



Health

Hunter New England
Local Health District

An intervention to facilitate the implementation of healthy eating and physical activity policies and practices in childcare services

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Acknowledgement of Country



I would like to acknowledge the original custodians of this land and pay my respects to the Elders both past and present and future for they hold the memories, the traditions, the culture, and hopes for Aboriginal Australia



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Background



- Global prevalence of childhood overweight/obesity increasing
 - 9% of children 0-5 years by 2020
 - 20-25% of Australian children

- Increased risk for chronic health conditions
 - 7.5% of burden of disease in Australia
 - Can track into adulthood

Childhood overweight and obesity



- Early childhood is a critical period in the development of diet and physical activity behaviours
- Interventions to improve child diet and physical activity have been recommended to prevent the onset of obesity



Childcare services as a setting for obesity prevention



- Identified as a key setting to create environments more supportive of child healthy eating and physical activity
- 72% of Australian children (3-5years) attend childcare services
- Existing infrastructure to facilitate child healthy eating and physical activity
- Licensing and accreditation requirements



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Childcare as an intervention setting



- Several reviews have identified a number of policy and practices that influence the nutrition and physical activity behaviours of children in this setting
- These have been included in recommendations and guidelines for the sector
- However, evidence suggests childcare services are not implementing the recommended physical activity and healthy eating practices



Previous studies



- Limited research of effective strategies to improve childcare service implementation of these policies and practices
- Previous studies:
 - 5 trials
 - Design limitations
 - Limited impact on practice change
- Previous HNE research on Physical Activity policy and practice:
 - Training, resources and follow up support
 - Modest effect
 - Significantly changed only 2 of 8 desired practices

Aim



- To assess the effectiveness of multi-component intervention in increasing the implementation of healthy eating and physical activity policies and practices by childcare services



Study design



Sample
Long day care services
and preschools
Hunter region, NSW,
Australia

Sample
N = 195 childcare
services

**Declined to
participate/ could not
be contacted**
N = 67

Randomly assigned
N = 128 childcare
services

**Allocated to
Intervention**
N = 64 childcare
services

**Allocated to
Control**
N = 64 childcare
services

12 month
intervention

Utilising 8
strategies

Baseline data collection
Computer assisted
telephone interview (CATI)
N = 64

Baseline data collection
Computer assisted
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N = 64

Follow up data collection
CATI
In progress

Follow up data collection
CATI
In progress

Intervention design: Theoretical Framework



- Damschroder's Consolidated Framework for Implementation

Research*:

- Intervention characteristics
- Outer setting
- Inner setting
- Characteristics of the individuals involved
- Process of implementation

*Damschroder et al. (2009)

Intervention design– policies and practices



- Written nutrition and physical activity policies
- Monitoring of children’s lunchboxes against a healthy service food standard and provision of feedback to parents when a non-compliant food is packed
- Provision of water or reduced fat milk only to children
- Staff role modelling of healthy eating and physically active play
- Provision of adult guided fundamental movement skill development activities
- Restriction of sedentary screen time

Implementation approach



Intervention implementation strategy	Adaptation for the setting	Description
Implementation support staff		<ul style="list-style-type: none"> Allocated support officer provides support via face-to-face visits, telephone and email contacts Use of continuous quality improvement principles
Securing executive support		<ul style="list-style-type: none"> Nominated Supervisors demonstrate leadership support for the trial and drive change
Staff training		<ul style="list-style-type: none"> 3 one hour training workshops <ol style="list-style-type: none"> Healthy eating Physical activity “Making it Happen”
Consensus process		<ul style="list-style-type: none"> Consensus discussions to progress policies and practices at workshops

Implementation approach



Intervention implementation strategy	Adaptation for the setting	Description
Academic detailing		<ul style="list-style-type: none">• 3 onsite visits post training to observe and support staff
Tools and resources		<ul style="list-style-type: none">• Package of tools and resources to support implementation
Performance monitoring and feedback		<ul style="list-style-type: none">• Performance feedback provided on progress towards implementation
Communications strategy		<ul style="list-style-type: none">• Bimonthly printed newsletters targeting key messages and case studies of innovative implementation





- Baseline and Follow up data collection:
 - Computer assisted telephone interview (CATI) surveys
- Process data:
 - Project records recorded by project officers

Survey tool



- Survey tool developed to assess healthy eating and physical activity policies and practices in childcare services.
- Survey items drew on validated items from :
 - U.S. Nutrition and Physical Activity Self-Assessment for Child Care (NAPSACC)
- Kappa statistics range 0.59-0.79

Measures



Primary outcome:

- Change in prevalence of services meeting all healthy eating and physical activity policies and practices

Process Evaluation:

- Extent of delivery of the 8 implementation strategies
- Policy and practice within group change

Results: Intervention implementation strategies



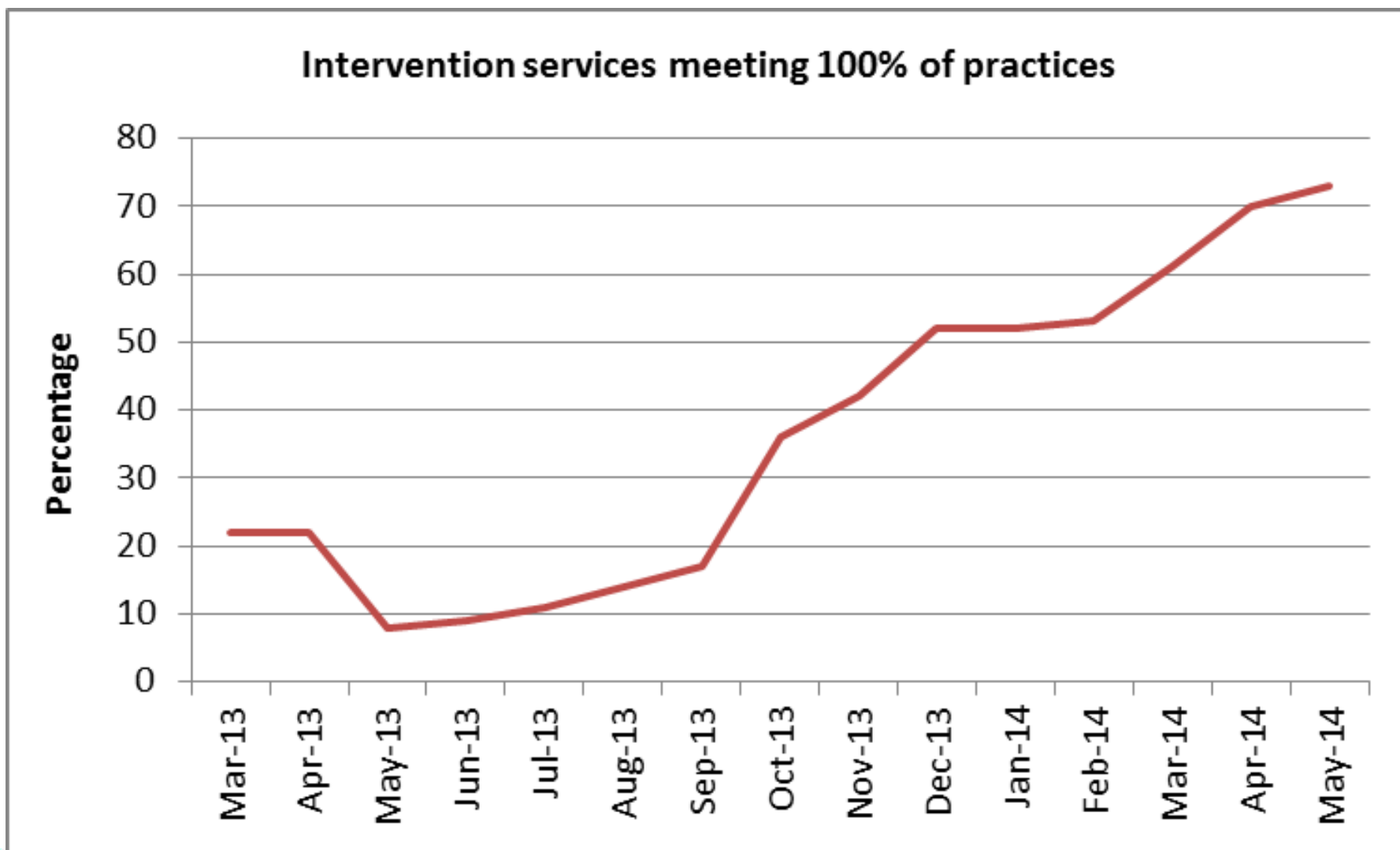
Intervention strategy	%
Implementation support staff - Service received support from implementation support staff	100
Executive support - Nominated supervisor demonstrated executive support	88
Consensus processes - Discussion following each staff training workshop occurred	93
Staff training - Training session 1 delivered - Training session 2 delivered - Training session 3 delivered	97 85 75

Results: Intervention implementation strategies



Intervention strategy	%
Academic detailing <ul style="list-style-type: none">- Visit 1 delivered- Visit 2 delivered- Visit 3 delivered	97 87 73
Tools and resources <ul style="list-style-type: none">- Service received relevant resources	100
Performance monitoring and feedback <ul style="list-style-type: none">- Service received feedback at 6 intervals throughout intervention	100
Communications strategy <ul style="list-style-type: none">- Bimonthly newsletters distributed- Service received recognition via certificate or case study in newsletter	100 97

Results: Practice Adoption



Conclusions



- This study will contribute to the evidence base regarding implementation of healthy eating and physical activity policies and practices by childcare services
- Good implementation fidelity considering intensity of intervention

Conclusions



- Preliminary data suggests the intervention was effective in improving within group change of policy and practice implementation
- Future analysis will investigate the impact of the intervention on the prevalence of services meeting the healthy eating and physical activity policies and practices between groups
- Scope to investigate lower intensity models and differentiate between different element(s) of the intervention

Acknowledgements



With grateful acknowledgements of:

- Lead Researcher: Jannah Jones. Co-authors: Luke Wolfenden, Rebecca Wyse, Meghan Finch, Serene Yoong, Pennie Dodds, Karen Gillham, Megan Freund, Patrick McElduff, Paula Wye, John Wiggers
- Participating Early Childhood Education and Care services
- The Good for Kids. Good for Life. Early Childhood Education and Care team



Hunter New England Population Health is a unit of the Hunter New England Local Health District.



Supported by funding from NSW Health through the Hunter Medical Research Institute.



Developed in partnership with the University of Newcastle.

