munch & move®

EVIDENCE AND EVALUATION

SUMMARY

NSW GOVERNMENT Health

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Disclaimer
NSW MINISTRY OF HEALTH
73 Miller Street
NORTH SYDNEY NSW 2060
Tel. (02) 9391 9000
Fax. (02) 9391 9101
TTY. (02) 9391 9900
www.health.nsw.gov.au

SHPN: (CPH) 150528
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Contents

Executive Summary 4

1. Background & Evidence 6

1.1 Prevalence of overweight and obesity in early childhood 6

1.2 Long term consequences of overweight and obesity 6

1.3 Importance of early intervention 7

1.4 Centre-based early childhood services 7

1.5 Evidence base for interventions in centre-based early childhood services 7

2. The *Munch & Move* Program 9

2.1 Overview of the *Munch & Move* program 9

2.2 Program principles of the *Munch & Move* program 10

2.3 National Quality Framework 11

3. Evaluation of the *Munch & Move* Program 12

3.1 Overview of evaluation components of the *Munch & Move* Program 12

3.2 Implementation process of the *Munch & Move* Program 12

3.3 Adoption of the *Munch & Move* program 15

3.4 Impact of the *Munch & Move* program 17

3.5. Data source and limitations 22

4. Future Directions 24

References 25

Executive Summary

Childhood obesity is one of the most important public health issues facing Australia, with approximately 23% of 2-3 year olds and 21% of 4-5 year olds being overweight or obese.

Early childhood is an important period to establish healthy eating and physical activity behaviours, and accordingly provides a critical time to implement obesity prevention initiatives. Evidence not only highlights the importance of early intervention at this time but also the willingness of early childhood services to implement obesity prevention programs. Centre-based early childhood services are important settings for promotion of healthy eating and physical activity and the prevention of unhealthy weight gain; and research suggests that obesity prevention interventions can produce significant changes in children's unhealthy food intake, physical activity skills and prevalence of overweight and obesity.

The *Munch & Move* program is a key NSW state-wide healthy eating and active play program aimed at influencing the healthy eating and physical activity behaviours of young children. It is an important initiative of the *NSW Healthy Eating and Active Living Strategy: Preventing overweight and obesity in NSW 2013-2018.* The *Munch & Move* program offers professional development with the purpose of **promoting and encouraging healthy eating and physical activity habits and reducing small screen recreation in young children birth to five years who attend NSW early childhood education and care services.**

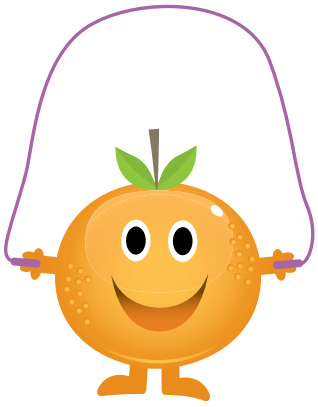
The *Munch & Move* program is based on six key health promoting messages, encouraging and supporting breastfeeding; choosing water as a drink; choosing healthier snacks; eating more fruit and vegetables; getting active every day; and turning off the television or computer and getting active. The *Munch & Move* program is also strongly aligned to the National Quality Framework and can help services meet the requirements of the National Quality Standard and the Early Years Learning Framework.

Within the delivery of the *Munch & Move* program are processes that monitor and evaluate the program and focus on assessing:

- the implementation of the *Munch & Move* program;
- the reach of the *Munch & Move* program; and
- the impact of the *Munch & Move* program on organisational change.

In relation to the implementation of the *Munch & Move* program, a substantial element of the *Munch & Move* program is the provision of state-wide training by an early childhood registered training organisation and support by Local Health Districts. In 2015, 89% of services had staff trained in the *Munch & Move* program, with a higher proportion of preschools and long day care services having their staff trained (91% and 90% respectively) compared to occasional care services (79%). The proportion of services whose staff had undergone training was consistent across geographic locations, however there were significant differences based on the socio-economic classification of services with a higher proportion of staff being trained in locations classified as the most disadvantaged socio-economic areas.

There has been a steady growth in the number and type of early childhood services that have adopted the *Munch & Move* program since it began as a pilot in 2008. There has been a significant increase in the proportion of early childhood services that have implemented 70% or more of the *Munch & Move* practices; in 2012 the total for NSW was 36% and by 2015 this had increased to 78%. Such an increase has been seen across all early childhood services (preschool, occasional care and long day care services) and also seen by those early childhood services that are characterised by priority population groups (services with a high proportion of Aboriginal children attending, services in disadvantaged communities and services in remote communities).



In relation to the impact of the *Munch & Move* program, there have been substantial improvements in the practice achievements made by early childhood services since 2012. Across the majority of the practices related to promoting and encouraging healthy eating, increasing physical activity and improving the quality of service delivery, there were improvements between 2012 and 2015, in particular the following practices showed substantial improvements:

Practice 4
Water or age-appropriate drinks

Practice 5
Healthy eating learning experiences at least twice per week

Practice 8
Fundamental movement skills (ages 3–5 years)

Practice 11
Written physical activity policy

Practice 13
Provision of health information to families annually

In relation to practice achievements for early childhood services that are characterised by priority population groups, services in remote communities achieved less of the practices associated with healthy eating and physical activity and the provision of health information to families when compared with all other services. Services with a high proportion of Aboriginal children attending; and services in disadvantaged communities were similar in their practice achievements to the other services; and in regard to the provision of water or age appropriate drinks a greater proportion of services with a substantial number of Aboriginal children attending and services in disadvantaged communities were meeting the practices compared to all services.

The *Munch & Move* program will continue to seek program support across sectors; measure program adoption and impact at the service and setting level; engage new early childhood services and educators, including students being trained in early childhood; and provide ongoing monitoring and evaluation.

1. Background & Evidence

1.1 Prevalence of overweight and obesity in early childhood

Childhood obesity is one of the most important public health issues facing Australia. Approximately one-quarter of 2-3 year olds are either overweight or obese [1]; and 1 in 5 Australian children aged 4-5 years are either overweight or obese [1] (Figure 1).
Research indicates that Aboriginal children and children from socio-economically disadvantaged backgrounds are more likely to be overweight or obese compared to their non-Aboriginal and more socio-economically advantaged counterparts [2].

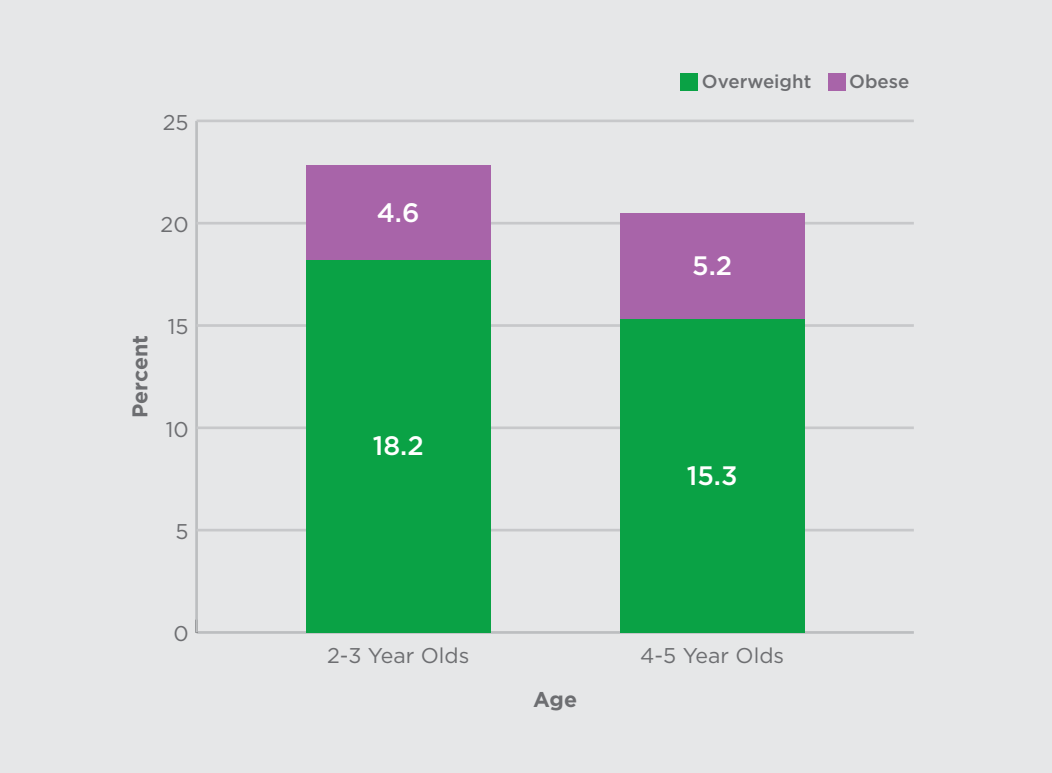


Figure 1: *Prevalence of overweight and obesity in Australian children*

1.2 Long term consequences of overweight and obesity

The consequences of childhood obesity occur both in the short and longer term, impacting on the health and well-being of the child [3] and with a negative impact into adulthood. Research suggests that overweight and obese children are more likely to remain obese into adulthood and accordingly are more likely to develop non-communicable diseases such as diabetes and cardiovascular disease at a younger age [4]. Further, childhood obesity is associated with a higher chance of premature death and disability in adulthood [4].

Childhood obesity has a socio-economic impact, with research suggesting that childhood is not only a critical time for socio-economic inequalities in overweight and obesity to emerge and amplify, but also that unhealthy weight gain increases incrementally with disadvantage [5].

1.3 Importance of early intervention

Early childhood is an important period to establish healthy eating [6] and physical activity behaviours [7] and therefore provides a critical time in the lifespan to establish healthy lifestyle patterns and implement obesity prevention interventions [8-10].

An updated systematic review [11] highlights both the importance of early intervention in obesity prevention; and the willingness of those providing early childhood services to implement obesity prevention programs.

1.4 Centre-based early childhood services

Centre-based early childhood services including preschool and long day care services are important settings for the promotion of healthy eating and physical activity and the prevention of unhealthy weight gain [8, 12-14]. Research suggests that [15]:

- Of Australian children aged 4-5 years who do not attend school, 83% attend a preschool or a preschool program.
- Child care is attended by 71% of Australian children aged 2-3 years; and of these children, 54% usually attend formal child care (such as long day care) and 36% use informal child care.
- For NSW children aged 2-3 years, 74% attend child care; and of these 58% attend formal child care.

1.5 Evidence base for interventions in centre-based early childhood services

The literature suggests that early childhood obesity prevention interventions promoting healthy eating, physical activity and reducing sedentary behaviour in preschool children is a growing research area [11, 16]. It has been recommended that obesity prevention should target dietary intake and activity behaviours simultaneously [17]; and the importance of strengthening policy to create a healthy early childhood environment has been highlighted [18].

Educational workshops and training for child care providers on nutrition, physical activity and screen-time behaviours and regulations increased provider knowledge, improved centre policies and reduced Body Mass Index for children in child care centres in the United States [19, 20]. State and federal healthy beverage policies in the United States have also had a positive effect on beverages served at child care sites [21].

Within Australia, preschool based obesity prevention interventions have produced significant changes in children's food intake, movement skills and indicators of weight status [22]; have reduced the prevalence of overweight and obesity in early childhood settings [23]; have improved children's food intake at preschool [24]; and healthy eating and physical activity strategies have been able to be sustained beyond one year of intervention [25]. Written physical activity policy, structured staff-led physical activity and staff participating in active play have been associated with higher levels of physical activity in preschools [24].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2. The *Munch & Move* Program

2.1 Overview of the *Munch & Move* program

The *Munch & Move* program is a key NSW state-wide healthy eating and active play program designed to influence healthy eating and physical activity behaviours of young children aged birth to five years. It is an important initiative of the *NSW Healthy Eating and Active Living Strategy: Preventing overweight and obesity in NSW 2013-2018*, and contributes to the NSW Government's commitments under the NSW State Health Plan: Towards 2021 of keeping people healthy and the Premier's Priority (identified in September 2015) to reduce overweight and obesity rates of children by 5% over 10 years.

The *Munch & Move* program offers a professional development program with the purpose of:

promoting and encouraging healthy eating and physical activity habits and reducing small screen recreation in young children from birth to five years who attend NSW early childhood education and care services.

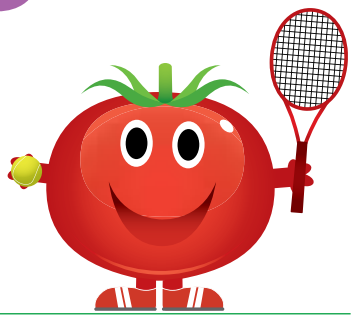
The *Munch & Move* program was launched in 2008 and from 2011-2014 was funded in part under the National Partnership Agreement on Preventive Health and in part by the NSW State Government. It continues to be funded by the NSW State Government. In its first phase the program targeted children aged 3-5 years attending NSW preschools. Subsequent phases of the implementation of the *Munch & Move* program saw the extension of the program into long day care, occasional care services and family day care services across NSW and the tailoring of training, strategies and resources to cater for children aged from birth to five years of age. The *Munch & Move* program is currently implemented in centre-based early childhood services across NSW and supported by the Local Health Districts.

The *Munch & Move* program offers services:

- **Professional development training** for educators via live webinar series (until April 2015 was via workshops);
- An **online refresher module** to further reinforce knowledge and skills development of educators;
- **Practical resources** to support the development and implementation of policies and practices promoting healthy eating and physical activity and limiting small screen time;
- **Fact sheets** to communicate key messages with families; and
- **Ongoing support** from Local Health District health promotion teams to implement *Munch & Move* within the early childhood setting. This includes support to develop and implement policies, embed practice, communicate with families and deliver innovative learning experiences.

An evaluation of phase one of the Munch & Move program demonstrated that it was a feasible, acceptable and appropriate way of building knowledge and skills of early childhood professionals [26].

An early evaluation of the Munch & Move program in preschools also showed that it was efficacious to improve fundamental movement skills, but had limited influence in producing changes in children's lunchboxes [27].



2.2 Program principles of the *Munch & Move* program

The *Munch & Move* program is based on six key health promoting messages:

Encourage and support breastfeeding

Eat more fruit and vegetables

Choose water as a drink

Get active every day

Choose healthier snacks

Turn off the television or computer and get active

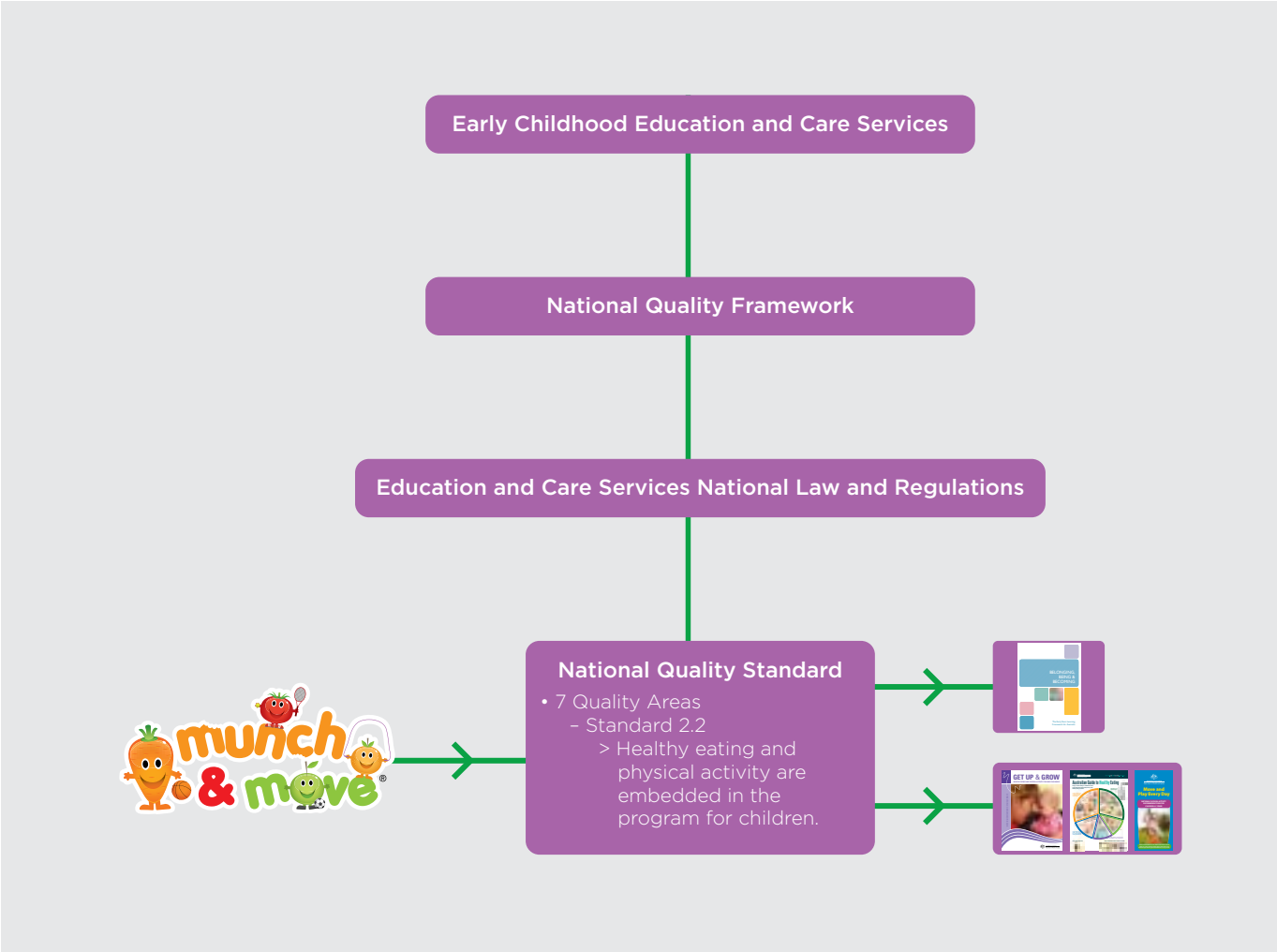
A set of 15 program adoption indicators, also known as practices (six related to promoting and encouraging healthy eating, four related to improving physical activity, two related to small screen recreation; and three related to quality of service delivery) have been developed to assist implementation:

Practice 1:	Service monitors food and drinks that are in children's lunchboxes every day
Practice 2:	Service menu includes fruit and vegetables at least once per day
Practice 3:	Service menu includes only healthy snack options every day
Practice 4:	Service supplies age appropriate drinks every day
Practice 5:	Service provides structured and specific learning experiences about healthy eating at least 2 times per week
Practice 6:	Service provides tummy time for babies 0-12 months of age every day
Practice 7:	Service provides physical activity for 1-5 year olds at least 25% of the daily opening hours
Practice 8:	Service provides fundamental movement skills for children 3-5 years of age every day, to at least 90% of children
Practice 9:	Service use of small screen recreation by 3-5 year olds is appropriate
Practice 10:	Service has a written nutrition policy
Practice 11:	Service has a written physical activity policy
Practice 12:	Service has a written policy restricting small screen recreation
Practice 13:	Service provided health information to families within past 12 months
Practice 14:	Service has at least 50% of primary contact educators trained in nutrition and at least 50% trained in physical activity
Practice 15:	Service monitors and reports achievements of healthy eating and physical activity objectives annually

2.3 National Quality Framework

The **National Quality Framework** introduced a new quality standard to improve education and care across long day care, family day care, preschool/kindergarten and outside school hours. The **National Quality Standard**, a key component of the National Quality Framework, sets a national benchmark for early childhood education and care and is linked to **Belonging, Being & Becoming: the Early Years Learning Framework** for Australia. The *Munch & Move* program is strongly aligned to the National Quality Framework and it can help services meet the requirements of the National Quality Standard and the Early Years Learning Framework (Figure 2).

Figure 2: *Relationship between the Munch & Move program and the National Quality Framework*



3. Evaluation of the *Munch & Move* Program

3.1 Overview of evaluation components of the *Munch & Move* Program

Embedded within the delivery of the *Munch & Move* program is a process of information and data collection that facilitates the monitoring and evaluation of the program. The primary goals of the monitoring and evaluation of the *Munch & Move* program are to:

- Assess the process of implementation of the *Munch & Move* program;
- Assess the reach of the *Munch & Move* program; and
- Assess the impact of the *Munch & Move* program on organisational change.

3.2 Implementation process of the *Munch & Move* Program

3.2.1 Evidence building and performance monitoring frameworks

The implementation of the *Munch & Move* program included the development of the program at a state-wide level and relied on the activities of Local Health District to implement the program and ensure the program met the needs of the local community. There have been two key strengths in the implementation of the *Munch & Move* program, namely:

Evidence building framework: The program implementation followed an evidence building process of translating research into practice[28]. A clearly identified problem was defined and solutions to the problem in the form of early childhood interventions were developed; the proposed solutions underwent a process of efficacy testing which added to the existing evidence base of effective interventions in this area and through the phased process of implementation the intervention was replicated and disseminated [28].

Monitoring framework: The implementation of the *Munch & Move* program involved the provision of additional funding to Local Health Districts; and the establishment of a performance monitoring framework. Targets for reach and adoption of the program were linked to the funding with Local Health Districts being responsible for managing service delivery, engaging early childhood services, providing ongoing support to facilitate program adoption and reporting progress against the targets[29]. The framework included both service delivery indicators and indicators of adoption of organisational practices. The strengths in implementing a performance monitoring system include [29]:

- Providing access to specific information about the organisational impacts of the program;
- Facilitating a feedback process to support improvements in the delivery and impact of the program;
- Providing a mechanism to ensure targets are reached; and
- Informing the process of quality improvement at both a state-wide and local level through the monitoring framework.

3.2.2 Centre-based Training

A substantial element of the *Munch & Move* program is the provision of state-wide training by an early childhood registered training organisation and support by Local Health Districts to early childhood services. This training was delivered via workshops until April 2015 and is now delivered via 'live' webinar series. In 2015, 89% of centre-based early childhood services had staff trained in the *Munch & Move* program (Figure 3). There was some variation between the type of services that had taken part in the training (Table 1), with a higher proportion of preschools and long day care services having their staff trained (91% and 90% respectively) compared to occasional care services (79%).

Figure 3: *Proportion of centre-based early childhood services that have participated in training (2015)*

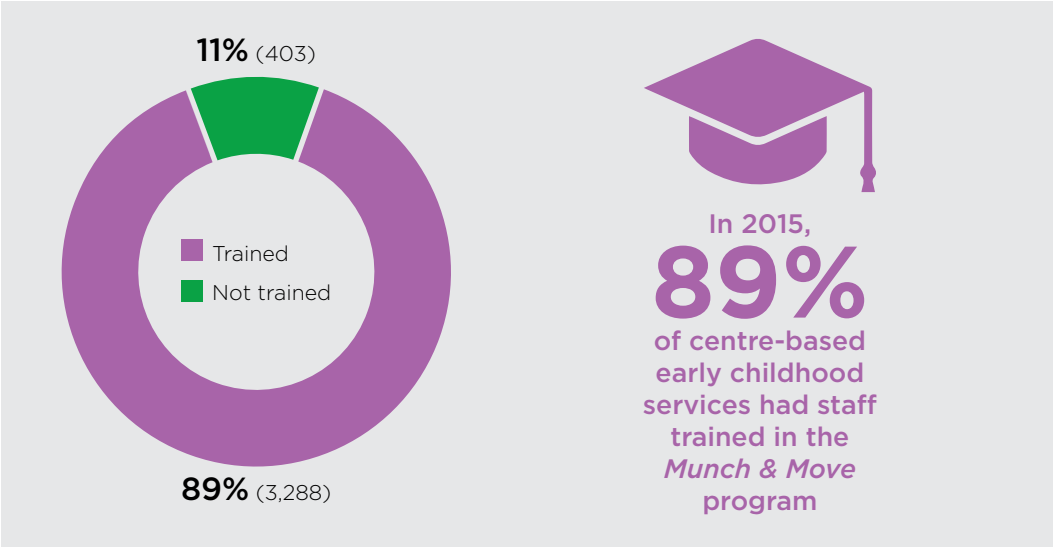


Table 1: *Training by service type (2015)*

	Trained	
Service Type	**n**	**%**
Long day care	2,362	89.8
Occasional care	57	79.2
Preschool	842	91.1
Other*	27	42.2
TOTAL	**3,288**	**89.1**

**Other includes distance learning, early intervention and mobile*

The proportion of services whose staff had undergone training was consistent across geographic locations (Table 2), and when comparing staff in major cities who had undergone training with staff in other locations (inner and outer regional and remote and very remote locations) there were no statistically significant differences (p-value=0.05). There were statistically significant differences between staff trained in locations classified as the two most disadvantaged socio-economic quintiles (p-value=0.009) (Table 3). Of the services that had fully adopted the *Munch & Move* practices (fully adopted is defined as meeting 80% or more of the practices relevant for that service) 95% had been trained in the *Munch & Move* program.

Table 2: *Training by region (2015)*

	Trained	
Location^	**n**	**%**
Major cities	2,412	88.5
Inner regional	638	90.8
Outer regional	204	90.7
Remote / very remote	34	91.9
TOTAL	**3,288**	**89.1**

^ Remote communities defined as remote and very remote communities as measured by Remoteness classifications [30]

Table 3: *Training by socio-economic levels of advantage (2015)*

	Trained	
Classification*	**n**	**%**
Quintiles 1 & 2 (most disadvantaged)	1,397	90.7
Quintiles 3, 4 & 5 (least disadvantaged)	1,891	88.0
TOTAL	**3,288**	**89.1**

** Disadvantaged communities defined as the two most disadvantaged communities as measured by the Socio-economic Index for Areas [31]*

3.2.3 Family Day Care Training

The *Munch & Move* program was extended to the family day care sector in August 2011 through a 'train the trainer' approach. Staff from Family Day Care Schemes were invited to attend a full day *Munch & Move* 'train the trainer' workshop facilitated by an early childhood registered training organisation. The training was designed to provide participants with the knowledge, skills and confidence required to 'on-train' family day care educators within their Scheme. Private family day care schemes and those attached to the NSW Family Day Care Association were invited to attend.

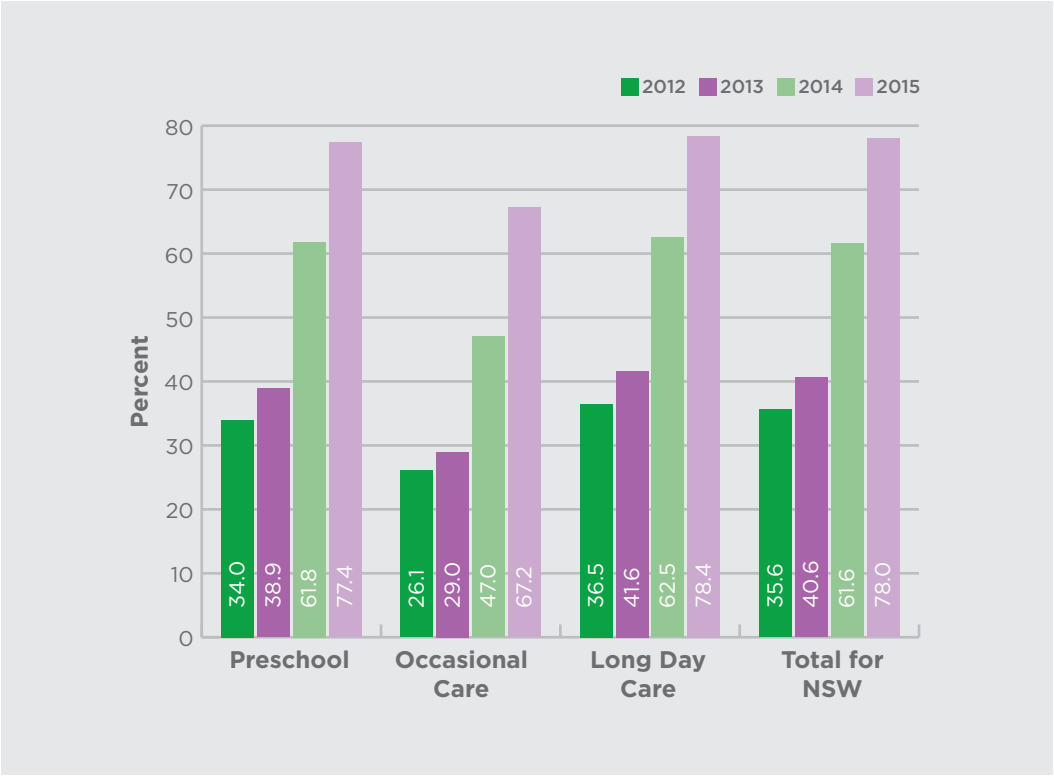
Fourteen 'train the trainer' workshops were delivered in 2011 and 2012 attracting 105 participants from 71 of 86 Family Day Care Schemes. This represented approximately 83% of NSW Family Day Care Schemes. These Schemes then collectively provided over 200 'on-training' sessions to educators.

3.3 Adoption of the *Munch & Move* program

3.3.1 Adoption over time

There has been a steady growth in the number and type of early childhood services that have adopted the *Munch & Move* program since it began as a pilot in 2008. The adoption of *Munch & Move* has been monitored state-wide since 2012. The adoption of the program is reported with reference to the number of services achieving 70% (or more) of the practices that are relevant for their particular service. There has been a statistically significant increase in the proportion of early childhood services that have implemented 70% or more of the *Munch & Move* practices. In 2012 the total for NSW was 36% and by 2015 this increased to 78% (p-value<0.001) (Figure 4); corresponding increases have been seen for preschool, occasional care and long day care services (all statistically significant at p-value<0.001).

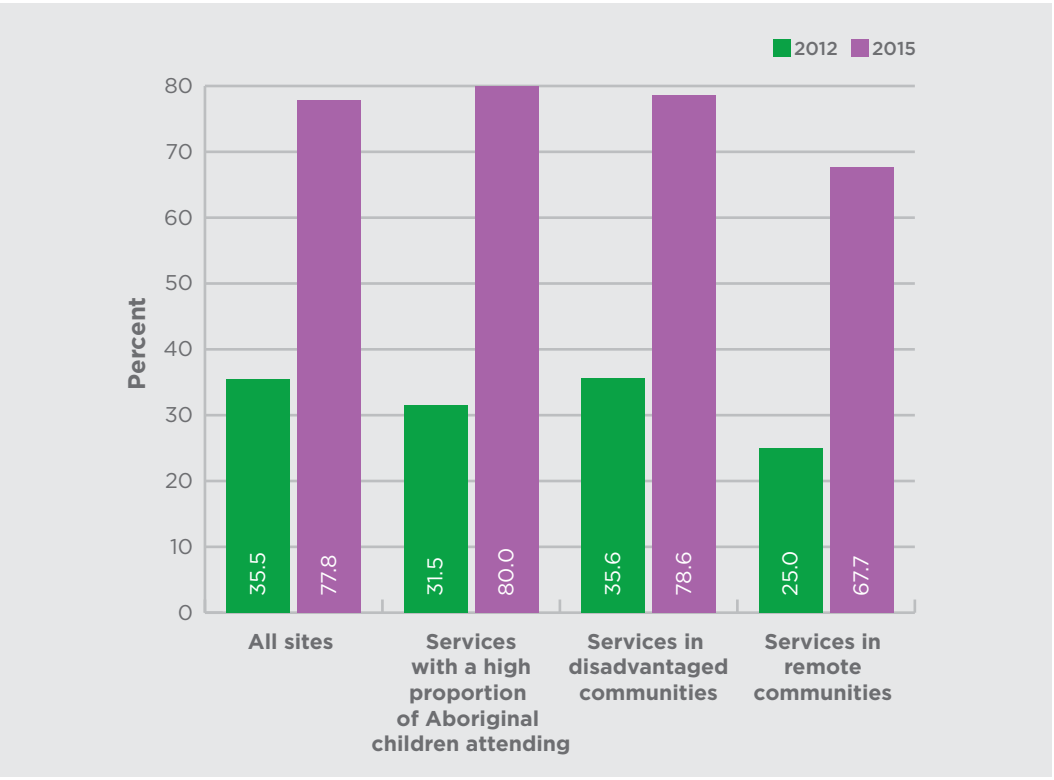
Figure 4: *Program adoption by service type over time (2012 - 2015)*



3.3.2 Adoption by priority population groups

In recognition of the prevalence of childhood obesity in disadvantaged communities, Aboriginal communities and remote communities, the adoption of the *Munch & Move* program is also reported according to early childhood services which either have a significant proportion of Aboriginal children in their care, are located in disadvantaged communities or are classified as being remote communities based on their postcode. There has been an increase in the proportion of services with priority population groups that have implemented 70% or more of the *Munch & Move* practices. Increases have been seen across all of the early childhood services characterised by priority population groups (all statistically significant at p-value<0.001) (Figure 5).

Figure 5: *Program adoption over time by priority population groups (2012 and 2015)*



3.4 Impact of the *Munch & Move* program

3.4.1 Practice achievements over time

There have been substantial improvements in the practice achievements made by early childhood services since the state-wide roll out of the *Munch & Move* program. Across the majority of the practices related to promoting and encouraging healthy eating, increasing physical activity and improving the quality of service delivery, there were improvements between 2012 and 2015 (Table 4). Two practices that already had relatively high levels of compliance in 2012 and did not improve between 2012 and 2015 were related to small screen recreation, namely appropriate use of small screen recreation and a written policy restricting small screen recreation. There were a number of practices where the improvements between 2012 and 2015 were considerable (Figure 6), including:

Practice 4
Water or age-appropriate drinks

Practice 5
Healthy eating learning experiences at least twice per week

Practice 8
Fundamental movement skills (ages 3–5 years)

Practice 11
Written physical activity policy

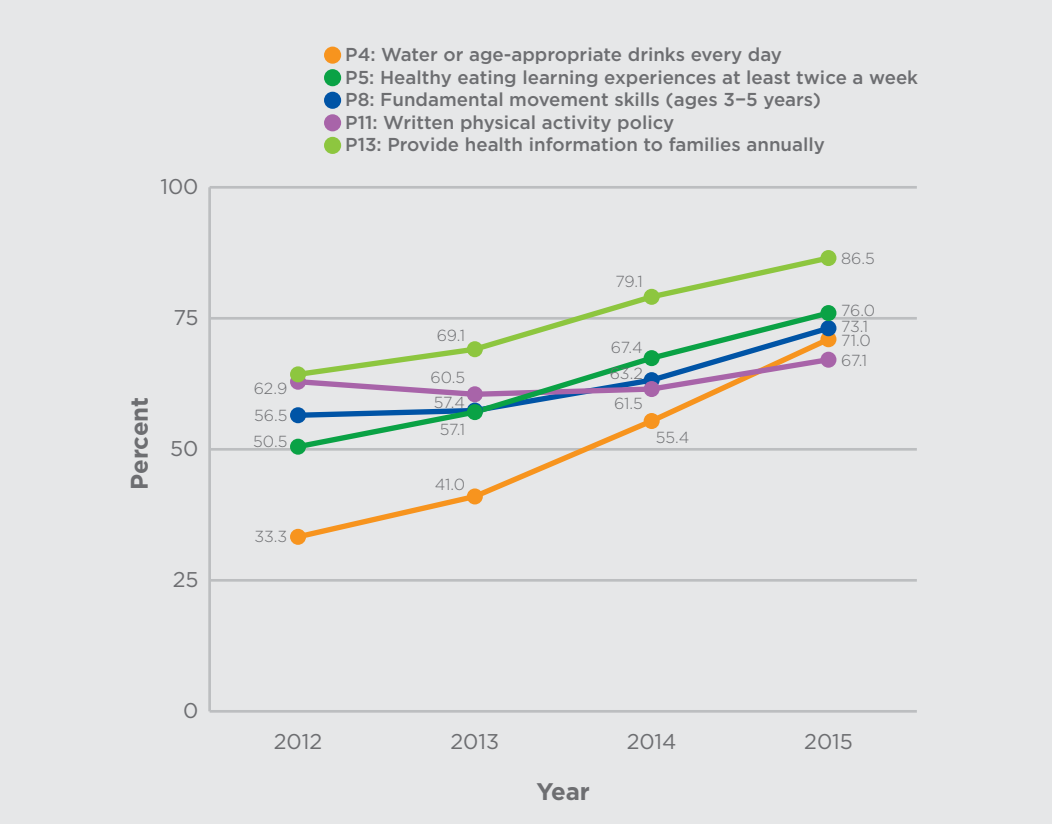
Practice 13
Provision of health information to families annually

Table 4: *Practice achievements over time (between 2012 and 2015)*

		2012# %	2015* %
Practice 1	Lunchboxes monitored daily	88.9	93.3
Practice 2	Fruit and vegetables at least once per day	92.5	93.6
Practice 3	Only healthy snacks on the menu	76.3	86.6
Practice 4	**Water or age-appropriate drinks every day**	**50.5**	**76.0**
Practice 5	**Healthy eating learning experiences at least twice per week**	**64.3**	**86.5**
Practice 6	Tummy time for babies every day	89.7	92.9
Practice 7	Physical activity for at least 25% of opening hours (ages 1–5 years)	90.7	93.3
Practice 8	**Fundamental movement skills (ages 3–5 years)**	**62.9**	**67.1**
Practice 9	Appropriate use of small screen recreation (ages 3–5 years)	96.6	92.1
Practice 10	Written nutrition policy	98.4	96.6
Practice 11	**Written physical activity policy**	**56.5**	**73.1**
Practice 12	Written policy restricting small screen recreation	85.6	77.9
Practice 13	**Provide health information to families annually**	**33.3**	**71.0**
Practice 14	Half of educators trained in nutrition and half of educators trained in physical activity	46.1	54.4
Practice 15	Monitoring and reporting annually	61.8	87.0

#Baseline collected using a Computer Assisted Telephone Interview
**Collected using database Population Health Intervention Management System*

Figure 6: *Improvements in practice achievements over time (2012-2015) for a select number of practices*



3.4.2 Practice achievements by service type

When focusing on the types of early childhood services where these practice achievements occurred, it is apparent that there were some differences between long day care, preschool and occasional care in their implementation of the practices (Table 5); however these differences were not consistent according to service type. There was some indication that:

- Long day care services achieved a greater proportion of practices relevant to healthy eating than preschool and occasional care services;
- Long day care services achieved a greater proportion of practices relevant to written policies than preschool and occasional care services; and
- Preschools achieved a greater proportion of practices relevant to monitoring and reporting of healthy eating and physical activity objectives and the training of staff in relation to nutrition and physical activity than long day care and occasional care services.

Table 5: *Practice achievements by service type (2015)*

		Long day care %	Preschool %	Occasional care %
Practice 1	Lunchboxes monitored daily	92.5	93.8	98.1
Practice 2	Fruit and vegetables at least once per day	94.5	75.8	66.7
Practice 3	Only healthy snacks on the menu	87.5	74.1	57.1
Practice 4	Water or age-appropriate drinks every day	70.6	89.9	85.7
Practice 5	Healthy eating learning experiences at least 2 times per week	86.8	86.0	91.0
Practice 6	Tummy time for babies every day	93.9	75.8*	93.2
Practice 7	Physical activity for at least 25% of opening hours (ages 1–5 years)	93.0	94.5	94.6
Practice 8	Fundamental movement skills (ages 3–5 years)	66.5	69.2	64.3
Practice 9	Appropriate use of small screen recreation (ages 3–5 years)	92.6	91.4	92.9
Practice 10	Written nutrition policy	97.3	95.5	94.6
Practice 11	Written physical activity policy	75.8	66.6	67.9
Practice 12	Written policy restricting small screen recreation	80.3	72.7	67.9
Practice 13	Provide health information to families annually	71.6	71.3	53.6
Practice 14	Half of educators trained in nutrition and half of educators trained in physical activity	51.1	63.7	55.4
Practice 15	Monitoring and reporting annually	87.3	86.6	85.7

** Although not applicable for preschools, at the time of data extraction the data was still being cleaned for accuracy of service type.*

3.4.3 Practice achievements by priority population groups

The *Munch & Move* program practice achievements are also reported according to early childhood service which either have a significant proportion of Aboriginal children in their care, or are located in disadvantaged communities or remote communities based on the postcode of the service (Table 6). The data suggests that early childhood services in remote communities achieved less of the practices associated with healthy eating and physical activity and the provision of health information to families when compared with all other services. Services with a high proportion of Aboriginal children attending; and services in disadvantaged communities were similar in their practice achievements to the other services; and in regard to the provision of water or age appropriate drinks (Practice 4) a greater proportion of services with a substantial number of Aboriginal children attending and services in disadvantaged communities were meeting the practices compared to all services (Figure 7).

Table 6: *Practice achievements by priority population groups (2015)*

		All services %	Services with high proportion of Aboriginal children attending# %	Services in disadvantaged communities* %	Services in remote communities ^ %
Practice 1	Lunchboxes monitored daily	93.4	96.9	93.9	90.5
Practice 2	Fruit and vegetables at least once per day	93.6	94.1	93.8	72.7
Practice 3	Only healthy snacks on the menu	86.7	88.7	85.5	66.7
Practice 4	Water or age-appropriate drinks every day	75.9	86.4	80.6	75.9
Practice 5	Healthy eating learning experiences at least 2 times per week	86.5	86.9	87.4	86.2
Practice 6	Tummy time for babies every day	92.9	98.6	92.6	76.9
Practice 7	Physical activity for at least 25% of opening hours (ages 1–5 years)	93.4	93.2	93.8	86.2
Practice 8	Fundamental movement skills (ages 3–5 years)	67.2	67.4	64.8	55.2
Practice 9	Appropriate use of small screen recreation (ages 3–5 years)	92.2	87.4	91.0	79.3
Practice 10	Written nutrition policy	96.7	99.4	97.4	93.1
Practice 11	Written physical activity policy	73.2	77.3	73.8	75.9
Practice 12	Written policy restricting small screen recreation	78.1	72.2	76.0	72.4
Practice 13	Provide health information to families annually	71.1	74.4	72.1	35.7
Practice 14	Half of educators trained in nutrition and half of educators trained in physical activity	54.5	67.1	58.3	58.6
Practice 15	Monitoring and reporting annually	87.0	89.2	86.6	65.5

 # Services with high proportion of Aboriginal children attending is defined as having a proportion of 10% or more identified as being from Aboriginal or Torres Strait Islander background
** Disadvantaged communities defined as the two most disadvantaged communities as measured by the Socio-economic Index for Areas [31]*
^ Remote communities defined as remote and very remote communities as measured by Remoteness classifications [30]

Figure 7A: *Comparison of healthy eating practice (p) achievements by priority population group (2015)*

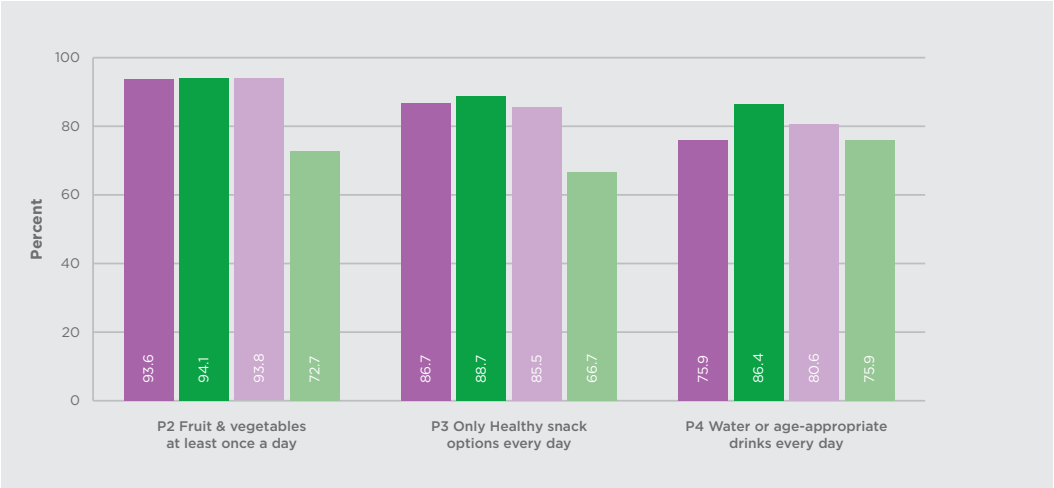


Figure 7B: *Comparison of physical activity and small screen recreation practice (p) achievements by priority population group (2015)*

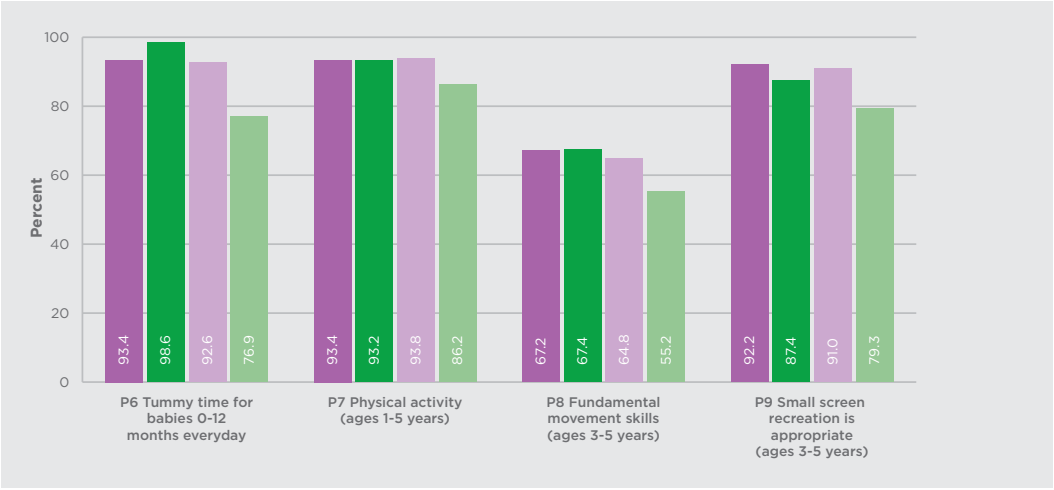
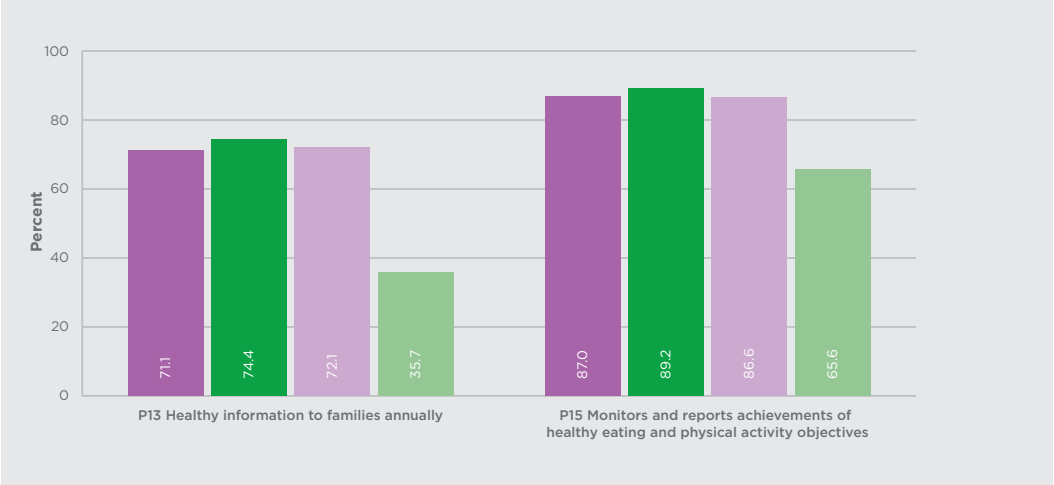


Figure 7C: *Comparison of quality service delivery practice (p) achievements by priority population group (2015)*



3.5. Data source and limitations

It should be noted that the evaluation of *Munch & Move* reflects the 'real world'. Administrative data such as number and classification of early childhood services was obtained from a government database, which is regularly updated by Local Health Districts. Accurate training data is maintained as part of program delivery and practice data is obtained by direct observation or through self-report from services by a trained health promotion officer, which has some limitations.

3.5.1 Administrative data

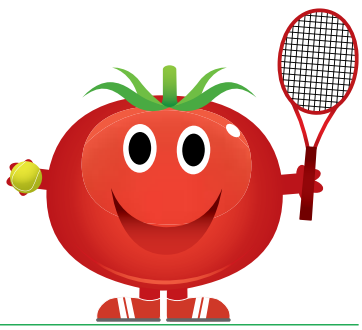
A key component of the implementation of the *Munch & Move* program has been the development of a monitoring framework that was supported by routine data collection in relation to:

- The number and classification of early childhood services across NSW;
- The number of early childhood services trained in *Munch & Move*; and
- The number of practices achieved and not achieved by early childhood services relevant to their service.

Practice data in the first instance was collected via a Computer Assisted Telephone Interview (CATI) (2012) and then subsequently collected by trained health promotion officers and entered into the Population Health Intervention Management System (PHIMS), a database that captures data from the activities of Local Health Districts and generates state-wide reports. The data that has been used for this report includes a combination of CATI and PHIMS data sources, and inherent within this process is the limitation of comparing data from different sources.

3.5.2 Data collection processes

In addition to the varied administrative datasets, the information collected via CATI was self-report data, which is limited by the accuracy of such subjective reporting. The information collected via PHIMS minimises the collection of self-reported information as it is collected by trained health promotion officers according to defined protocols developed by the NSW Ministry of Health and Local Health Districts.



At Connie's Child Care Centre we have been involved with the *Munch & Move* program since we were trained in 2013.

Our Local Health District Support Officer has helped us review and recreate our menu to ensure that we are serving food that meets the Australian Dietary Guidelines and the nutritional needs of our children. We also involve families in the process, asking them for their favourite recipes and cultural foods which we include on the menu.

Munch & Move enables our educators to link the introduction of healthier meals with healthy eating learning experiences with the children, to ensure these new foods are met with excitement and exploration. These experiences include cooking activities, games and books, songs and tactile experiences with fruit and vegetables.

We also established a garden bed in our service yard for children to be directly involved in the planting and growing of herbs and vegetables which are later used in cooking and other learning experiences.

We promote physical activity with all the children in our service alongside a wide choice of play-based, physically active learning experiences that link to children's interests. We hope to create good habits early in life and encourage families to engage in regular physical activity with their children.

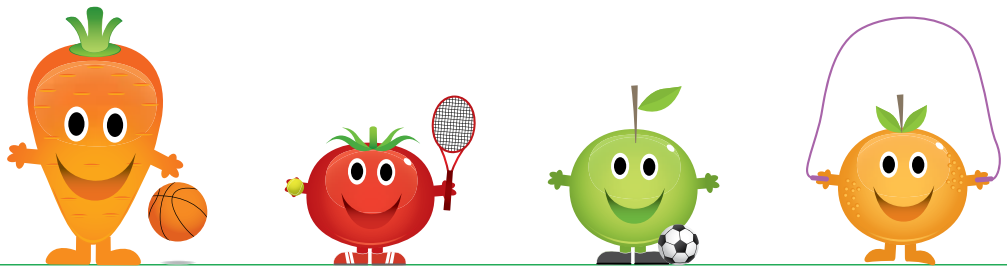
Paula,
Connies Child Care Centre,
Mount Druitt

4. Future Directions

As previously noted, the *Munch & Move* program is a key NSW state-wide healthy eating and active play program designed to influence and support the healthy eating, physical activity and small screen recreation policies and practices within the early childhood setting. Any changes made within the setting would then relate to the behaviours of children and their families attending these services.

Future directions for the *Munch & Move* program include:

1. Maintaining and enhancing program support across sectors;
2. Refreshing program resources;
3. Strengthening program adoption (particularly for lower adopting practices) and program impact at the service and setting level;
4. Engagement of newly opened early childhood services in training and implementation;
5. Re-engagement of family day care schemes in training and implementation;
6. Developing new approaches to professionally develop the growing body of educators, including students studying early childhood in vocational and tertiary institutions;
7. Ongoing monitoring and evaluation; and
8. Innovation in the early childhood setting i.e. online training.



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Ayden
SO CAL CRUISER