voluntary and negotiated on a practice-by-practice basis, recent surveys have found that the expansion of the FCHCS to include after-hours visits has seen a significant reduction in cost for children under 6 across all 20 District Health Boards (DHBs), although fees are still charged by a minority of GPs.<sup>3</sup>

While this is good news, susceptibility to illness and the need to access healthcare do not disappear once a child turns 6. Some conditions in fact become more prevalent in older children. One important example is rheumatic fever, where the incidence peaks in children around the age of eight.<sup>4</sup> The cost of a visit can present a significant barrier to access to primary care, and difficulties with access to primary care can in turn be a component of ongoing child health inequalities.<sup>5</sup> In May 2014, the Minister of Health announced a plan to extend the voluntary scheme for free visits to a GP to children aged 6-12 from 1 July 2015. The aim of this paper is to provide a snapshot of recent costs faced by caregivers seeking in-hours and after-hours care for children aged between 6 and 17.

### Methods

#### **Study population**

In this cross-sectional study, to ensure a systematic and reliable approach to obtaining information on costs, a stratified sampling technique was used. The entire NZ population was divided into 20 sub-populations, allocated according to the boundaries within which the 20 DHBs currently operate in NZ.

For each DHB, figures were obtained from the Ministry of Health website<sup>6</sup> with regard to the service population (the number of people to whom the DHB offers medical and health services). The number of practices sampled within each DHB was proportionate to the size of that DHB's service population. A population width band rule was devised, as follows: 5 practices were surveyed for 0–100,000 people, 10 for 100,001–200,000, 15 for 200,001–300,000, 20 for 300,001–400,000, 25 for 400,001–500,000, and 30 for 500,001 or more. The number of practices surveyed within each DHB is shown in Table 1.

#### Data source

Each DHB website, or respective websites from Primary Health Organisations (PHO) in the DHB, was visited in February 2013 to obtain and collate a list of practices registered under it. This list of practices was then randomised, using a random number generator formula on Microsoft Excel. This was undertaken for all of the DHBs. Overall, a list of 280 practices to be surveyed was tabulated.

#### **Data collection**

In this study, standard business hours, from 9am to 5pm Monday to Friday, were referred to as inhours, and the period beyond these was referred to as after-hours. Each practice was individually telephoned by one of the authors. The following questions were asked: "How much does it cost a child aged 6 to17 to visit the GP during in-hours?" and "How much does it cost a child aged 6 to17 to visit the GP during after-hours?" There was a 100% response rate for these two questions from the 280 practices surveyed throughout NZ. The costs obtained for each of these practices were tabulated using Microsoft Excel.

#### **Data analyses**

First, average costs within each DHB, for both in-hours and after-hours visits, were calculated. The average cost for each DHB was calculated by adding the costs for all the practices surveyed in each DHB, for each type of visit, and dividing the sum by the total number of practices surveyed for that DHB. Ranges of costs for each type of visit were also calculated for each DHB. The range of costs was calculated by stating the lowest cost and the highest cost in each DHB.

Secondly, the national average costs and ranges of costs for in-hours and after-hours visits were calculated. The total national sum of costs for each type of visit was divided by the 280 practices surveyed, to give the average costs for NZ as a whole. The range of costs was calculated by stating the lowest cost and the highest cost across the nation.

Thirdly, each DHB was categorised by cost range, according to the average cost calculated for each type of visit. The ranges of costs were free (\$0), \$0.01-\$5, \$5.01-\$10, \$10.01-\$20, \$20.01-\$30, \$30.01-\$40, \$40.01-\$50, and \$50.01+. The total number of DHBs within each cost range was summed and compared.

The final analysis involved all surveyed practices. Each practice was categorised into a cost range according to the cost for a child aged 6-17 to visit the GP, in-hours and after-hours. The ranges of costs were free (\$0), \$0.01-\$5, \$5.01-\$10, \$10.01-\$20, \$20.01-\$30, \$30.01-\$40, \$40.01-\$50, \$50.01-\$60, and \$60.01+. The total number of practices within each cost range was totalled and compared.

# Results

Nationally, the average cost for a child aged 6-17 to visit their GP in-hours was \$24.07 and the range was \$0 - \$60 (Table 1). The average cost for a child aged 6-17 to visit their GP after-hours was \$44.16 and the range was \$0 - \$89.

There were no DHBs where every sampled practice offered free visits for children aged 6-17, either inhours or after-hours. In 45% (9) of the 20 DHBs there was at least one surveyed practice which did not charge for in-hours visits. For after-hours visits, in 45% (9) of the 20 DHBs there was at least one surveyed practice which did not charge (see Table 2).

Costs were separated into seven cost categories, and each DHB was placed in a cost category according to their respective average cost (shown in Table 3). In 45% (9) of the 20 DHBs, the cost for children aged 6-17 was, on average, between \$20.01 and \$30 for in-hours visits. For after-hours visits, in 35% (7) of the 20 DHBs, the cost for children aged 6-17 was, on average, between \$30.01 and \$40, and in another 35% (7), it was over \$50.

All 280 practices were placed into their respective cost range. Table 4 shows that 93% (261) charged for in-hours visits for children aged 6-17, and 94% (262) charged for after-hours visits. The most common range of costs for in-hours visits for children aged 6-17 was \$20.01 - \$40, charged by 59% (164) of practices surveyed. Another 40% (113) charged over \$50 for after-hours visits.

### Discussion

The main finding of this study is that, as of February 2013, the national average cost for a child 6 to 17 years of age to visit a GP was \$24 in-hours and \$44 after-hours. Only 7% of the 280 surveyed practices were free for in-hours visits, and 6% were free for after-hours visits.

It is estimated that around 285,000 NZ children (a quarter of all children) currently live in poverty, defined as a household income below 60% of the median household equivalent disposable income, after housing costs.<sup>7</sup> The NZ Living Standards Survey 2008 found that 17% of children lived in material hardship. This includes not being able to afford shoes, a sufficient nutritious diet, and postponing, at times, a child's visit to the doctor because of cost.<sup>7</sup> For a household simply "getting by" week-to-week, there is unlikely to be a spare \$24 available for an unexpected trip to the GP in-hours, let alone \$44 after-hours. The cost of after-hours care for children aged 6-17 is of particular concern for several reasons, including the following:

- The period defined as "after-hours" (outside standard business hours of 9-5, Monday to Friday) represents 75% of one entire week. This is a substantial portion of any given week. The 25% of a week defined as "in-hours" may be a time when many parents are occupied with work and/or other commitments.
- ii. Many common childhood illnesses, such as asthma, allergies and fever, worsen at night and are therefore likely to require attention after-hours.

The high cost of after-hours GP visits in particular, and the effects of this cost, were recognised by the Ministry of Health After Hours Primary Health Care Working Party, which noted that: "High fees for after-hours services create access barriers for patients, who may delay seeking the urgent primary health care treatment they require."<sup>8</sup>

The experiences of childhood are major determinants of health outcomes in adulthood. The potentially serious implications of delaying medical care are well illustrated by acute rheumatic fever; a chronic yet preventable condition that develops from a bacterial (Group A Streptococcus pyogenes) infection of the throat. For a child who has this infection, delay in seeking treatment could mean the difference between a short-term, easily treated infection and the long-term cardiac damage of rheumatic heart disease. New Zealand continues to have one of the highest rates of rheumatic fever among the countries of the Organisation for Economic Co-operation and Development (OECD).<sup>9</sup> In 2013 the NZ government set aside a further \$21.3 million to combat rheumatic fever, with the funding going towards a health literacy campaign, an increased number of sore throat 'drop in' clinics, healthy housing initiatives, and a \$1.6 million contribution to the Trans Tasman vaccine research initiative. While this increased funding is a welcome step, the extension of the FCHCS to children over 6 is likely to contribute to reducing the need for some of that expenditure. The cost savings from preventing hospital admissions and long-term sequelae could offset the costs of extending the FCHCS.

Health care has five dimensions: availability, accessibility, affordability, acceptability and accommodation.<sup>10</sup> Affordability involves both direct and indirect costs. This study investigated the important aspect of direct costs for children aged 6-17 visiting a GP The main findings of this study support arguments for the need to decrease costs in order to increase access to primary health care for children aged 6-17.

This study is an extension of the survey, also conducted in February 2013, which looked at the implementation of free after-hours healthcare services for children under 6. That study concerned primary health care costs for children under 6 both in-hours and after-hours, with a specific focus on the FCHCS. In that survey, the FCHCS had brought about a significant reduction in costs,<sup>3</sup> thereby reducing this barrier to accessing primary health care.

Using this example, a government policy change which introduced free GP visits, both in-hours and after-hours, for children aged 6-17 years should have a similarly beneficial effect. It would reduce costs for children, parents and families, and consequently increase access to primary health care for children of all ages at all times. This would be likely to contribute to a reduction of the burden of preventable disease in New Zealand.

#### **Study Limitations**

One limitation in this analysis is the averaging of costs per DHB. The averaging of costs in this study was dependent on the randomisation process. If this process had led to the selection of practices with different characteristics, the average cost findings may have been different. This might have been evident particularly for those DHBs where a small number of practices were surveyed, such as South Canterbury, Tairawhiti, Wairarapa, West Coast and Whanganui, where only five practices were

surveyed.

Another limitation is lack of acknowledgement of those DHBs that had more than one practice with no costs for children. For example, of the 10 practices surveyed from Northland DHB, four had free after-hours services for children aged 6-17. However, because the other six practices in Northland DHB did charge for after-hours visits for these children, this DHB had an average cost higher than zero. Consequently this DHB was categorised as not providing free after-hours visits. This also applies to some other areas where practice costs were added together and then averaged.

### Conclusion

The majority of practices surveyed charge children aged over 6 to visit a GP for both in-hours and after-hours care, with after-hours costs at some practices exceeding \$80. It is commendable that in May 2014, the Minister of Health, announced a plan to extend the voluntary scheme for free visits to 6-12 year olds from 1 July 2015. With continuing high rates of admission for potentially preventable diseases,<sup>7</sup> and the cost of care being a part of ongoing health inequalities in NZ, it is important that financial barriers to primary care be reduced for *all* children. The findings of this survey support our recommendation for an extension of the FCHCS up to 18 years in order for this to happen.

# Data Tables

DHB	Service population	Practices surveyed
Waitemata	558,010	30
Counties Manukau	512,885	30
Canterbury	509,670	30
Auckland	465,965	25
Waikato	371,540	20
Southern	308,133	20
Capital & Coast	299,025	15
Bay of Plenty	215,440	15
MidCentral	170,095	10
Northland	159,630	10
Hawke's Bay	156,430	10
Hutt Valley	144,865	10
Nelson Marlborough	141,248	10
Taranaki	110,138	10
Lakes	103,340	10
Whanganui	62,853	5
South Canterbury	56,420	5
Tairawhiti	46,648	5
Wairarapa	40,630	5
West Coast	32,870	5
Total	4,465,835	280

### Table 1: DHB service populations (February 2013) and practices surveyed

	Practices	In	-hours	(\$)		Aft	er-hour	s (\$	)
DHB	surveyed	Mean	n Range		Mean	Range			
Waitemata	30	34	1	-	60	55	35	-	64
Counties Manukau	30	16	0	-	43	30	11	-	47.5
Canterbury	30	27	10	-	39	58	46	-	65
Auckland	25	31	0	-	54	54	10	-	80
Waikato	20	15	0	-	26	39	11.5	-	65
Southern	20	27	11.5	-	40	56	20	-	89
Capital & Coast	15	32	7	-	41	59	26	-	70
Bay of Plenty	15	22	0	-	35.5	39	0	-	50
Mid Central	10	26	11.5	-	35.5	48	0	-	65.5
Northland	10	11	0	-	24.5	26	0	-	49.5
Hawke's Bay	10	23	0	-	36	30	26	-	34
Hutt Valley	10	27	0	-	50	52	50	-	67
Nelson Marlborough	10	28	11.5	-	35	37	0	-	50
Taranaki	10	23	11.5	-	35	33	0	-	45
Lakes	10	14	0	-	25	27	0	-	45
Whanganui	5	23	11	-	33.5	31	11	-	36
South Canterbury	5	31	26.5	-	37	60	35	-	72
Tairawhiti	5	7	0	-	11.5	11	0	-	45
Wairarapa	5	31	25.5	-	42.5	34	0	-	42.5
West Coast	5	12	11.5	-	11.5	31	0	-	51
National	280	24.07	0	-	60	44.16	0	-	89

### Table 2: Average DHB costs and ranges of costs for children aged 6-17 to visit a GP

### Table 3: Number of DHBs within each cost range

Cost range (\$)	In-hours	After-hours
Free (0)	0	0
0.01 - 10	1	0
10.01 - 20	5	1
20.01 - 30	9	4
30.01 - 40	5	7
40.01 - 50	0	1
50.01+	0	7

Cost Range (\$)	In-hours	After-hours
Free (0)	19	18
0.01 - 5	3	0
5.01 - 10	12	2
10.01 - 20	66	19
20.01 - 30	90	25
30.01 - 40	74	19
40.01 - 50	12	84
50.01 - 60	4	73
60.01+	0	40

### Table 4: Number of practices within each cost range

### References

- 1. Tuohy P. Influences in childhood on the development of cardiovascular disease and Type 2 diabetes in adulthood. Wellington: Ministry of Health. 2005.
- 2. Case A., Fertig A., Paxson C. The lasting impact of childhood health and circumstance. Journal of Health Economics. 2005; 24:365–389.
- 3. Ruscoe C, Haran C. Implementation of free after-hours healthcare services for children under six. Auckland: Child Poverty Action Group Inc. 2013.
- 4. The National Heart Foundation of New Zealand. New Zealand guidelines for rheumatic fever 1: Diagnosis, management and secondary prevention. Auckland: Heart Foundation. 2006.
- 5. Asher, I. Improving our poor child health outcomes what more can New Zealand do? Paper presented at the Paediatric Society of New Zealand Annual Scientific Meeting, Waitangi, New Zealand. 2008, 29 Oct.
- 6. Ministry of Health (NZ). My DHB. Wellington (New Zealand) Ministry of Health (NZ); 2013 [updated 13 Dec. 2012; sighted 22 Feb. 2013]. Available from: http://www.health.govt.nz/new-zealand-health-system/my-dhb
- 7. Craig E., Reddington A., Wicken A., Oben G., Simpson J. Child Poverty Monitor 2013 Technical Report. Dunedin: New Zealand Child & Youth Epidemiology Service, University of Otago. Updated 2014.
- 8. Ministry of Health. Towards accessible, effective and resilient after hours primary health care services. Report of the After Hours Primary Health Care Working Party. Wellington: Ministry of Health. 2005.
- 9. Craig E., Adams J., Oben G., Reddington A., Wicken A., Simpson J. The health status of children and young people in New Zealand. Dunedin: New Zealand Child and Youth Epidemiology Service, University of Otago. 2011.
- 10. Penchansky R., Thomas J.W. The concept of access: definition and relationship to consumer satisfaction. Medical Care. 1981;12:127–140.