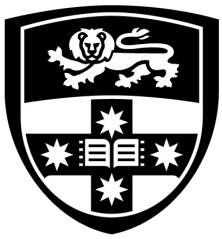

THE UNIVERSITY OF SYDNEY

Active Kids Evaluation Report 2018-2020

Full Report

SPRINTER group, Prevention Research Collaboration,
Charles Perkins Centre, The University of Sydney

Purpose of this report

This report presents evaluation findings from the independent evaluation of the New South Wales (NSW) Government's Active Kids program. Data are presented from the first 3 years of the Active Kids program delivery (2018, 2019, and 2020).

Active Kids, the first universal voucher program of its kind, is an innovative approach to promoting participation in organised sport and physical activity outside-of-school among all school-enrolled children in NSW, Australia.

Evaluation of the program was designed to help us understand the extent to which a universal voucher program can reach and engage children in organised sport and physical activity. The evaluation affords a unique opportunity to learn more about influencing the physical activity participation behaviours of children in NSW, the factors that affect participation and to understand health and well-being outcomes associated with participation. These population-level program evaluation data have not previously been collected throughout the sport sector.

This evaluation also makes an important contribution to the evidence base on how, to effectively design, implement and evaluate complex, at-scale programs, underpinned by evidence, and reported in a way that is readily accessible and appropriate for policy makers and practitioners.

The SPRINTER[1] Group is a specialist academic research group within the Charles Perkins Centre and the School of Public Health at the University of Sydney. In 2016, the Prevention Research Collaboration established a policy-focused partnership with the NSW Government Office of Sport, entitled SPRINTER. SPRINTER led the pragmatic evaluation design of the Active Kids program in close collaboration with the Office of Sport. Through this collaboration, SPRINTER influenced routine data capture within the registration process for the Active Kids program led by the NSW Government - Service NSW and Office of Sport.

The evaluation of Active Kids is registered with the Australian and New Zealand clinical trials registry: ACTRN12618001148268. The evaluation protocol was designed using the TIDieR (Template for Intervention Description and Replication) Checklist. A complete outline of the evaluation protocol can be accessed here: https://doi.org/10.17061/phrp30122006[2]. This evaluation received ethics approval from the Human Research Ethics Committee at the University of Sydney (Project number: 2017/947).

This report:

I. Presents the reach of the Active Kids program in 2018, 2019 and 2020
II. Highlights data on priority populations identified by the NSW Government Office of Sport
III. Assesses the effectiveness of the Active Kids voucher program against the impacts proposed in the Active Kids program logic (planning) model agreed across NSW Government at program inception (Figure 1)
IV. Presents research findings (SPRINTER) from the first three years of the Active Kids program (2018, 2019, 2020), and
V. Summarises the contribution the SPRINTER research partnership has made to the evidence base.

[1] Sport and Active Recreation Intervention and Epidemiology Research (SPRINTER) group.
[2] Reece LJ, Foley B, Bellew W, Owen K, Cushway D, Srinivasan N, Hamdorf P, Bauman A. Active Kids: evaluation protocol for a universal voucher program to increase children's participation in organised physical activity and sport. Public Health Res Pract. 2021; 31(2): e30122006. First published 2 June 2020

How to read this report:

This evaluation report is structured to present evaluation data against in term of impacts within the Active Kids logic model (an overall visual plan mapping the operational pathways to the strategic outcomes of the program). An **Executive Summary** presents an overview of the key evaluation findings with evidence-based **recommendations**. Insights into our **evaluation approach** are given, with detailed attention provided on the statistical and analytical processes undertaken to produce this report. The comprehensive evaluation results are discussed, following the **short-term impacts, medium-term impacts and long-term impacts proposed in the logic model.** At the beginning of each of these results sections there is a description of what is to follow and a summary of key findings for those in a hurry. A **glossary of definitions** for terms used throughout the report is in Appendix A.

Appendix B provides **'at-a-glance'** snapshots for each priority group identified by the NSW Government Office of Sport. These at-a-glance snapshots provide a summary of the important information collected about the specific priority groups from all available evaluation data.

SPRINTER additional research outcomes that add value to data included in the logic model are presented, with a full outline of all SPRINTER **peer-reviewed publications** completing the report.

An accompanying document, **Evaluation Summary and Policy Brief** (hereafter referred to as 'Policy Brief') complements this comprehensive report, synthesising the 'top level' findings from the logic model and additional research outcomes.

Acknowledgements

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Executive Summary

The NSW Government is helping kids (school-enrolled 4.5-18-year-olds) in NSW get active through the ***Active Kids*** program. ***Active Kids*** is one of 70 NSW Government vouchers and savings designed to help people with the cost of living. ***Active Kids*** provides vouchers for parents, guardians, and carers of school-enrolled children to use towards organised sport and active recreation registration and membership costs each year. When the program started in January 2018, **one** $100 voucher was offered annually, but from July 2019, **two** $100 vouchers were available each year.

The number of vouchers claimed increased each successive year, reaching 1,060,846 unique school-enrolled children in the first three years so that over half of eligible NSW children (59%) have claimed and redeemed an Active Kids voucher. This despite the impact of COVID-19 community restrictions in 2020.

Before the Active Kids program launched, the University of Sydney's SPRINTER group was engaged to design and lead the independent evaluation of the Active Kids voucher program. This report presents findings from the first three years (2018-2020) of the Active Kids program implementation.

The Active Kids Program:

- ✓ **supported half (50%) of children's time participating** in organised sport and recreation programs
- ✓ reached a large number of children who were **overweight or obese** (n=217,239 in 2020)
- ✓ had **high program retention rates**, with 441,776 (56%) children returning across 2018, 2019 and 2020
- ✓ facilitated **473,766 children to access activities they had not done before**
- ✓ facilitated, on average, more than **200 minutes of organised sport and recreation participation per week** for children who redeemed a voucher
- ✓ supported **previously inactive kids to accumulate over 260 minutes of organised sport and recreation per week**, 2 years after their first Active Kids voucher was redeemed
- ✓ stimulated **one additional day per week of children's participation in physical activity**, reaching a peak after 12-18 months of using program vouchers
- ✓ had **cumulative benefits;** children who redeemed more vouches were more active
- ✓ had **durable impacts**: children undertook higher levels of activity after using their first voucher; *this was **maintained 2 years later.***

The Program reached **1.1 million unique children** in its first 3 years.

Previously **inactive kids attained over 260 minutes** of weekly organised sport and recreation two years after using their first voucher.

The program **contributed to 50% of children's overall participation** in organised sport and recreation in NSW.

Recommendations

These recommendations for the NSW Government are based on the Active Kids evaluation conducted by the University of Sydney, scientific evidence and guidance which has emerged since the program launch, and on expert advice from the World Health Organization (WHO) Collaborating Centre for Physical Activity, Nutrition and Obesity (a global centre, based at The University of Sydney).

- The Active Kids independent evaluation is world leading in size, scale, and contribution to knowledge of incentive programs to increase children's sport. On-going commitment to evaluate the population reach and impact of the Active Kids program is recommended.
- Research survey responses decline over time. Ongoing promotion of the research findings combined with the importance of participating in the Active Kids research are potential strategies to prevent further decline. Research retention strategies should be implemented to ensure sufficient and representative samples are maintained in long-term evaluations of the program.
- Maintain investment in the Active Kids Program, and retain the universal eligibility criteria but, realign investment to boost inclusion and engagement of priority populations, applying proportionate universalism principles. Focus up to 80% of program investment on priority populations realigning strategic goals, resources, communications and voucher availability (see Appendix C for justification).
- Target the engagement of priority populations[3] in the Active Kids program, ensuring equity and inclusion runs through every aspect of program design, implementation, promotion, and evaluation. Intensely targeted implementation strategies are required to achieve greater social gains. Strategies to increase registration and voucher use could include:
  a) Supporting school-based promotion of the Active Kids program, especially in disadvantaged areas and high schools.
  b) Ensuring parents/carers and adolescents have information about the program benefits, and how to claim and redeem vouchers, using digital communication and community outreach.
  c) Targeting Culturally and Linguistically Diverse and disadvantaged communities to boost program engagement through intensified investment in a broad range of strategies. For example, segmented mass media and social media-based marketing approaches.
  d) Empowering adolescents to claim and redeem vouchers by providing more flexible activity options.
  e) Adapting the supply and/or value of Active Kids vouchers to provide additional benefit to priority populations.
- Promoting the use of multiple vouchers within and across calendar years is encouraged, as higher redemption rates are consistently associated with higher rates of participation. Encouraging the use of more than one is recommended.
- Advocating awareness and understanding of the evaluation data gleaned through the independent evaluation of the Active Kids program would likely accelerate knowledge of the program impact across sport and recreation, to other government agencies and to the wider sector.
- Increasing the breadth of activities available through the Active Kids' program through increasing number and diversity of approved providers would help overcome a key reason reported by parents/carers for non-redemption of vouchers; activity the children does isn't part of the program.
- Detailed understanding of the impact of targeted projects and initiatives led by the NSW Government and the sport and recreation sector, to promote participation in Active Kids, could provide further context that aids the interpretation of this evaluation.

[3] Children living in regional and remote NSW, Female children, Culturally and Linguistically Diverse children, Aboriginal children, children with a disability, children aged 12-18, children from low SEIFA backgrounds.

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Our approach to evaluation

The purpose of independently evaluating the New South Wales (NSW) Government's Active Kids program was to understand if the program achieved its impacts, understand the mechanisms behind these impacts, identify the long-term effects of the program on NSW communities and ultimately provide evidence for government investment in this or similar programs.

This evidence is important given multiple sectors and agencies that engage with the NSW Government in the design and delivery of organised sport and recreation programs for children in NSW.

This section describes the evaluation framework and components of the evaluation used in this Active Kids Evaluation Report. When SPRINTER designed the Active Kids evaluation, they did so collaboratively with NSW Government and considered the multiple levels of evaluation.

Formative Evaluation

The formative evaluation comprised the program planning component. This frequently includes the development of a logic model. A logic model is a planning tool that can help identify the primary and secondary outcomes anticipated in a project. Logic models describe the relationship between each element in a project or intervention and the likely direction of change in subsequent stages. Logic models describe what is expected to happen in a project, providing a mechanism to check that the appropriate indicators have been selected and subsequently monitor whether the project is likely to achieve its objectives.

A logic model for the Active Kids program was developed by a multidisciplinary team across the NSW Government and the SPRINTER research group before the launch of the program, in 2017. This was revised and updated by the NSW Government Office of Sport in 2020 (See Figure 1). From an evaluation perspective, logic models are essential for structuring evaluation data collection to ensure that the data can ultimately be used to explain whether the programs achieved its outcomes, or why it did not achieve its outcomes. An evidence review was conducted by SPRINTER on the design, delivery, and effects of existing voucher schemes to help provide a sound evidence base to commence the program design[4].

Collectively, the logic model and evidence review informed the quasi-experimental and mixed-method pragmatic evaluation which was designed to evaluate the implementation and effectiveness of the 4-year Active Kids program.

All children who claim an Active Kids voucher in NSW were invited to participate in the Active Kids Evaluation each calendar year. Several discrete populations were identified within the evaluation, namely:

- All children that claim and Active Kids voucher (process evaluation).
- Children who consented to be followed up in an evaluation cohort (Impact evaluation) & parents or caregivers of the registered children.
- Accredited physical activity and sport providers (Process).

Process Evaluation Plan

Process evaluation assesses the implementation of program components, their delivery and reach, and essentially understand whether a program was delivered in the way it was intended. **Impact evaluation** assesses the short-term, medium-term, and long-term impacts of a program.

[4] Bellew, B., Young, S. Voucher schemes to promote increased participation in Sport and Active Recreation: Rapid Evidence Review for the NSW Office of Sport. SPRINTER Group, 2017. The University of Sydney.

Population reach (consistently referred to throughout this report as voucher registrations) were collected through the mandatory registration data fields required for every participant that claims an Active Kids voucher. This information was captured at the Active Kids registration on the Service NSW government online portal.

Registration (mandatory) data fields include participant (child) socio-demographic characteristics, intended voucher use, participation data on structured sport and recreational physical activity (child and adult/carer), achievement of physical activity guidelines (child and adult/carer), height and weight (child). All data were self-report and completed by the adult caregiver, ideally with the child present. Consent for SPRINTER research was also collected here.

A centralised repository of all information about the Active Kids data, including the origin and use is available upon request.

Outcome Evaluation Plan

Throughout 2018, 2019, 2020, 958,518 (90%) registrants agreed to participate in the Active Kids research. This interest in research participation enabled a large nested sub-set of children to be followed up longitudinally throughout each calendar year (2018, 2019, 2020) and across years (follow children who claimed vouchers in 2018 into 2019 into 2020).

All adult caregivers who provided consent for additional research at the point of voucher registration were sent a research survey multiple times throughout 2018 and 2019 and 2020, irrespective of voucher use and survey completion. Detailed information on the distribution and response rates to this survey are explained within the report's data analysis section. A copy of the survey is available.

Outcomes which were measured in the research surveys were agreed based upon the impacts proposed in the logic model and additional research outcomes identified by SPRINTER. It is these outcomes that are presented throughout this evaluation report.

Validated and established measures used in the online surveys captured the following logic model outcomes.

- Physical activity levels in accordance with Australian physical activity guidelines
- Frequency and duration of sport participation
- Voucher use including voucher activity, frequency, and duration of participation in voucher activity
- Child height and weight (enabling Body Mass Index to be calculated)
- Global subjective well-being
- Adults' awareness of the Australian physical activity guidelines for children

Additional SPRINTER research outcomes.

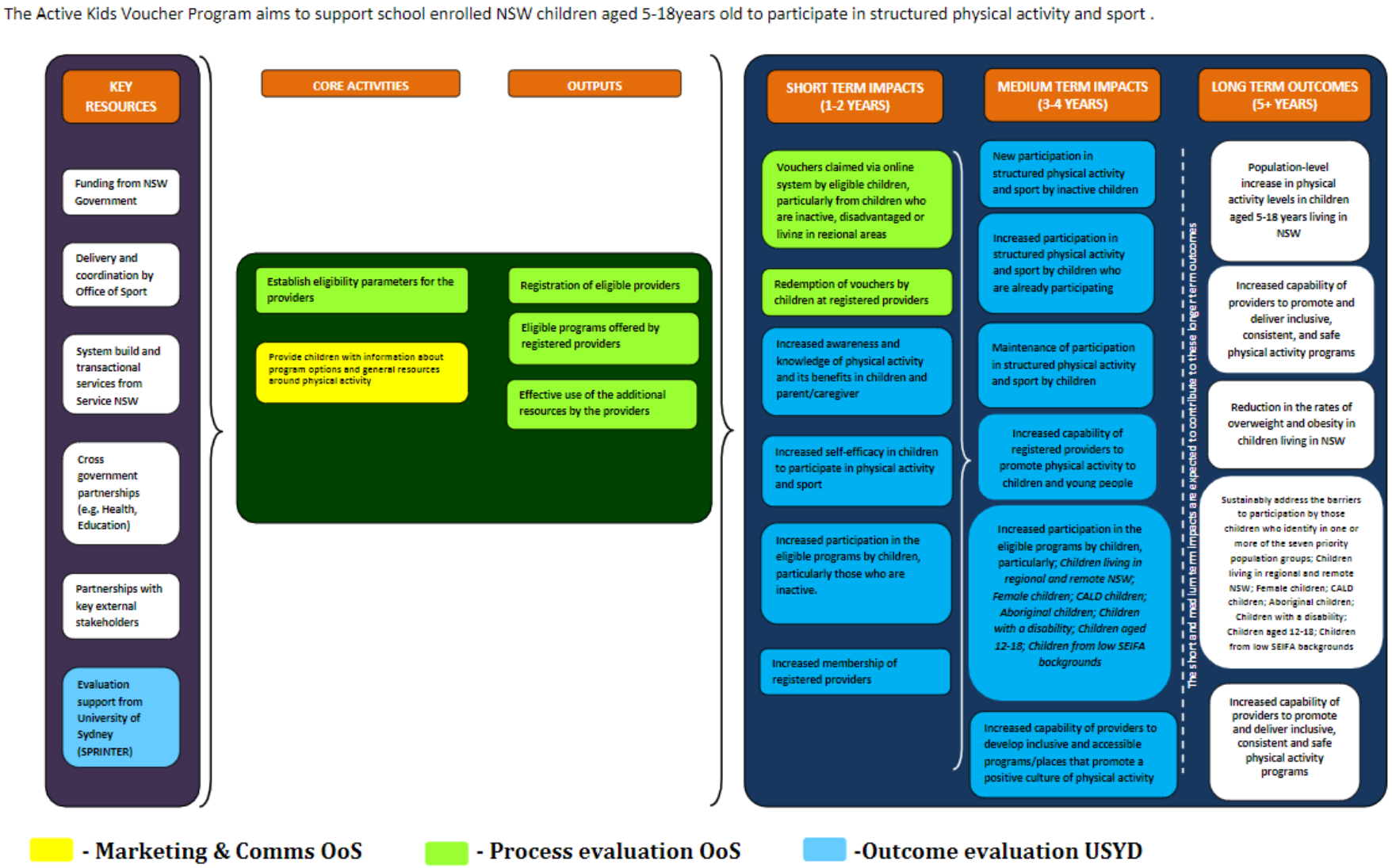
- Expenditure on sport and physical activity per calendar year.
- Contribution of the voucher to overall expenditure
- Voucher activity participation; choice of activity, frequency, and duration
- Voucher contribution to overall activity
- Annual sport participation
- Perceived impact of the Active Kids vouchers on children's physical activity
- Reasons for claiming but not redeeming an Active Kids Voucher
- Adult sport participation and Adult's achievement of physical activity level
- Adults psychological distress

Through conversations with the Office of Sport, SPRINTER work to date and feedback gained from the 2-year evaluation, the following themes have been identified as priorities for consideration in the 3-year report.

- What is the impact of the Active Kids voucher on children's behaviours over the 3 years the program has been running?
- Who is claiming and using Active Kids vouchers? Are there specific populations who are not claiming? Are there specific populations who are claiming but not using a voucher? Reasons for not using a voucher.
- Does the redemption of more vouchers over time affect Children's behaviour i.e., participation?
- Is investment in multiple vouchers having a positive impact on children behaviour?
- What are the benefits of having data over a longer-term period?

The revised logic model clearly identifies priority groups as defined by the NSW Government Office of Sport. These include the following children who identify in one or more of the priority groups; children living in regional and remote NSW; Female children; Culturally and Linguistically Diverse children; Aboriginal and/or Torres Strait Islander children; Children living with a disability; Children aged 12-18; Children from low socio-economic backgrounds.

Figure 1 Active Kids voucher program evaluation logic model [5]



[5] Please note that this logic model was developed by the NSW Government Office of Sport and was revised and updated by the Office Sport in 2020 hence it differs slightly from the figure presented in the 2-year SPRINTER evaluation report.

Demographic variables

Demographic variables were collected at registration and were linked to the survey data. The registration and survey data were linked using the updated Service NSW unique identifier. During 2018, 2019, and 2020, Service NSW changed the methods for creating this identifier. During these years the SPRINTER team developed and used their own linking strategy. In 2021, Service NSW rectified their identifier, and it can now be used to link the registration data across years.

Demographic variables included age, sex, disability status, Aboriginal identity, Primary language spoken at home, Body Mass index (BMI) category, socio-economic status, and remoteness.

BMI was classified into categories of overweight and obesity. Height and weight were reported by the parent or carer of each child and adolescent at registration and in the survey. BMI was calculated as weight divided by height squared (i.e., kg/m2). Each child was categorised as thin, healthy weight, overweight or obese using the International Obesity Task Force (IOTF) definitions (Cole and Lobstein, 2012). The IOTF definitions provide age and sex specific BMI cut-offs for overweight, and obesity based on representative data from six countries, and thus provide a standard international definition for categorising childhood overweight and obesity.

Area level socio-economic status was determined using postcode of residence and categorised using the Socio-Economic Index for Area (SEIFA), specifically the Index of Relative Socio-Economic Disadvantage (Australian Bureau of Statistics, 2016), which ranks regions in Australia according to relative socioeconomic disadvantage. Postcode-based SEIFA percentiles were converted into quartiles, with the lowest 25% of postcodes classified as 1 (most disadvantaged area) and the top 25% of postcodes as 4 (least disadvantaged area).

Location was assessed using postcode of residence and categorised using the Accessibility/Remoteness Index of Australia (ARIA+). ARIA+ indicates remoteness and groups areas based on relative access to services. Postcodes were categorised into major city, inner regional, outer regional or remote (Australian Bureau of Statistics, 2018).

Data Analysis & Analytical Plan

Descriptive statistics, including frequencies and proportions, for all demographic characteristics (age, sex, disability status, Aboriginal identity, primary language spoken at home, BMI category, socio-economic status, and remoteness) and outcomes (physical activity and sport participation) of all children and adult parents/caregivers who completed surveys were calculated for voucher registrations and voucher redemptions.

A range of multivariable statistical models (generalised linear, logistic, mixed) were used to examine associations and interactions between demographic characteristics and outcomes of interest to assess changes in outcomes over time.

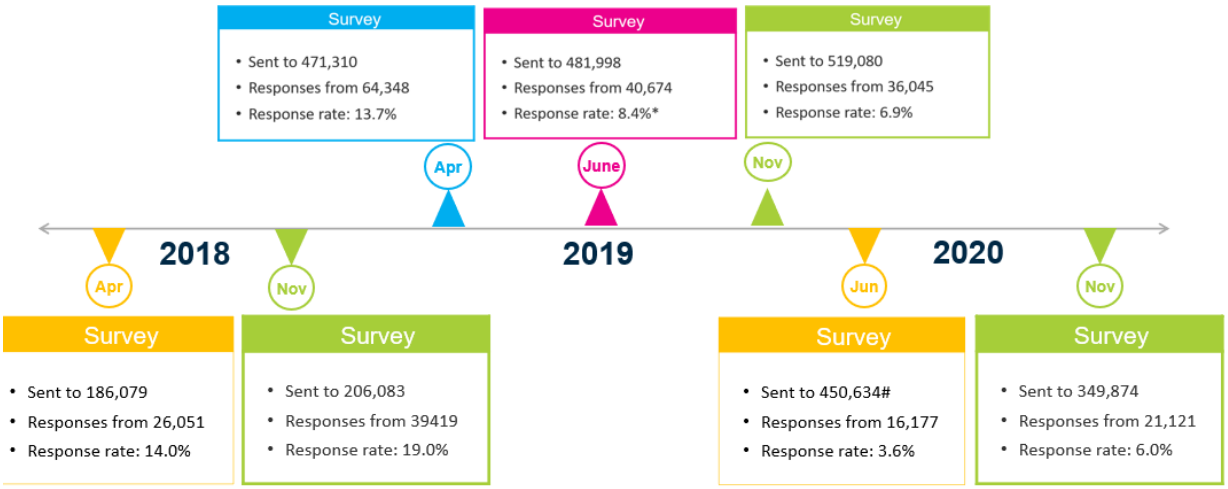
In-depth information on the statistical process will now be explained. The timing of the research surveys, response rates to the surveys and how the survey responses were grouped and analysed will also be outlined.

Statistical Information

Timepoints

Figure 2 shows the surveys distributed and the response rates associated with each survey. This element of the evaluation is essential if short- and medium-term impacts are to be determined.

Figure 2 Active Kids evaluation survey distribution and response rates in 2018, 2019 and 2020



** An IT issue was experienced resulting in not all surveys distributed being delivered*
 # From 2020 one survey was sent to each family rather than a survey for each child to each family

Analytical methods for logic model outcomes

Short term outcomes

Data are used from 146,486 children who completed 192,695 surveys. To be included in this analysis, children needed to claim a voucher, redeem at least one voucher, and respond to at least one survey in the year that the voucher was redeemed. The number of children included in this analysis is shown in Figure 3 and the number of surveys included is shown in Table 1.

Within each calendar year, children were classified as having used zero, one or two vouchers (except 2018 where only one voucher was available). We then examined changes in the outcome of interest (e.g., time spent in the voucher activity) since the voucher redemption date each year. Time was categorised based on the time between voucher redemption and survey completion each calendar year. Time categories include 0-8 weeks, 9-26 weeks, and 27+ weeks post voucher use. For example, if a child redeemed their voucher in March and completed a survey in April, this survey would be classified as 0-6 months post voucher use.

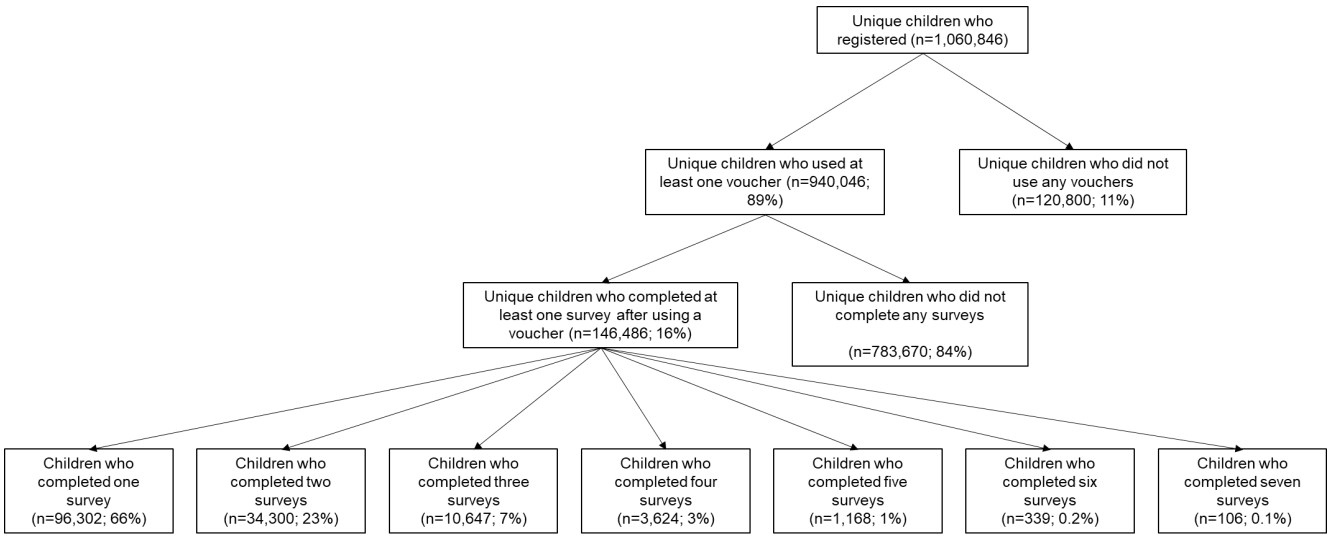
This analysis option shows the short-term impact of using one or two vouchers each year on outcomes of interest.

Table 1 Number of surveys completed at each timepoint within each calendar year

Number of vouchers used each year	0-8 weeks	9-26 weeks	27+ weeks	Total
2018: 1 voucher	9,382	27,107	13,380	49,869
2019: 1 voucher	9,788	20,610	4,454	34,852
2019: 2 vouchers	26,402	54,722	0	81,124
2020: 1 voucher	842	4,473	4,058	9,373
2020: 2 vouchers	4,127	11,967	1,383	17,477

Note. In 2019, of the children who redeemed 2 vouchers, 0 children completed a survey 27+ weeks post using their second voucher.

Figure 3 Flow chart to show the number of children included in the short-term and medium-term outcome analysis



Medium term outcomes

Data are used from the same 146,486 children who completed 214,609 surveys. To be included in this analysis, children needed to claim for a voucher, redeem at least one voucher, and respond to at least one survey. The number of children included in this analysis is shown in Figure 3 and the number of surveys included is shown in Table 2.

Within the child's time in the Active Kids program, each child was classified as having used 0, 1, 2, 3, 4, or 5 vouchers. We then examined changes in the outcome of interest (e.g., time spent participating in organised sport) since the first voucher redemption date, regardless of calendar year. Time was categorised based on the time between first voucher redemption and survey completion. Time categories included 0-6 months, 6-12 months, 12-18 months, 18-24 months, 24+ months.

For example, if John redeemed his first voucher in March 2018, all surveys are then categorised based on time between March 2018 and the survey completion date. A survey completed in November 2020 would be classified as "24+ months" post first voucher redemption.

Table 2 Number of surveys completed at each timepoint across the Active Kids program

Number of vouchers used	0-6 months	6-12 months	12-18 months	18-24 months	24+ months	Total
1 voucher	10,232	3,400	1,224	289	223	15,368
2 vouchers	13,660	6,441	6,691	1,614	997	29,403
3 vouchers	15,966	9,651	14,399	3,834	3,216	47,066
4 vouchers	18,393	12,271	16,942	5,777	4,786	58,169
5 vouchers	13,224	14,109	21,876	7,367	8,027	64,603

Example of survey classifications

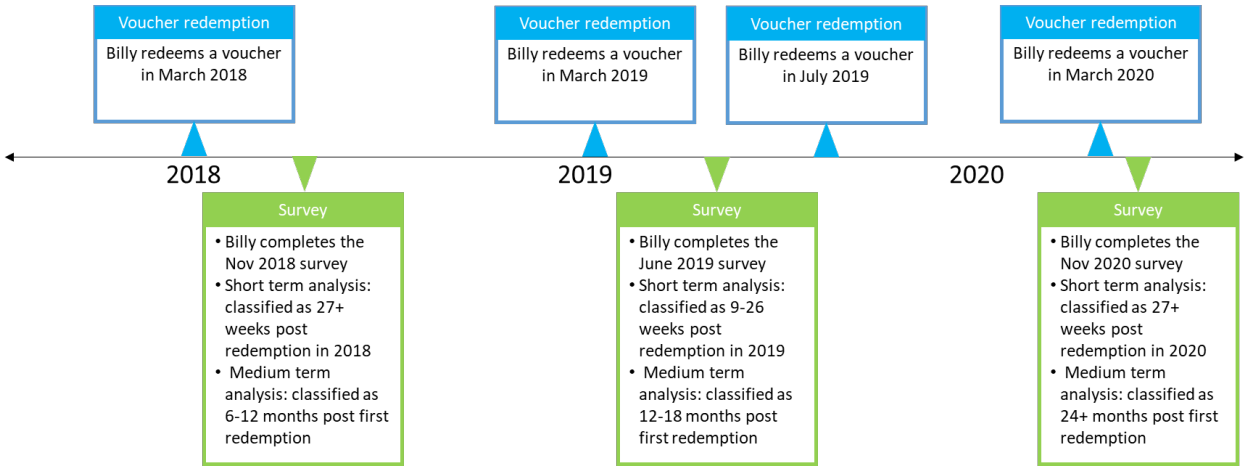
Figure 4 shows an example of how surveys were classified for the short- and medium-term outcome analysis. The main difference in classification is that for the short-term outcome analysis, the time from redemption to survey completion is based on the voucher redeemed in each calendar year, whereas, for the medium-term outcome analysis, the time from redemption to survey completion is always based on the first voucher redeemed. In the example below, Billy redeemed four vouchers and completed three surveys.

- In 2018, Billy used a voucher in March 2018 and completed a survey in November 2018. This November 2018 survey was classified as 27+ weeks post using his 2018 voucher (short-term outcome analysis), and 6-12 months post using his first ever voucher (medium-term outcome analysis).

- In 2019, Billy used a voucher in March 2019 and July 2019 and completed a survey in June 2019. This June 2019 survey was classified as 9-26 weeks post using his March 2019 voucher (short-term outcome analysis), and 12-18 months post using his first ever voucher (medium-term outcome analysis).

- In 2020, Billy used a voucher in March 2020 and completed a survey in November 2020. This November 2020 survey was classified as 27+ weeks post using his 2020 voucher (short-term outcome analysis), and 24+ months post using his first ever voucher (medium-term outcome analysis).

Figure 4 Example flow of how surveys are classified for the short- and medium-term outcomes analysis



Long-term outcomes

Data is used from the child's registration for each calendar year. In 2018, 671,375 children provided registration data, in 2019, 777,969 children provided registration data and in 2020, 795, 528 children provided registration data.

Generalised linear mixed models

Generalised linear mixed models (GLMMs) were the statistical method used to examine changes in outcomes over time. GLMMS are a flexible method for analysing data with different distributions and data that is repeatedly collected over time from the same individuals (i.e., multiple surveys from the same child). SPRINTER collects survey data through the Active Kids surveys from the same children over time, and these repeated measures within individuals are not independent. For example, a child who responded to a survey in April 2018 and again in November 2018 will have similar responses in the two surveys. This dependence, or clustering of data, is accounted for in the GLMM.

The GLMMs estimate the adjusted means or proportions with 95% confidence intervals (95%CI). These GLMM models adjusted for all demographic characteristics (see Appendix D for fitted model). Demographic characteristics included sex, age, Aboriginal identity, identified disability, language spoken at home, socio-economic status, geographic location, and BMI. These variables are potential confounders, which means that the outcome of interest (e.g., physical activity) could be influenced by these characteristics and not adjusting for them could bias the results. For example, the Active Kids data consists of a large proportion of younger children who tend to be more physically active than adolescents. Adjusting for age means that we have removed the effect of age and can draw conclusions that are not influenced by age.

For each outcome of interest, we examined the interaction between time and demographic characteristics. This analysis technique provided information on how each subgroup of interest changed over time and whether there were differences between subgroups over time. For example, we included an interaction term for time and sex to examine whether boys and girls experienced different changes in physical activity over time.

Missing data

Missing data is a common issue in almost all research. In this evaluation, missing data occurs when a child did not complete a survey at one of the defined timepoints. For example, in the short-term outcome analysis, a

child might have completed a survey 0-8 weeks post voucher redemption, and 9-26 weeks post voucher redemption, but not at 27+ weeks post voucher redemption. Traditionally, missing data was handled using listwise (deleting all affected cases) or pairwise deletion (deleting all affected cases for a particular analysis). Both methods are limited and can lead to misinterpretation of parameter estimates and a loss of power (Osborne, 2013). If we were to use these methods in the Active Kids evaluation short-term outcomes analysis, we would reduce our sample of 146,486 children to 0 children, as 0 children completed surveys at all timepoints. Unlike listwise and pairwise deletion, Maximum Likelihood (ML) utilises all available data to provide accurate parameter estimates and retain power (Enders, 2010; Graham, 2009; Graham et al., 2003). ML uses each child's available data to compute maximum likelihood estimates, which are the values most likely to be observed in the observed data. For more information on maximum likelihood estimates, see **https://sites.stat.washington.edu/jaw/COURSES/580s/581/HO/LeCam-1990.ISIRev.pdf**.

Evaluation Caveats

The evaluation methods implemented to assess the effectiveness of Active Kids, against the outcomes identified in the logic model reflect an academically sound and evidence-based approach. The process has been managed by a pragmatic and experienced evaluation team to ensure validity and reliability of the findings. The mixed methods approach adopted provides insights that will enable researchers, practitioners, and policymakers to better understand how vouchers can promote children and adolescents' participation in organised sport and physical activity in Australia and beyond. However, numerous challenges must be acknowledged.

- This report focuses on the outcomes of participants who provided mandatory data at voucher registration and children who voluntarily chose to engage with the subsequent in-depth Active Kids evaluation. The potential self-selection bias, social desirability bias, and pre-test sensitisation must be acknowledged for those who voluntarily participated in the Active Kids evaluation surveys and had benefited from voucher use.

- The evaluation participants reflect a bias towards a healthier, more active population, especially those who completed two surveys, with underrepresentation from children living in disadvantaged areas, obese children and children who infrequently participated in sport in the 12 months before registration. Older adolescents were under-represented in the sample, and of those participating, adolescents who used an Active Kids voucher were more active and engaged in sport at registration.[6]

- Consistent with other natural experiments of policy interventions and the scale of the Active Kids program, we were unable to establish a comparison group. The absence of traditional experimental design means firm conclusions about the causal reasons for change are limited.

- Consistent with other natural experiments, changes made to the delivery of the Active Kids program during the evaluation period were beyond the control of the evaluation team. A key change was in 2018, one $100 voucher was offered annually, but from July 2019, two $100 vouchers were available each year.

- An online questionnaire was the most pragmatic measurement tool; however, the use of self-report data (reported by proxy through parent/guardian) is prone to social desirability bias and recall bias.

- Data were collected using validated self-report or proxy-report items where possible; consistent items for all ages (4.5–18 years) were included in our study; however, none of the items have been validated across all age groups and with proxy-report. Items not valid for proxy-report (self-efficacy and wellbeing items), were omitted from the survey if adults were completing the survey without the child present to strengthen internal validity.

- Some survey items were developed specifically for this study and were not subject to validity or reliability testing before being included in the evaluation survey.[7]

[6] Differences between Active Kids registrants in 2020 and survey participants: live in the most disadvantaged quartile (16.2% vs. 13.2%); met physical activity guidelines (17.7% vs. 18.9%); participated in sport at least four times per week (9.4% vs. 13.9%).

[7] Reece LJ, Foley B, Bellew W, Owen K, Cushway D, Srinivasan N, Hamdorf P, Bauman A. Active Kids: evaluation protocol for a universal voucher program to increase children's participation in organised physical activity and sport. Public Health Res Pract. 2021; 31(2): e30122006. First published 2 June 2020

- The administration system recorded redemption date is the best proxy of the child's voucher redemption. However, this date may not be the actual date the child redeemed the voucher. This date is the date that the activity provider redeemed the voucher in the government administration platform.

- The logic model focuses on two overarching populations – registered children and registered Active Kids providers. Process evaluation related to registered Active Kids providers was limited.

- In March 2020, the WHO declared COVID-19 a pandemic, with state and local governments enacting numerous community and social restrictions, including school closures, physical distancing, and the postponement of community sport to prevent the spread of infection (WHO). As part of the restriction measures, daily activities such as community organised sport and physical activity were severely disrupted and opportunities to engage in physical activity were substantially reduced, resulting in an inability to redeem an Active Kids voucher. The impact of the pandemic on the effectiveness of the Active Kids program cannot be controlled but must be considered when interpreting the evaluation findings.

These evaluation caveats should be considered when interpreting the findings of this report. For further information regarding the caveats outlined please contact **sprinter.group@sydney.edu.au**.

Results: Logic Model Impacts

The logic model in Figure 1 is a graphic depiction, a road map of the anticipated impacts that the Active Kids program could achieve. These outcomes are split into short-term, medium-term, and long-term impacts and provided the framework for the evaluation detailed in this report.

This section of the report presents data against each of the coloured boxes, in turn, with the sections split by short term impacts, medium-term impacts, and long-term impacts. Data were analysed in accordance with the logic model using sample sizes described in the previous section. This approach enables making a judgement of the extent to which the Active Kids program is achieving the intended outcomes identified in the logic model.

Short-term Impacts (1-2 years)

This section provides evidence for the short-term impacts of the Active Kids program articulated in the Active Kids logic model Figure 1. These include:

- Number of vouchers claimed via the online system (voucher registrations) by eligible children particularly from inactive, disadvantaged or living in regional areas
- Redemption of vouchers by children at registered providers
- Redemption of vouchers by provider activity classification
- Increased awareness and knowledge of physical activity guidelines and its benefits in children and the parent/caregiver
- Increased self-efficacy (confidence) in children to participate in physical activity and sport
- Increased participation in eligible programs by children, particularly those who are inactive or have not previously been involved in programs (non-sporty children)
- Increased membership of providers.

To showcase these outcomes, data are presented on all individuals who redeemed at least one voucher and responded to at least one survey (range of 1 – 7 responses). Data are separated by calendar year, with the average value of the data reported after voucher use. This enables us to assess changes in the outcome SINCE the first voucher was used (redeemed).

SHORT TERM IMPACTS SUMMARY

- ✓ The Active Kids program reached more eligible children in NSW in each calendar year.
- ✓ More than half of the eligible NSW population (59%) have claimed an Active Kids voucher.
- ✓ Each year, four out of five children who claimed a voucher redeemed a voucher.
- ✓ Soccer (Football) and swimming were the most popular activities for voucher use.
- ✓ 95% of children reported finding physical activity fun, which is a key factor in sustaining physical activity throughout life.
- ✓ All children reported participating in over 200 minutes of activity a week at the activity where the Active Kids voucher was redeemed. Therefore, the Active Kids voucher is facilitating over 200 minutes (>3 hours) of physical activity for children in a typical week.

Number of vouchers claimed [8] via the online system (registered) by eligible children particularly from inactive[9], disadvantaged[10] or living in regional areas[11]

This section refers to the first green box under the short-term outcomes in the logic model (Figure 1).

The demographics of all children who claimed a voucher in 2018, 2019 and 2020 can be found in Table 3.

- A greater number of people claimed a voucher in 2020 (n=795,528) compared to 2019 (n=777,240) and 2018 (n=664,973).
- Children aged 4-8 years old consistently reflect the greatest proportion of vouchers claimed across years.
- 43,128 children who identified as Aboriginal and/or Torres Strait Islander claimed a voucher in 2020, the greatest number across all 3 years.
- Less than a quarter of eligible children in NSW that speak a language other than English at home claimed a voucher.
- A clear socio-economic gradient exists in program reach. Fewer children living in disadvantaged areas claimed a voucher, with increasing numbers as socio-economic advantage rises.
- Despite an increase in total vouchers claimed, a decline in children from the most disadvantaged areas is observed in 2020. 16% of all 2020 vouchers claimed were from most disadvantaged communities with 35% of children living in the least disadvantaged communities having claimed a voucher.
- Predominantly, children that claimed a voucher resided in major cities. A slight decline in vouchers claimed from children in outer regional and remote areas was observed in 2020 (n=37,556) compared to 2019 (n=40, 687) and 2018 (n=35,413).
- More than 10% of vouchers claimed in 2020 were claimed by children living with obesity, an increase from the previous two years.
- Nearly 80% of children who claimed a voucher in 2020 were physically inactive (n=635,554), an increase from 77% in 2018 (n=513, 319) and 79% in 2019 (n=615,171).
- An increased proportion of children claiming a voucher who had not played sport in the previous 12 months was observed in 2020 (7%; n=57, 379), with a slight reduction in the very sporty children claiming a voucher (9%; n=74, 438).

[8] Vouchers claimed refers to the voluntary registration of the Active Kids voucher so refers to 1 voucher only. The second voucher is allocated.
[9] Children who self-reported not achieving physical activity guidelines at Active Kids voucher registration.
[10] Children who lived in SEIFA 1 most disadvantaged quartile according to their postcode provided at voucher registration.
[11] Classified using child's postcode at voucher registration using ARIA.

Table 3 Number and proportion of all children who claimed (registered) an Active Kids voucher in calendar years 2018, 2019 and 2020 and the reach of the program into all eligible children in New South Wales (NSW), by demographic characteristics

	Children who claimed an Active Kids voucher in 2018		Children who claimed an Active Kids voucher in 2019		Children who claimed an Active Kids voucher in 2020		All eligible children in NSW (2016 Census data)	Reach in 2018 as % of eligible children	Reach in 2019 as % of eligible children	Reach in 2020 as % of eligible children
	N	%	N	%	N	%	N	%	%	%
All children	664,973	100.0	777,240	100.0	795,528	100.0	1,263,454	52.6	61.5	63.0
Age category										
4-8	267,247	40.2	319,445	41.1	321,274	40.4	378,787	70.6	84.3	84.8
9-11	183,855	27.7	208,548	26.8	208,242	26.2	274,038	67.1	76.1	76.0
12-14	136,686	20.6	158,177	20.4	166,421	20.9	258,828	52.8	61.1	64.3
15-18	77,185	11.6	91,070	11.7	99,591	12.5	351,801	21.9	25.9	28.3
Sex										
Boys	358,223	53.9	408,998	52.6	416,606	52.4	648,759	55.2	63.0	64.2
Girls	305,778	46.0	366,921	47.2	376,786	47.4	614,695	49.7	59.7	61.3
Aboriginal identity										
Aboriginal and/or Torres Strait Islander	35,738	5.4	41,698	5.4	43,128	5.4	59,554	60.0	70.0	72.4
Non-Aboriginal and/or Torres Strait Islander	620,777	93.4	725,773	93.4	744,974	93.7	1,203,900	51.6	60.3	61.9
Prefer not to say	8,458	1.3	9,769	1.3	7,426	0.9				
Primary language spoken at home										
English	615,238	92.5	711,004	91.5	723,800	91.0	953,924	64.5	74.5	75.9

	Children who claimed an Active Kids voucher in 2018		Children who claimed an Active Kids voucher in 2019		Children who claimed an Active Kids voucher in 2020		All eligible children in NSW (2016 Census data)	Reach in 2018 as % of eligible children	Reach in 2019 as % of eligible children	Reach in 2020 as % of eligible children
	N	%	N	%	N	%	N	%	%	%
Other	49,735	7.5	66,236	8.5	71,728	9.0	309,530	16.1	21.4	23.2
Identified disability										
Yes	17,543	2.6	21,569	2.8	27,417	3.5	31,705	55.3	68.0	86.5
No	638,497	96.0	745,213	95.9	756,657	95.1	1,169,846	54.6	63.7	64.7
Prefer not to say	8,210	1.2	10,458	1.4	11,454	1.4				
Socio-economic status										
1st (most disadvantaged)	107,505	16.2	128,146	16.5	126,847	16.0	263,911	40.7	48.6	48.1
2nd	151,501	22.8	176,895	22.8	176,368	22.2	290,625	52.1	60.9	60.7
3rd	171,687	25.8	207,534	26.7	214,292	26.9	334,919	51.3	62.0	64.0
4th (least disadvantaged)	217,978	32.8	264,044	34.0	277,819	34.9	373,455	58.4	70.7	74.4
Missing	16,302	2.5	621	0.1	202	0.0				
Location										
Major cities	477,624	71.8	578,608	74.4	600,865	75.5	935,525	51.1	61.8	64.2
Inner regional	136,397	20.5	157,436	20.3	156,897	19.7	257,961	52.9	61.0	60.8
Outer regional and remote	35,413	5.3	40,687	5.2	37,556	4.7	69,943	50.6	58.2	53.7
Missing	15,539	2.3	509	0.1	210	0.0				
Body mass index category										
Thin/ underweight	35,076	5.3	82,195	10.6	91,769	11.5	NA	NA	NA	NA

	Children who claimed an Active Kids voucher in 2018		Children who claimed an Active Kids voucher in 2019		Children who claimed an Active Kids voucher in 2020		All eligible children in NSW (2016 Census data)	Reach in 2018 as % of eligible children	Reach in 2019 as % of eligible children	Reach in 2020 as % of eligible children
	N	%	N	%	N	%	N	%	%	%
Healthy weight	193,804	29.1	407,328	52.4	430,227	54.1	NA	NA	NA	NA
Overweight	52,208	7.9	127,843	16.5	135,573	17.0	NA	NA	NA	NA
Obesity	23,037	3.5	75,953	9.8	81,666	10.3	NA	NA	NA	NA
Missing	360,848	54.3	83,921	10.8	56,293	7.1	NA	NA	NA	NA
Met physical activity guidelines										
No	513,319	77.2	615,171	79.2	635,554	79.9	NA	NA	NA	NA
Yes	128,131	19.3	135,643	17.5	141,151	17.7	NA	NA	NA	NA
Missing	23,523	3.5	26,426	3.4	18,823	2.4	NA	NA	NA	NA
Sport participation										
None	12,088	1.8	49,814	6.4	57,379	7.2	NA	NA	NA	NA
At least once a month	143,127	21.5	182,610	23.5	214,988	27.0	NA	NA	NA	NA
At least once a week	215,925	32.5	224,682	28.9	233,216	29.3	NA	NA	NA	NA
At least twice a week	146,018	22.0	192,571	24.8	200,725	25.2	NA	NA	NA	NA
At least four times a week	100,434	15.1	88,056	11.3	74,438	9.4	NA	NA	NA	NA
Not sure	40,145	6.0	39,507	5.1	14,782	1.9	NA	NA	NA	NA

NA= Comparison data not available in the Census

Redemption of vouchers by children at registered providers[12]

This section refers to the second green box under short term outcomes in the logic model (Figure 1).

Reasons for not redeeming a voucher are explored in detail in the SPRINTER Additional research outcomes section.

In 2018, one voucher was available during the calendar year. In 2019 and 2020, two vouchers were available per child per calendar year. The demographic characteristics of children who redeemed one voucher and two vouchers, including children who did not redeem any vouchers in calendar year 2020 are shown in Table 4, with key points summarised below.

- Four out of five children that claimed a vouchered redeemed it, in 2020. 41% (n=321,781) of children redeemed one voucher and 41% (n=328,980) redeemed two vouchers.
- 18% (n=144,767) of children did not redeem their voucher which is a similar percentage to 2019 and 2020.
- Children that indicated they had participated in zero sessions of structured physical activity in the 12 months prior to registration had the lowest odds of redeeming an Active Kids voucher.
- Children that were 15-18 years old, living with a disability, identified as Aboriginal or Torres Strait Islander, spoke a primary language other than English at home, lived in the most disadvantaged areas or outer regional remote areas, and children that were not-meeting physical activity guidelines or participated in fewer sessions of structured physical activity had the lowest odds of redeeming an Active Kids after registering in the Active Kids program.
- In 2020, children who redeemed two vouchers were mostly aged 4-8 years, thin or healthy weight, met physical activity guidelines, lived in least disadvantaged areas of NSW, and played sport at least four times per week.

Reasons for not redeeming a voucher are explored in detail in the SPRINTER additional research outcomes section.

[12] Data presented focuses on activities rather than providers. SPRINTER do not have access to provider information.

Table 4 Number and proportion of vouchers redeemed at registered providers in calendar years 2018, 2019 and 2020

	2018				2019						2020					
	0 vouchers		1 voucher		0 vouchers		1 voucher		2 vouchers		0 vouchers		1 voucher		2 vouchers	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All children	124,873	18.8	540,100	81.2	114,995	14.8	278,460	35.8	383,785	49.4	144,767	18.2	321,781	40.5	328,980	41.4
Age category																
4-8	43,830	16.4	223,417	83.6	39,388	12.3	95,985	30.1	184,072	57.6	53,200	16.6	118,376	36.9	149,698	46.6
9-11	30,884	16.8	152,971	83.2	28,062	13.5	71,323	34.2	109,163	52.3	34,240	16.4	81,186	39.0	92,816	44.6
12-14	28,381	20.8	108,305	79.2	26,744	16.9	65,689	41.5	65,744	41.6	32,233	19.4	72,156	43.4	62,032	37.3
15-18	21,778	28.2	55,407	71.8	20,801	22.8	45,463	49.9	24,806	27.2	25,094	25.2	50,063	50.3	24,434	24.5
Sex																
Boys	62,740	17.5	295,483	82.5	57,679	14.1	153,735	37.6	197,584	48.3	71,134	17.1	173,214	41.6	172,258	41.4
Girls	61,929	20.3	243,849	79.8	57,084	15.6	124,290	33.9	185,547	50.6	73,168	19.4	147,767	39.2	155,851	41.4
Missing	204	21.0	768	79.0	232	17.6	435	32.9	654	49.5	465	21.8	800	37.5	871	40.8
Aboriginal identity																
Aboriginal and Torres Strait Islander	8,236	23.1	27,502	77.0	7,590	18.2	19,037	45.7	15,071	36.1	9,180	21.3	20,037	46.5	13,911	32.3
Non-Aboriginal and Torres Strait Islander	114,936	18.5	505,841	81.5	105,902	14.6	255,626	35.2	364,245	50.2	134,173	18.0	298,651	40.1	312,150	41.9
Prefer not to say	1,701	20.1	6,757	79.9	1,503	15.4	3,797	38.9	4,469	45.8	1,414	19.0	3,093	41.7	2,919	39.3
Primary language spoken at home																
English	111,162	18.1	504,076	81.9	101,672	14.3	259,362	36.5	349,970	49.2	125,938	17.4	296,196	40.9	301,666	41.7
Other	13,711	27.6	36,024	72.4	13,323	20.1	19,098	28.8	33,815	51.1	18,829	26.3	25,585	35.7	27,314	38.1
Identified disability																
Yes	4,908	28.0	12,635	72.0	4,766	22.1	7,852	36.4	8,951	41.5	7,148	26.1	10,919	39.8	9,350	34.1

	2018				2019						2020					
	0 vouchers		1 voucher		0 vouchers		1 voucher		2 vouchers		0 vouchers		1 voucher		2 vouchers	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
No	117,968	18.5	520,529	81.5	108,290	14.5	266,894	35.8	370,029	49.7	135,077	17.9	306,218	40.5	315,362	41.7
Prefer not to say	1,882	22.9	6,328	77.1	1,939	18.5	3,714	35.5	4,805	46.0	2,542	22.2	4,644	40.5	4,268	37.3
Socio-economic status																
1st (most disadvantaged)	25,350	23.6	82,155	76.4	24,603	19.2	50,995	39.8	52,548	41.0	29,142	23.0	54,977	43.3	42,728	33.7
2nd	27,218	18.0	124,283	82.0	25,583	14.5	67,946	38.4	83,366	47.1	31,578	17.9	75,453	42.8	69,337	39.3
3rd	30,872	18.0	140,815	82.0	29,649	14.3	73,100	35.2	104,785	50.5	38,177	17.8	86,451	40.3	89,664	41.8
4th (least disadvantaged)	36,723	16.9	181,255	83.2	35,077	13.3	86,275	32.7	142,692	54.0	45,806	16.5	104,817	37.7	127,196	45.8
Missing	4,710	28.9	11,592	71.1	83	13.4	144	23.2	394	63.5	64	31.7	83	41.1	55	27.2
Location																
Major Cities of Australia	89,305	18.7	388,319	81.3	86,277	14.9	196,808	34.0	295,523	51.1	109,527	18.2	235,472	39.2	255,866	42.6
Inner Regional Australia	23,777	17.4	112,620	82.6	21,900	13.9	63,679	40.5	71,857	45.6	27,450	17.5	69,260	44.1	60,187	38.4
Outer Regional and remote Australia	7,265	20.5	28,148	79.5	6,749	16.6	17,832	43.8	16,106	39.6	7,729	20.6	16,960	45.2	12,867	34.3
Missing	4,526	29.1	11,013	70.9	69	13.6	141	27.7	299	58.7	61	29.1	89	42.4	60	28.6
Body mass index category																
Thin	5,728	16.3	29,348	83.7	11,404	13.9	26,574	32.3	44,217	53.8	15,986	17.4	34,554	37.7	41,229	44.9
Healthy weight	31,384	16.2	162,420	83.8	57,116	14.0	142,801	35.1	207,411	50.9	73,766	17.2	170,993	39.7	185,468	43.1
Overweight	9,297	17.8	42,911	82.2	19,797	15.5	48,773	38.2	59,273	46.4	25,539	18.8	57,018	42.1	53,016	39.1
Obesity	4,594	19.9	18,443	80.1	12,752	16.8	29,955	39.4	33,246	43.8	16,701	20.5	35,542	43.5	29,423	36.0
Missing	73,870	20.5	286,978	79.5	13,926	16.6	30,357	36.2	39,638	47.2	12,775	22.7	23,674	42.1	19,844	35.3

	2018				2019						2020					
	0 vouchers		1 voucher		0 vouchers		1 voucher		2 vouchers		0 vouchers		1 voucher		2 vouchers	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Met physical activity guidelines at registration																
Did not meet guidelines	97,052	18.9	416,267	81.1	91,061	14.8	221,715	36.0	302,395	49.2	117,119	18.4	259,597	40.9	258,838	40.7
Met guidelines	20,545	16.0	107,586	84.0	16,982	12.5	46,607	34.4	72,054	53.1	21,296	15.1	54,497	38.6	65,358	46.3
Missing	7,276	30.9	16,247	69.1	6,952	26.3	10,138	38.4	9,336	35.3	6,352	33.8	7,687	40.8	4,784	25.4
Sport participation at registration																
None	4,898	40.5	7,190	59.5	14,844	29.8	20,767	41.7	14,203	28.5	20,871	36.4	25,523	44.5	10,985	19.1
At least once a month	36,830	25.7	106,297	74.3	31,427	17.2	67,406	36.9	83,777	45.9	45,880	21.3	91,853	42.7	77,255	35.9
At least once a week	36,300	16.8	179,625	83.2	27,583	12.3	80,939	36.0	116,160	51.7	34,824	14.9	94,612	40.6	103,780	44.5
At least twice a week	22,182	15.2	123,836	84.8	24,637	12.8	67,862	35.2	100,072	52.0	30,979	15.4	79,106	39.4	90,640	45.2
At least four times a week	14,551	14.5	85,883	85.5	9,541	10.8	26,423	30.0	52,092	59.2	8,819	11.9	24,543	33.0	41,076	55.2
Not sure	8,876	22.1	31,269	77.9	6,963	17.6	15,063	38.1	17,481	44.3	3,394	23.0	6,144	41.6	5,244	35.5

Redemption of voucher by provider activity classification

This section provides supplementary information to support the second green box under short-term outcomes in the Active Kids logic model (Figure 1).

Data focuses on the top 5 activities using activity classifications set by the NSW Government Office of Sport. Word clouds for voucher 1 (Figure 5) visually represent all activities children redeemed their voucher for. The larger the word size, the more voucher that were used at that type of activity.

- Top 5 activities for voucher 1 in 2020; Soccer (27%) Swimming (14%) Netball (9%) Dance (9%) and Rugby league (9%).
- Top 5 activities for voucher 2 in 2020; Swimming (19%) Dance (13%) Soccer (11%) Cricket (6%) and Oztag (6%).

In total 11,807 Approved Active Kids providers were created on the Active Kids platform during 2018-2020. Most providers joined the program in 2018 (n=9,410), with 1,580 new providers accredited in 2019 and 817 accredited in 2020. Among Active Kids providers 68% were Affiliated with a State Sporting Organisation, and 32% were not affiliated with a State Sporting Organisation.

Figure 5 Top activities the first voucher was used for by all children

Increased awareness and knowledge of physical activity guidelines and its benefits in children and the parent/caregiver

Data presented here relates to the third blue box under short-term impacts in the logic model (Figure 1). Understanding knowledge and awareness of physical activity guidelines is an important component when trying to increase population levels of physical activity. Evidence suggests that a lack of awareness of physical activity guidelines and lack of knowledge regarding physical activity 'dose' recommendations are associated with low rates of population physical activity [13].

Awareness and knowledge of physical activity guidelines were assessed using online surveys administered throughout 2018, 2019 and 2020. Research data provided by parents/caregivers who participated in all surveys are presented in Figure 6.

- The ability to accurately recall physical activity guidelines for children does not appear to be affected by the length of the time after redeeming an Active Kids voucher.

- There are some differences in the ability to recall accurate physical activity guidelines by the number of vouchers used. The proportion of adults who could accurately recall physical activity guidelines for their children increased 26 + weeks after using 2 vouchers in 2020.

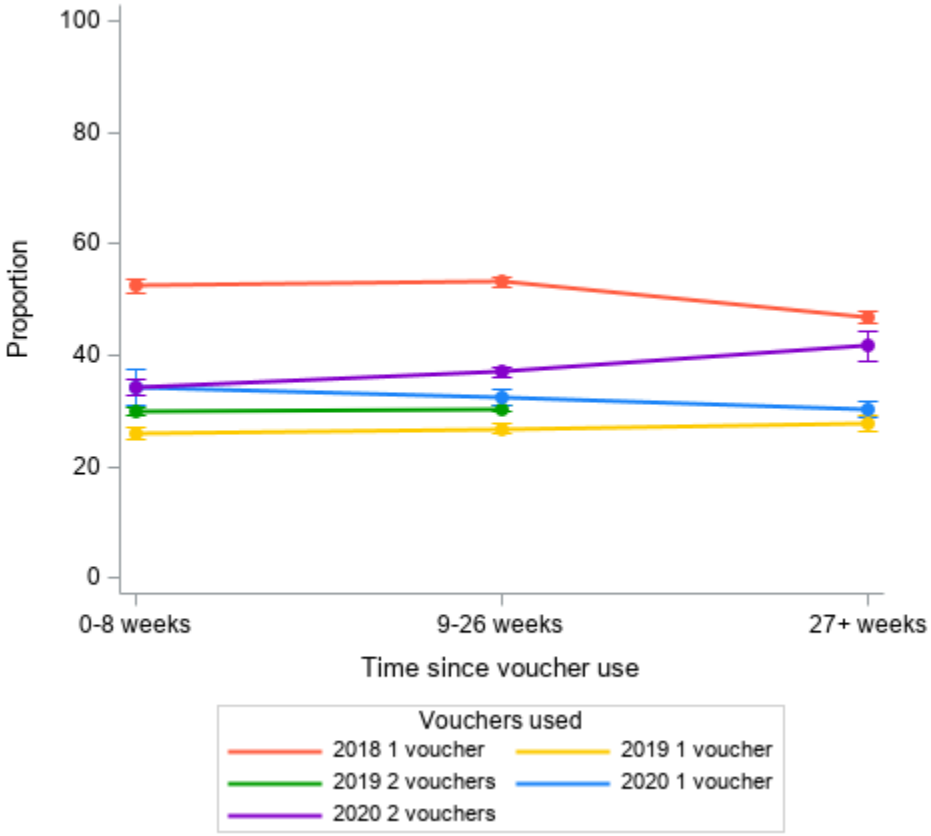
- As observed in 2018 and 2019, and now in 2020, a greater proportion of Active Kids parents can recall physical activity guidelines that from representative NSW schools survey estimates [14].

- Due to the significant reach (large numbers of the NSW population claiming Active Kids vouchers), the Active Kids program could be one vehicle for raising population awareness of physical activity guidelines, which could subsequently lead to positively influencing behaviour change amongst the NSW community.

[13] Piercy KL, Bevington F, Vaux-Bjerke A, Hilfiker SW, Arayasirikul S, Barnett EY. Understanding Contemplators' knowledge and awareness of the physical activity guidelines. Journal of Physical Activity and Health. 2020 Feb 21;1(aop):1-8.

[14] NSW Schools Physical Activity and Nutrition Survey (SPANS). https://www.health.nsw.gov.au/heal/Pages/spans-2015-full-report.aspx.

Figure 6 Changes in the ability to correctly recall the physical activity guidelines for children



Increased self-efficacy[15] (confidence) in children to participate in physical activity and sport[16]

This section refers to the fourth blue box under short term impacts in the logic model (Figure 1).

Self-efficacy and reported enjoyment of exercise and sport contribute to initiating and maintaining physical activity and sport participation behaviours. Self-efficacy is defined as an individual's belief in their own capabilities to accomplish a task or succeed in a specific situation, in this case, to be physically active. Increasing a child's self-efficacy and enjoyment of physical activity is likely to increase their participation, which has beneficial effects on their health and wellbeing.

To understand how the redemption of an Active Kids voucher influenced self-efficacy and enjoyment, we present measurements amongst children who redeemed and completed research with their adult caregivers[17].

[15] Personal judgements of own ability to be physically active (Bandura).
[16] Only 2019 participants who had redeemed a voucher before doing a survey were included here because we wanted to understand the impact of the Active Kids voucher on these outcomes, so needed to be confident children at redeemed a voucher.
[17] Questions assessing self-efficacy amongst children were only asked in the online survey if the adult and child are present. This is known through by participant response to the question; 'who is completing this survey'.

- Over 95% of children reported finding physical activity fun. The Active Kids voucher enabled children to engage in programs they find fun by reducing the cost barrier to participation. Fun is a key factor in sustaining physical activity throughout life.

- Children who redeemed 1 voucher in 2020 reported the sharpest increase in the proportion of children finding physical activity fun 8 weeks after using their voucher. This may be a result of children not being able to access sport and physical activity programs during the COVID-19 pandemic. See Figure 7.

- Children who redeemed 2 vouchers in 2020 reported finding physical activity fun and this increased more than 27 weeks after redeeming their Active Kids voucher. This could imply that engaging with the Active Kids program helped children have fun through physical activity. See Figure 7.

- Having the autonomy to be physically active during your free time is an essential indicator of self-efficacy for physical activity. Over 85% of children reported strongly agreeing they could be active in their free time 27 weeks after using an Active Kids voucher. See Figure 8.

Figure 7 Changes in the proportion of children who indicated 'somewhat agree' or 'strongly agree' that being physically active is fun

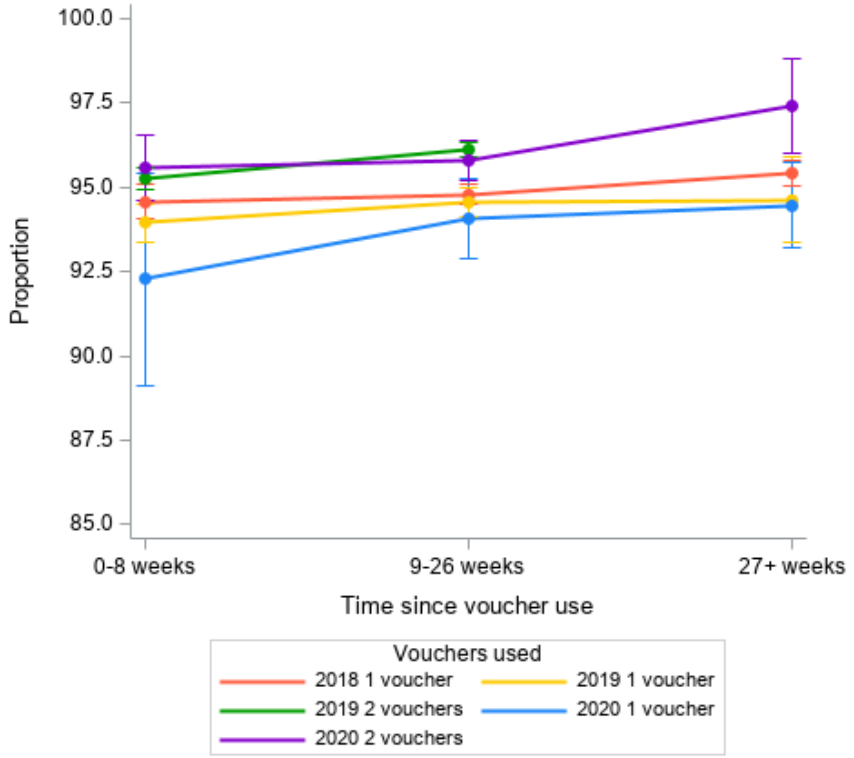
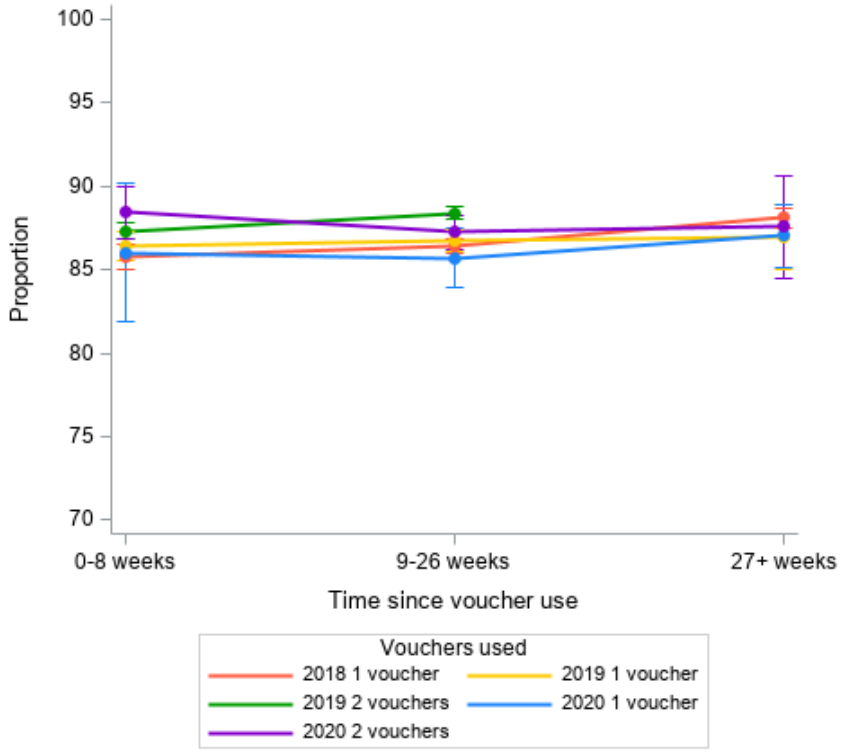


Figure 8 Changes in the proportion of children who indicated 'somewhat agree' or 'strongly agree' that they can be physically active in their free time



Increased participation in eligible programs by children, particularly those who are inactive[18]

This section focuses on the sixth blue box under short-term impacts in the logic model (Figure 1).

Data here focuses on the participation undertaken as a direct result of redeeming (using) an Active Kids voucher at a selected Active Kids approved provider[19].

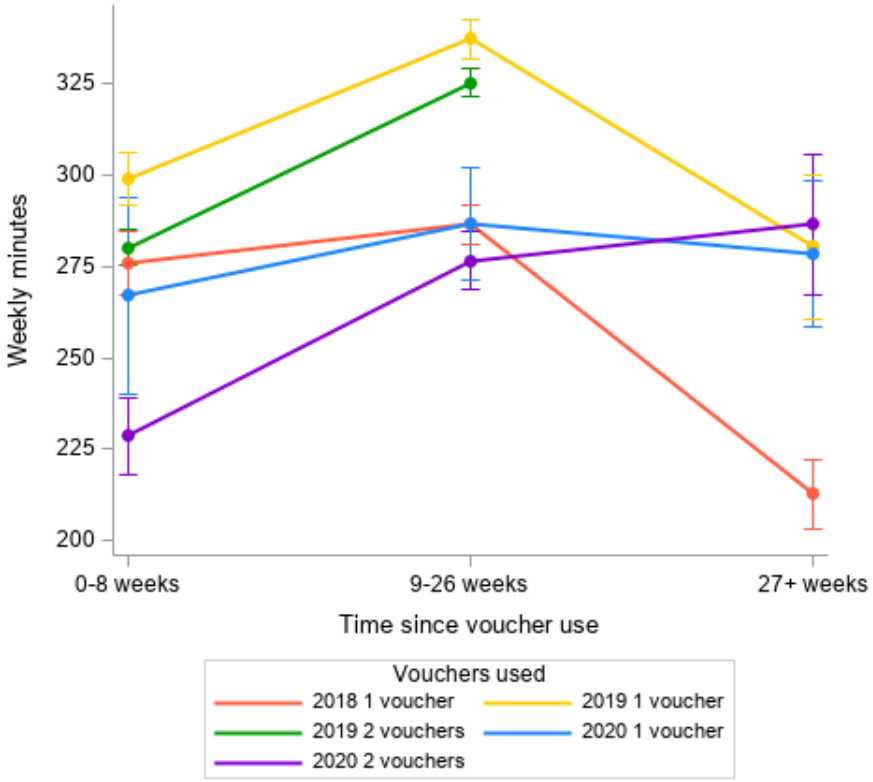
Voucher activity participation is captured by an adult and/or child reporting the frequency of sessions and average duration of a typical session for the activity that the voucher was redeemed. Only children who redeemed a voucher are included in these analyses.

- All children, irrespective of the number of vouchers redeemed in 2018, 2019, or 2020 report participating in over 200 minutes of activity in a typical week at the activity where the Active Kids voucher was redeemed. Therefore, the Active Kids voucher is facilitating over 200 minutes (>3 hours) of physical activity for children in a typical week.

- A mixed pattern here in Figure 9 - generally, the trend infers increased participation in voucher activity up to 26 weeks after using a voucher, with declines observed 27+ weeks after redemption.

[18] Children who were classified as not achieving physical activity guidelines at voucher registration.
[19] A caveat in interpretating this information is the lack of available information on the sessions and delivery of the voucher activity by the approved Active Kids providers. All information is self-report from the adult caregivers and children.

Figure 9 Changes in minutes spent participating in the voucher activity



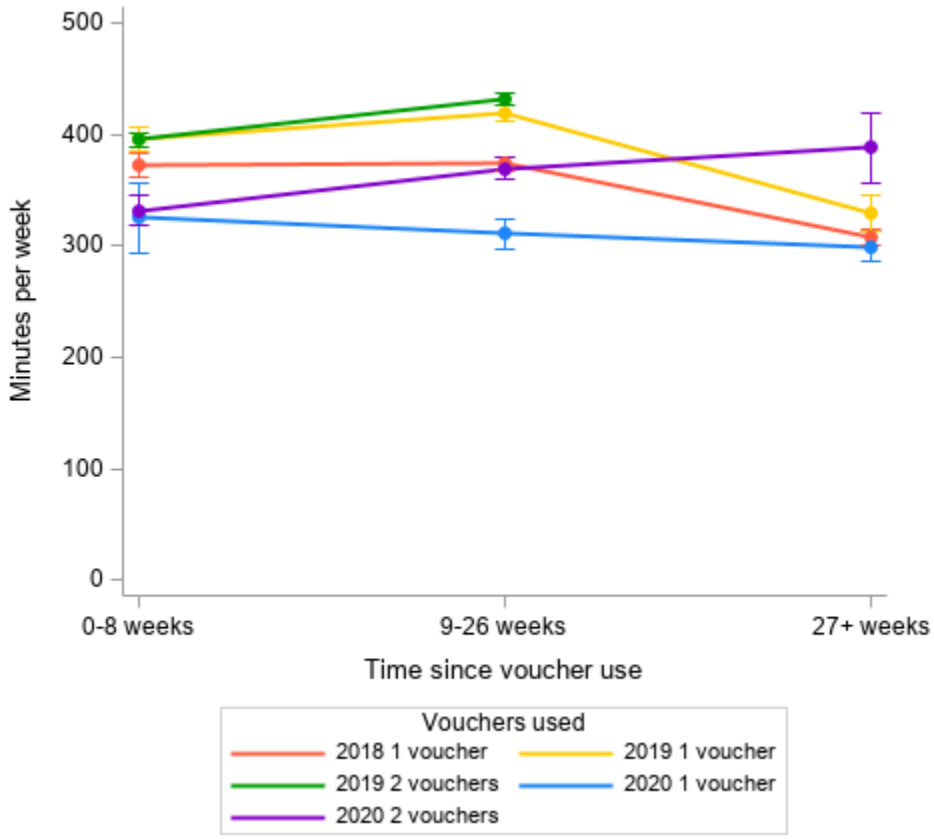
- Children who redeemed 2 vouchers in 2020 report the lowest participation in their voucher activity up to 8 weeks after redemption (just over 225 minutes); this is likely due to COVID-19 restrictions. Although there were limitations on participation in their voucher activity, children report increased time spent being physically active with their voucher 27 weeks after using a voucher.

- Children who redeemed 2 vouchers in 2020 had the highest rates of weekly participation in minutes (388 minutes) 27+ weeks after using their first voucher. This may be a reflection of COVID-19 restrictions easing and children participating in their second voucher activity within 6 months of their first voucher being used.

- Declines in weekly participation in minutes are observed 26 weeks after using their first voucher for children who used 1 voucher in 2018, 2019. This suggests the use of 2 voucher could be enabling higher levels of participation in organised sport and physical activity to be maintained 27 weeks after using a voucher, for physically inactive children.

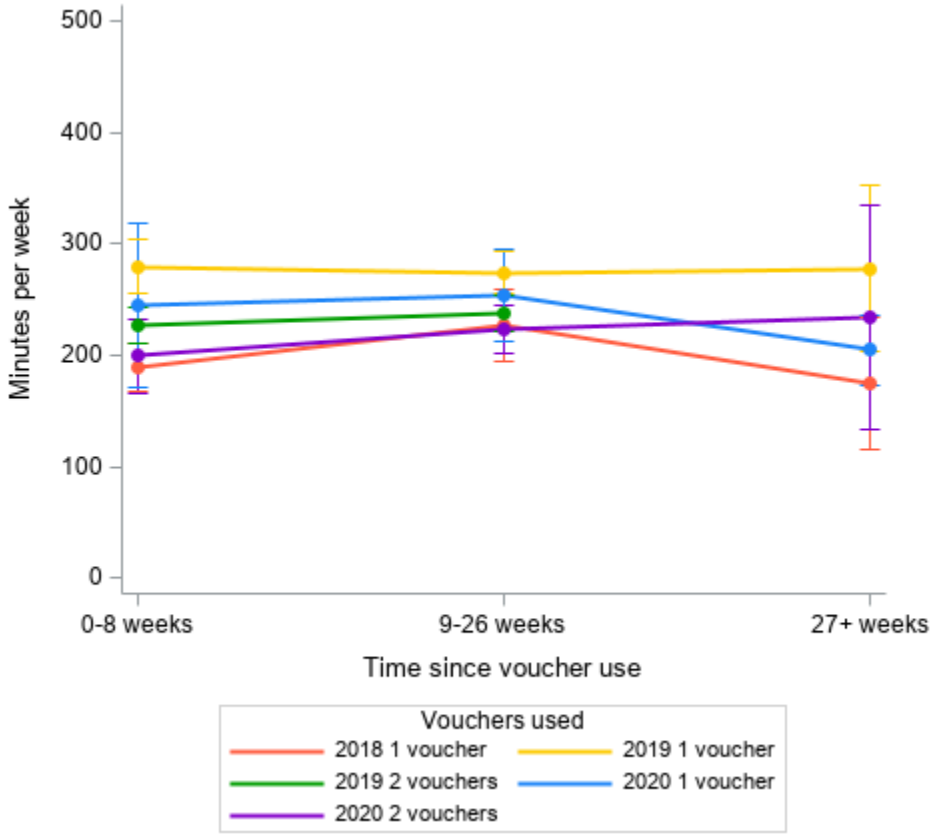
- Children who reported being physically inactive at voucher registration maintained over 300 minutes of weekly participation 27 weeks after redeeming a voucher (Figure 10).

Figure 10 Changes in weekly minutes participating in organised sport since first voucher use in 2018, 2019, and 2020 for inactive children



- Children who reported not playing any sport in the previous 12 months at the point of claiming a voucher, reported between 180 minutes and 250 minutes of activity 8 weeks after using a voucher. This level of participation was maintained up to 27 weeks after first voucher use (Figure 11).

Figure 11 Changes in weekly minutes participating in organised sport since first voucher use in 2018, 2019, and 2020 for non-sporty children

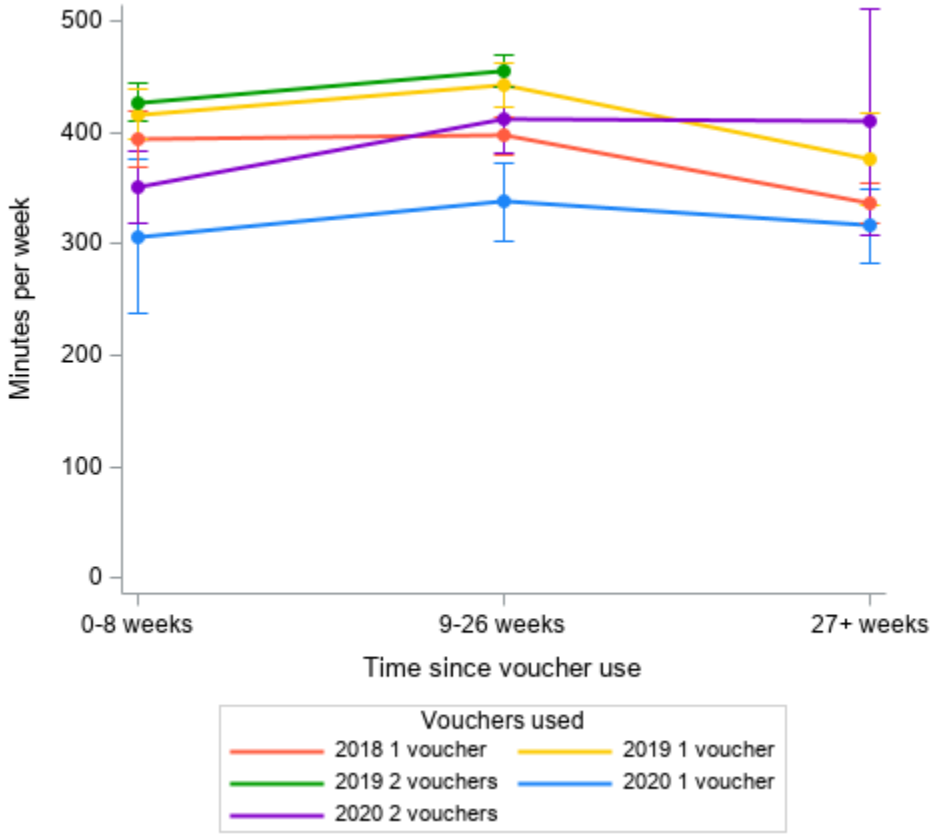


- Children residing in the most disadvantaged areas participated in over 300 minutes of organised sport and physical activity in a typical week, 8 weeks after redeeming their first voucher (Figure 12).

- Differences exist between number of vouchers redeemed across 2018, 2019, and 2020, yet the pattern of participation is similar. Increases in minutes of participation per week up to 26 weeks after voucher redemption, with some declines observed 27 weeks after.

- Only children who used 2 vouchers in 2020 continued to increase participation after using their first voucher, reporting 409 minutes of participation in a typical week, 27 weeks after using a voucher.

Figure 12 Changes in weekly minutes participating in organised sport since first voucher use in 2018, 2019, and 2020 for children living in disadvantaged areas



Increased membership of registered providers

This section focuses on qualitative data to support the seventh blue box under short term impacts in the logic model (Figure 1). The NSW Government Office of Sport did not include the collection of this data on the SPRINTER workplan in 2019 or 2020. Process evaluation data collected by the Office of Sport does not assess the overall membership of registered Active Kids providers, only the number of vouchers redeemed by providers. This qualitative data was collected through telephone interviews with a small, representative sample of Active Kids providers in 2018 (n=28).

- The perception of the Active Kids program among interviewed providers was positive. The government program aims strongly aligned with those of the providers – to get more kids more active. This common goal contributed to the acceptability of the Active Kids program from participating providers.

- Providers recognised the importance of keeping their activity costs low to encourage participation; with the introduction of the Active Kids vouchers, families could access reduced fees without impacting the organisation's financial stability.

  "[The Active Kids program aims] to remove barriers for parents for putting their kids into sports. We are always trying to incentivise parents to get their kids active and into our programs. It's a win-win" Committee member, Medium Affiliated organisation.

- Nearly all (n=28) providers kept offering their usual activities, as they already met the government criteria. When asked about getting more participants in their activity, providers highlighted the inclusive nature of their usual activity. They reported they just need to just raise awareness of what they offer and the benefits of participating.

  "All of our programs were term-based anyway; they run for greater than the minimum requirement of eight weeks for the Active Kids program. So, it wasn't necessarily a change for us." Manager, Non-affiliated, large organization

- The Active Kids vouchers provided new motivation for recruiting new participants for some providers and their staff members. Those working in socioeconomically disadvantaged areas and/or with low-cost activities most reported this shift in approach.

- Knowing that families would be assisted financially through the Active Kids program and that membership would not result in less money for essential items empowered staff to encourage families to invest in their child's sports registration.

  "It's been a positive impact on staff because they feel that they can better sell our programs to other people and know the fact that everybody can be involved in these programs, even if they are a little bit socio-economically disadvantaged in any way, they don't have the financial means, they can definitely provide that opportunity to them. Which is great, because it makes them feel more confident talking to people on the phone, it makes them feel empowered as well." Manager, Non-affiliated large organization

  "It's very hard to get the money from the parents, and a lot of the time, they've got other kids doing other sports and everything, so now with this Active Kids program, the money's there, and they don't have to go searching for it, and I've claimed it all. I think it's the first time in many years it's all been paid up, and I'm not chasing them up during the year." Committee member, SSO

- This empowerment of staff and volunteers facilitated further promotional activities to increase participant recruitment. Providers took the Active Kids program as an opportunity to promote their activity as well as ensure their community members were aware of how to utilise the vouchers.

- Many interviewed providers (n=16) reported increasing their marketing activity once registered as a provider and included Active Kids in their promotional materials.

  "I've now added the approved provider logo that the New South Wales government said that we could add…. certainly, having that logo on our marketing is reducing the barrier to entry."

  "It has driven our marketing, so it's increased it, because we never used to use Facebook and we didn't use things like Snapchat and Instagram and all that. Whereas we get the kids, our older kids like our 16 and 17-year-old kids, we get them to do the Snapchat and Instagram things." Committee member, Medium Affiliated organisation

- One participant reported holding a forum in her regional community after noticing that local families were not aware of the voucher or how to access them. They conducted sessions to increase registration of children in any structured physical activity opportunity, not just specifically their sport.

  "In our community hall, we set up three stations of laptops. And we got parents to come in with a group of community people and show them how to use the laptops to get onto their sites to get the access, and then they could print them out there and then, or they could just write their number down and access them later and lodge it wherever they wanted to" Committee member, Medium Affiliated organisation

- Another organisation reported doing presentations at local schools to increase awareness of their sport and the Active Kids program. Most providers (n=26) reported asking individuals whether they had an Active Kids voucher when they began the registration process with a new or existing member. Those who actively asked parents and carers if they had a voucher would often help people to sign up their children to the Active Kids program online before taking their registration fee.

  "for us, it's about making sure that all our membership knows about it, how to access it, especially when the second one came available as well. Make sure you guys go and get your second one. Getting that first touch with our membership, to ensure the fact that they understand all the goodies that are available there for people to be able to utilise." Manager, large non-affiliated organisation

- Providers who only chose to engage with Active Kids due to consumer demand (n=3) reported challenges engaging with the Active Kids program.

- If medium and large Active Kids providers did not have systems integrated within their registration process which made redemption of vouchers simple to process, they were far less likely to encourage registering families to redeem a voucher.

  "Well, we definitely added to our website that we are an Active Kids provider because then it deflects a lot of questions." Business owner, large non-affiliated organisation

The next section will focus on the **medium-term impacts.**

Medium-term Impacts

This section presents data to assess progress against the medium-term outcomes articulated in the Active Kids logic model (Figure 1).

This section predominantly sought to determine the Active Kids voucher's role in enabling children to start a new activity or maintain their participation. Outcomes include:

- New participation in structured physical activity and sport by inactive children.
- Increased participation in structured physical activity and sport by children who are already participating.
- Maintenance of participation in structured physical activity and sport by children.
- Increased capability of registered providers to promote physical activity to children and young people.
- Increased participation in the eligible programs by children particularly; children living in regional and remote NSW; Female children; Culturally and Linguistically Diverse children; Aboriginal and/or Torres Strait Islander children; Children living with a disability; Children aged 12-18; Children from low[20] socio-economic areas.
- Increased capability of providers to develop inclusive and accessible programs/places that promote a positive culture of physical activity. (This outcome was added in 2020 by NSW Office of Sport and was not a priority for the SPRINTER evaluation hence no data available to show here).
- Retention rates for children in the Active Kids program from 2018 to 2019 and 2020 by demographics, active/inactive status, and sport status.

To showcase these outcomes, data is presented from children who claimed an Active Kids voucher in the calendar years, 2018, 2019 and 2020 by their physical activity status (physically inactive and achieved physical activity guidelines). All information regarding the priority populations is obtained by information provided by parents/caregivers at voucher registration. Information regarding the sample sizes and data analysis used for this section can be found on page 15.

Data presented here focuses on the role of the Active Kids voucher in enabling new participation. New participation is defined as children who were physically inactive at registration; children who had not participated in sport outside of school in the previous 12 months. Data is also presented for children whose caregivers planned to start the child in a new activity using the Active Kids voucher, by redemption of none, one or two vouchers each year.

COVID-19 should be considered when interpreting the medium-term outcomes. In 2020, as part of the restriction measures, daily activities such as community organised sport and physical activity were severely disrupted and opportunities to engage in physical activity were substantially reduced, resulting in an inability to redeem an Active Kids voucher. It is likely that the 24+ month timepoint was impacted by these restrictions.

This section presents total (overall) participation in structured physical activity and sport of the child, not just voucher activity which was explained in detail in the short-term impacts section. This focus enables us to understand how the Active Kids voucher activity influenced overall physical activity levels in the medium term.

[20] Low means most disadvantaged

MEDIUM TERM IMPACTS SUMMARY

- ✓ Retention was high, with 441,776 children claiming an Active Kids voucher in all three years.
- ✓ The number of vouchers a child redeemed was associated with higher rates of initial and maintained participation in organised sport and physical activity.
- ✓ Four out of five children were classified as physically inactive and planned to use their Active Kids voucher to start a new activity
- ✓ The Active Kids voucher stimulated one additional day per week of children's participation in physical activity, reaching a peak after 12-18 months of using program vouchers. This demonstrates durable benefits from voucher use.
- ✓ The program had cumulative benefits with children who redeemed more vouchers reported higher levels of organised sport and physical activity participation in minutes per week 6 months after using their first voucher
- ✓ Improvement in organised sport and physical activity participation were more pronounced in priority populations that used a voucher. Intensely targeted implementation strategies are required to achieve greater social gains.

New participation[21] in structured physical activity and sport by inactive[22] children

This section presents data to evidence progress against the first blue box articulated in the medium-term impacts section of the logic model (Figure 1).

Demographic characteristics of children whose parents/caregivers were planning to use their voucher for the child to start a new activity, classified by the achievement of physical activity guidelines at registration in calendar years 2018, 2019 and 2020, are presented in Table 5.

- Higher proportions of parent/caregivers planned to use their voucher for a new activity in 2020 compared with 2018 and 2019.

- In 2020, 81.7% (n=162, 203) of parents/caregivers reported their child to be physically inactive when claiming a voucher and planned to use their voucher for a new activity.

[21] New participation was defined as adults care givers who planned to use their voucher for the child to start a new activity at voucher registration or any participation reported amongst children who reported not playing sport or were classified as physically inactive at voucher registration.

[22] Inactive children are defined as children who are not currently meeting physically activity guidelines

- 90.8% (n=16,396) of adolescents who planned to use their voucher for a new activity were classified as physically inactive.

- 79.5% (n=10,482) of children who identified as Aboriginal and/or Torres Strait Islander and planned to use their voucher on a new activity were physically inactive.

- 81.5% (n=167,888) of children who planned to use their voucher for a new activity redeemed a voucher in 2020. This is lower than 2019 (n=176,963; 84.6%) but higher than 2018 (n=141,885; 82.4%).

- In 2020, 67% (n=12,742) of adolescents who planned to use their voucher for a new activity redeemed a voucher.

- In 2020, n=8,684 children in the most disadvantaged areas and n=10,303 children in the least disadvantaged areas did not redeem a voucher after reporting they intended to use a voucher for a new activity when it was claimed.

- In 2020, n=28,886 children did not redeem their voucher who live in major cities and after they reported they intended to use their voucher for a new activity when it was claimed.

If the Active Kids program is to facilitate new participation, focusing on specific children who claim but don't redeem a voucher with the Active Kids program could be an efficient strategy. '*Targeting the low-hanging fruit*'. Data suggests these groups include adolescents, major cities, and different levels of socio-economic status.

Table 5 Demographics of all children who planned to use their voucher for a new activity at registration, by inactive and active at registration in calendar years 2018, 2019 and 2020

	2018				2019				2020			
	Did not meet guidelines		Met guidelines		Did not meet guidelines		Met guidelines		Did not meet guidelines		Met guidelines	
	N	%	N	%	N	%	N	%	N	%	N	%
All persons	130,171	80.2	32,174	19.8	161,700	81.8	35,900	18.2	162,203	81.7	36,325	18.3
Age category												
4-8	64,305	76.2	20,100	23.8	78,617	77.4	22,951	22.6	79,055	76.8	23,899	23.2
9-11	32,430	81.6	7,293	18.4	39,314	83.8	7,587	16.2	38,213	84.2	7,182	15.8
12-14	21,971	86.7	3,357	13.3	28,377	88.6	3,654	11.4	28,539	88.8	3,583	11.2
15-18	11,465	89.0	1,424	11.0	15,392	90.0	1,708	10.0	16,396	90.8	1,661	9.2
Sex												
Boys	66,901	77.0	20,005	23.0	82,064	79.1	21,675	20.9	81,271	78.8	21,811	21.2
Girls	63,125	83.9	12,145	16.1	79,467	84.9	14,175	15.1	80,515	84.8	14,447	15.2
Missing	145	85.8	24	14.2	169	77.2	50	22.8	417	86.2	67	13.8
Aboriginal identity												
Aboriginal and Torres Strait Islander	8,436	75.5	2,737	24.5	10,467	78.3	2,904	21.7	10,483	79.5	2,703	20.5
Non-Aboriginal and Torres Strait Islander	120,196	80.5	29,041	19.5	149,413	82.1	32,530	17.9	150,239	81.9	33,261	18.1
Prefer not to say	1,539	79.5	396	20.5	1,820	79.6	466	20.4	1,481	80.4	361	19.6
Primary language spoken at home												
English	118,557	79.7	30,121	20.3	145,844	81.4	33,419	18.6	144,714	81.1	33,641	18.9
Other	11,614	85.0	2,053	15.0	15,856	86.5	2,481	13.5	17,489	86.7	2,684	13.3
Identified disability												

	2018				2019				2020			
	Did not meet guidelines		Met guidelines		Did not meet guidelines		Met guidelines		Did not meet guidelines		Met guidelines	
	N	%	N	%	N	%	N	%	N	%	N	%
Yes	4,247	81.3	980	18.7	5,556	82.8	1,156	17.2	6,753	83.3	1,358	16.7
No	124,204	80.1	30,817	19.9	153,893	81.8	34,313	18.2	152,896	81.6	34,471	18.4
Prefer not to say	1,601	81.6	360	18.4	2,251	83.9	431	16.1	2,554	83.7	496	16.3
Missing	119	87.5	17	12.5								
Socio-economic status												
1st (most disadvantaged)	24,053	80.7	5,761	19.3	30,619	83.3	6,151	16.7	29,885	83.8	5,788	16.2
2nd	30,889	78.6	8,434	21.4	38,453	80.3	9,463	19.7	36,628	79.8	9,277	20.2
3rd	33,377	80.4	8,151	19.6	43,237	82.0	9,507	18.0	43,830	82.0	9,618	18.0
4th (least disadvantaged)	38,377	80.8	9,090	19.2	49,279	82.1	10,750	17.9	51,810	81.7	11,635	18.3
Missing	3,475	82.5	738	17.5	112	79.4	29	20.6	50	87.7	7	12.3
Location												
Major Cities of Australia	92,421	81.8	20,513	18.2	119,722	83.3	23,933	16.7	123,108	83.1	25,091	16.9
Inner Regional Australia	27,205	76.2	8,509	23.8	33,588	78.4	9,253	21.6	31,642	78.1	8,887	21.9
Outer Regional and remote Australia	7,225	74.7	2,441	25.3	8,299	75.5	2,686	24.5	7,408	76.0	2,339	24.0
Missing	3,320	82.4	711	17.6	91	76.5	28	23.5	45	84.9	8	15.1
Body mass index category												
Thin	6,631	76.0	2,093	24.0	17,149	79.0	4,572	21.0	18,699	78.4	5,139	21.6
Healthy weight	32,891	78.8	8,845	21.2	78,567	81.3	18,120	18.7	80,273	80.9	18,978	19.1
Overweight	10,188	82.9	2,099	17.1	27,929	84.9	4,958	15.1	28,819	84.6	5,230	15.4

	2018				2019				2020			
	Did not meet guidelines		Met guidelines		Did not meet guidelines		Met guidelines		Did not meet guidelines		Met guidelines	
	N	%	N	%	N	%	N	%	N	%	N	%
Obesity	5,684	83.7	1,106	16.3	19,399	84.5	3,561	15.5	20,757	84.8	3,715	15.2
Missing	74,777	80.6	18,031	19.4	18,656	79.9	4,689	20.1	13,655	80.7	3,263	19.3
Sport participation												
None	6,825	84.5	1,256	15.5	27,345	83.2	5,521	16.8	29,419	82.6	6,187	17.4
At least once a month	50,915	84.1	9,648	15.9	51,585	86.0	8,422	14.0	58,350	85.8	9,619	14.2
At least once a week	38,741	81.4	8,869	18.6	37,592	81.4	8,566	18.6	35,453	79.7	9,013	20.3
At least twice a week	18,835	77.3	5,517	22.7	32,637	81.7	7,329	18.3	32,375	81.0	7,586	19.0
At least four times a week	7,307	62.6	4,371	37.4	6,782	63.6	3,886	36.4	4,973	61.7	3,083	38.3
Not sure	6,022	72.5	2,287	27.5	5,759	72.6	2,176	27.4	1,633	66.1	837	33.9
Missing	1,526	87.1	226	12.9								

Table 6 Demographics of all children who planned to use their voucher for a new activity at registration, by redemption in calendar years 2018, 2019 and 2020

	2018				2019				2020			
	Did not redeem		Redeemed		Did not redeem		Redeemed		Did not redeem		Redeemed	
	N	%	N	%	N	%	N	%	N	%	N	%
All persons	30,343	17.6	141,885	82.4	32,248	15.4	176,963	84.6	38,165	18.5	167,888	81.5
Age category												
4-8	9,912	11.1	79,431	88.9	11,360	10.6	96,198	89.4	15,952	15.0	90,689	85.0
9-11	7,195	17.1	34,867	82.9	7,439	15.0	42,062	85.0	8,041	17.1	38,890	82.9
12-14	7,269	27.0	19,646	73.0	7,541	22.2	26,372	77.8	7,860	23.5	25,567	76.5
15-18	5,967	42.9	7,941	57.1	5,908	32.4	12,331	67.6	6,312	33.1	12,742	66.9
Sex												
Boys	14,794	16.1	77,179	83.9	15,786	14.4	93,711	85.6	18,552	17.4	88,204	82.6
Girls	15,510	19.4	64,542	80.6	16,410	16.5	83,032	83.5	19,511	19.8	79,248	80.2
Missing	39	19.2	164	80.8	52	19.1	220	80.9	102	19.0	436	81.0
Aboriginal identity												
Aboriginal and Torres Strait Islander	2,641	22.0	9,358	78.0	2,630	18.3	11,738	81.7	3,024	21.8	10,823	78.2
Non-Aboriginal and Torres Strait Islander	27,280	17.3	130,763	82.7	29,205	15.2	163,074	84.8	34,780	18.3	155,453	81.7
Prefer not to say	422	19.3	1,764	80.7	413	16.1	2,151	83.9	361	18.3	1,612	81.7
Primary language spoken at home												
English	26,451	16.8	130,565	83.2	27,876	14.8	161,062	85.2	32,840	17.8	151,814	82.2
Other	3,892	25.6	11,320	74.4	4,372	21.6	15,901	78.4	5,325	24.9	16,074	75.1
Identified disability												
Yes	1,716	29.0	4,199	71.0	1,903	25.1	5,680	74.9	2,585	29.5	6,187	70.5
No	28,079	17.1	135,773	82.9	29,716	15.0	168,792	85.0	34,806	17.9	159,158	82.1

	2018				2019				2020			
	Did not redeem		Redeemed		Did not redeem		Redeemed		Did not redeem		Redeemed	
	N	%	N	%	N	%	N	%	N	%	N	%
Prefer not to say	525	22.6	1,796	77.4	629	20.2	2,491	79.8	774	23.3	2,543	76.7
Missing	23	16.4	117	83.6	.	.	.	.	.	.	.	.
Socio-economic status												
1st (most disadvantaged)	7,679	23.5	25,050	76.5	7,978	19.8	32,217	80.2	8,684	23.0	29,112	77.0
2nd	6,988	16.8	34,673	83.2	7,597	15.0	43,185	85.0	8,748	18.4	38,884	81.6
3rd	7,366	16.8	36,529	83.2	8,428	15.1	47,285	84.9	10,410	18.8	44,967	81.2
4th (least disadvantaged)	6,933	14.0	42,474	86.0	8,230	13.2	54,144	86.8	10,303	15.8	54,885	84.2
Missing	1,377	30.4	3,159	69.6	15	10.2	132	89.8	20	33.3	40	66.7
Location												
Major Cities of Australia	21,076	17.6	98,927	82.4	24,190	15.9	128,170	84.1	28,886	18.7	125,189	81.3
Inner Regional Australia	6,254	16.6	31,451	83.4	6,397	14.2	38,762	85.8	7,519	17.9	34,397	82.1
Outer Regional and remote Australia	1,671	16.4	8,508	83.6	1,646	14.2	9,921	85.8	1,740	17.4	8,267	82.6
Missing	1,342	30.9	2,999	69.1	15	12.0	110	88.0	20	36.4	35	63.6
Body mass index category												
Thin	1,170	3.86	7,887	87.1	3,135	3.86	19,741	86.3	4,238	3.86	20,365	82.8
Healthy weight	6,505	21.44	36,644	84.9	14,974	21.44	86,066	85.2	17,663	21.44	84,567	82.7
Overweight	2,155	7.1	10,687	83.2	5,721	7.1	29,065	83.6	6,927	7.1	28,486	80.4
Obesity	1,370	4.52	5,882	81.1	4,117	4.52	20,612	83.4	5,331	4.52	20,374	79.3
Missing	19,143	63.09	80,785	80.8	4,301	63.09	21,479	83.3	4,006	63.09	14,096	77.9
Met physical activity guidelines												

	2018				2019				2020			
	Did not redeem		Redeemed		Did not redeem		Redeemed		Did not redeem		Redeemed	
	N	%	N	%	N	%	N	%	N	%	N	%
Yes	4,156	12.9	28,018	87.1	4,220	11.8	31,680	88.2	5,377	14.8	30,948	85.2
No	23,377	18.0	106,794	82.0	25,205	15.6	136,495	84.4	30,458	18.8	131,745	81.2
Missing	2,810	28.4	7,073	71.6	2,823	24.3	8,788	75.7	2,330	31.0	5,195	69.0
Sport participation												
None	2,600	8.57	6,732	72.1	8,472	8.57	29,486	77.7	11,479	8.57	27,923	70.9
At least once a month	14,016	46.19	51,040	78.5	10,291	46.19	51,946	83.5	13,829	46.19	55,859	80.2
At least once a week	6,486	21.38	42,020	86.6	5,214	21.38	41,581	88.9	5,464	21.38	39,404	87.8
At least twice a week	3,134	10.33	21,484	87.3	5,188	10.33	35,460	87.2	5,830	10.33	34,618	85.6
At least four times a week	1,420	4.68	10,338	87.9	1,072	4.68	9,648	90.0	761	4.68	7,347	90.6
Not sure	2,368	7.8	8,805	78.8	2,011	7.8	8,842	81.5	802	7.8	2,737	77.3
Missing	319	1.05	1,466	82.1	.	1.05	.	.	.	.	.	.

Physically inactive children

Children who were classified as physically inactive at voucher registration, participated in over 300 minutes organised sport and physical activity per week up to 6 months after redeeming their first voucher (Figure 13).

- Physically inactive children at voucher registration maintained over 260 minutes of participation 2 years after redeeming their first voucher. This suggests the Active Kids vouchers are enabling physically inactive children to participate in organised sport and physical activity in the short (6 months) and longer term (2 years).

- At each timepoint, children who redeemed more vouchers participated in higher levels of organised sport. Children who redeemed all 5 vouchers who were physically inactive at voucher registration, reported over 402 minutes (95%CI 393-412 minutes) 6 months after using a voucher which peaked at 12-18 months at 483 minutes (95%CI 475-492 minutes), and maintained at 389 minutes (95%CI 377-402 minutes) 2 years later.

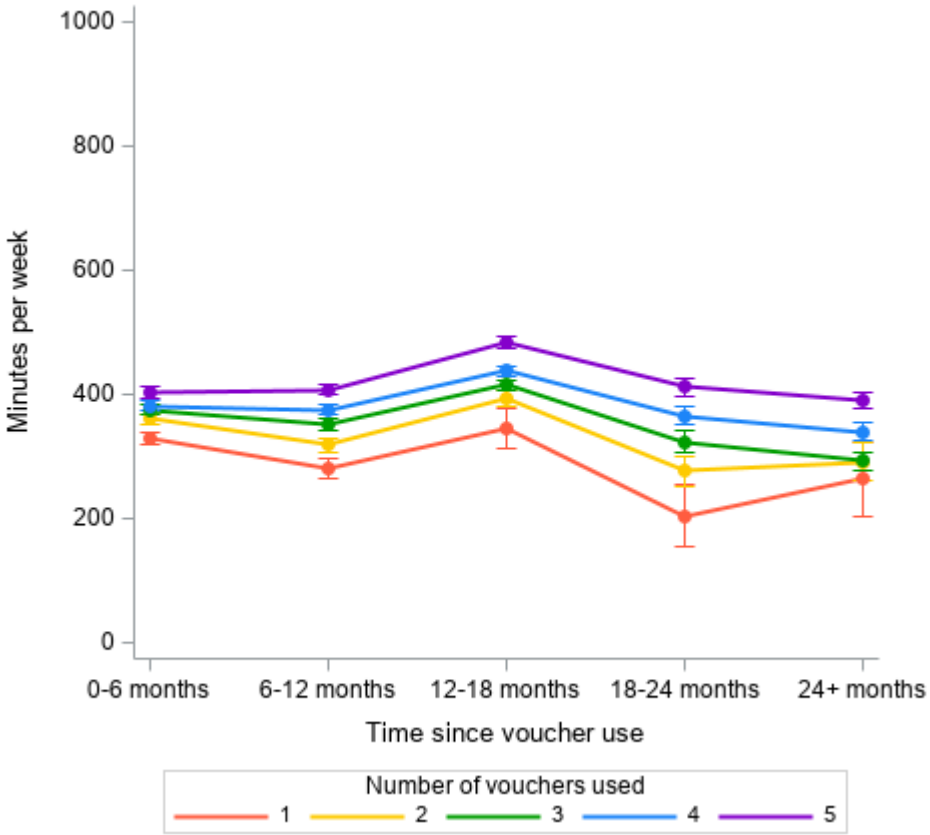
- Children who used 1 voucher had lower levels of participation compared to children who used 2 – 5 vouchers, and their participation dropped substantially 18-24 months later at 205 minutes (95%CI 155-254 minutes).

- If we compare participation levels amongst these physically inactive children (Figure 13) with all children (Figure 15), the same pattern exists. Children who redeem 5 vouchers consistently report higher levels of participation per week than children who use 1-4 vouchers, with children using 1 voucher also consistently reporting the lowest participation levels.

- Physically inactive children who use 5 vouchers maintain higher levels of participation per week compared to other physically inactive children using less vouchers, but still report lower number of minutes per week than all children. At 6 months after using a voucher physically inactive children report 402 minutes (95%CI 393-412 minutes) compared to all children who used 5 vouchers reporting 423 minutes (95% CI 414-431 minutes). At 2 years after redeeming a voucher, physically inactive children report 389 minutes per week (95%CI 377-402 minutes) compared to all children who report 414 minutes (95% CI 403-425).

In summary, the number of vouchers redeemed is associated with higher levels of participation per week 2 years after using a voucher. Physically inactive children maintain participation in organised sport and physical activity per week 2 years after using a voucher but overall, their participation is lower than all children.

Figure 13 Changes in weekly minutes participating in organised sport since first voucher use in 2018, 2019, and 2020 for inactive children



Children choosing a new activity

- The Active Kids voucher facilitates access to, and ongoing participation in, new activities for children across NSW. This is reflected in data gathered by children who reported intending to redeem their voucher at a new activity at voucher registration (Figure 14).

- The number of vouchers redeemed affects the numbers of minutes participating in organised sport and physical activity per week, with 5 vouchers redeemed reporting higher participation.

- 6 months after using a voucher, children who intended to use their voucher at a new activity and redeemed 1 voucher, reported 298 minutes of participation per week (95%CI 285-311 minutes).

- Children who redeemed 5 vouchers and intended to use their voucher at a new activity, reported 340 minutes of participation per week (95%CI 325-355 minutes).

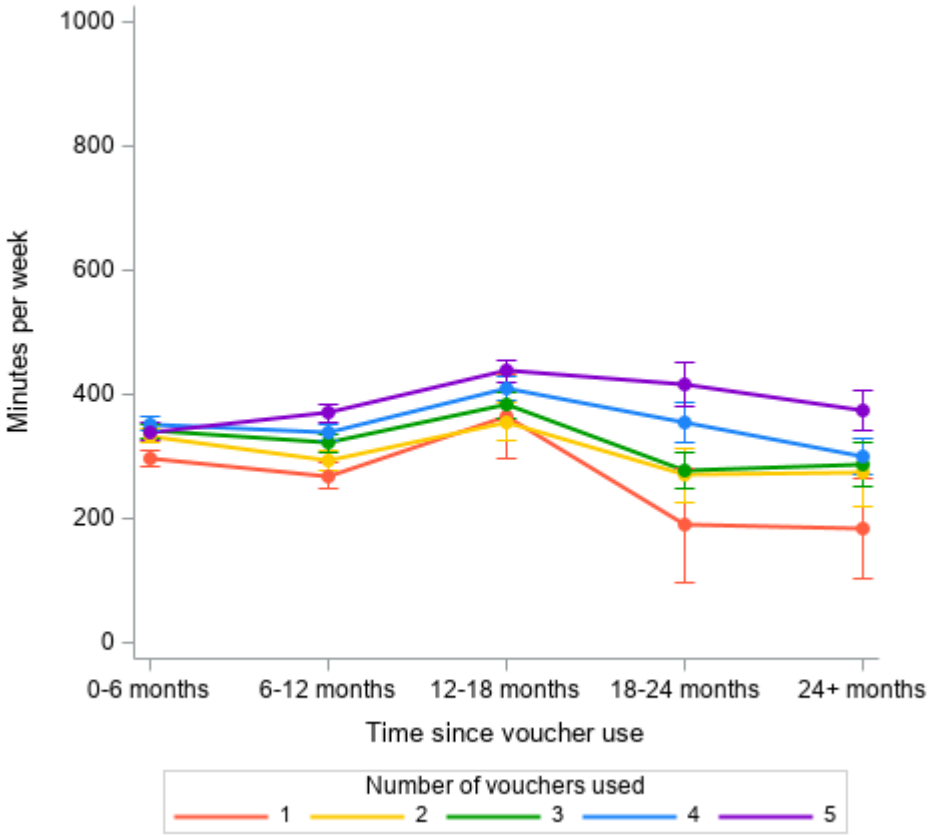
- Participation per week appears to peak 18 months after using a voucher irrespective of the number of vouchers redeemed.

- Only children who redeemed 4 or 5 vouchers maintained higher levels of participation per week 2 years after redeeming a voucher (4 vouchers 300 minutes, 95%CI 271-329 minutes, 5 vouchers 374 minutes 95%CI 341-407 minutes) than reported 0-6 months after using a voucher (4 vouchers 353 minutes 95%CI 342-364 minutes, 5 vouchers 340 minutes 95%CI 325-355 minutes). This suggests that the more vouchers redeemed, the

higher levels of participation are maintained for a longer period, amongst children who intend to use their voucher for a new activity.

- Compared to all children (Figure 15), children who planned to use their voucher for a new activity (Figure 14) had consistently lower levels of participation in organised sport and physical activity per week, at all-time points over the 2-year period.

Figure 14 Changes in weekly minutes participating in organised sport since first voucher use in 2018, 2019, and 2020 for children intending to use their voucher on a new activity



Increased participation in structured physical activity and sport by children who are already participating

This section presents data on the second box in the logic model under medium-term impacts (Figure 1).

Data are from children who were already engaged in sport and physical activity when claiming for an Active Kids voucher, to explore changes in their overall participation after using an Active Kids voucher.

Exploring the changes in weekly minutes spent participating in sport after redeeming a voucher helps determine whether the Active Kids voucher supported increased physical activity and/or maintenance of physical activity.

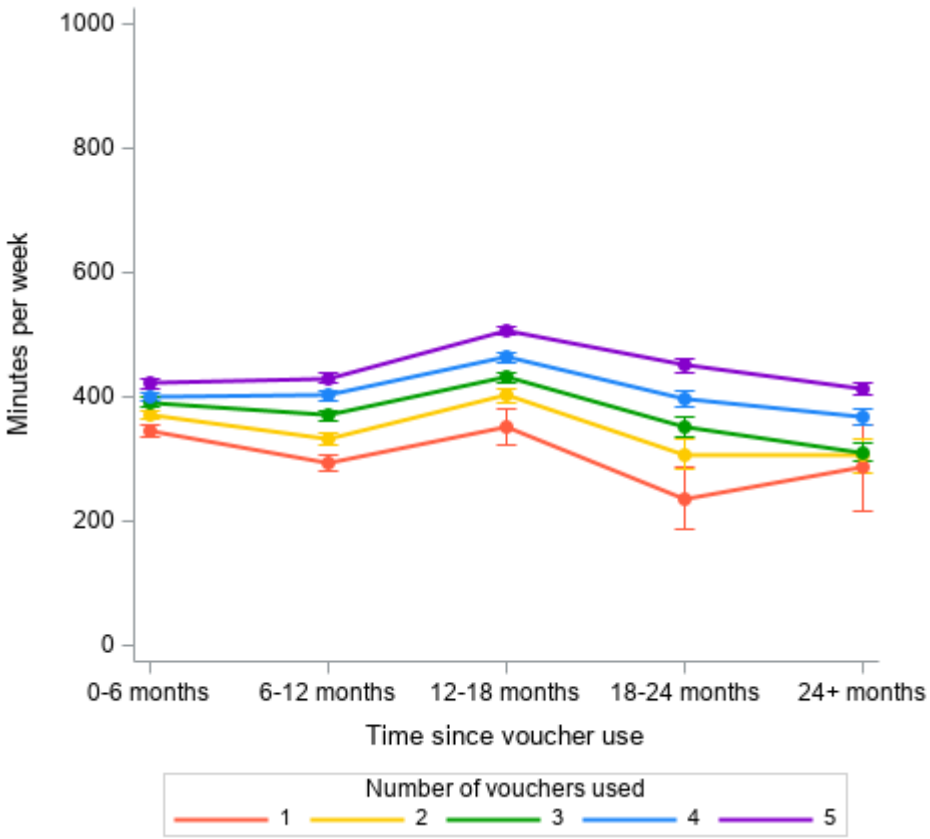
- The use of more vouchers amongst children who reported playing sport for at least one session in the previous 12 months, was associated with a higher number of minutes spent playing organised sport and physical activity each week.

- Children who had participated in at least one session of sport in the previous 12 months at voucher registration, reported over 350 minutes of organised sport and physical activity 0-6 months after using a voucher.

- For all children who used between 1 and 5 vouchers participation peaked 12-18 months after using a voucher, although children who used all 5 vouchers showed the steepest increases.

- Whilst all children who used 1 – 5 vouchers reduced the number of minutes spent each week participating in organised sport and physical activity, children who used 1 voucher reduced participation steeply, 18-24 months after using their first voucher, with an increase observed at the 24 months+ time point (Figure 15).

Figure 15 Changes in weekly minutes participating in organised sport since first voucher use in 2018, 2019, and 2020 for all children



Maintenance of participation in structured physical activity and sport by children

This section presents data on the third and fifth box in the logic model under medium-term impacts (Figure 1).

Data is presented from all children who completed at least 1 survey during 2018, 2019 and/or 2020 with time since voucher use taken from the time a child redeemed their first voucher. Children are split according to the number of vouchers they have used across the 3 years which is between 1 voucher and 5 vouchers.

The data presented helps identify the patters of participation behaviour in structured sport and physical activity in minutes per week, over time, up to 2 years after a child using their first voucher. The data also helps identify whether the use of a higher number of vouchers is associated with higher levels of participation over the 2-year period after redeeming their first voucher.

- The general trend across all children (Figure 15) is that participation in organised sport and physical activity peaks 12-18 months after first voucher use and then declines 2 years post first voucher use. The declines at 2 years post first voucher use is lower than participation observed at 0-6 months irrespective of the number of vouchers used.

- Children who redeemed 1 voucher reported 346 minutes (95%CI 337-354 minutes) 0-6 months post voucher use; 294 minutes (95%CI 281-308 minutes) at 6-12 months; 351 minutes (95%CI 232-380 minutes) 12-18 months; 237 minutes (95%CI 187-287 minutes) at 18-24 months and 413 minutes (95%CI 402-424 minutes) 24 months post first voucher use.

- Children who redeemed 5 vouchers reported 422 minutes (95%CI 414-430 minutes) 0-6 months post voucher use; 430 minutes (95%CI 423-438 minutes) at 6-12 months; 507 minutes (95%CI 500-514 minutes) 12-18 months; 450 minutes (95%CI 438-462 minutes) at 18-24 months and 413 minutes (95%CI 402-424 minutes) 24 months post first voucher use.

Children living in outer regional and remote areas

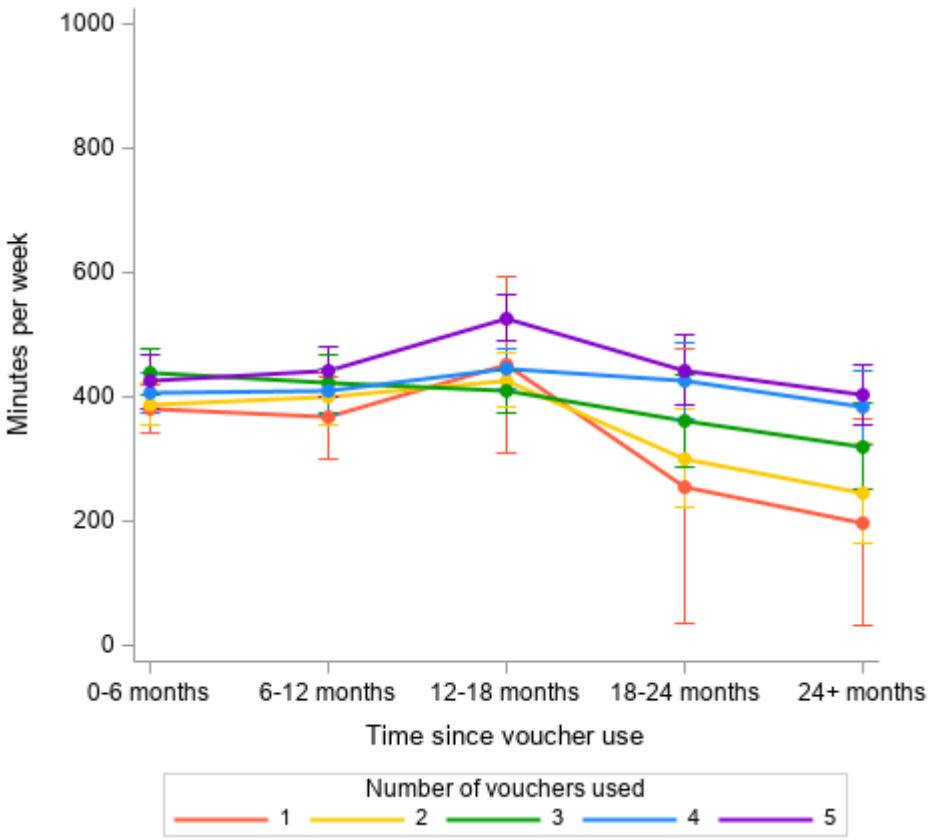
- The general trend is that participation in organised sport and physical activity peaks 12-18 months after first voucher use and then declines 18 months-2 years after first voucher use.

- Children residing in outer regional and remote areas are the first sub-group where children redeeming 3 vouchers report the highest rates of weekly participation in sport at 0-6 months (440 minutes 95%CI 402-477 minutes) than children who redeemed 1, 2, 4 or 5 vouchers. 440 minutes is also higher than all children at 0-6 months inferring children who lived in outer regional and remote areas were participating in higher levels of organised activity at 0-6 months than the overall Active Kids cohort.

- At 12-18 months, this pattern is no longer the case with children who redeemed 5 vouchers reporting higher rates of participation (527 minutes 95%CI 491-563 minutes) compared to children living in outer regional and remote areas and used 1 – 4 vouchers. Once again higher than all children.

- At 2-years post voucher use, children living in outer regional and remote areas reported lower levels of weekly participation across 1-5 vouchers compared to all children across 1-5 vouchers. This suggests promoting the maintenance of ongoing engagement with organised sport and physical activities in outer regional and remote areas is needed to prevent the drop off.

Figure 16 Changes in weekly minutes participating in organised sport since first voucher use in 2018, 2019, and 2020 for children living in outer regional and remote areas



Girls

- The general trend across all girls (Figure 17) is that participation in organised sport and physical activity peaks 12-18 months after first voucher use and then declines 2 years post first voucher use.

- Girls who redeemed 5 vouchers consistently reported higher levels of participation in minutes per week than girls who used 1 – 4 vouchers.

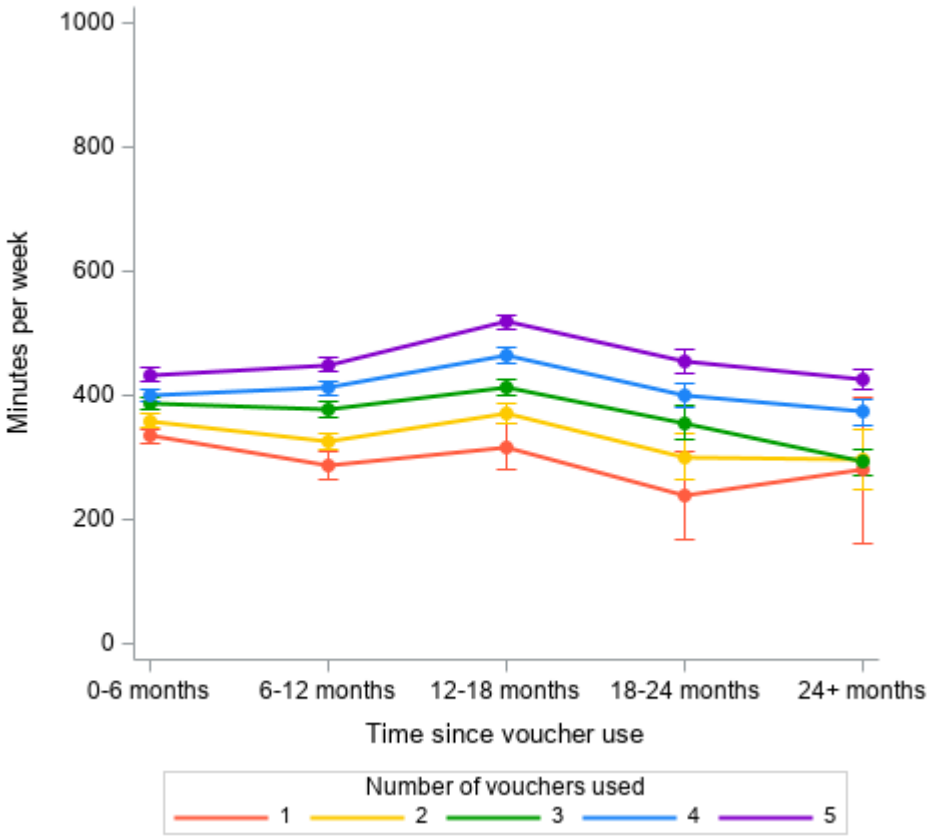
- Compared to all children, girls reported lower participation levels in minutes per week. Girls who redeemed 5 vouchers reported 334 minutes (95%CI 322-346 minutes) at 0-6 months, compared to all children who used 5 vouchers who reported 346 minutes (95%CI 337-354) at 0-6 months.

- 2-years post first voucher use, girls who used 5 vouchers reported 425 minutes (95%CI 408-443 minutes) compared to all children who used 5 vouchers who reported 413 minutes (95%CI 402-424 minutes).

- Girls who redeemed 1 and 2 vouchers reported increases in participation in minutes per week between 18 months – 2 years whilst girls who redeemed 3-5 vouchers were declining participation.

- Irrespective of the number of vouchers used, the Active Kids voucher enabled girls to maintain over 280 minutes of organised sport and physical activity participation 2 years post voucher use.

Figure 17 Changes in weekly minutes participating in organised sport since first voucher use in 2018, 2019, and 2020 for girls



Culturally and Linguistically diverse children

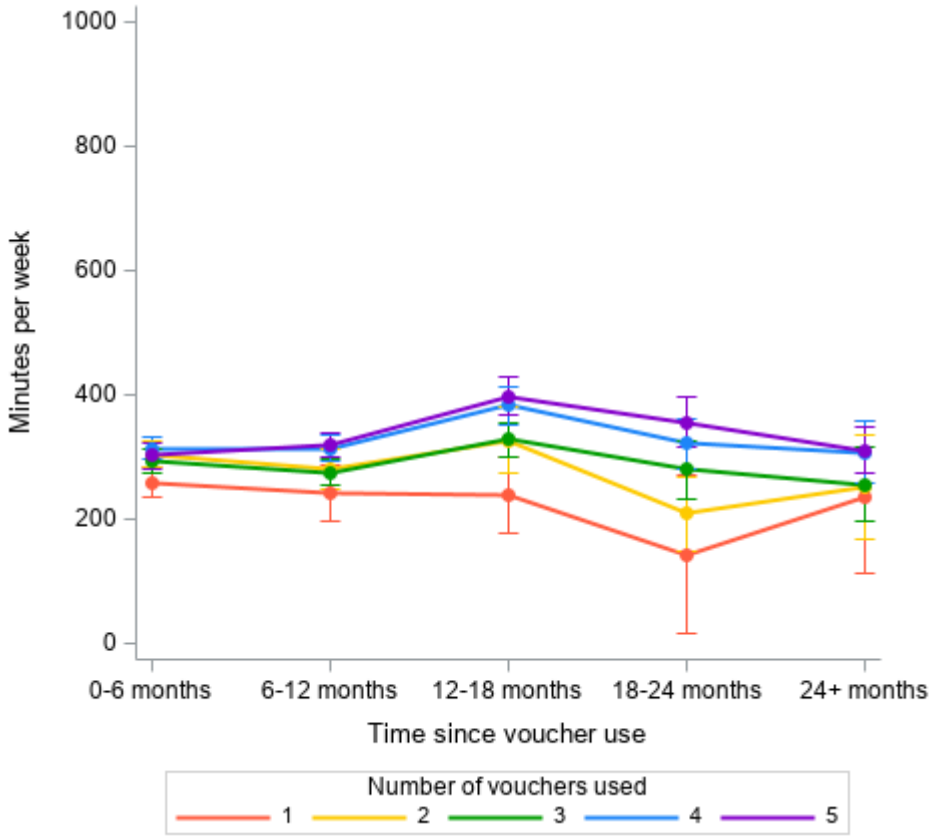
- Children who spoke another language to English and redeemed 5 vouchers consistently reported higher levels of participation in minutes per week than children who spoke another language to English who used 1 – 4 vouchers over 2 years.

- At 0-6 months children who spoke another language to English and used 1-5 vouchers similar levels of participation. Over time the participation rates between redeeming 1-5 vouchers widens.

- At 18-24 months children who spoke another language to English and redeemed 1 voucher substantially reduced participation at 18-24 months reporting 143 weekly minutes (95%CI 15-272 minutes) which then increased at 2 years + to 236 minutes (95%CI 113-358 minutes). Reasons for this increase are unknown.

- Irrespective of numbers of vouchers redeemed, children who spoke another language to English consistently reported lower levels of weekly participation in sport and physical activity compared to all children. Targeted efforts to increase participation amongst culturally and linguistically diverse communities is recommended.

Figure 18 Changes in weekly minutes participating in organised sport since first voucher use in 2018, 2019, and 2020 for children who spoke a language other than English at home



Children who identify as Aboriginal and or Torres Strait Islander

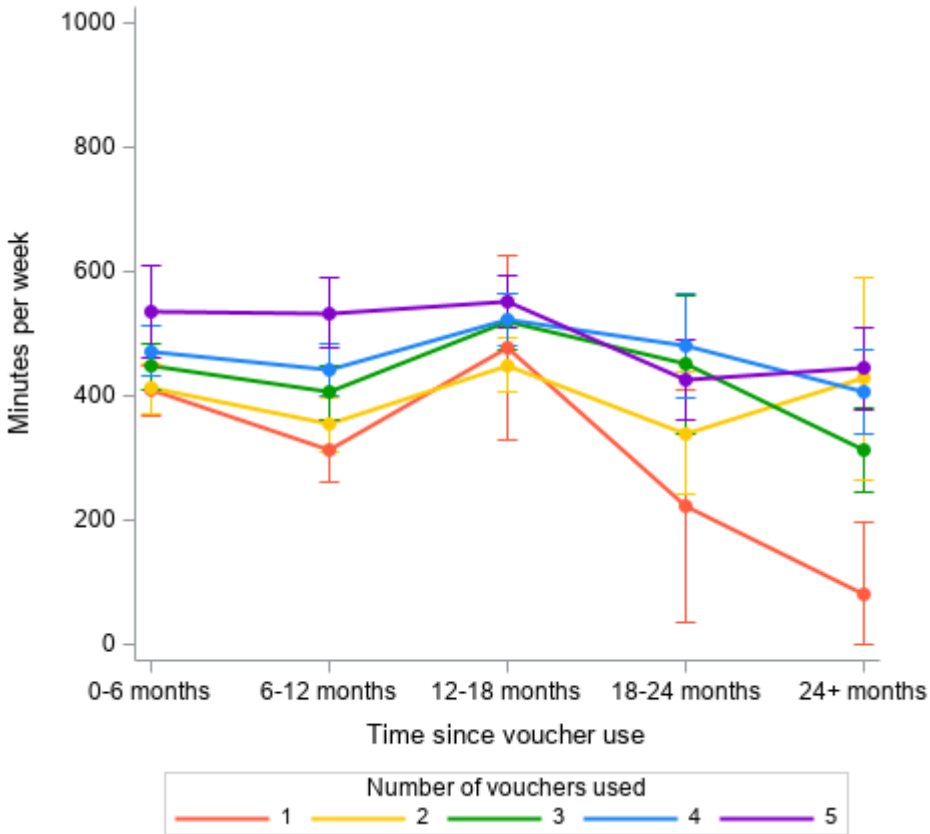
- Participation in organised sport and physical activity measured by minutes per week varies depending on the number of vouchers redeemed.

- For children who identify as Aboriginal and or Torres Strait Islander they have consistently higher levels of weekly participation in organised sport and physical activity across 1 – 5 vouchers redeemed, compared to all children. This illustrates that within the first 0-6 months of using an Active Kids voucher they are reporting more minutes of weekly sport participation than the whole Active Kids cohort.

- For children who identify as Aboriginal and or Torres Strait Islander and redeem 1 Active Kids voucher, weekly participation substantially declines from 12-18 months to 2 years reporting 82 minutes of participation (95%CI 0 – 198 minutes).

- Children who identify as Aboriginal and or Torres Strait Islander and used 1 voucher reported 408 minutes (95%CI 369-447 minutes) at 0-6 months and 311 minutes at 6-12 months. It is reasonable to assume that they used their first and only voucher at this time. Therefore, declines in participation observed 12-24 months since voucher use could be due to the voucher activity seizing. Promoting uptake of more than 1 voucher amongst Indigenous communities could help increase and sustain weekly participation levels.

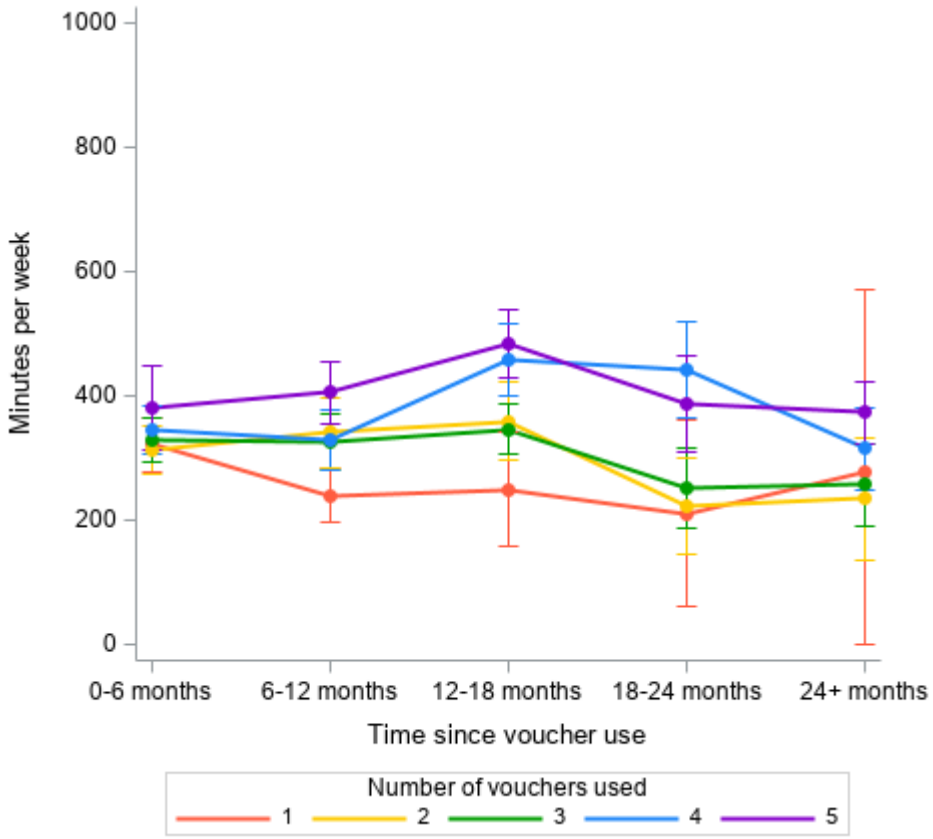
Figure 19 Changes in weekly minutes participating in organised sport since first voucher use in 2018, 2019, and 2020 for children who identified as Aboriginal and or Torres Strait Islander



Children living with a disability

- Participation in weekly sport and physical activity differed depending on the number of vouchers used.
- Children living with a disability who used 5 vouchers reported higher levels of weekly participation than children living with a disability who used 1 voucher.
- 0-6 months after using their first voucher, all children living with a disability report over 312 minutes of weekly organised sport participation.
- Up to 18 months, children who used 1 voucher report a substantially lower level of participation compared to children living with a disability who used between 2 and 5 vouchers. 1 voucher reported 249 minutes (95%CI 157-342 minutes) compared to 2 vouchers 360 minutes (95%CI 296-423 minutes).
- Children living with a disability who redeemed between 1 and 5 vouchers consistently reported lower rates of weekly participation than all children. Promoting participation in children living with a disability is recommended.

Figure 20 Changes in weekly minutes participating in organised sport since first voucher use in 2018, 2019, and 2020 for children living with a disability



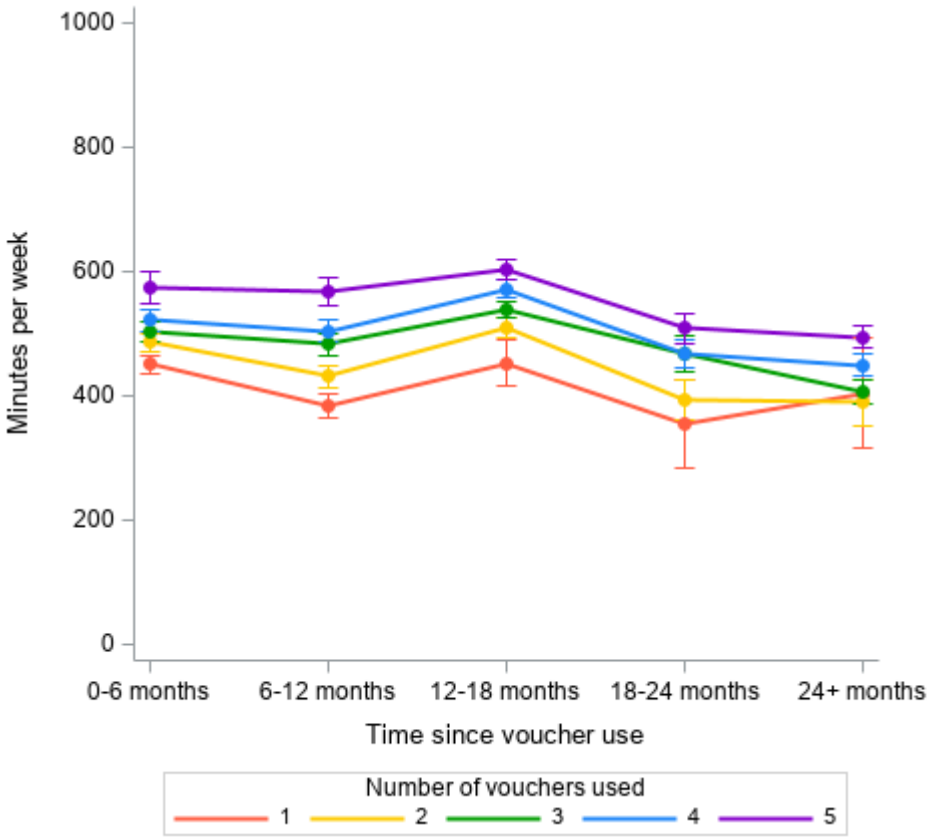
Children aged 12-18 years

- Participation in weekly sport and physical activity by adolescents differed depending on the number of vouchers used. Adolescents who used 1 voucher reported lower levels of weekly participation in organised sport and physical activity than children who redeemed 5 vouchers.

- Adolescents who used all 5 available vouchers consistently reported higher minutes of participation in organised sport and physical activity (consistently around 600 minutes per week), than children who used 1-4 vouchers.

- All adolescents who used between 1 and 5 vouchers reported participating above 400 minutes of organised sport and physical activity per week, with children who redeemed 2 vouchers decline participation 12-18 months after using their first voucher, to a level at month+ which was lower than children who reported using 1 voucher.

Figure 21 Changes in weekly minutes participating in organised sport since first voucher use in 2018, 2019, and 2020 for adolescents 12-18 years old



Children from most disadvantaged background (low SEIFA)

- Participation in weekly sport and physical activity differed depending on the number of vouchers used. Children who used 1 voucher reported lower levels of weekly participation in organised sport and physical activity than children who redeemed 5 vouchers.

- The differences in participation between children who redeemed 1, 2, 3,4 and 5 vouchers were much lower at 0-6 months, with the gap appearing to widen over time.

This could imply that redemption of multiple vouchers helps to maintain weekly participation in organised sport and physical activity.

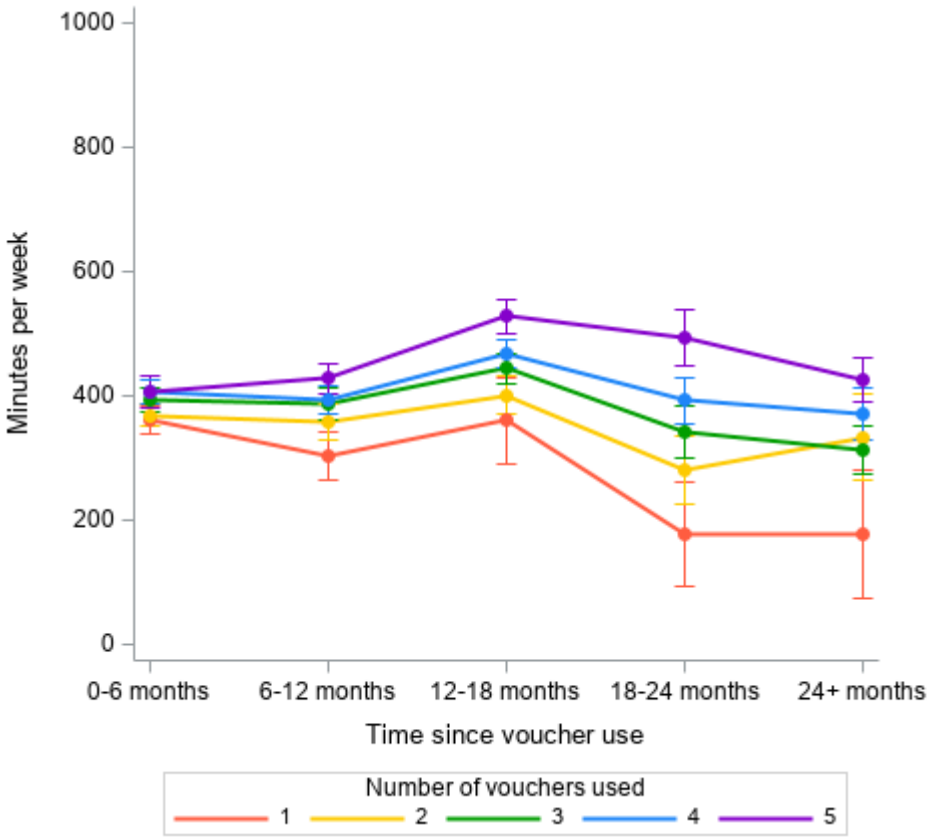
- Children living in the most disadvantaged areas and who used 5 vouchers report higher rates of participation than children who used 1-4 vouchers, with the gap widening at 12-18 months – 2 years post voucher use. At 12-18 months children in most disadvantaged areas who used 5 vouchers reported 528 minutes of weekly participation (95%CI 329-387 minutes) compared to children who used 4 vouchers who reported 468 minutes (95%CI 445-492 minutes).

- Children living in the most disadvantaged areas who used 1 voucher had substantially lower levels of participation 2-years post first voucher use (176 minutes, 95%CI 73-279 minutes) than children who used between 2 and 5 vouchers (2 vouchers redeemed 334 minutes, 95%CI 265-402 minutes).

- Compared to all children, children from disadvantaged areas who redeemed 5 vouchers maintained higher levels of weekly participation at 18-24 months (492 minutes 95%CI 447-537 minutes compared to 450 minutes, 95%CI 438-462 minutes) and 2 years post first voucher use (426 minutes, 95%CI 390-462 minutes compared to 413 minutes, 95%CI 402-424 minutes).

- Promoting multiple vouchers in children living in most disadvantaged areas has potential to ensure higher levels of participation in organised sport and physical activity up to 2 years after using a voucher. Targeted promotion of multiple vouchers amongst disadvantaged communities is recommended.

Figure 22 Changes in weekly minutes participating in organised sport since first voucher use in 2018, 2019, and 2020 for children living is disadvantaged areas



Retention rates for children in the Active Kids program from 2018 to 2019 and 2020 by demographics, active/inactive status, and sport status[23]

This section presents data on retention rates for children in the Active Kids voucher program, which is not articulated in the logic model (Figure 1). Understanding retention rates for children in the Active Kids program from 2018, 2019 to 2020 is important if the impact of Active Kids is to be measured in the longer term. Retention rates for children in the Active Kids program from 2018 to 2020 by demographics, physical activity status and sports status can be found in Table 7.

- Of the 795,528 children who claimed a voucher in 2020, 441,776 (56%) registered in all three years. The highest retention rates across the three years were in the 9-11 years (70%) and 12-14 years (71%).
- 152,389 (19%) were new registrants in 2020 which were predominantly aged 4-8 years. It is likely that it was the first year that these children were eligible.
- The Active Kids program is retaining children from identified priority populations across all 3 years. These include children who identify as Aboriginal and or Torres Strait Islander (n=22,768); who speak a primary language other than English (n=28,534); children who live with a disability (n=13,465).

Table 7 Retention rates for children in the Active Kids program across 2018, 2019 and 2020

	2018, 2019 and 2020		2019 and 2020		2018 and 2020		2020 only	
	N	%	N	%	N	%	N	%
All persons	441,776	55.5	171,822	21.6	29,541	3.71	152,389	19.2
Age category								
4-8	109,715	34.2	100,271	31.2	6,376	2.0	104,912	32.7
9-11	146,795	70.5	33,495	16.1	8,656	4.2	19,296	9.3
12-14	118,544	71.2	23,910	14.4	7,937	4.8	16,030	9.6
15-18	66,722	67.0	14,146	14.2	6,572	6.6	12,151	12.2
Sex								
Boys	238,771	57.3	85,558	20.5	15,409	3.7	76,868	18.5
Girls	201,889	53.6	85,787	22.8	14,031	3.7	75,079	19.9
Missing	1,116	52.3	477	22.3	101	4.7	442	20.7
Aboriginal identity								
Aboriginal and Torres Strait Islander	22,768	52.8	8,966	20.8	2,108	4.9	9,286	21.5

[23] This heading does not feature specifically in the logic model but is used to evidence increased and maintained participation.

	2018, 2019 and 2020		2019 and 2020		2018 and 2020		2020 only	
	N	%	N	%	N	%	N	%
Non-Aboriginal and Torres Strait Islander	414,636	55.7	161,454	21.7	27,121	3.6	141,763	19.0
Prefer not to say	4,372	58.9	1,402	18.9	312	4.2	1,340	18.0
Primary language spoken at home								
English	413,242	57.1	152,415	21.1	26,817	3.7	131,326	18.1
Other	28,534	39.8	19,407	27.1	2,724	3.8	21,063	29.4
Identified disability								
Yes	13,465	49.1	6,227	22.7	1,457	5.3	6,268	22.9
No	422,225	55.8	163,067	21.6	27,568	3.6	143,797	19.0
Prefer not to say	6,086	53.1	2,528	22.1	516	4.5	2,324	20.3
Socio-economic status								
1st (most disadvantaged)	61,767	48.7	28,503	22.5	6,059	4.8	30,518	24.1
2nd	100,276	56.9	36,799	20.9	6,844	3.9	32,449	18.4
3rd	118,590	55.3	46,876	21.9	7,715	3.6	41,111	19.2
4th (least disadvantaged)	161,032	58.0	59,609	21.5	8,910	3.2	48,268	17.4
Missing	111	54.9	35	17.3	13	6.4	43	21.3
Location								
Missing	128	60.9	32	15.2	11	5.2	39	18.6
Major Cities of Australia	329,379	54.8	131,906	22.0	22,117	3.7	117,463	19.6
Inner Regional Australia	90,691	57.8	32,097	20.5	5,965	3.8	28,144	17.9
Outer Regional and remote Australia	21,578	57.5	7,787	20.7	1,448	3.9	6,743	18.0
Body mass index category								
Thin	46,638	50.8	21,691	23.6	2,806	3.1	20,634	22.5
Healthy weight	256,926	59.7	88,340	20.5	15,308	3.6	69,653	16.2
Overweight	78,891	58.2	27,676	20.4	5,716	4.2	23,290	17.2
Obesity	38,083	46.6	19,970	24.5	3,537	4.3	20,076	24.6
Missing	21,238	37.7	14,145	25.1	2,174	3.9	18,736	33.3
Met physical activity guidelines								
Yes	73,782	52.3	31,944	22.6	3,971	2.8	31,454	22.3
No	361,720	56.9	135,750	21.4	24,337	3.8	113,747	17.9
Missing	6,274	33.3	4,128	21.9	1,233	6.5	7,188	38.2
Sport participation								
None	9,631	16.8	8,985	15.7	5,301	9.2	33,462	58.3
At least once a month	103,556	48.2	52,214	24.3	9,462	4.4	49,756	23.1

	2018, 2019 and 2020		2019 and 2020		2018 and 2020		2020 only	
	N	%	N	%	N	%	N	%
At least once a week	138,661	59.5	54,257	23.3	6,380	2.7	33,918	14.5
At least twice a week	125,683	62.6	42,668	21.3	5,976	3.0	26,398	13.2
At least four times a week	57,362	77.1	10,478	14.1	1,802	2.4	4,796	6.4
Not sure	6,883	46.6	3,220	21.8	620	4.2	4,059	27.5

Increased capability of registered providers to promote physical activity to children and young people

This section refers to the fourth box in the Active Kids logic model under medium-term impacts (Figure 1).

No data has been collected through the SPRINTER partnership agreed by the NSW Government Office of Sport.

Increased capability of providers to develop inclusive and accessible programs/places that promote a positive culture of physical activity

This section refers to the sixth box in the Active Kids logic model under medium-term impacts (Figure 1).

No data has been collected through the SPRINTER partnership agreed by the NSW Government Office of Sport.

This concludes the **section on medium-term impacts.**

The next section will now focus on the **long-term Impacts.**

Long-term Impacts (5+ years)

This section presents data on the long-term outcomes in the Active Kids logic model (Figure 1). Outcomes include:

- Population increases in physical activity levels in children aged 5-18 years living in NSW.
- Increased capability of providers to promote and deliver inclusive consistent and safe physical activity programs. [no SPRINTER data available].
- Reduction in the rates of overweight and obesity in children living in NSW.
- Sustainably address the barriers to participation by those children who identify in one or more of the priority groups; children living in regional and remote NSW; Female children; Culturally and Linguistically Diverse children; Aboriginal and/or Torres Strait Islander children; Children living with a disability; Children aged 12-18; Children from low socioeconomic areas. (no SPRINTER data available).

To showcase the long-term outcomes, the data presented uses information from all children collected through the online NSW government registration process in 2018, 2019 and 2020. Information regarding the sample sizes and data analysis used for this section can be found on Page 16.

LONG TERM IMPACTS SUMMARY

- ✓ The average number of days children reported being physically active for 60 minutes remained stable across the three years.
- ✓ The proportion of overweight and obesity remained relatively stable across the three years.
- ✓ This stable trend in overweight and obesity is consistent with the NSW population health survey data.
- ✓ These data suggest that the Active Kids program has not had an impact on population levels of physical activity or overweight and obesity. This is consistent with the literature[24], where to date, there has been limited success in population level approaches that target overweight and obesity.

[24] Bleich, S. N., Vercammen, K. A., Zatz, L. Y., Frelier, J. M., Ebbeling, C. B., & Peeters, A. (2018). Interventions to prevent global childhood overweight and obesity: a systematic review. The Lancet Diabetes & Endocrinology, 6(4), 332-346.

Population increases in physical activity levels in children aged 5-18 years living in NSW

Data presented relates to the first white box in the logic model under longer term outcomes (Figure 1).

Data comes from all children who claimed an Active Kids voucher in 2018, 2019 and 2020 and as a group. See Table 3.

- In 2020, 795,528 children claimed an Active Kids voucher. This is an increase from 777,240 in 2019 and 664,973 in 2018. This demonstrates the increase reach of the Active Kids program year on year.

- Most children who claimed a voucher in 2020 were aged 4-8 (n=321,274; 40% of all registrations).

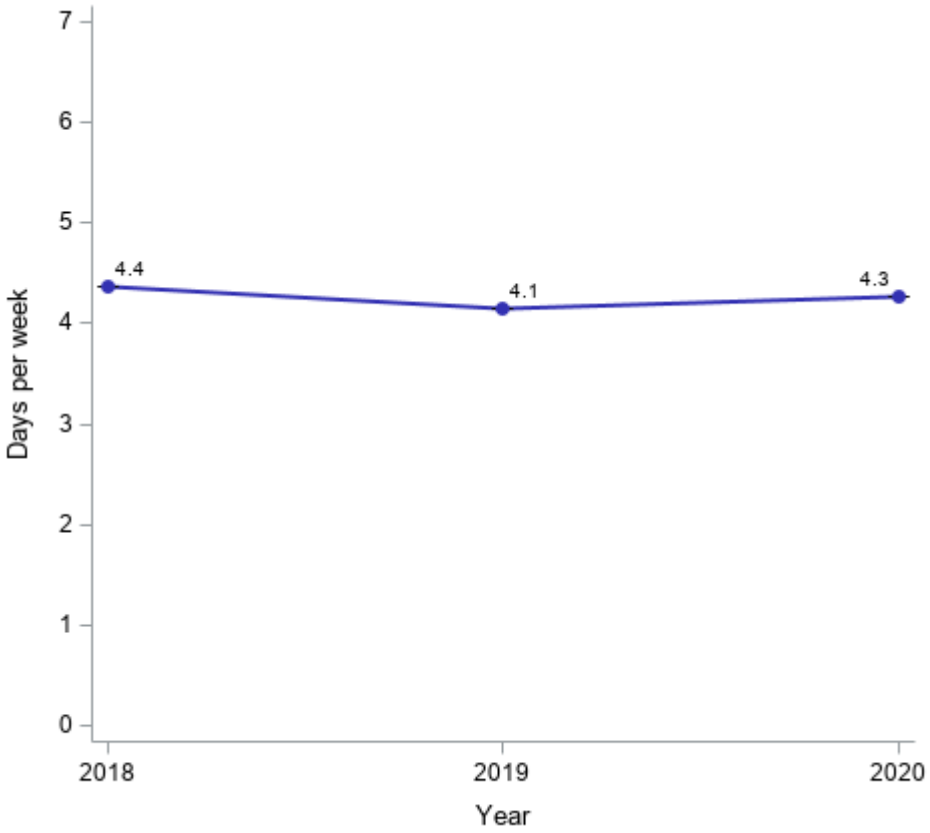
- In 2020, fewer girls claimed a voucher than boys in 2020, with 47% of all Active Kids vouchers claimed by girls (n=376, 786). This is consistent with 2018 and 2019.

- Higher numbers of children who identify as Aboriginal and/or Torres Strait Islander (n=43,128; 5% of all registrations); were culturally and linguistically diverse (n=71,728; 9%); and children living with a disability (n=27,417; 3%); physically inactive (n=635, 554; 80%) claimed a voucher in 2020 compared to 2018 and 2019.

- Despite an increase in the total number of vouchers claimed, a decline in the number of children from most disadvantaged areas was observed in 2020 (n=126,847; 16%) compared to 2018 and 2019.

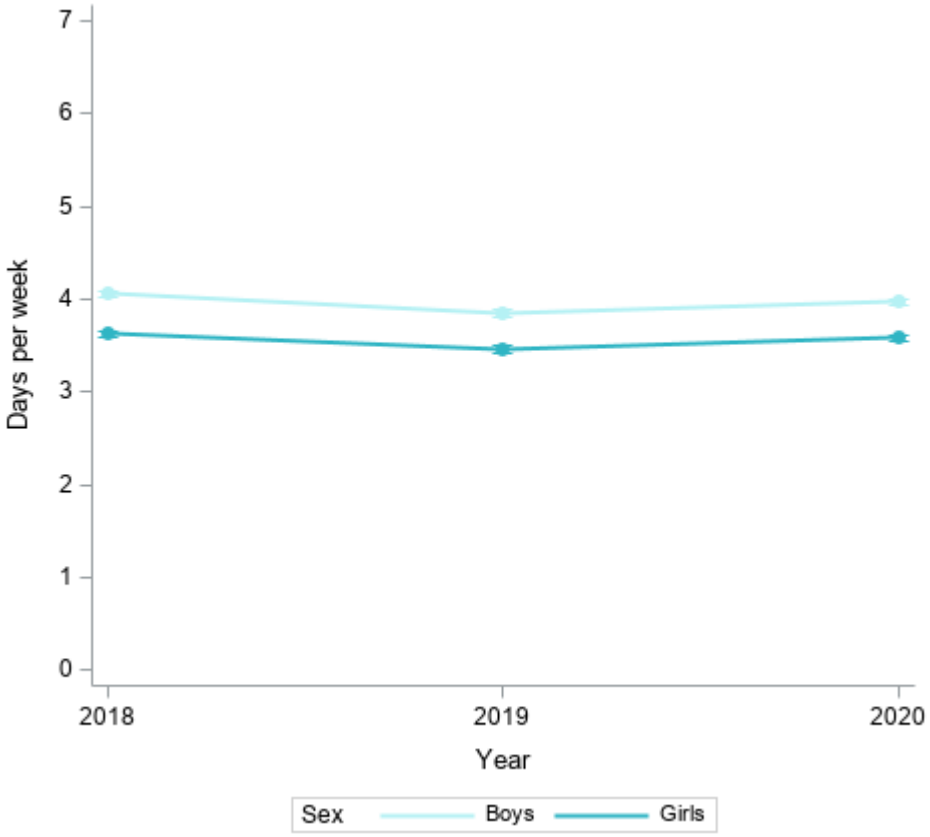
- The average number of days of children reported being physically active for 60 minutes when claiming a voucher remained relatively stable across 2018 (Mean = 4.4 days), 2019 (Mean = 4.1 days) and 2020 (Mean = 4.3 days).

Figure 23 The number of days in a typical week that children were physically active for at least 60 minutes for all children at registration in 2018 (n=671,375), 2019 (n=77,969), and 2020 (n=795,528)



- Girls reported less days achieving 60 active minutes than boys across the three years.
- In 2020, girls reported 3.6 days on average per week of achieving 60 active minutes compared to boys who reported 3.9 days (Figure 24).

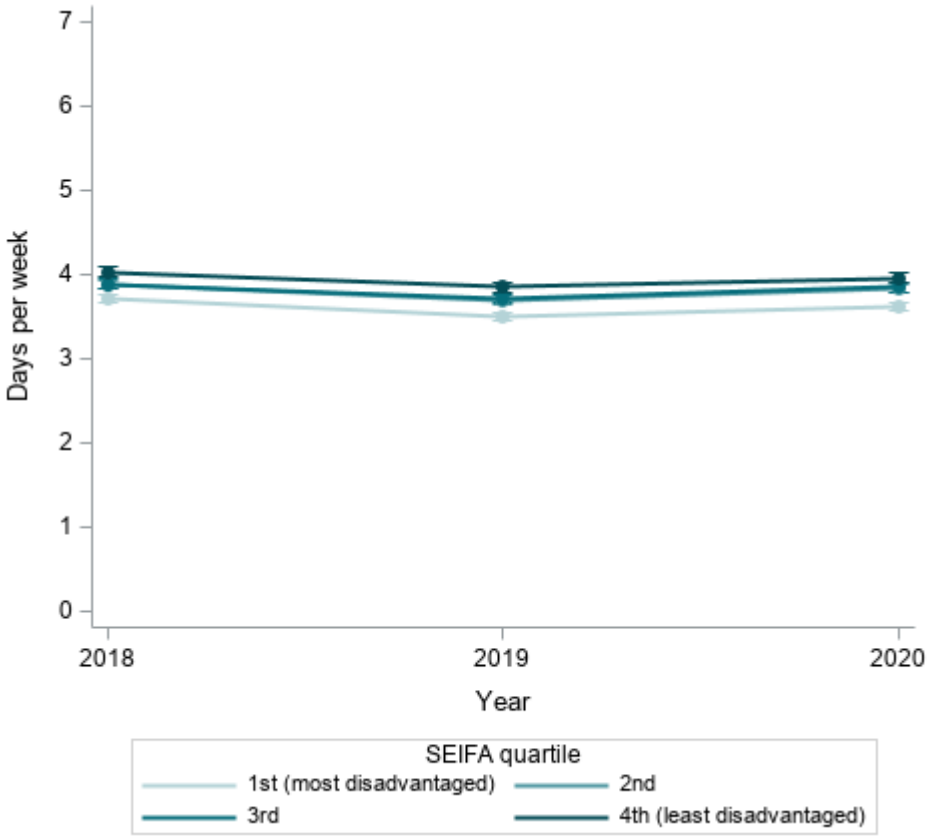
Figure 24 The number of days in a typical week boys and girls were physically active for at least 60 minutes at registration in 2018 (n=671,375), 2019 (n=77,969), and 2020 (n=795,528)



- In 2020, Children who identify as Aboriginal and/or Torres Strait Islander reported higher numbers of days achieving 60 minutes per week (3.8 days 95%CI 3.8-3.9) compared to children who do not identify as Aboriginal and/or Torres Strait Islander (3.7 days 95%CI 3.7-3.8). This pattern has occurred consistently over the 3 years.

- The number of days achieving 60 minutes of physical activity per week differs between the most disadvantaged communities and the least disadvantaged communities. Children living in the most disadvantaged communities reported fewer days per week (3.6 days, 95%CI 3.5-3.7) compared to least disadvantaged communities (4 days, 95%CI 3.9-4.1). A consistent pattern since 2018 (Figure 25).

Figure 25 The number of days in a typical week that children living in different disadvantaged areas were physically active for at least 60 minutes at registration in 2018, 2019, and 2020



- In 2020, children living with a disability (3.6 days 95%CI 3.5-3.6), children who spoke a language other than English (3.5 days 95%CI 4-4.1) and were obese (3.5 days 95%CI 3.5-3.6), reported fewer days of participating in 60 minutes of physical activity than their counterparts, at voucher registration.

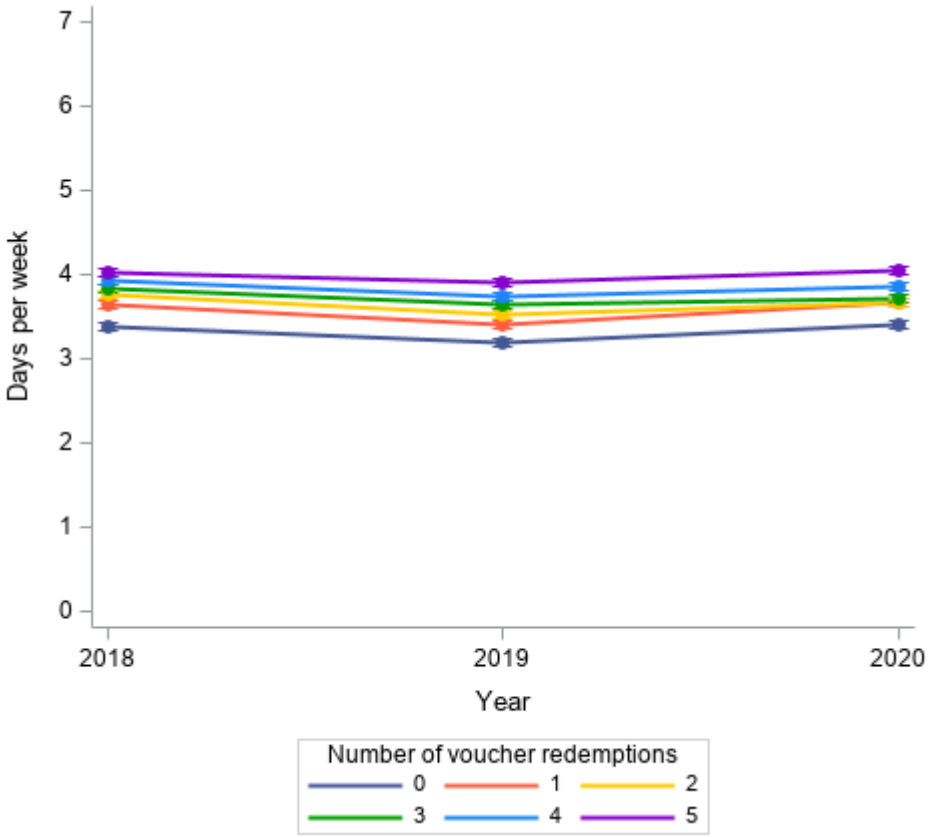
- In 2020, children who lived in outer regional and remote areas reported higher numbers of days achieving 60 minutes of physical activity per week (4.0 days 95%CI 4.0-4.1) compared to children who lived in major cities (3.6 days 95%CI 3.6-3.7) (Figure 26).

Figure 26 The number of days in a typical week that children living in different locations were physically active for at least 60 minutes at registration in 2018, 2019, and 2020

- Children who redeemed 5 vouchers consistently report higher numbers of days achieving 60 minutes (2018; 4.0 days 95%CI 4.0-4.1; 2019; 3.9 95%CI 3.9-4.0; 2020; 4.1 95%CI 4.0-4.1) compared to children who redeem 1-4 vouchers. This suggests that more physically active children are when they claim a voucher, the more Active Kids vouchers they redeem (Figure 27).

- No change in the number of days achieving 60 minutes is observed between 2018 and 2020.

Figure 27 The number of days in a typical week that were physically active for at least 60 minutes at registration in 2018, 2019, and 2020 by the number of vouchers they redeemed



Reduction in the rates of overweight and obesity in children living in NSW

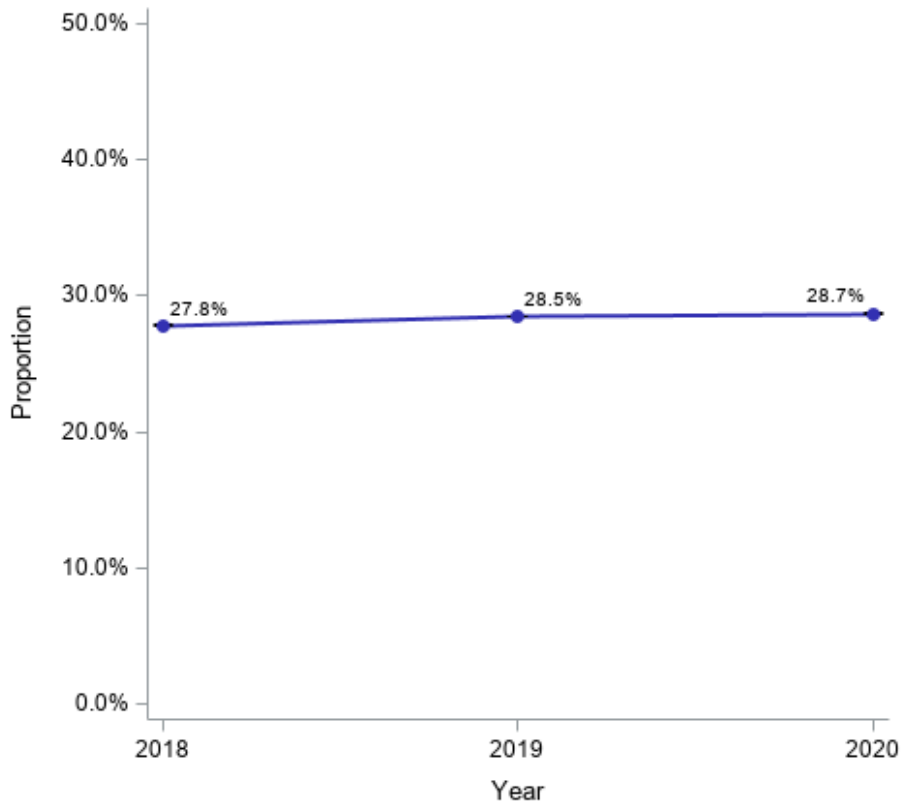
Data presented relates to the second white box in the logic model under longer term outcomes (Figure 1). Data comes from all children who claimed an Active Kids voucher in 2018, 2019 and 2020. See Figure 28.

- The proportion of overweight and obese for all children who claimed an Active Kids voucher remained relatively stable across the three years (2018: 27.8%, 95% CIs 27.7–27.9; 2019: 28.5%, 95%CIs 28.4-28.5; 2020: 28.7%, 95%CIs 28.6-28.7).

- This stable trend in overweight and obesity among registered children reflects population trends observed in the NSW Population Health Survey data.

- It is also important to note that in 2018, the reporting of height and weight was optional, and there was a higher proportion of missing data. Furthermore in 2019 and 2020, where there were more complete data, overweight and obesity rates did not differ.

Figure 28 The proportion of registered children categorised as overweight or obese at registration in 2018, 2019 and 2020



This concludes the **section on long-term impacts.**

The next section will now focus on additional research outcomes produced by the SPRINTER research group.

SPRINTER Additional Research Outcomes

The Active Kids' logic model collaboratively developed with agencies across NSW government articulated the evaluation roadmap for the impacts that were deemed essential and high priority for measuring the success of Active Kids. In 2016, the NSW Government Office of Sport and the University of Sydney, SPRINTER group established a partnership. The purpose of this partnership was to assist the NSW Office of Sport in leading and shaping the sport and physical activity system by the generation and translation of world-class research, which can strengthen the voice of sport across government.

SPRINTER worked collaboratively with the Office of Sport to integrate data throughout the routine delivery of Active Kids and designed an independent evaluation that would collect the data required to evidence the outcomes in the logic model.

In addition, SPRINTER identified critical policy-relevant and academic questions that would be important to measure throughout the Active Kids program. The collection of these outcomes indicates the utility and added value of an academic partnership with a government agency.

Data presented in this section focuses on the additional research outcomes articulated by SPRINTER as priorities for inclusion within the evaluation. For brevity here, all data presented in this section were captured through research surveys distributed to children who claimed an Active Kids voucher, consented to participate in research and completed an online research survey at least once in calendar years 2018 and 2019. It should be noted that if a child completed more than one survey each survey, the first survey was used. The rationale for this is described in the statistical method section.

In addition, a summary of the ten peer-reviewed Active Kids publications to date from the SPRINTER group are presented with a summary of their main findings and a full citation list provided (See Page 101).

Annual expenditure

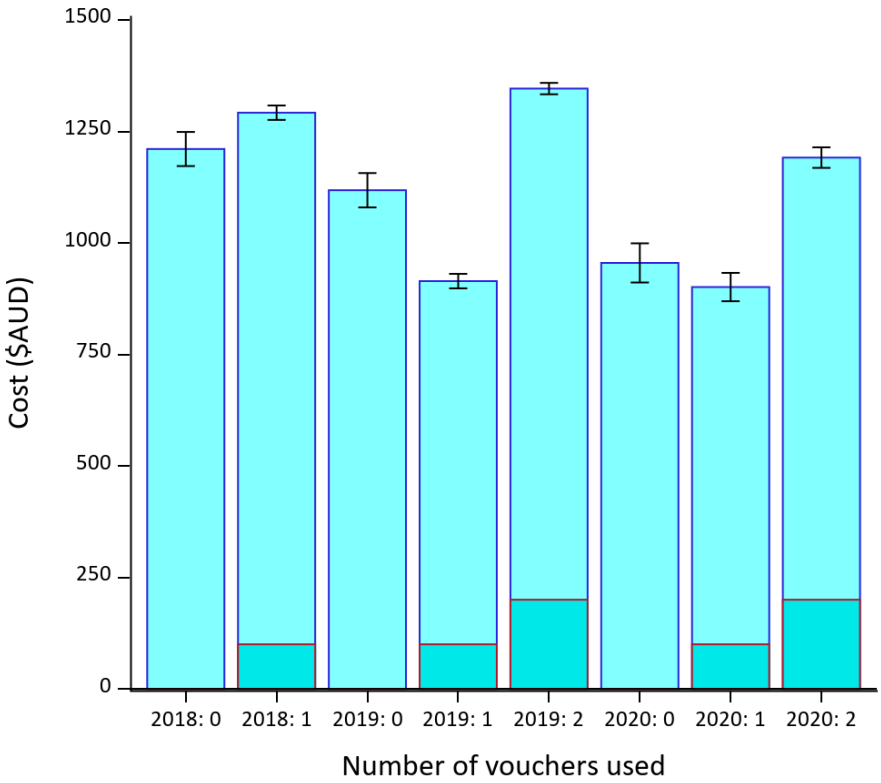
Annual expenditure refers to the total amount an adult caregiver reported spending on all sport and physical activity, in addition to the Active Kids voucher (i.e., not including the voucher), in a calendar year. Understanding expenditure enables conclusions to be made about the extent the voucher overcomes the cost barrier to access sport and physical activity opportunities. It also helps understand if the Active Kid program influenced overall population expenditure within the sports sector – a potential unexpected positive impact of the Active Kids program on the sport and physical activity economy. Data presented here include children who claimed an Active Kids voucher in 2018, 2019 and 2020 by the number of vouchers they redeemed. The horizontal line within the figure represents the total value of the voucher redeemed in that year (Figure 29).

- The highest reported expenditure on organised sport and physical activity was by children who redeemed 2 vouchers in 2019 ($1346, 95%CI 1333-1358).

- A higher number of vouchers redeemed within a calendar year, is associated with higher expenditure than children who don't redeem an Active Kids voucher within that calendar year. In 2020, children who redeemed 2 vouchers spent $1191 (95%CI 1168-1214) on organised activities compared to $955 (95%CI 911-999) amongst children who didn't use an Active Kids voucher.

- Children who didn't use an Active Kids voucher reported a reasonable sum of money on organised activities, this is evidenced by the lowest reported expenditure amongst non-redeemers observed in 2020 with children who didn't use a voucher reporting $955 (95%CI 911-999) on organised sport.

Figure 29 Yearly expenditure on sport in 2018 (vouchers: 0=7675; 1=39115), 2019 (vouchers: 0=9892; 1=33363; 2=81473) and 2020 (vouchers: 0=4008; 1=8842; 2=17500)



- Irrespective of the number of vouchers redeemed within a calendar year, Girls spent a higher sum of money on organised activities compared with boys (Figure 30). With previous data suggesting that girls are not participating more than boys, it would be logical to infer those activities chosen by girls are more expensive. Further information is needed.

- Irrespective of the number of vouchers redeemed within a calendar year, expenditure rose with increasing age. See Figure 31.

Figure 30 Yearly expenditure on sport in 2018 (vouchers: 0=7675; 1=39115), 2019 (vouchers: 0=9892; 1=33363; 2=81473) and 2020 (vouchers: 0=4008; 1=8842; 2=17500) by Sex

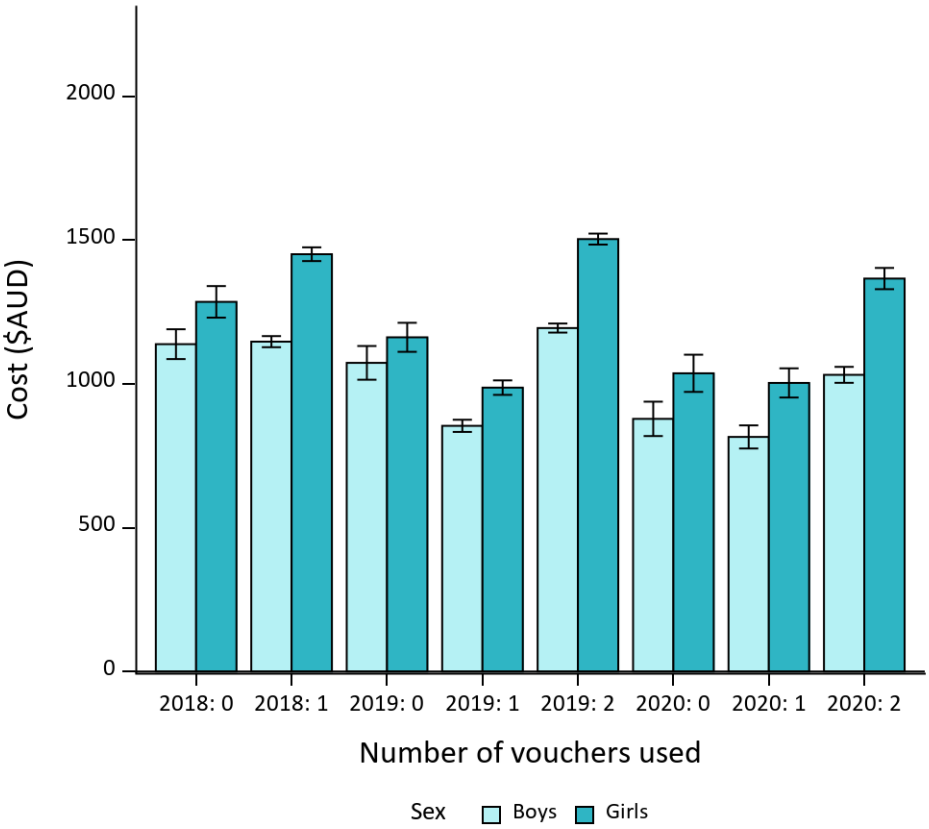
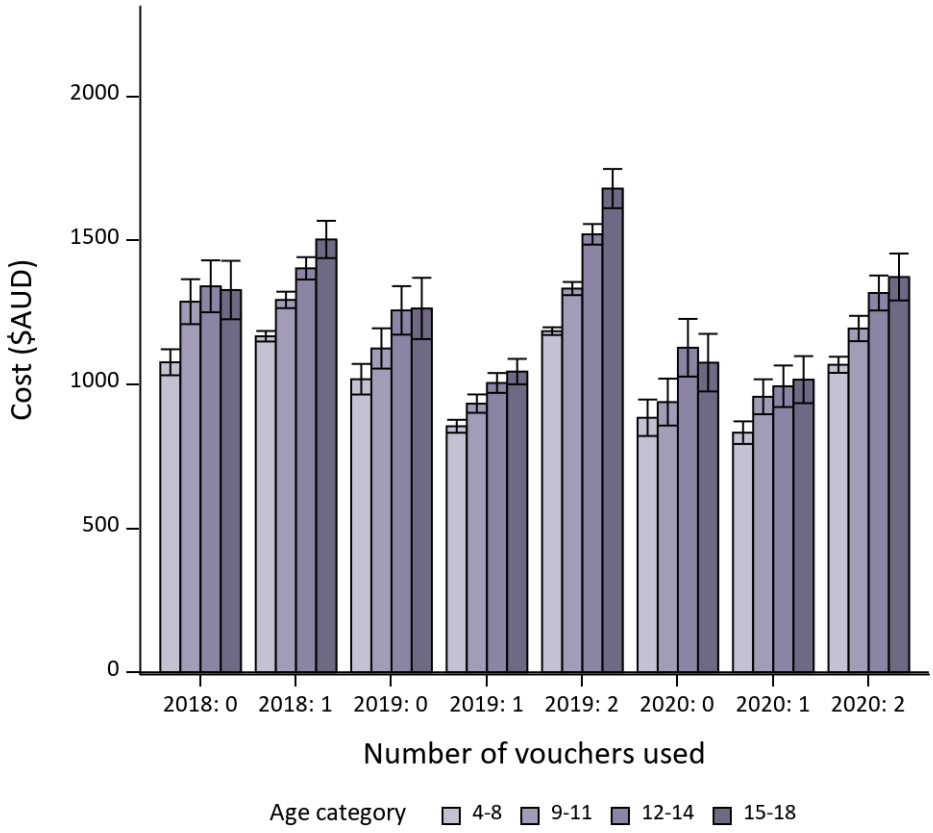
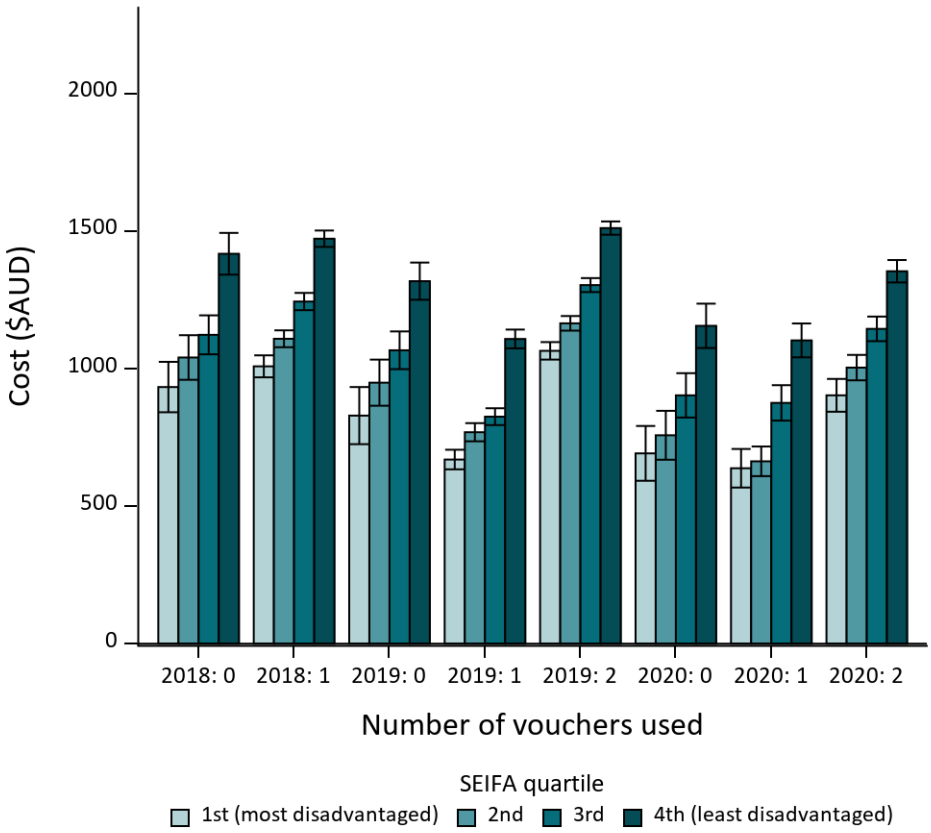


Figure 31 Yearly expenditure on sport in 2018 (vouchers: 0=7675; 1=39115), 2019 (vouchers: 0=9892; 1=33363; 2=81473) and 2020 (vouchers: 0=4008; 1=8842; 2=17500) by Age category



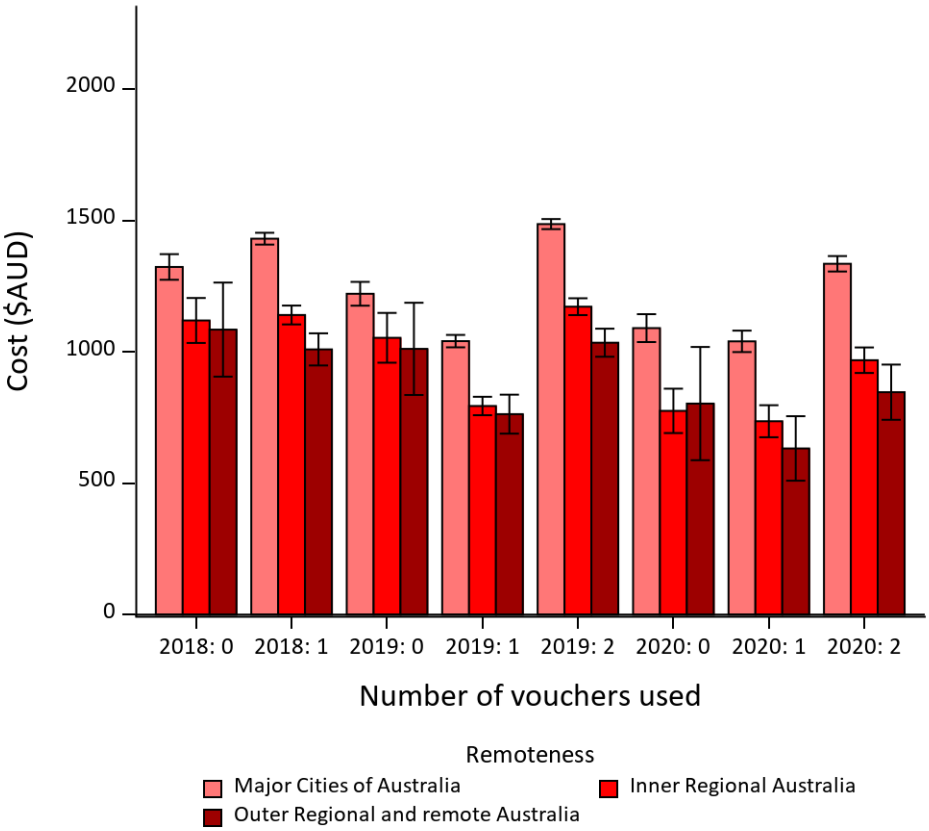
- A linear social gradient is clear in relation to expenditure on organised sport and socio-economic status. Total expenditure reported for organised sport and physical activity rises with increasing advantaged, irrespective of number of vouchers redeemed within a calendar year (Figure 32).

Figure 32 Yearly expenditure on sport in 2018 (vouchers: 0=7675; 1=39115), 2019 (vouchers: 0=9892; 1=33363; 2=81473) and 2020 (vouchers: 0=4008; 1=8842; 2=17500) by socio-economic status



- Children living in major cities report great annual expenditure on organised sport and physical activity compared with children in outer regional and remote and inner regional areas (Figure 33). This suggests activities delivered in major cities are more expensive than inner and outer regional and remote areas. Further information from Active Kids providers would add to this knowledge.

Figure 33 Yearly expenditure on sport in 2018 (vouchers: 0=7675; 1=39115), 2019 (vouchers: 0=9892; 1=33363; 2=81473) and 2020 (vouchers: 0=4008; 1=8842; 2=17500) by Remoteness



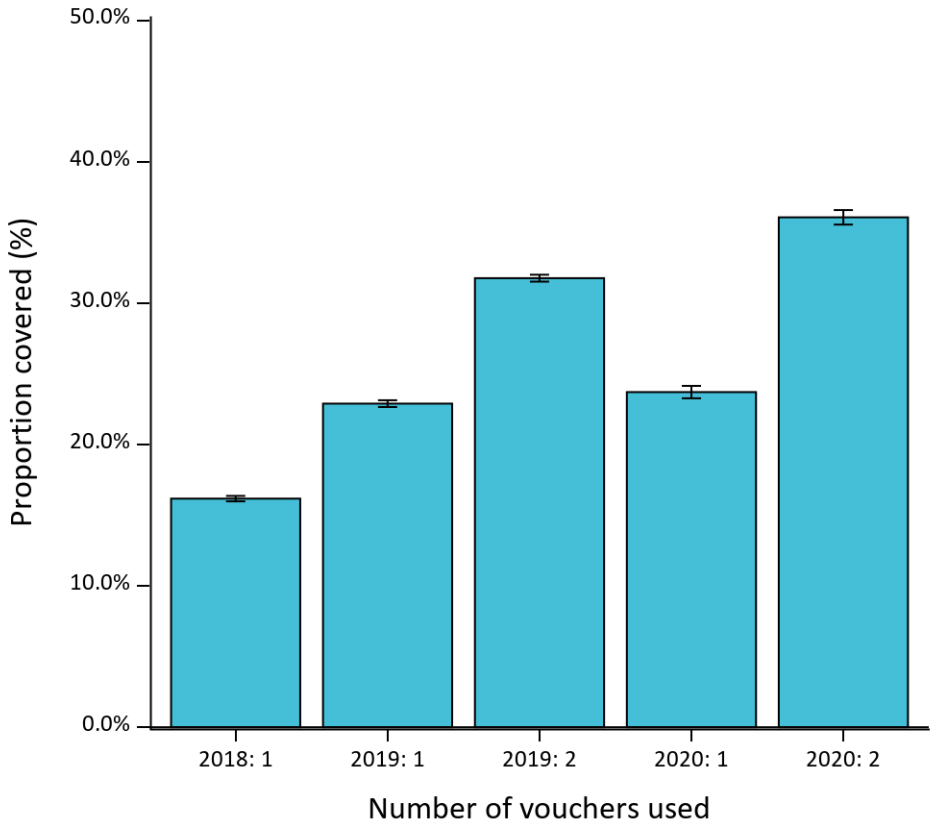
Proportion of yearly expenditure covered by the Active Kids voucher

To understand the impact of the Active Kids voucher on NSW family's expenditure on sport, we must consider the proportion of the overall expenditure covered by an Active Kid's voucher. This information is collected within the research survey.

- The more vouchers redeemed within a calendar year, the greater proportion of total expenditure supported by an Active Kids voucher.

- In 2020, 2 Active Kids vouchers supported 36% of overall expenditure compared with 16% covered by 1 Active Kids voucher in 2018.

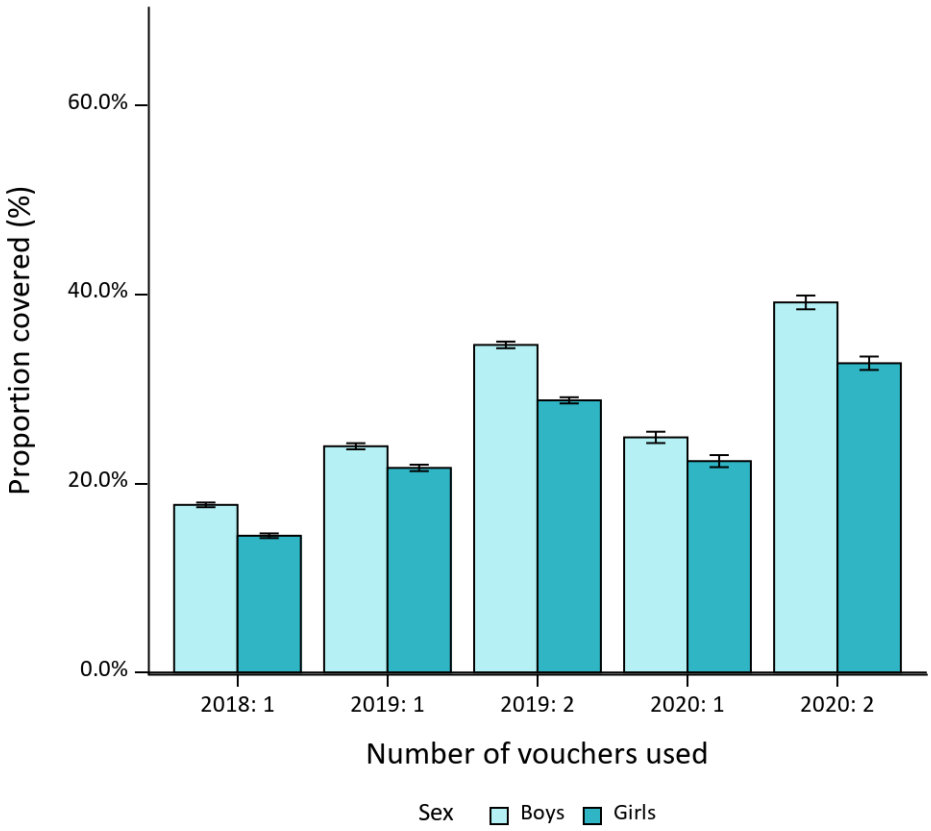
Figure 34 Proportion of expenditure covered by the Active Kids voucher in 2018 (vouchers: 0=7675; 1=39115), 2019 (vouchers: 0=9892; 1=33363; 2=81473) and 2020 (vouchers: 0=4008; 1=8842; 2=17500)



Note. Model adjusts for age, sex, aboriginality, language, disability, SEIFA quartile, remoteness, and BMI.

- A greater proportion of annual expenditure was covered by an Active Kids voucher for boys compared with girls, across 2018, 2019 and 2020 (Figure 35).

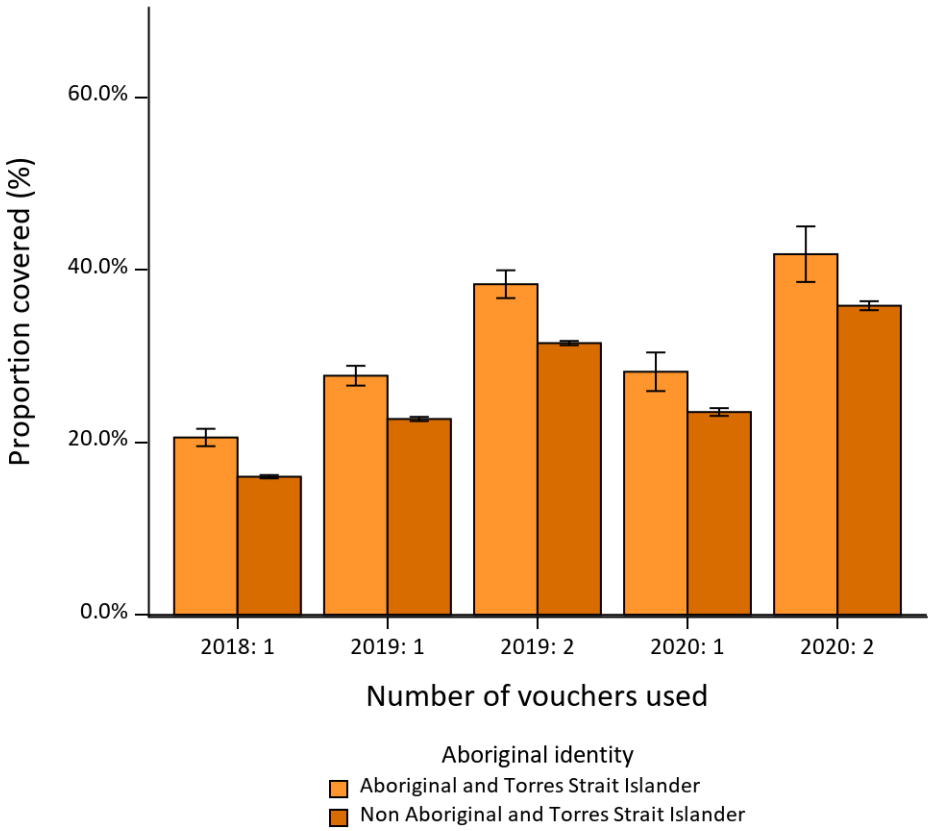
Figure 35 Proportion of expenditure covered by the Active Kids voucher in 2018 (vouchers: 0=7675; 1=39115), 2019 (vouchers: 0=9892; 1=33363; 2=81473) and 2020 (vouchers: 0=4008; 1=8842; 2=17500) by Sex



- A greater proportion of overall expenditure was covered by an Active Kids voucher for children who identify as Abroginal and/or Torres Strait Islander comapred with children who don't identify as Abroginal and/or Torres Strait Islander (Figure 36).

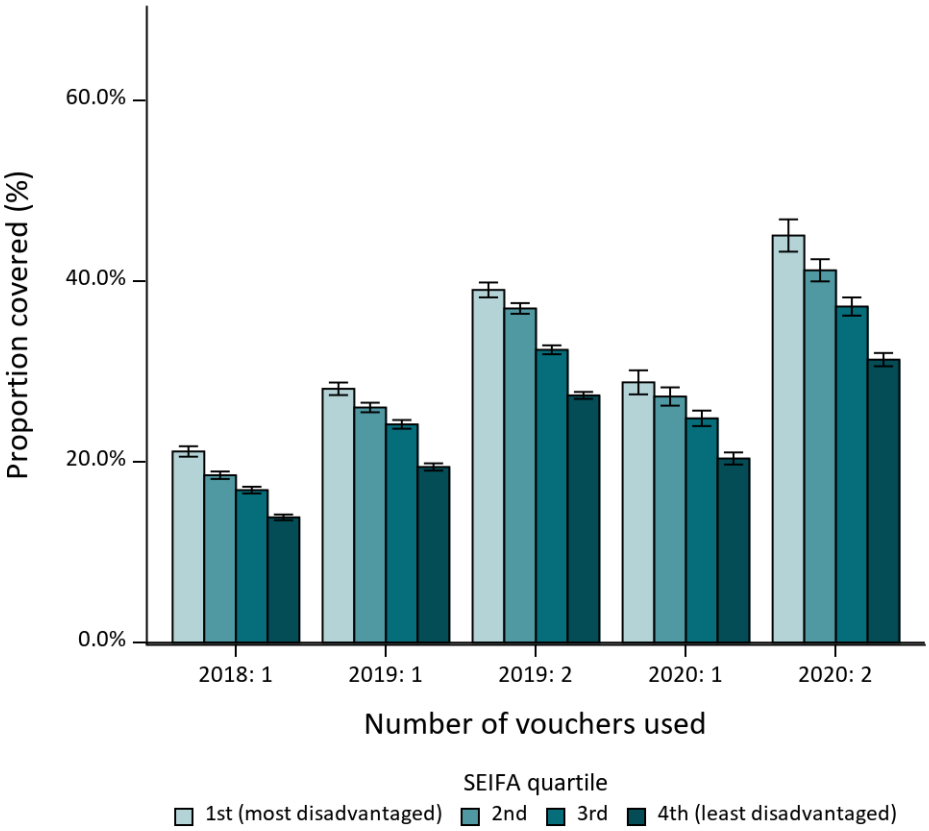
- In 2020, 2 Active Kids vouchers supported 42% (95%CI 39-45) of total expenditure by children who identify as Abroginal and/or Torres Strait Islander, which is an increase from 38% (95%CI 37-40) in 2019.

Figure 36 Proportion of expenditure covered by the Active Kids voucher in 2018 (vouchers: 0=7675; 1=39115), 2019 (vouchers: 0=9892; 1=33363; 2=81473) and 2020 (vouchers: 0=4008; 1=8842; 2=17500) by Aboriginal identity



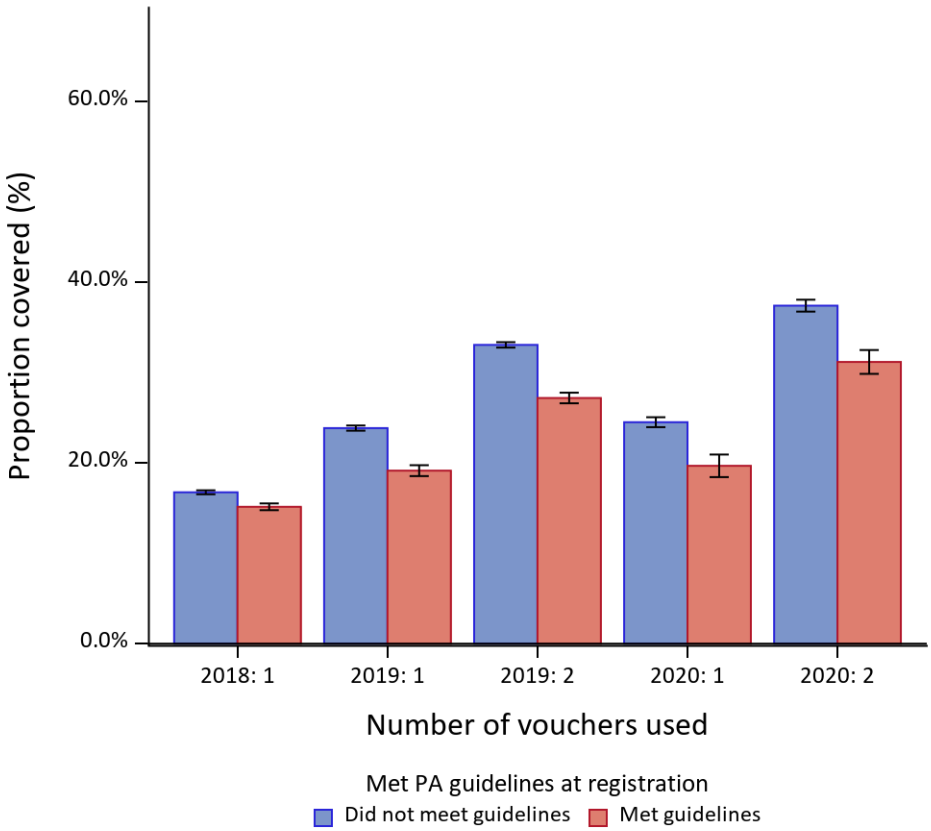
- Consistenty children residing in the most disadvantged areas of NSW are supported by a greater contribution from the Active Kids vouchers, than chlidren living in the least disadvantaged areas (Figure 37).

Figure 37 Proportion of expenditure covered by the Active Kids voucher in 2018 (vouchers: 0=7675; 1=39115), 2019 (vouchers: 0=9892; 1=33363; 2=81473) and 2020 (vouchers: 0=4008; 1=8842; 2=17500) by SEIFA quartile



- Children who are physically inactive at voucher registration are supported to a greater extent by the Active Kids vouchers financially, than physically active children (Figure 38).

Figure 38 Proportion of expenditure covered by the Active Kids voucher in 2018 (vouchers: 0=7675; 1=39115), 2019 (vouchers: 0=9892; 1=33363; 2=81473) and 2020 (vouchers: 0=4008; 1=8842; 2=17500) by meeting physical activity (PA) guidelines at registration

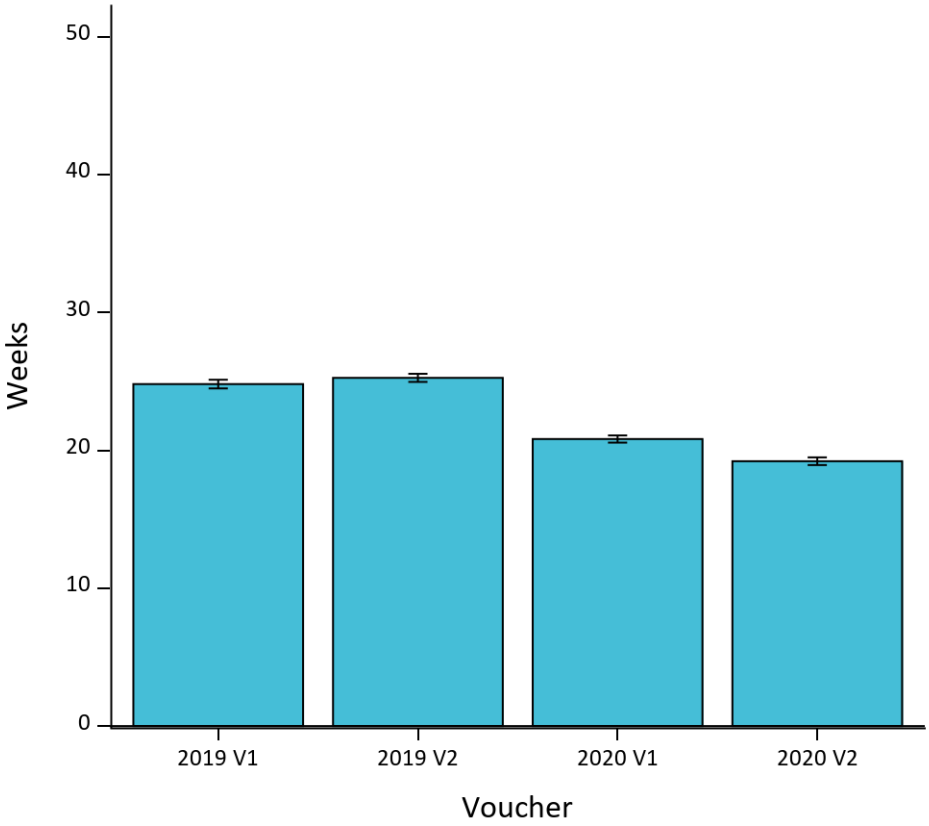


Voucher activity duration

For providers to be approved as Active Kids providers, they must deliver activities for a minimum of 8 weeks.

- The duration of Active Kids activities reduced in 2020 to 20 weeks compared with 25 weeks in 2019 (Figure 39). Limited data from Active Kids providers makes understanding this finding difficult, it is likely related to the COVID-19 pandemic.

Figure 39 Duration (in weeks) of voucher activity



Voucher contribution to overall physical activity

Increasing overall physical activity levels amongst NSW children is a critical success indicator for the Active Kids program. To understand the extent to which an Active Kids voucher supports participation in sport and physical activity, the time spent participating in the voucher activity in a typical week was collected. The time in voucher activity and total overall activity were used to calculate the proportion of overall activity supported by the voucher.

- Active Kids voucher(s) typically support 50% of a child's reported overall participation in organised sport and physical activity (Figure 40).

- The proportion of overall participation in organised sport and physical activity supported by an Active Kids voucher(s) increases with age, and is higher amongst boys, children who speak English as a primary language, do not live with a disability (Figure 41), and do not meet physical activity guidelines at voucher registration.

- The shorter duration reported for V2 in 2020 is most likely due to the shorter delivery period for the sport and recreation sector in response to the COVID-19 pandemic.

Figure 40 Proportion of annual activity covered by the voucher in 2018 (n=12,551), 2019 (V1 n=22,522; V2 n=19,844) and 2020 (V1 n=3,636; V2 n=4,077)

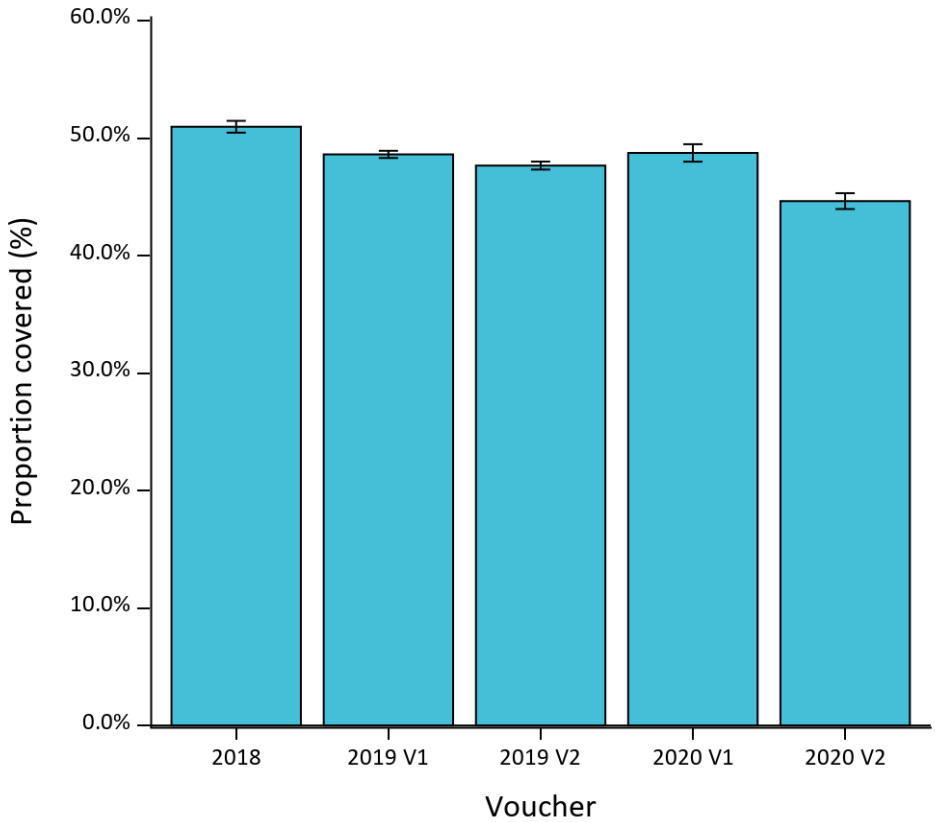
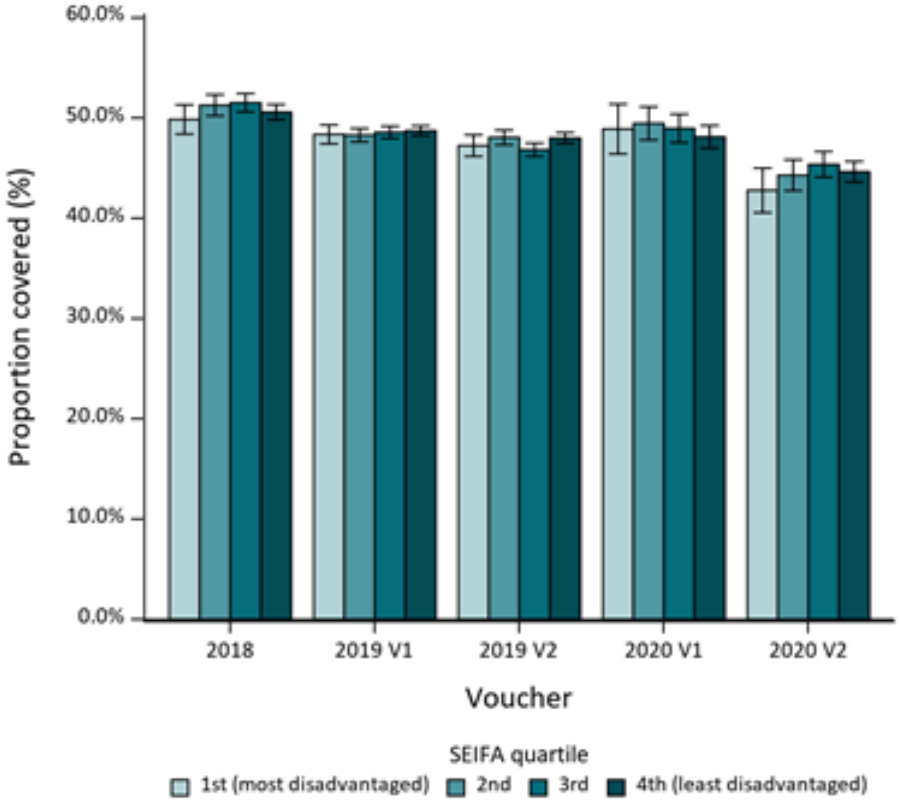


Figure 41 Proportion of annual activity covered by the voucher in 2018 (n=12,551), 2019 (V1 n=22,522; V2 n=19,844) and 2020 (V1 n=3,636; V2 n=4,077) by identified disability

- The percentage of overall participation supported by an Active Kids voucher, is similar amongst children who live in the most disadvantaged area and children who live in the least disadvantaged areas (Figure 42).

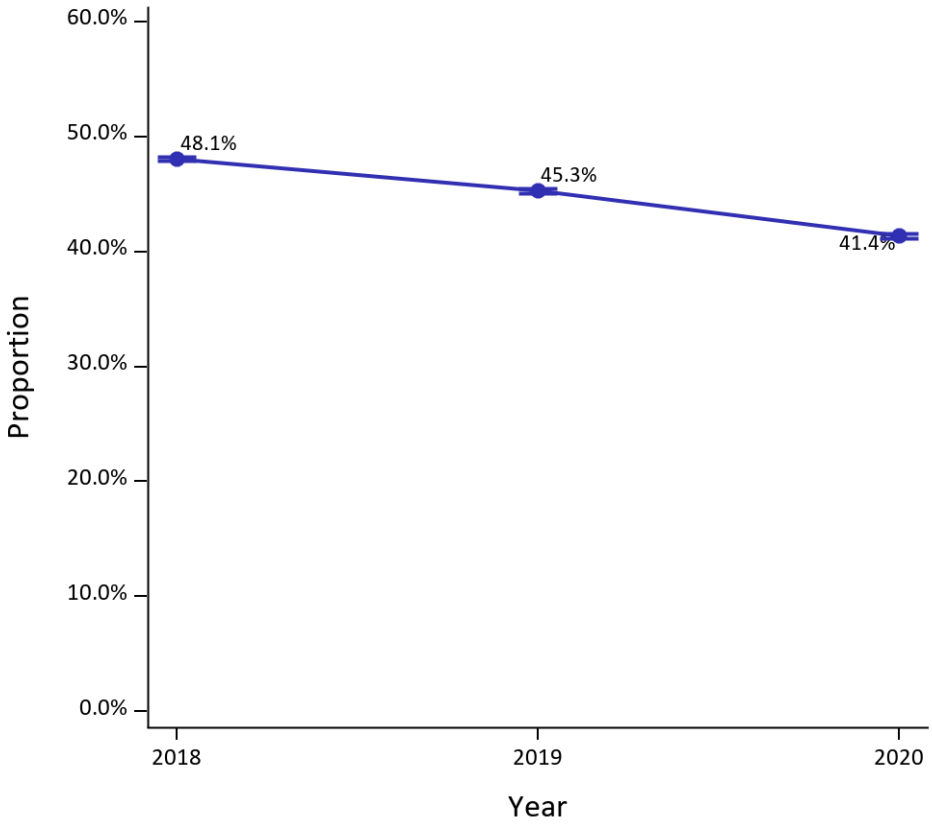
Figure 42 Proportion of annual activity covered by the voucher in 2018 (n=12,551), 2019 (V1 n=22,522; V2 n=19,844) and 2020 (V1 n=3,636; V2 n=4,077) by socioeconomic status



Changes in annual sports participation

- Children who reported participation in at least 2 sessions of organised sport and physical activity per week when they claimed a voucher, and registered in 2018, 2019 and 2020 in the Active Kids program, reported a decline in total organised sport and physical activity from 2018 – 2020 of around (Figure 43).

Figure 43 Changes in annual sport participation (at least twice per week) at registration for children that used a voucher in 2018, 2019, and 2020 (n=341,184)



Changes in annual sports participation of inactive[25] children who re-registered in 2019 and 2020

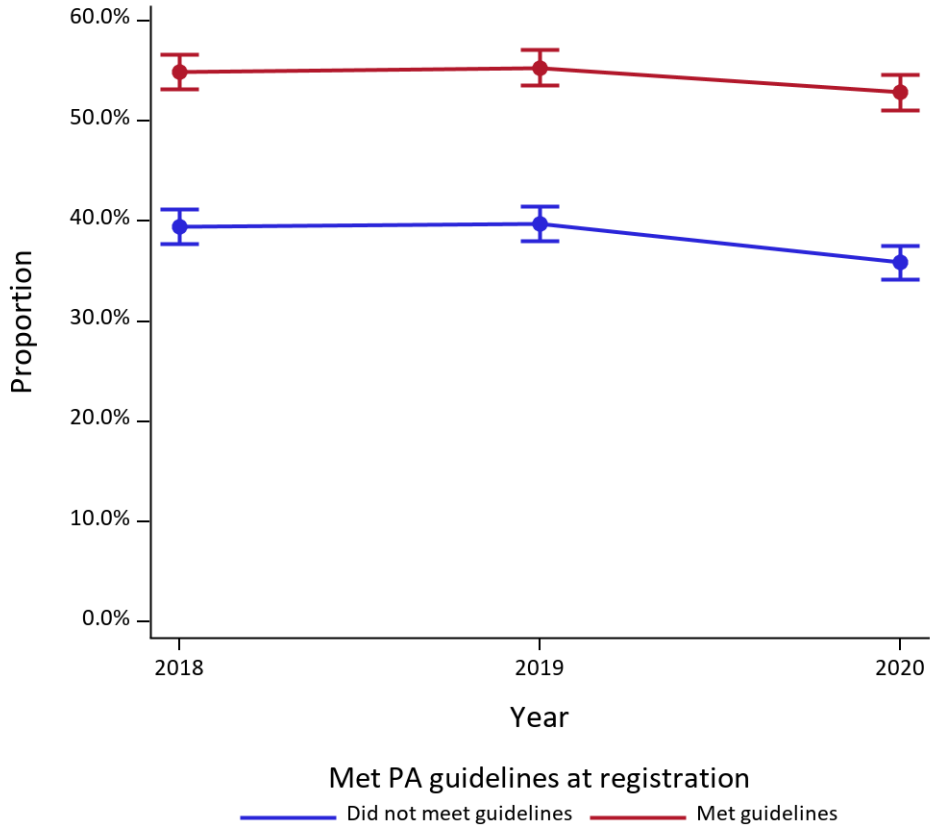
Structured physical activity and sport participation during childhood and adolescence are associated with important health and wellbeing benefits, including self-esteem, wellbeing, and social skills. Sport also has the potential to provide children with the opportunity to learn teamwork and negotiation skills, self-discipline, decision-making skills, and peer engagement.

To understand the contribution of structured physical activity and sport on broad health and wellbeing outcomes, it is helpful to capture frequency and duration of participation in structured physical activity and sport – which is not routinely collected in the sports sector.

- Similar proportions of children who were achieving physical activity guidelines and who did not achieve physical activity guidelines, claimed an Active Kids voucher each year of the program. (Figure 44).

- Declines were observed in registration amongst both groups in 2020.

Figure 44 Changes in the proportion of children that were meeting physical activity guidelines at registration for children that used a voucher in 2018, 2019, and 2020



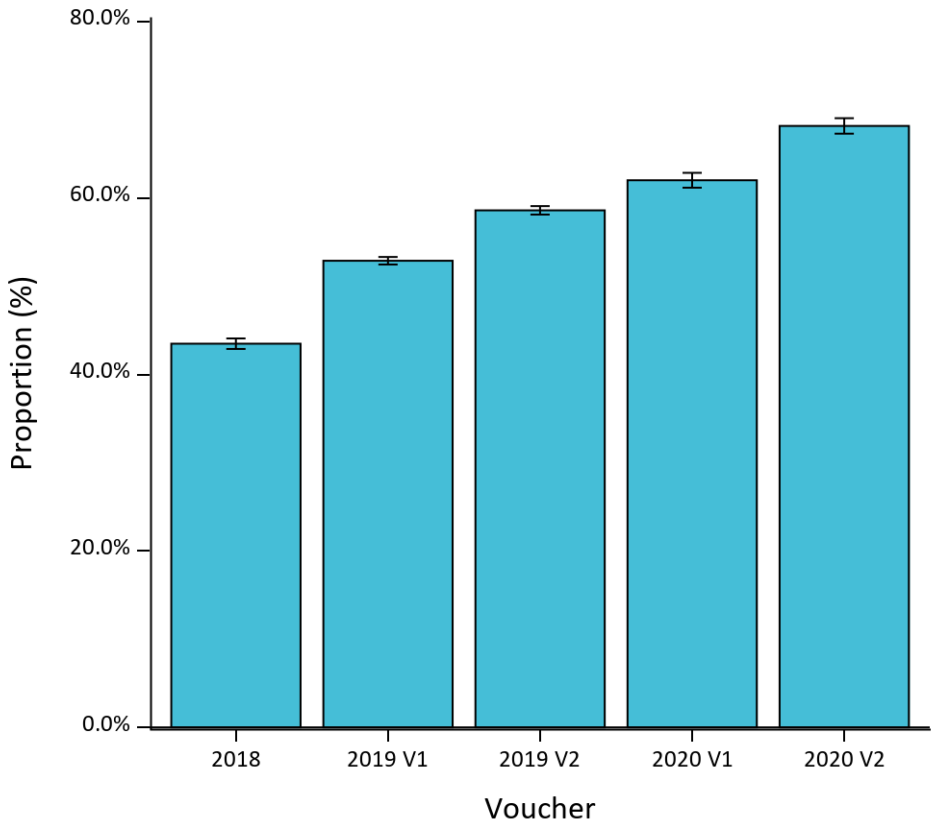
[25] Children not achieving physical activity guidelines at voucher registration.

Perceived impact of the Active Kids voucher

Adult caregivers who claimed and redeemed vouchers in 2018 and subsequently in 2019 and completed at least one research survey in 2018 and one research survey in 2019, were asked about the perceived impact of the Active Kids voucher on their child's physical activity (n=435).

- Over 40% of adult caregivers perceived that the Active Kids voucher increased their child's physical activity levels.
- The proportion of adult caregivers who perceived their child's physical activity to increase, increased with each voucher available each calendar year.
- Over 60% of adult caregivers perceived the second Active Kids voucher increased children's physical activity levels.

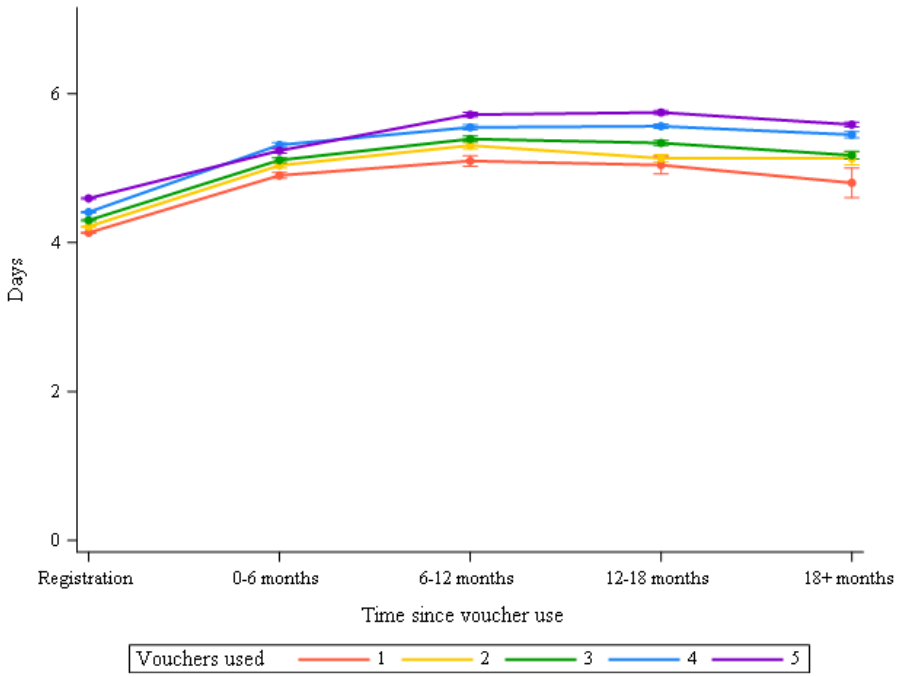
Figure 45 Proportion who perceived the Active Kids voucher increased the child's physical activity levels in 2018, 2019, and 2020



Changes in physical activity from first registration by number of vouchers used

- The number of vouchers a child redeemed was associated with higher rates of initial and maintained participation in physical activity (i.e., days achieving 60 minutes of activity per week).
- Participation after registering for the first Active Kids voucher generally peaked after 6-12 months amongst all children who redeem between 1 and 5 vouchers, with participation levels being maintained up to 18+months.
- This trend in increased physical activity was similar across all sociodemographic groups.

Figure 46 Changes in physical activity after registering for the first Active Kids voucher by the number of vouchers redeemed



Adult parent/caregiver physical activity levels and sport participation

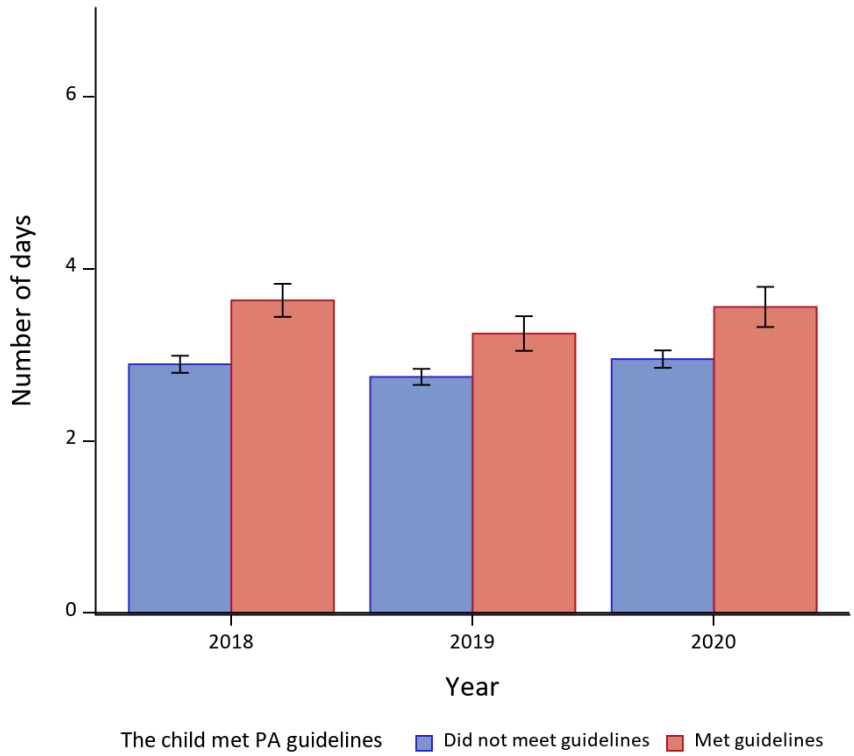
Child behaviours are known to be impacted by a variety of factors, with caregivers and adult caregivers' behaviours being strong determinants of children's physical activity behaviours. The outcomes of the Active Kids program are focused on children. Still, for ethical purposes, consent for research is obtained from the adult caregiver, and all research data must be provided with the adult caregiver present. This presented a unique opportunity to understand the physical activity and sporting behaviours of adult caregivers choosing to register children in the Active Kids program. For benefits, adults should do at least 150 minutes – 300 minutes of moderate to vigorous physical activity per week, which equates to 30 minutes per day [26].

- Adult caregivers who were classified as physically inactive also had children who were classified as physically inactive. Adult caregivers who met physical activity guidelines, had children who also achieved physical activity guidelines (Figure 47).

- Adult caregivers who participated in more sport sessions, had sporty children (Figure 48).

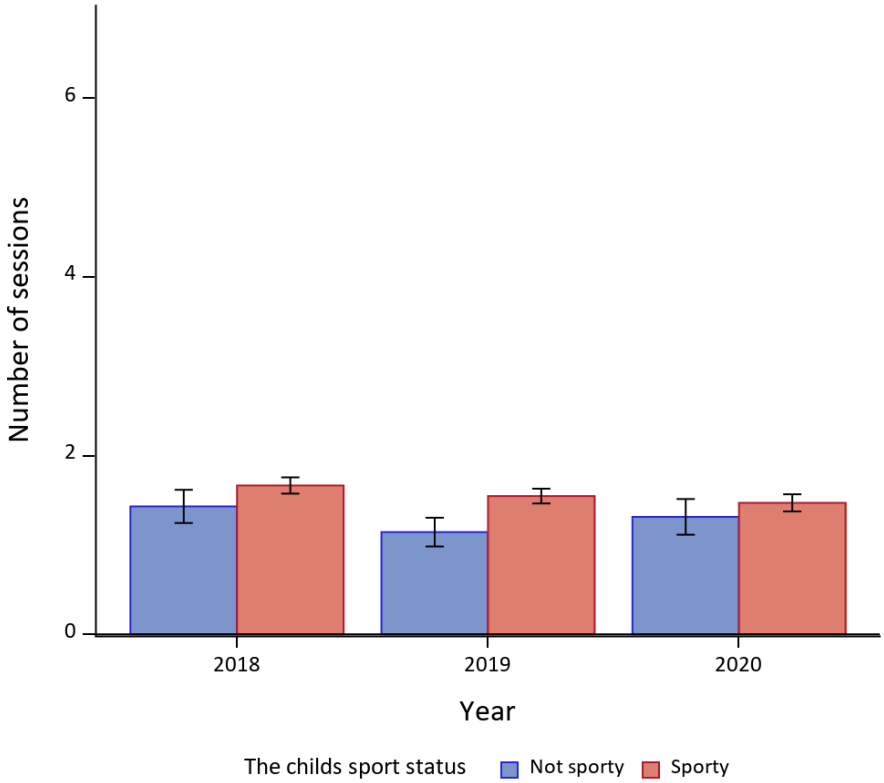
- This infers a relationship between adult caregiver physical activity levels and children's physical activity levels.

Figure 47 The number of days per week that the adult accumulated at least 30 minutes of physical activity, by whether the child achieved their physical activity guidelines (n=2,938)



26 https://www1.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-strateg-phys-act-guidelines

Figure 48 The adult's participation in sport sessions by the child's sport status (n=6,435)



- Collectively data collected through Active Kids supports the need to promote and encourage more NSW adults to become physically active through sport and or all forms of physical activity.

- Based upon the significant reach of the Active Kids (voucher registrations) to more than half of the eligible children in NSW, this could be a unique opportunity to intervene with low active adults on the benefits and importance of being physically active throughout life.

Children who claimed but did not redeem an Active Kids voucher

A strength of the SPRINTER evaluation is that all children who claim an Active Kids voucher are invited to participate in follow-up survey research. Sociodemographic characteristics of these children are presented earlier in the report (see Table 4). This section presents additional research analysis on survey responses regarding children that claimed an Active Kids voucher but did not redeem their voucher, referred to as non-redeemers.

Reasons for not redeeming an Active Kids voucher

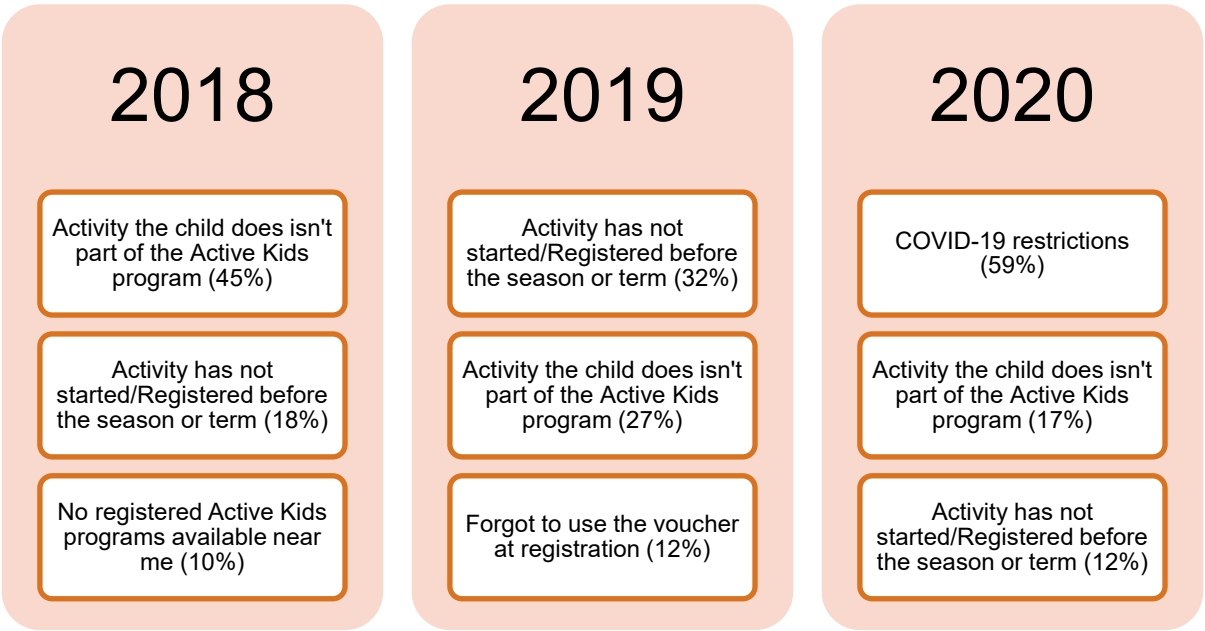
There was no difference between the participants' survey invitations based on their redemption status. All survey invitations instruct recipients to participate whether they had redeemed their voucher, or not, stating "Even if you have not redeemed your voucher, we still want to hear from you" or similar.

The survey included a question with pre-defined options and an opportunity to provide an "other" reason. Participants could select up to three responses. The pre-defined options were:

- Activity not started/registered before the season or term
- Activity cancelled or postponed due to the 2020 coronavirus pandemic
- Activity the child does isn't part of the Active Kids program
- Forgot to use the voucher at registration
- Not sure how or where to redeem the voucher
- No registered Active Kids programs available near me
- Technical issues with the activity registration website
- No time for the child to do the activity
- The adult's commitments make registration challenging
- The child feels anxious or nervous about participating
- The voucher has been redeemed
- Child illness or disability
- Child injury
- The child refused to participate
- Other (text entry)

In total, 5621 participants (2018=2461; 2019=2639; 2020=521) did not redeem a voucher during the calendar year and reported a reason for not using their voucher in the evaluation surveys. These self-report data provide the best available insight regarding the reasons for not using a voucher from the evaluation for program planning.

Figure 49 Top reasons for not redeeming a voucher each calendar year in 2018, 2019 and 2020



The most common reason reported for not using a voucher for children was "Activity the child does isn't part of the Active Kids program". Reasons for not using a voucher were not significantly different by the sex of the child.

Children aged 15-18 rears old (n = 1318)
Older children were more likely to report the "Activity the child does isn't part of the Active Kids program" (38% of 15-18-year-olds compared to 28% of 4-8-year-olds). Open text responses suggest that senior competitions in sports didn't accept Active Kids vouchers or these children preferred gym-based activities, which is not eligible for voucher use.

> *Child plays in a senior football competition - and they didn't know how to redeem it*
>
> *As now in Senior year, we were hoping a local gym would be of the Active Kids program, which would help with stress but no gym available. As a senior student they don't want to have to be in a group sport as additional pressure so gym would be perfect*
>
> *None of the organizations she participates with will accept them despite us trying*
>
> *15-year-old wants to go to gym, but gym does not accept voucher. Previously danced.*

A higher proportion (7%) of 15-18-year-olds reported having "No time for the child to do the activity" compared to younger children (4% of 4-8-year-olds). Open text responses suggest that school-related study and work commitments took up their time for activity during these older years.

> *Child chooses just to focus on Higher School Certificate*
>
> *Doing HSC. Prefers to go for a jog in own predetermined time to work around study and part-time work commitments.*
>
> *He started working on the weekends and couldn't play*

A higher proportion (8%) of younger children reported that "The adult's commitments make registration challenging" compared to older children (3% of 15-18-year-olds). This younger group was also more likely to report forgetting to use the voucher at registration (12% of 4-8-year-olds compared to 5% of 15-18-year-olds).

Just started school so I felt it might be too much

Haven't got around to it as focused on other things

I'm a single parent and it's very hard to find a team sport that doesn't play on weekends. Her father has refused to take her on his weekends, and I have no option to as it's his time each fortnight on the Saturday.

We have 4 children and 2 full time working parents. It's just hard to get them there.

Children living in low socioeconomic areas (n=892)
Children that lived in the most disadvantaged areas of NSW were more likely to report having "No registered Active Kids programs near me" and "Not sure how or where to redeem the voucher" respectively 11% and 10% compared to 8% and 7% of participants living in the least disadvantaged areas. They were also more likely to report having no time and being nervous/anxious about participating than their less disadvantaged counterparts.

The dance school doesn't accept the voucher

Sporting club said they didn't know how to use the voucher

Culturally and linguistically diverse children (n=673)
Culturally and linguistically diverse participants were more likely to report there were "No registered Active Kids programs available near me" (14% of Culturally and linguistically diverse children compared to 7% of children who only spoke English). They were also more likely to report being "Not sure how or where to redeem the voucher".

I can't find a place who accept the voucher I have no experience in this domain as I'm new to the country wish if there was a list of the places which accept vouchers to make it easier to the parents with poor English& experience

Aboriginal and Torres Strait Islander children (n=285)
Aboriginal children were more likely to report "the child feels anxious or nervous about participating" (11%), "Not sure how or where to redeem the voucher" (11%) and "The adults commitments make registration challenging" (8%); compared to reasons for not redeeming from non-aboriginal children - 4%, 8% and 5% respectively.

Children with a disability (n=316)
Participants reported that the child's disability was a major reason for not redeeming a voucher. Children with a disability were more likely to report "the child feels anxious or nervous about participating" (16%), "No registered Active Kids programs available near me" (12%), or "Child refused to participate (10%). Open text responses regarding children living with a disability included:

Difficult to find registered services for children with special needs

Hardly found activity that my kids like to do

Organization we registered in for the specific activity has long waiting list likely we won't be able to use voucher this year

A smaller proportion reported "Activity not started/registered before the season" was a reason for not redeeming a voucher among children with a disability (17%) compared to children without a disability (24%).

Children living in outer regional and remote NSW (n=264)
Reasons for not using a voucher were similar across major cities, inner regional and outer regional and remote areas. Children living in outer regional and remote areas were more likely to report "No registered Active Kids programs available near me" (11%) compared to children living in major cities (8%).

Participants in Major cities were more likely to report they forgot to use their voucher (10%) compared to participants in inner regional (8%), and remote areas on NSW (5%).

Summary

The proportion of registrants who redeemed a voucher remained stable, with no clear pattern of improved odds of voucher redemption among participants during 2018-2020. This may be due to changes in the program design (only one voucher available in 2018, and two per year available in 2019 and 2020), variations in the number of providers registered in the program, targeted strategies to increase program adoption, or the environmental context in NSW (e.g., drought, floods and the coronavirus pandemic). The general improvement in redemption in 2019 may be due to strategies implemented by the Office of Sport however, details of these strategies and their effectiveness have not been linked with the process data. In 2020, adoption of the program returned to similar levels as in 2018 which is likely a result of the coronavirus pandemic, which led to widespread cancellation of structured physical activity programs in Australia. The survey data reflects the impacts of the pandemic on program adoption in 2020, with 59% of survey participants indicating that coronavirus restrictions were the reason they had not redeemed an Active Kids voucher.

Strategies that could be implemented to increase voucher use include:

- supporting school-based promotion of the Active Kids program, especially in disadvantaged areas and high schools.
- ensuring parents/carers and adolescents have information about the program benefits, and how to claim and redeem vouchers, using digital communication and community outreach.
- targeting CALD and disadvantaged communities to boost program engagement through intensified investment in a broad range or strategies. For example, segmented mass media and social media-based marketing approaches.
- adapting the supply and/or value of Active Kids vouchers to provide additional benefit to priority populations.
- empowering adolescents to claim and redeem vouchers by providing more flexible activity options.

NSW Population Health Survey and Active Kids

SPRINTER worked in collaboration with NSW Government Ministry of Health to add two items to the 2018 and onwards NSW Population health surveys [27]. The purpose of these additional questions was to measure awareness and engagement of the Active Kids program within the population health survey – a validated government surveillance tool in NSW that was independent of the Office of Sport evaluation of the Active Kids program.

The caregivers were first asked how many children in the household were enrolled in primary or high school to determine eligibility.

If the caregivers responded that there was at least one child enrolled in primary or high school, they were asked: "There is an Active Kids program in NSW to support participation in structured physical activity and sport. *Which of the following applies to you and the child/children in your household?" The caregivers responded with a) never heard of the scheme [unaware and unengaged]; b) heard of the scheme but not registered [aware and unengaged];* c) *registered but not followed through and redeemed the voucher [aware and partially engaged]; d) registered and have redeemed the voucher to participate [aware and fully engaged]; e) don't know.*

Frequencies and weighted proportions for the caregivers' awareness and engagement in the Active Kids program by socioeconomic status were calculated.

Caregivers' awareness and engagement in the Active Kids program by socioeconomic status

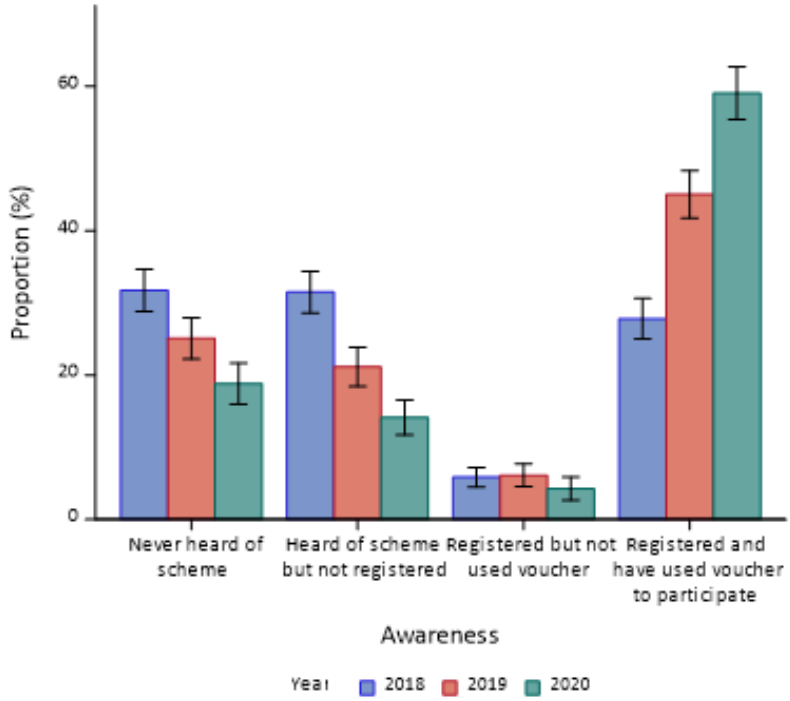
- In 2020 59% of the eligible NSW population registered and used an Active Kids voucher. See Figure 50.

- The proportion of people who had never heard of the Active Kids program reduced each year from 31% in 2018 to 19% in 2020.

- Of people who had never heard of the scheme 33% were from the most disadvantaged areas in 2018 and 30% in 2020.

27 SPRINTER has an MOU with NSW Health regarding the transfer and use of population health survey data for the purposes of the Active Kids survey data.

Figure 50 Awareness of the Active Kids program in parents/guardians that completed the NSW Population Health Survey by year



- Most people who have heard of the Active Kids program but have not claimed an Active Kids voucher live in the most disadvantaged communities.

- Whilst reductions in the number of people who have heard of the program and not claimed a voucher are observed, from 31% in 2018 to 16% in 2020, ongoing promotion of the program is recommended to convert awareness into action.

Figure 51 The proportion of parents/guardians that had heard of the Active Kids program but not claimed a voucher, by year and socioeconomic status

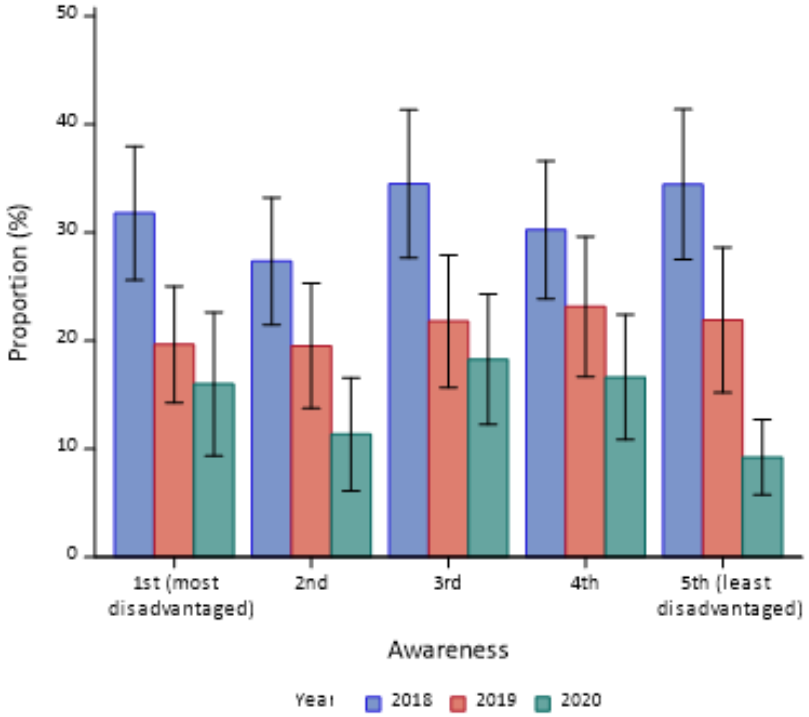
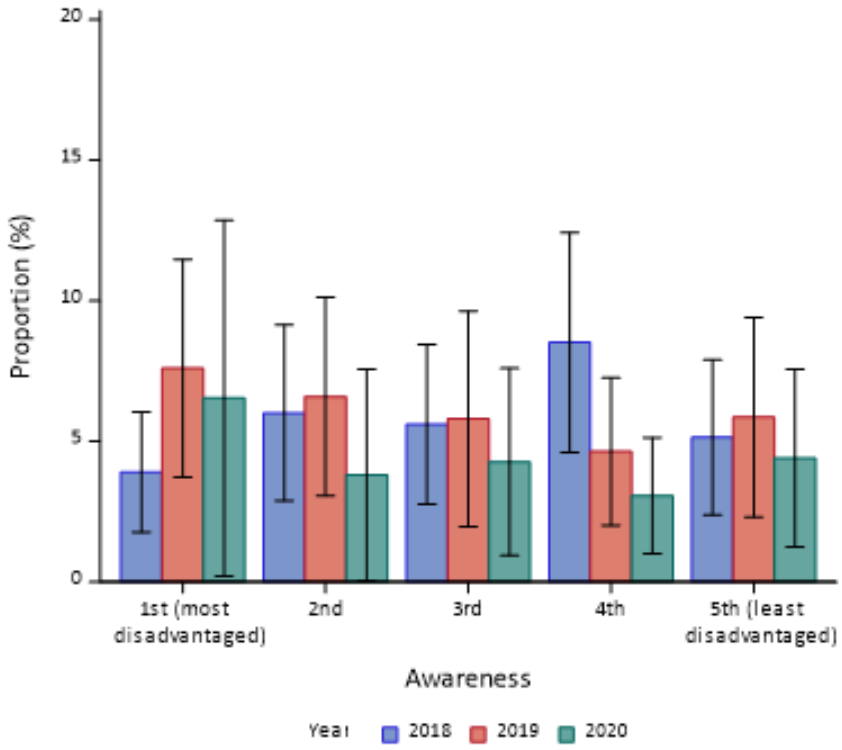


Figure 52 The proportion of parents/guardians that had claimed an Active Kids voucher but not used the voucher, by year and socioeconomic status



SPRINTER peer-review research publications

SPRINTER has published eleven peer-reviewed academic journal papers on different aspects of the evaluation of Active Kids. Peer review is the academic process of scholarly assessment by experts within the field. The strength of publishing peer-reviewed outputs is that it is a trusted form of scientific communication and informs people about the Active Kids program globally.

The independent publication of SPRINTER evaluation provides further credibility and academic rigour to the data being presented and provides a platform for the NSW government and the sport and physical activity community more broadly to discuss and access the publication data. The transparency provided by peer-reviewed publication also enables other interdisciplinary partners to share and learn from the results here, enhancing the international relevance of the New South Wales government work in this area. For this reason, and were deemed appropriate, NSW Government Stakeholders or other agency partners have co-authored some academic papers.

The Active Kids program is one of a kind around the world based upon the universal design and the significant scale of the population involved. Not only does little data exist on the role that voucher schemes have in increasing sport and physical activity amongst children and young people, but the dataset created through Active Kids is also one of the largest globally. It, therefore, provides a unique opportunity to learn more about the participation behaviours of children and young people and contribute to the global evidence base about what works to enable increases in population physical activity.

A summary of each research paper is provided below, along with its appropriate citation. Papers can also be accessed on the SPRINTER page on the **NSW Government Office of Sport website.**

1. **Reece LJ. Owen KB, Foley B, Rose C, Bauman A, Rosenbaum, S. Psychological distress, physical activity and socio-economic status in parents and caregivers of school-aged children (Awaiting Submission)**

- Background: Regular physical activity benefits physical and mental health both in the short and long term yet for many physical activity levels declined during restrictions associated with COVID-19. The purpose of this study was to explore psychological distress, physical activity levels and socio-economic status amongst a large sample of parents/caregivers registered in the state-wide organised sport voucher program (Active Kids) program.
- Method: Cross-sectional data collected at two time points (during COVID-19 restrictions June – August 2020 and post COVID-19 restrictions April – June 2021) designed to assess the relationship between parent/caregivers' psychological distress, physical activity levels and socio-economic status.
- Results: 10,990 parents/caregivers responded to psychological distress survey questions in 2020 with 17,106 responding in 2021. Parents/caregivers who were physically active seven days per week were 60% less likely to report high psychological distress compared with parents/carers who were physically inactive (OR: 0.40, 95% CIs 0.33,0.49). A clear linear socio-economic gradient existed for psychological distress. In 2020 9.8% of parents/ caregivers (n=1,076) reported high psychological distress and this decreased to 8% in 2021 (n=1,366). In 2021, parents/ caregivers were 21% less likely to report high psychological distress (OR: 0.79, 95% CIs 0.72, 0.86).
- Conclusions: In this large sample of parents and caregivers, achieving the physical activity guidelines was associated with lower odds of experiencing psychological distress. Socio-economic disadvantage negatively impacted psychological distress and physical activity levels. Reciprocal recognition between the mental health and physical activity sectors is

recommended alongside the contribution of socio-economic status. This has implications for the on-going COVID-19 response.

2. **FOLEY BC, OWEN KB, BAUMAN AE, BELLEW W, REECE LJ. EFFECTS OF THE ACTIVE KIDS VOUCHER PROGRAM ON CHILDREN AND ADOLESCENTS' PHYSICAL ACTIVITY: A NATURAL EXPERIMENT EVALUATING A STATE-WIDE INTERVENTION. BMC PUBLIC HEALTH. 2021 DEC;21(1):1-6.**

- In 2018, all children and adolescents registered for an Active Kids voucher provided sociodemographic characteristics, physical activity, and research consent. This prospective cohort study used an online survey with validated items to measure physical activity and other personal and social factors in children and adolescents who used an Active Kids voucher. Generalized linear mixed models were used to examine changes from registration to after voucher use at ≤8 weeks, 9–26 weeks and ≥ 6 months.
- Study participants reported increasing their days achieving physical activity guidelines from 4.0 days per week at registration to 4.9 days per week after 6 months. Increased physical activity was observed for all sociodemographic population groups.
- The voucher-specific activity contributed 42.4% to the total time children participated in structured physical activities outside of school. Children and adolescents who increased to, or maintained, high levels of activity were socially supported to be active, had active parent/caregivers, had better concentration and were overall happier than their low-active counterparts.
- The Active Kids program significantly increased children's physical activity levels and these increases continued over a six-month period. The Active Kids voucher program shows promise as a scaled-up intervention to increase children and adolescents' physical activity participation.

3. **REILLY K, BAUMAN A, REECE L, LECATHELINAIS C, SUTHERLAND R, WOLFENDEN L. EVALUATION OF A VOUCHER SCHEME TO INCREASE CHILD PHYSICAL ACTIVITY IN PARTICIPANTS OF A SCHOOL PHYSICAL ACTIVITY TRIAL IN THE HUNTER REGION OF AUSTRALIA. BMC PUBLIC HEALTH. 2021 DEC;21(1):1-2.**

- It is a longitudinal study of parents /carers amongst primary school children in the Hunter region of NSW. This was a follow-up of an existing intervention trial for school students, examining Active Kids engagement, voucher redemption and participation 12 months after the end of the trial.
- 96% of these Newcastle region parents (n=407) reported redeeming a voucher. Most children were already physically active or encouraged in some form of sport.
- Children who redeemed a voucher had three times the odds to participate in organized team sports from baseline to follow-up ($p = 0.009$). Subgroup analyses identified that females who redeemed a voucher had four times the odds to participate in organized team sports ($p = 0.012$)

4. **OWEN KB, BELLEW B, FOLEY BC, BAUMAN A, REECE LJ. BODY MASS INDEX OF CHILDREN AND ADOLESCENT PARTICIPANTS IN A VOUCHER PROGRAM DESIGNED TO INCENTIVIZE PARTICIPATION IN SPORT AND PHYSICAL ACTIVITY: A CROSS-SECTIONAL STUDY. PREVENTIVE MEDICINE REPORTS. 2021 JUN 1;22:101349.**

- The Active Kids program reached 75,927 children who were overweight or obese.

- The program reached approximately 25% of all eligible children who were overweight and obese.
- The prevalence of overweight and obesity was 17.2% and 7.6%, respectively.
- There was a clear socio-economic gradient for obesity prevalence.

5. **VIRGONA N, FOLEY B, RYAN H, NOLAN M, REECE L. "ONE HUNDRED DOLLARS IS A BIG HELP, BUT TO CONTINUE, IT'S A CHALLENGE". A QUALITATIVE STUDY EXPLORING CORRELATES AND BARRIERS TO ACTIVE KIDS VOUCHER UPTAKE IN WESTERN SYDNEY. HEALTH PROMOTION JOURNAL OF AUSTRALIA. 2022 JAN; 33(1):7-18.**

- The universal Active Kids voucher program has had a positive impact on participation in structured physical activity among children who are overweight or obese and culturally and linguistically diverse children.
- Study participants reported very few barriers to registering in the Active Kids program for parents of children who were overweight or obese
- Parents, regardless of socioeconomic status, wanted their children to engage in structured activities they were interested in and found fun. Parents valued flexible trial period for activities and multi-sport opportunities to develop kids' interest in motivation to participate in structured physical activities.
- The Active Kids program provides a platform for collaboration between state government, local governments and the sport and physical activity sector to address challenges remaining for parents of overweight and obese children and low socioeconomic families. The voucher in isolation is not enough to overcome the array of barrier that make it difficult for parents to register children in structured physical activity and sports programs.

6. **REECE LJ, MCINERNEY C, BLAZEK K, FOLEY BC, SCHMUTZ L, BELLEW B, BAUMAN AE. REDUCING FINANCIAL BARRIERS THROUGH THE IMPLEMENTATION OF VOUCHER INCENTIVES TO PROMOTE CHILDREN'S PARTICIPATION IN COMMUNITY SPORT IN AUSTRALIA. BMC PUBLIC HEALTH. 2020 DEC;20(1):1-7.**

- Five States and Territories implemented sports vouchers from 2011 to 2018, with a median value of AU$150. Nationally, median annual expenditure for children's sport participation was AU$447 (IQR $194.2–936), with 27% reported expenditure supported by a sports voucher.
- The proportion of financial support from sports vouchers increased considerably with social disadvantage, rising to over 60% of total expenditure in the most disadvantaged populations.
- Socio-economic status was associated with sports-related expenditure and sports participation amongst children. Sport vouchers should target children in the most disadvantaged areas to promote participation in structured physical activity and sport.

7. **MACNIVEN R, FOLEY BC, OWEN KB, EVANS JR, BAUMAN AE, REECE LJ. PHYSICAL ACTIVITY AND SPORT PARTICIPATION CHARACTERISTICS OF INDIGENOUS CHILDREN REGISTERED IN THE ACTIVE KIDS VOUCHER PROGRAM IN NEW SOUTH WALES. JOURNAL OF SCIENCE AND MEDICINE IN SPORT. 2020 DEC 1;23(12):1178-84.**

- In 2018, more than 35,000 Indigenous children engaged with Active Kids. This is one of the largest samples of Indigenous children in Australia, presenting unique opportunity to learn more about the effect of the program in this population.
- The Active Kids voucher program evaluation highlights the significant reach that the program achieved to Indigenous and non-Indigenous children indicating that the universality of the Active Kids program appears acceptable, enabling reach to children from low socioeconomic backgrounds and of all abilities which is essential to promote inclusive sport and physical activity opportunities.
- This study found that Indigenous children are more physically active, however their sport participation is lower, than non-Indigenous children.
- This universal approach could be complemented with additional targeted approaches to achieve equitable socioeconomic reach.

8. REECE LJ, OWEN K, FOLEY B, ROSE C, BELLEW B, BAUMAN A. UNDERSTANDING THE IMPACT OF COVID-19 ON CHILDREN'S PHYSICAL ACTIVITY LEVELS IN NSW, AUSTRALIA. HEALTH PROMOTION JOURNAL OF AUSTRALIA. 2021APR;32(2):365-366.

- During the NSW COVID-19 community restrictions, parents/carers reported that 40% of children's voucher activities were postponed, 38% were continuing but in a modified form, 12% were cancelled and only 6% remained unaffected.
- Since the COVID-19 restrictions, most respondents reported that children's physical activity levels had decreased (a lot: 31%, a little: 39%) with the decrease most notable amongst adolescents aged 12 years or over.
- COVID-19 influenced the setting for undertaking activity, with most children being active at home (82%) whilst a large proportion went to public spaces (52%). Most children's screen time increased (a lot 48%, a little 37%).
- Children from higher socioeconomic areas had greater increases in screen time than did those from lower socioeconomic areas. This decline in children's physical activity was not observed in 2018 and 2019, in fact, increases in children's physical activity levels were observed previously, independent of socio-demographic characteristics.

9. OWEN KB, FOLEY BC, BAUMAN A, BELLEW B, REECE LJ. PARENTAL AWARENESS AND ENGAGEMENT IN THE ACTIVE KIDS PROGRAM ACROSS SOCIOECONOMIC GROUPS. JOURNAL OF SCIENCE AND MEDICINE IN SPORT. 2020 AUG 1;23(8):753-7.

- In 2018, the Active Kids program reached over half (53%) of all school-enrolled children in NSW and subsequently reduced the cost barrier to structured physical activity and sport for these children. This reach supports continued government investment in the program.
- A substantial proportion of children who live in the most disadvantaged areas have engaged in the Active Kids program.
- However, there is still a large proportion of socially disadvantaged groups who have not engaged in the program.
- Parent/carer's in the most disadvantaged areas were twice as likely to be unaware and not engage in the Active Kids Program compared with parents/carers in the least disadvantaged areas.
- Further targeted work is required to increase the awareness and engagement in the Active Kids program for socially disadvantaged groups.

10. **REECE LJ, FOLEY BC, BELLEW W, OWEN K, CUSHWAY D, SRINIVASAN N, HAMDORF P, BAUMAN A. ACTIVE KIDS; EVALUATION PROTOCOL FOR A UNIVERSAL VOUCHER PROGRAM TO INCREASE CHILDREN'S PARTICIPATION IN ORGANISED PHYSICAL ACTIVITY AND SPORT. PUBLIC HEALTH RES PRACT. 2021;31(2)E30122006**

- Active Kids, the first universal sports voucher program of its kind in Australia, is an innovative approach to promoting participation in recreational physical activity and organised sport among all children in New South Wales (NSW), Australia.
- Evaluation of the program presents a unique opportunity to learn about the sport and physical activity participation behaviors of children in NSW. Evaluation of the program will also contribute to the evidence base on how to effectively design and implement complex yet pragmatic evaluations, underpinned by evidence yet appropriate for policy makers and practitioners.

11. **FOLEY BC, OWEN KB, BELLEW W, WOLFENDEN L, REILLY K, BAUMAN AE, REECE LJ. PHYSICAL ACTIVITY BEHAVIORS OF CHILDREN WHO REGISTER FOR THE UNIVERSAL, STATE-WIDE ACTIVE KIDS VOUCHER: WHO DID THE VOUCHER PROGRAM REACH? INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH. 2020 JAN;17(16):5691.**

- Active Kids is a government-led, universal voucher program that aims to reduce the cost of participation in structured physical activity for all school-enrolled children in New South Wales (NSW), Australia.
- As part of the Active Kids program evaluation, this cross-sectional study examined the Active Kids' program's reach to children in NSW and their physical activity behaviors, before voucher use.
- Demographic registration data from all children (4.5–18 years old) who registered for an Active Kids voucher in 2018 (n = 671,375) were compared with Census data. Binary and multinomial regression models assessed which correlates were associated with meeting physical activity guidelines and participation in the sessions of structured physical activity.
- The Active Kids program attracted more than half (53%) of all eligible school-age children in NSW. Children who spoke a primary language other than English at home, were aged 15–18 years old, lived in the most disadvantaged areas, and girls, were less likely to register.
- Of the registered children, 70% had attended structured physical activity sessions at least once a week during the previous 12 months, whilst 19% achieved physical activity guidelines.
- Active Kids achieved substantial population reach and has the potential to improve children's physical activity behaviors.

Appendices

Appendix A: Glossary of definitions

Table 8 Glossary of definitions

Term	Definition
Active Recreation	Physical activity for the purposes of relaxation, health and wellbeing or enjoyment which can be self-directed of facilitated by a provider or organisation.
ARIA+	Accessibility and Remoteness Index of Australia
Confidence Interval	A range of values that likely include the true population proportion of mean.
Demographic characteristics	Characteristics of a group of people. In this report, the focus is on age, gender, SEIFA status, ARIA+.
Eligible population	Children aged between 4.5 – 18 years school enrolled living in NSW with a valid Medicare card
Evaluation	Process of judging the value of something. Formative: Set of activities designed to develop and present program materials and methods. Process: a set of activities designed to assess the success of program implementation. Describes and explains what happens once the program has started and the extent to which it is delivered as planned. Outcome: a set of activities designed to assess whether the program [Active Kids] achieved its goals and objectives.
Exercise	Intentional physical activity carried out to sustain or improve health and/or physical fitness.
Generalized linear models (GLMM)	A flexible generalization of linear regression that allows for outcome variables to have error distribution models other than a normal distribution.
Inactive (adult)	Adult caregiver reports they do not do 150 Active minutes of moderate to vigorous physical activity in the previous 7 days a week, not achieving physical activity guidelines.
Inactive (child)	Adult caregiver reports child does not do 60 Active minutes of moderate to vigorous physical activity on 7 days a week in the previous 7 days a week, not achieving physical activity guidelines.
Inactivity (insufficient Physical Activity)	An absence of sufficient physical activity to meet current national physical activity guidelines / recommendations. Australian guidelines recommend a child does 60 minutes of moderate to vigorous physical activity on 7 days a week. If a child does less than 7 days, then they are classed as not meeting physical activity guidelines.

Term	Definition
Logic Model	A way of describing the changes that the program [Active Kids] is intended to bring about, defining what will happen during a program, in what order and with what anticipated effects.
Mixed method research	Mixed method is the term used to describe research that involves collecting, analysing, and interpreting data from multiple sources or studies. In this case we use registration data and survey data and qualitative responses within survey data.
Multisport	A category for providers where activity isn't specified for the specific voucher.
New participation	Defined as adults care givers who planned to use their voucher for the child to start a new activity at voucher registration or any participation reported amongst children who reported not playing sport or were classified as physically inactive at voucher registration.
Non-redeemers	Children/Adult caregivers who do not use their Active Kids voucher at an Active Kids provider.
Non-sporty	Children who played 0 sessions of Sport in the previous 12 months before accessing an Active Kids voucher. This is known as the adult caregiver entered 0 to this question on the Active Kids registration form. This question aligns with AusPlay.
Odds ratio	is a measure of association between an exposure and an outcome. The OR represents the odds that an outcome will occur given a particular exposure, compared to the odds of the outcome occurring in the absence of that exposure. In this case the exposure is the Active Kids program.
Organised Sport	Sport that consists of structured competition, follows a defined set of rules, and is governed and officiated by an organised body.
Physical Activity	Any activity that gets your body moving, makes your breathing become quicker and your heartbeat faster.
Priority populations	As defined by the Office of Sport [OOS to insert link to document]. (CALD, Indigenous, Girls, Adolescents, Inactive, living with a disability, Regional and Remote)
Quasi-experimental research design	Quasi-experimental means selecting a group and testing whether something works or not. In this case, we surveyed a selection of kids who registered in Active Kids to test the impact of the voucher.
Reach	Proportion of a target population that is engaged in the program. Reach is especially important in determining the generalisability of the program to the population as a whole Number of unique people who register for an Active Kids voucher each calendar year.
Redeemers	Children/Adult caregivers who successfully use one or more Active Kids voucher at an Active Kids provider this information is gained from the Active Kids/Service NSW database.
Registered children	Number of children who had entered details online through Service NSW to get an Active Kids voucher

Term	Definition
Representativeness	Ability to draw accurate conclusions about a population from a sample. In this evaluation, the ability for us to make accurate conclusions about the NSW population from the children who register for an Active Kids voucher.
SEIFA	Area level socio-economic status was determined using postcode of residence and categorised using the Socio-Economic Index for Area (SEIFA), specifically the Index of Relative Socio-Economic Disadvantage (Australian Bureau of Statistics, 2016), which ranks regions in Australia according to relative socioeconomic disadvantage. Postcode-based SEIFA percentiles were converted into quartiles, with the lowest 25% of postcodes classified as 1 (most disadvantaged area) and the top 25% of postcodes as 4 (least disadvantaged area).
Sport	Physical activity that can be undertaken by team or individual in a social or competitive environment in pursuit of a result.
Sporty	Children who played at least 4 sessions of sport per week in the previous 12 months before accessing an Active Kids voucher.
Used a voucher	Redeemed a voucher at a provider
Voucher redemption	Adult caregiver used an Active Kids voucher at an Active Kids Provider. This information is accessed by the Service NSW redemption database.
Vouchers claimed	Voucher registration made online

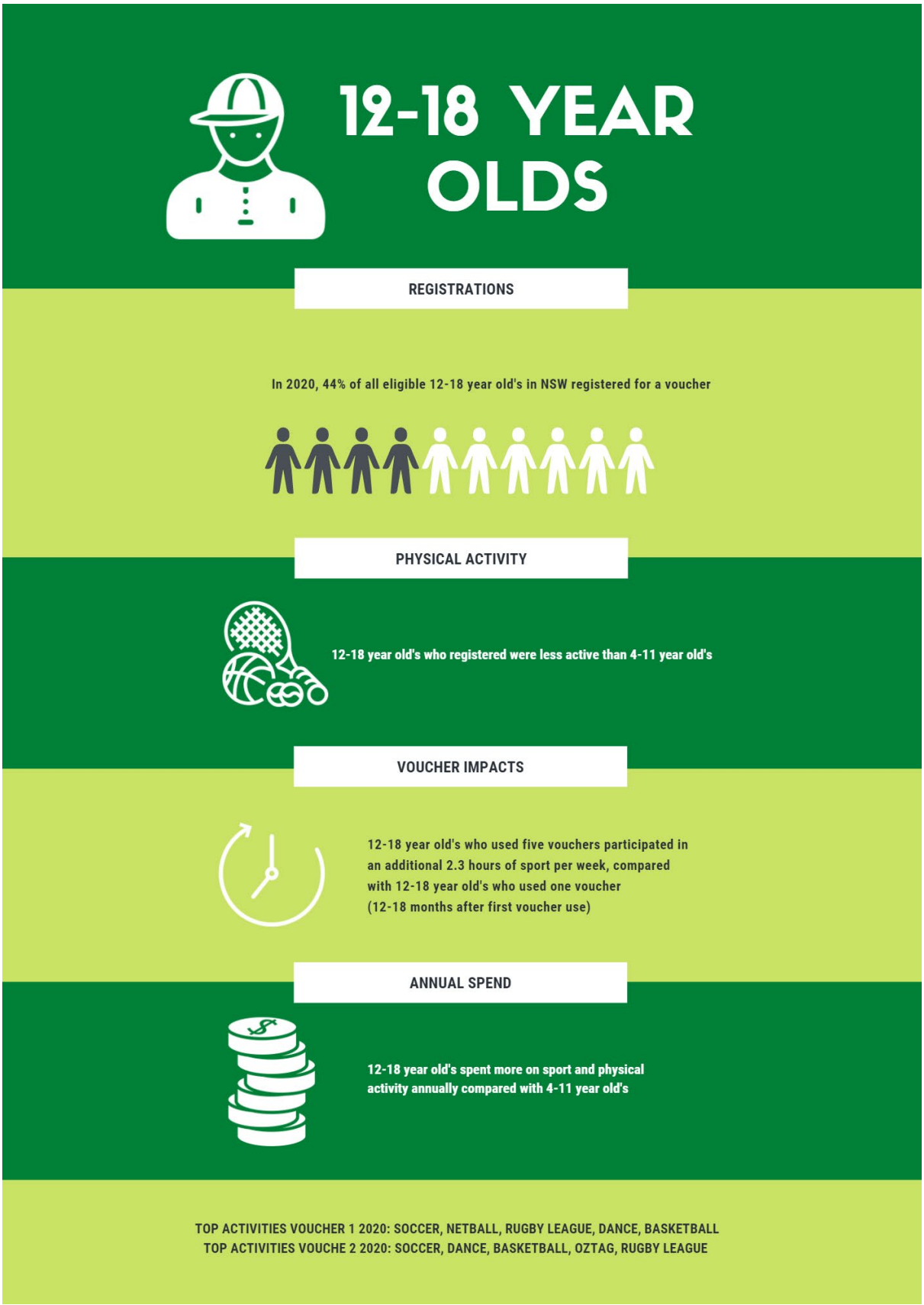
Appendix B: At-A-Glance

These '**at-a-glance'** snapshots provide key information about each of the priority groups identified by the NSW Government Office of Sport. These priority groups include.

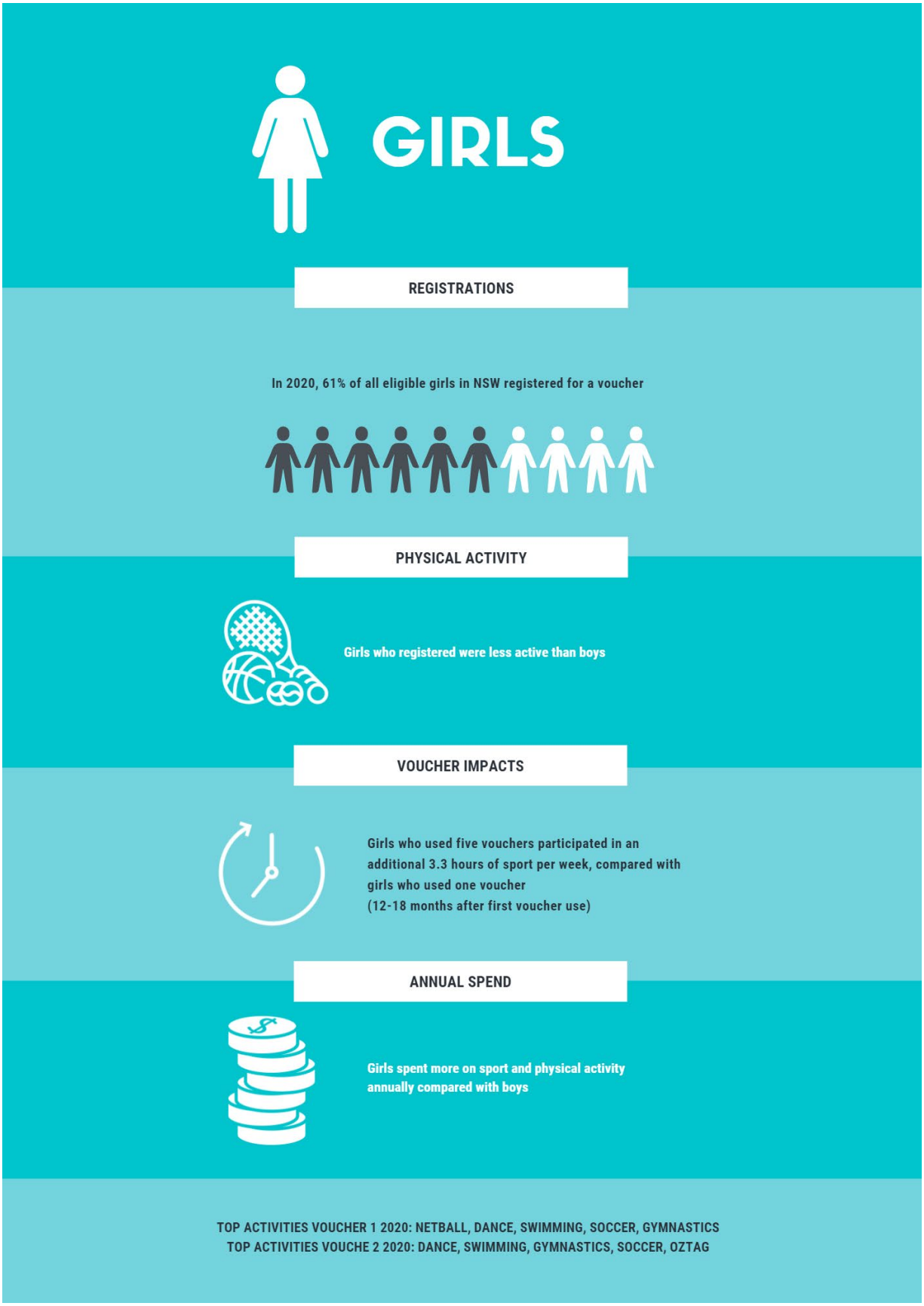
- Adolescents (12-18 years old)
- Girls
- Culturally and linguistically diverse (CALD)
- Children who identify as Aboriginal and/or Torres Strait Islander
- Children living with a Disability
- Children living in socioeconomically disadvantaged areas (Socio-economic Index for Areas, SEIFA)
- Children living in outer regional and remote areas (Accessibility/Remoteness Index of Australia, ARIA)

These evidence-based snapshots provide digestible information on what the Active Kids evaluation is telling us about each of the priority groups identified. Information has been selected based upon its significance for the priority group, and therefore each at-a-glance snapshot is different. It is the intention that these snapshots can be used individually to tell a story about one priority group or as a collective summary as presented here.

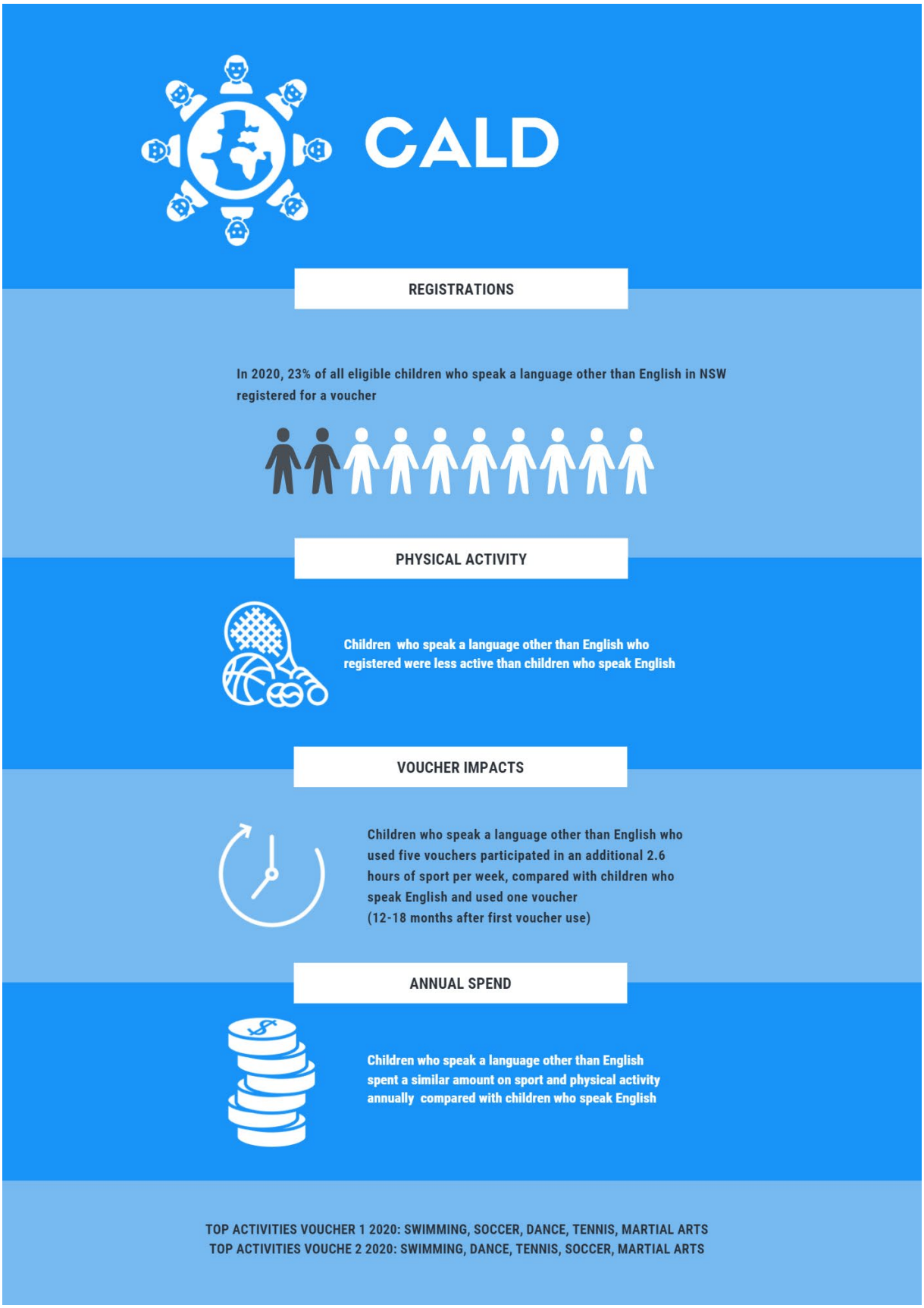
Adolescents (12-18 years old)



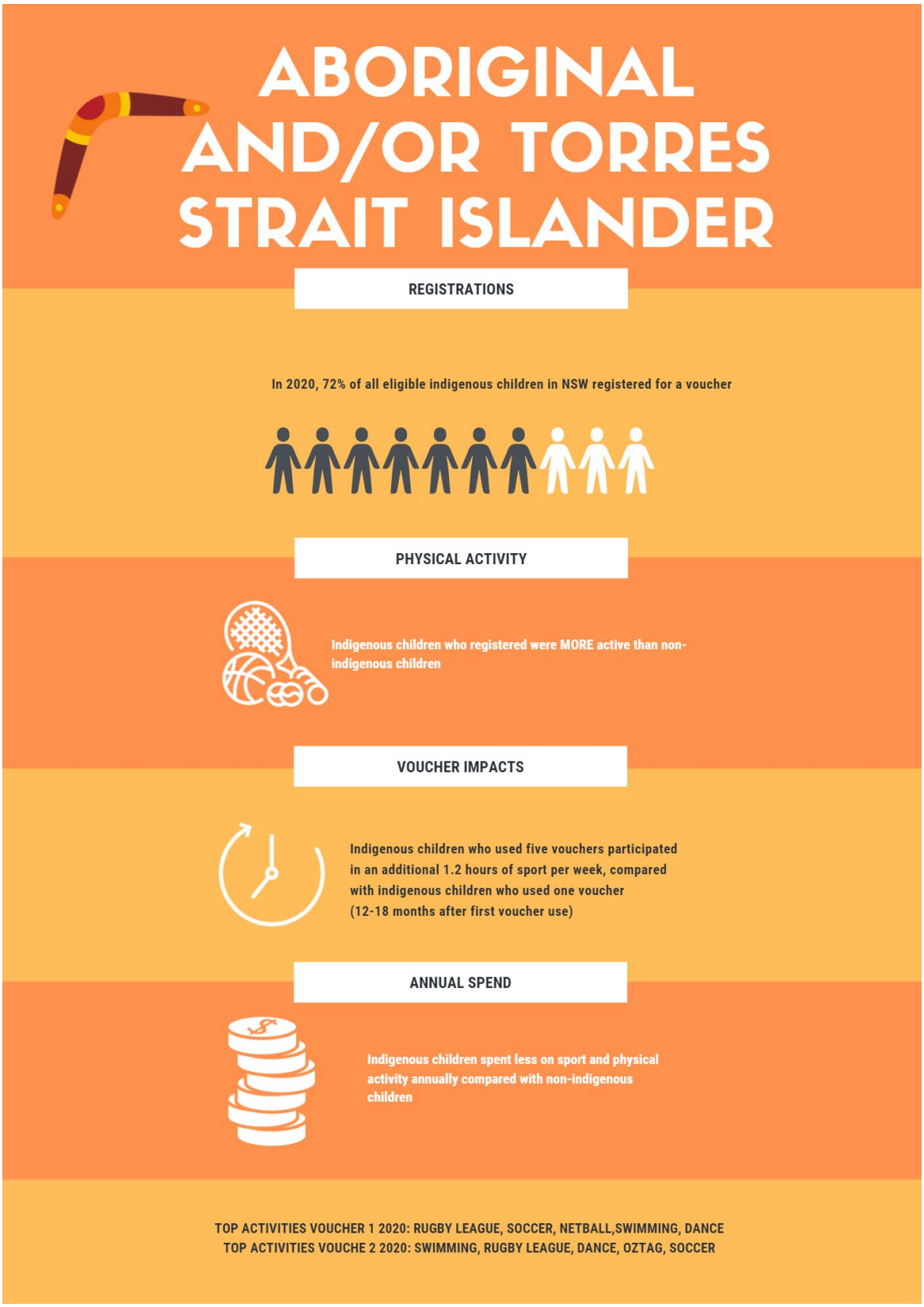
Girls


GIRLS
REGISTRATIONS
In 2020, 61% of all eligible girls in NSW registered for a voucher
PHYSICAL ACTIVITY
Girls who registered were less active than boys
VOUCHER IMPACTS
Girls who used five vouchers participated in an additional 3.3 hours of sport per week, compared with girls who used one voucher
(12-18 months after first voucher use)
ANNUAL SPEND
Girls spent more on sport and physical activity annually compared with boys
TOP ACTIVITIES VOUCHER 1 2020: NETBALL, DANCE, SWIMMING, SOCCER, GYMNASTICS
TOP ACTIVITIES VOUCHE 2 2020: DANCE, SWIMMING, GYMNASTICS, SOCCER, OZTAG

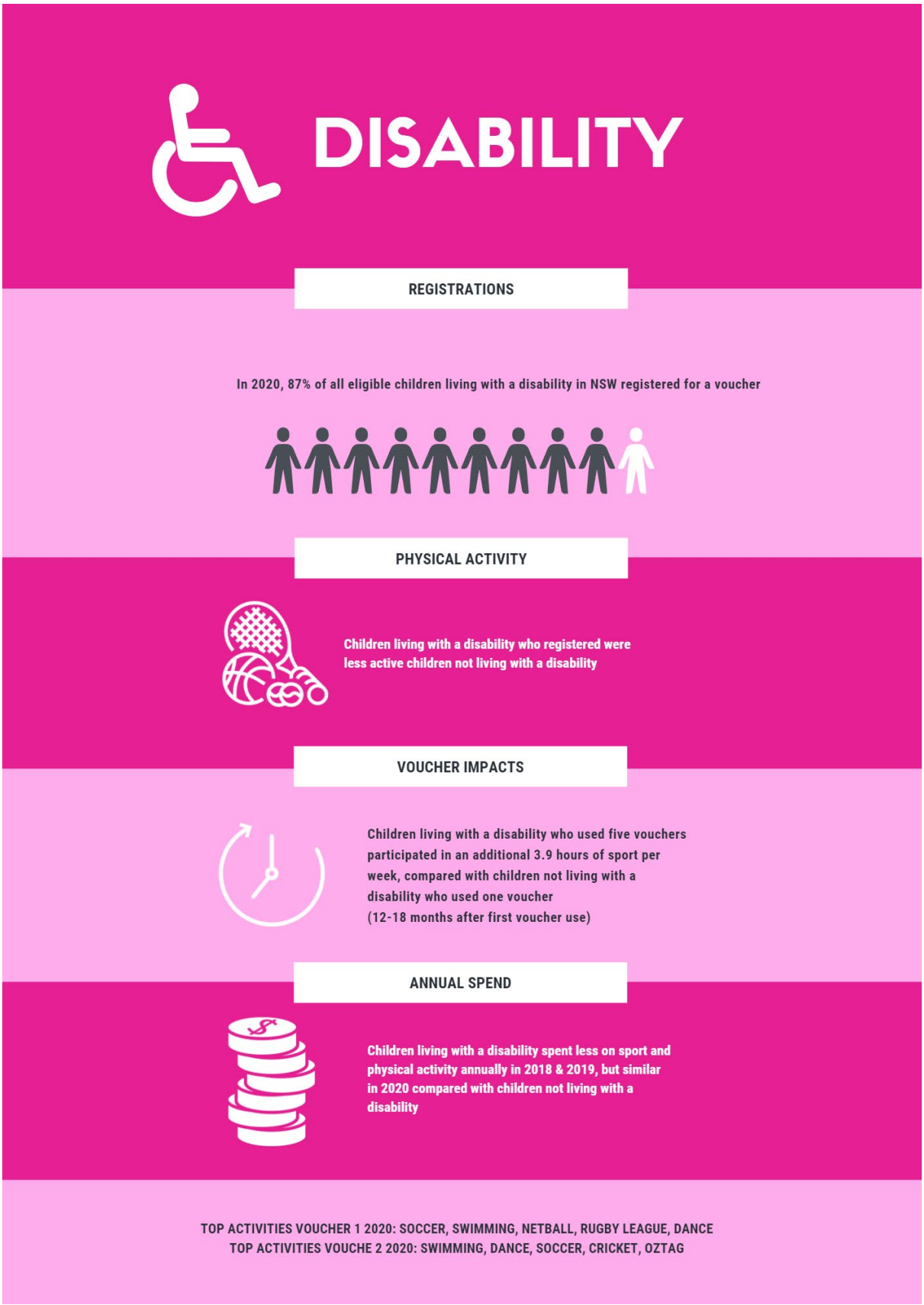
Culturally and linguistically diverse (CALD)



Children who identify as Aboriginal and/or Torres Strait Islander

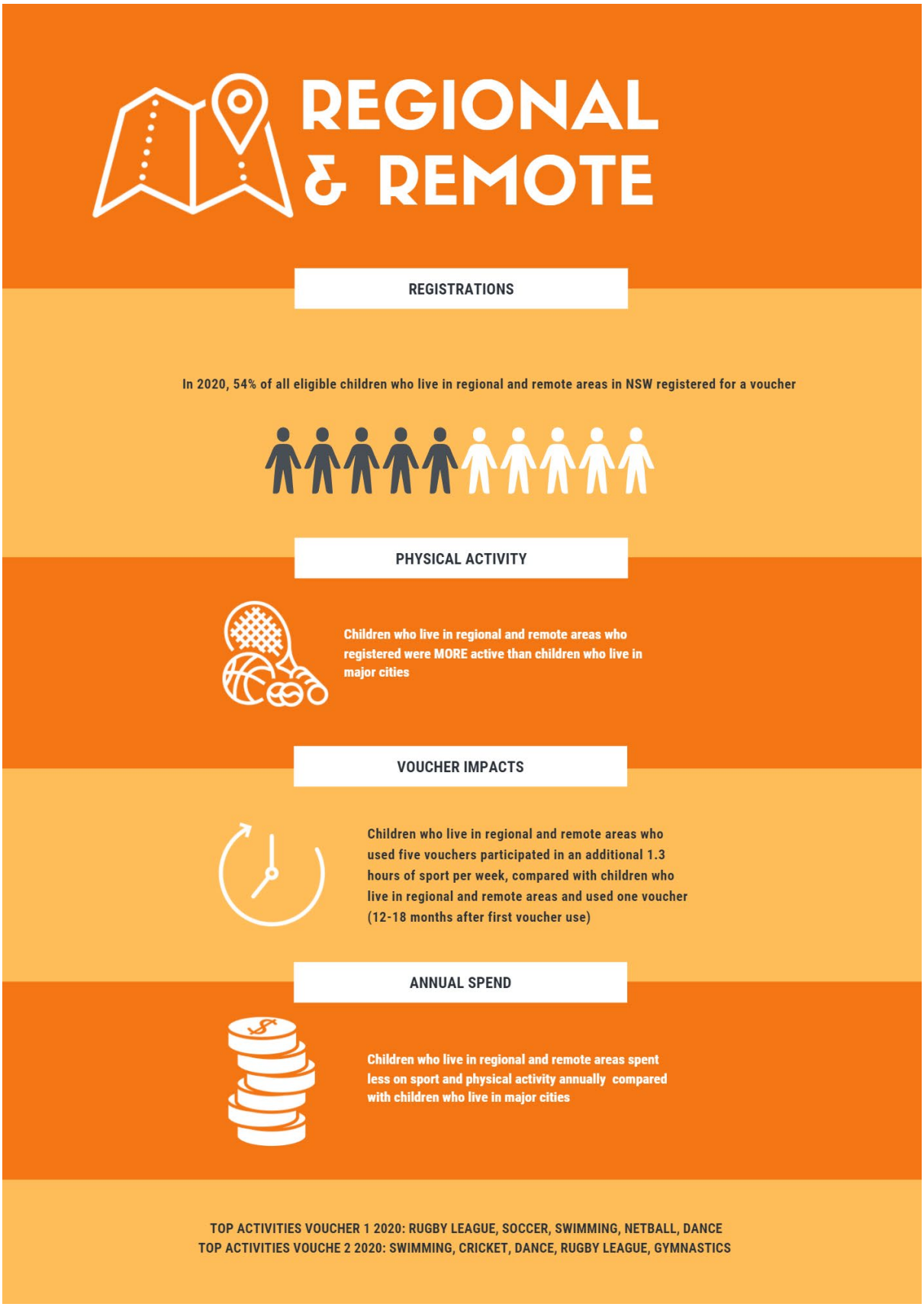


Children living with a Disability



Children living in socioeconomically disadvantaged areas (SEIFA)

Children living in outer regional and remote areas



Appendix C: Targeted program investment

Table 9 Number and proportion of children who claimed (registered) an Active Kids voucher in 2020 and the reach of the program into all eligible children in New South Wales (NSW)

	Registered in 2020	All eligible children in NSW	Reach in 2020 as % of eligible children	Odds of registering in 2020
	N	N	%	
All children	795,528	1,263,454	63.0	
Girls	376,786	614,695	61.3	0.88 (0.88, 0.89)
Adolescents (12-18)	266,012	610,629	43.6	0.18 (0.18, 0.18)
CALD	71,728	309,530	23.2	0.10 (0.09, 0.10)
Aboriginal and/or Torres Strait Islander	43,128	59,554	72.4	1.62 (1.59, 1.65)
Disability	27,417	31,705	86.5	3.49 (3.38, 3.61)
Most disadvantaged	126,847	263,911	48.1	0.46 (0.45, 0.46)
Outer regional and remote	37,556	69,943	53.7	0.67 (0.66, 0.68)

Note. The reference group for girls is boys; for adolescents (12–18 years) is 4–11 years; for CALD is non-CALD; for Aboriginal and/or Torres Strait Islander is non-Aboriginal and/or Torres Strait Islander; for children living with a disability is children not living with a disability; for most disadvantaged is all other less disadvantaged areas; for outer regional and remote areas is major cities and inner regional areas.

Culturally and Linguistically Diverse (CALD) children, adolescents, children living in areas of disadvantage, and children living in regional and remote areas are all significantly less likely to claim an Active Kids voucher.

- 12-18-year-olds are 82% less likely to register in the program compared with all other age groups (OR: 0.12, 95% CIs 0.12, 0.12).
- CALD children are 90% less likely to register in the program compared with children who speak English at home (OR: 0.10, 95% CIs 0.09, 0.10).
- Children living in disadvantaged areas are 54% less likely to register in the program compared with children living in less disadvantaged areas (OR: 0.46, 95% CIs 0.45, 0.46).
- Children living in regional or remote areas are 33% less likely to register in the program compared with children living in major cities or inner regional areas (OR: 0.67, 95% CIs 0.66, 0.68).

Children in these priority groups currently make up 74% (n=589,971) of the Active Kids sample, but they are still significantly underrepresented.

Therefore, we recommend that up to 80% of program investment should be focused on these priority populations to increase reach and engagement.

Appendix D: Generalised Linear Mixed Model

Generalised Linear Mixed Model, fitted by:

$$E(Y_{ij}) = \beta_0 + \beta_1 voucher_{ij} * \beta_2 time_{ij} + \beta_3 age_{ij} + \beta_4 sex_{ij} + \beta_5 language_{ij} + \beta_6 indigenous_{ij} + \beta_7 ses_{ij} + \beta_8 remoteness_{ij} + u_i + \varepsilon_{ij}$$

- $E(Y_{ij})$ Expected value of physical activity days
- β_0 Intercept
- βx_{ij} Control variables –
  age, sex, language, indigenous status, socioeconoimc status, remoteness
- u_i Variability within subjects (random effect)
- ε_{ij} Variability between subjects (random effect)

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