

Active kids: evaluation protocol for a universal voucher program to increase children's participation in organised physical activity and sport

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Key points

- 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 behaviours 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

Abstract

Background: Regular participation in physical activity during childhood and adolescence is important for good health. There is strong evidence of the physical and psychosocial benefits associated with recreational physical activity in these age groups, specifically in the context of organised sport. Most children in New South Wales (NSW), Australia, do not meet the recommended guidelines for physical activity, with financial cost commonly cited as a barrier to the initiation and maintenance of sport. The Active Kids program is a major policy initiative introduced in 2018 that aimed to overcome this barrier by implementing a statewide sport voucher scheme, allowing all NSW school-enrolled children (1.2 million) initial access to a \$100 annual contribution towards organised sport and physical activity, with concurrent evaluation over the initial 4-year phase of the program.

Study type: This paper presents the protocol for evaluation of the Active Kids program, including an assessment of program impact on children's organised sport participation and recreational physical activity level, and analysis of the correlates of participation at individual, state and national levels.

Methods: A quasi-experimental and mixed-method evaluation will be used to examine the patterns of organised sport and recreational physical activity behaviour and the correlates associated with sports participation, voucher uptake and program reach. Sociodemographic information will be collected for each child who registers for a voucher. The effects of this program on children's health-enhancing physical activity, engagement with the sport sector, self-efficacy and social influences on participation will be monitored through a cohort study. Acceptability, engagement and experience of the voucher program will be assessed from both user and provider perspectives. Additionally, effects of the program on families' annual sport-related expenditure will be assessed.

Results and conclusion: It is anticipated that the implementation of the NSW Government's Active Kids program will increase participation in recreational physical activity among NSW children. The results of this evaluation will contribute to the evidence base and policy directions for sport voucher programs in Australia and internationally.

Background

Regular participation in physical activity during childhood and adolescence is important for good health.¹ To acquire health and wellbeing benefits, it is recommended that children participate in at least 60 minutes of at least moderate-intensity physical activity every day.² Data from 2015 indicate that 81% of adolescents worldwide and 88% of Australian adolescents residing in New South Wales (NSW) do not meet these recommendations.^{2,3} Children can accumulate the requisite minutes for health in a variety of physical activity domains including active transport, recreational activities and organised sport.⁴ There is evidence that children's participation in organised sport has greater psychological, social, health and cognitive benefits compared with their participation in other forms of recreational physical activity.^{1,5,6} Participation during childhood is also predictive of a lasting commitment to engage in sport and physical activity.^{7,8,9} Although Australia ranks reasonably well for children's participation in organised sport compared with other countries¹⁰, children's total physical activity levels are significantly lower, indicating sports participation alone does not currently generate enough minutes of health-enhancing physical activity to meet guideline recommendations. It is therefore important to understand the contribution that sport participation can make to a child's overall physical activity profile.

A recent systematic review found a positive association between sport participation and recreational physical activity, with sport participants more likely to achieve the recommended level of moderate intensity physical activity than non-participants.¹¹ More than half of the reviewed studies included adolescents, with the school and education sector the most frequently cited intervention setting.¹¹ Research indicates a sport participation peak in children aged 10–14¹², decreasing significantly during adolescence.¹³ Kjønniksen et al also found that children enrolled in a sports club during adolescence (13–16 years old) were more likely to be physically active than older children, and that engagement in multiple sports was favourably associated with an active lifestyle in adulthood.¹⁴ Adolescents involved with sport clubs report higher life satisfaction than those not involved¹⁵ and clubs provide opportunities for social interactions.¹⁶ Notwithstanding the benefits associated with sport participation and recreational physical activity, a longitudinal cross-sectional population survey of school children aged 5–16 years in NSW found that only one in five (19%) were meeting daily physical activity recommendations.³ Among those, subgroups that were less likely to meet the recommendations include girls (15% met recommendations), children from

urban areas (18%) and those from Middle Eastern (13%) and Asian cultural backgrounds (9%).³

Designing effective strategies to increase recreational physical activity and sport among children is challenging due to the myriad factors influencing children's and adolescents' behaviour at personal, social, community and environmental levels.¹⁷ Cost, lack of parental support and a lack of local and adequate facilities are frequently cited as key barriers for children to engage in sport.¹⁸ In response, policies have been trialled that deploy financial incentives to promote children's participation in sport and physical activity, with mixed effects. In 2007, the Canadian Government implemented a children fitness tax credit (CFTC) providing non-refundable CAD\$500 (AUD\$556) for eligible physical activity. Although uptake was high, with more than half of all parents claiming a voucher, the tax credit appeared to benefit the wealthier families in Canada. In contrast, a sport voucher program, ACTIVE, targeting disadvantaged communities in Wales, UK, positively influenced attitudes towards physical activity and enabled children from disadvantaged backgrounds to access broader opportunities to participate in sport and physical activity.¹⁹⁻²¹

The Active Kids program

On 31 January 2018, the NSW State Government launched the Active Kids program framework; a universal voucher program to provide annual support to parents and primary caregivers to subsidise the cost of children's participation in sport and physical activity, over the 4-year period to December 2021. The primary objective of Active Kids is to increase participation of school-enrolled children in sport and physical activity in NSW. The program aims to reduce the barrier of sport registration cost or membership fees for after-school and weekend structured sport or physical activity, by up to AUD\$100 per year per child. To promote access to organised sport and physical activity all year round, from 1 July 2019, every school-enrolled child has had access to a second voucher. The two \$100 vouchers both expire at the end of each calendar year. To register for an Active Kids voucher, adults/caregivers must register online through the NSW Government online platform each year.

Eligible activities must be provided as part of an organised program of at least 8 weeks' duration and involve moderate or vigorous levels of physical activity; these activities include recognised sports, swimming lessons, structured fitness programs, outdoor recreation programs and approved active recreation (e.g. dance).

Evaluation of the program will assess policy implementation and reach across NSW. The effects of the universal Active Kids voucher program on increasing participation in recreational physical activity and organised sport outside school will be monitored among NSW school-enrolled children. The evaluation also aims to improve understanding of the patterns of organised sport and recreational physical activity behaviour, along with assessing the correlates associated with sports participation, voucher uptake and population reach of the program. This evaluation will inform refinement and targeted components of the Active Kids program, in line with the NSW Office of Sport commitment to evidence-based delivery of the program. Secondary evaluation aims include: assessing the impact of Active Kids on social wellbeing, self-efficacy, participant's body mass index and knowledge of the benefits of physical activity; and experiences of being engaged with the Active Kids program from the individual and delivery organisation perspectives.

Methods

Study design

A quasi-experimental and mixed-method pragmatic evaluation will evaluate the implementation and effectiveness of the Active Kids program. To achieve this, several discrete populations will be included in the evaluation, namely: all children who are registered for the program (process evaluation); all children and their parents/caregivers for whom consent to follow-up in an evaluation cohort is given (impact/outcome evaluation). An additional component will include all sports service providers registering for the program. The Active Kids program started on 31 January 2018 and will end in December 2021. This study received ethics approval from the Human Research Ethics Committee at the University of Sydney (Project number: 2017/947) and is registered with Australian New Zealand Clinical Trials Registry (ACTRN12618000897268).

Process evaluation

Evaluation of population reach, voucher uptake and implementation will be performed through the collection of mandatory registration data for each participant. Mandatory data fields include participant demographic characteristics, as well as information on intended voucher use, participation data on structured sport and recreational physical activity and achievement of physical activity guidelines.

Semistructured qualitative interviews with a representative sample will be conducted to assess the experience of the accredited Active Kids' providers being involved in the program, along with the barriers and facilitators associated with Active Kids and their perceived impact of Active Kids on their organisation. A representative sample will be assessed by geographic location, sport and active recreation providers, as well as the number of vouchers claimed within the organisation.

Impact/outcome evaluation

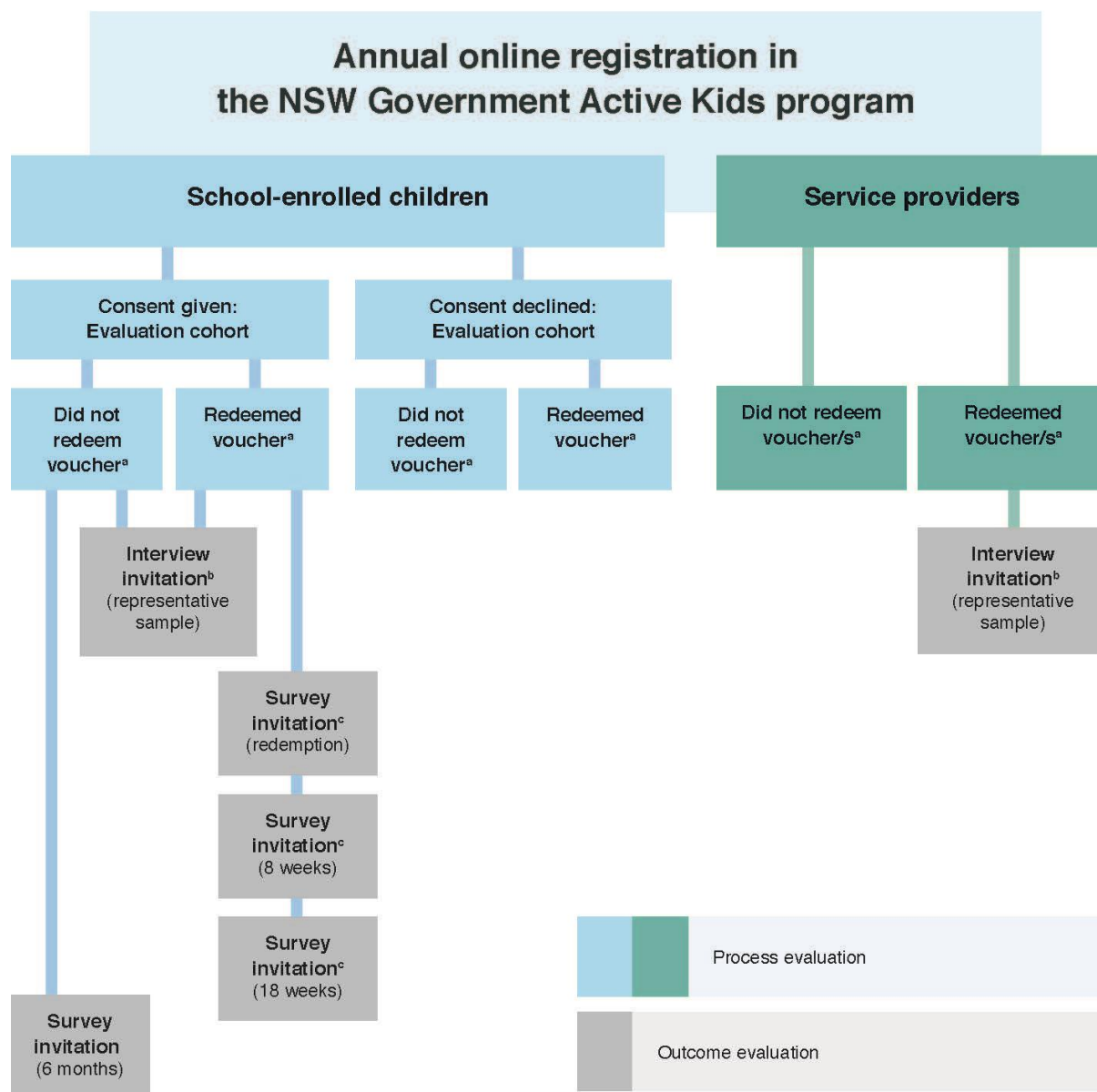
A nested, large subset cohort will be recruited within this evaluation to determine whether there are changes in children's physical activity and sport participation, and health and wellbeing, after registering for an Active Kids voucher. This cohort of children will be recruited during registration for the program. Participants must register for all of their Active Kids vouchers each year online. Longitudinal data will be collected at voucher redemption, and then 8 weeks and 18 weeks after voucher redemption. This longitudinal sample will enable us to tell which children increased their activity, which children within this sample were already active or inactive, and which children come from marginalised, geographical areas with low socio-economic status. As this sample is reasonably representative of the whole Active Kids sample from which it will be drawn, the results will enable the impact of the program to be assessed. A key consideration inherent within this evaluation is the purchasing behaviour of the adult primary caregivers. Data collected from the cohort will capture expenditure on sport-related memberships in the 12-month period before data collection, which will enable assessment of any changes in adult spending before, during and after the implementation of Active Kids. We can also assess expenditure of adults by geographical location, socio-economic status, activity status, sex, age and gender.

Participant recruitment

To be eligible for an Active Kids voucher, children must be aged between 4.5 and 18 years, be enrolled in school and reside in NSW. Participants for this study will be recruited on a rolling basis during the program registration process through a bespoke online government

portal. All children who are eligible for an Active Kids voucher will be eligible to participate in the evaluation, with parental/caregiver consent (Figure 1). For all children, the primary adult caregiver completes the registration process for the child.

Figure 1. Process and outcome evaluation flow diagram



Note: Irrespective of survey completion, consenting participants will be invited to complete a survey at each time point, unless consent is withdrawn.

- ^a Mandatory registration data to provide information on population reach, voucher uptake and implementation
- ^b Qualitative interviews to explore participants' experience of engaging with the Active Kids program
- ^c Online surveys to provide information on sport-related participation, physical activity, voucher use, body mass index and global subjective wellbeing
- ^d Semistructured qualitative interviews to explore experience of providers being involved with the Active Kids program

Sample size

There were more than 1.2 million school-enrolled children who were eligible to claim a voucher on 31 January 2018. Everyone who registers for a voucher will be invited to take part in the evaluation, and they will be invited each year they register.

Data collection

The cohort study includes three email invitations to complete three online surveys, with additional reminder messages, sent close to when the Active Kids sport subsidy voucher is redeemed. All those who successfully claim their voucher are classified as 'redeemers'. If the voucher is not used within 6 months after registration, one online invitation will be sent to this group classified as the 'non-redeeming' group. Figure 1 depicts the evaluation components however, in brief, all cohort participants who redeem their voucher with an eligible provider in an organised sport program will be contacted:

- At point of redemption – pragmatically, redemption is considered to indicate the start of participation in the physical activity or sport, although this depends on providers' organisational capacity to redeem vouchers during busy registration periods
- 8 weeks after redemption – survey will align with the final week of participation in the voucher activity as this is the minimum threshold for a provider to be recognised as an accredited Active Kid's provider
- 18 weeks after redemption – follow-up surveys will assess whether physical activity is maintained after the registered activity has ended.

Primary outcomes

Participation in organised sport and recreational physical activity

Self-report sport-related participation will be collected using select questions from the Ausplay Survey (2016), the Australian national sport sector population survey.²² These questions will provide detailed information on the frequency and duration of structured sport and physical activity sessions. This will be administered at the point of voucher registration for each child, once per year. This question is also included in the online survey sent to all cohort participants at three time points, each calendar year.

Physical activity

Physical activity is measured by self-report attainment of physical activity guidelines captured broadly using the single-item measure, which asks how many days in the past week the child was physically active for at least 60 minutes.²³ This will be administered at the point of voucher registration for each child, once per year. This question is also included in the online survey sent to all cohort participants at three time points each calendar year.

Secondary outcomes

Voucher use

Motivation to engage with Active Kids will be captured along with a subjective assessment of the ease of locating places for the child to be physically active.²⁴ Additional information will be captured on the frequency and duration of physical activities for which the voucher was used to assess the impact of the Active Kids voucher on organised sport and recreational physical activity participation. This will be assessed using validated questions which are also

included within the population measurement tool; Ausplay, (2018). The economic contribution of the voucher on total annual expenditure on sport-related costs will also be assessed.

Body mass index

All voucher registrants (parents/caregivers) will be asked to voluntarily report the child's weight and height at the point of voucher registration, which will be repeated each year. Body mass index will be calculated as weight divided by height squared (i.e., kg/m²), and categorised as below healthy weight, healthy weight, overweight or obese using the International Obesity Taskforce definitions.²⁵

Global subjective wellbeing

Children's global subjective wellbeing, specifically self-efficacy and enjoyment of physical activity, will be assessed using self-reported measures adapted from Motl et al.²⁶ Social influences on children's physical activity will also be captured.²⁷ All measures will be assessed in cohort participants at voucher redemption, 8 weeks and 18 weeks post voucher redemption, repeated each year of registration.

Analysis

To assess if the children registered in the Active Kids program are representative of the NSW population, process evaluation data and participant outcomes from all Active Kids' registrants will be compared with existing population health surveys, specifically comparing participants in terms of population groups and demography, weight status (NSW Population Health Survey/ABS National Health Survey); organised participation (AusPlay) and physical activity (NSW Population Health Survey/Schools Physical Activity and Nutrition Survey). All research outcomes will be stratified by registrant demographics (age, sex and weight status, recreational physical activity, organised sport status and socio-economic status) to explore their potential effect of children's uptake of the program in NSW. Statistical multivariate modelling will explore the relationship between exposure to the voucher and changes in physical activity minutes and sessions of organised sport activity with subgroups and for the whole population adjusting for potential demographic factors.

Conclusion

Active Kids is an innovative approach to promoting participation in recreational physical activity and organised sport among all NSW children and is the first universal voucher program of its kind in Australia. This large-scale prevention policy initiative is a unique opportunity to engage with the sport and recreation sector. The population scale of the program will allow detailed examination of the reach of the Active Kids scheme, and assess any inequalities in reach, uptake or impact of the program. The campaign targets children during a key developmental period and leverages a partnership between providers and parents to affect behaviour change. This evaluation will also further understanding of the mediating factors that influence children's participation in recreational physical activity and organised sport.

Peer review and provenance

Externally peer reviewed, not commissioned.

Competing interests

The SPRINTER research partnership is a funded partnership between the University of Sydney and the Office of Sport NSW Government.

Author contributions

LR led the design of this evaluation protocol, facilitated the research team and led the writing of this manuscript. AB and WB provided senior research, epidemiology and evaluation expertise to support the complex pragmatic evaluation design. KO led the analytical plan and BF conducted research into the validated measures used, with both supporting the drafting of the manuscript. PH, as the executive director at the NSW Government Office of Sport at the time the Active Kids program started, provided senior support for the SPRINTER partnership to evaluate the Active Kids program. Together with DC, PH shared operational details of the program required for the evaluation design and contributed this detail in the manuscript. NS helped with methodological design. All authors contributed to the drafting and editing of this manuscript.

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