

# Evaluation of NSW-specific early childcare regulations

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## Acknowledgment of Country

We acknowledge that Aboriginal and Torres Strait Islander peoples are the First Peoples and Traditional Custodians of Australia, and the oldest continuing culture in human history.

We pay respect to Elders past and present and commit to respecting the lands we walk on, and the communities we walk with.

We celebrate the deep and enduring connection of Aboriginal and Torres Strait Islander peoples to Country and acknowledge their continuing custodianship of the land, seas, and sky.

We acknowledge the ongoing stewardship of Aboriginal and Torres Strait Islander peoples, and the important contribution they make to our communities and economies.

We reflect on the continuing impact of government policies and practices and recognise our responsibility to work together with and for Aboriginal and Torres Strait Islander peoples, families, and communities, towards improved economic, social, and cultural outcomes.

Artwork:

*Regeneration* by Josie Rose



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# Executive summary

- NSW maintains stricter Early Childhood Education and Care (ECEC) staff ratios and qualification requirements compared with national benchmarks. The stricter NSW standards say that ECEC services must **employ more degree-qualified early childhood educators** than centres elsewhere in Australia. In addition, all NSW ECEC centres must **operate with stricter staff-to-child ratios** of at least 1:10 compared to the national standard of 1:11 for children aged 3-6 years.
- This NSW Productivity Commission report evaluates the costs and benefits of these stricter requirements as recommended in the NSW Productivity Commission White Paper 2021. It draws on the latest available data, literature, survey responses and stakeholder consultations.
- The Commission finds that **moving to the national standards could have benefits for NSW of around \$3.1 billion** in net present value terms, or \$410 million per annum. The impact of the regulatory change on the workforce participation of parents alone could boost Gross State Product by \$180 million per year over the long term. Adopting national standards could also help improve educational outcomes for children that attend ECEC services due to the associated reduction in cost and increased availability of childcare places.
- The **educational outcomes of children in NSW are not any better than comparable states** that do not have the stricter ECEC staffing requirements. This may be because:
  - Stricter staff-to-child ratios and qualification standards may hinder educational and development outcomes for children who cannot attend ECEC. Even if they help children who attend ECEC, they may stop other children from attending by raising costs beyond what some families can afford.
  - Stricter staff-to-child ratios may have a small positive or no impact on educational outcomes of children. Previous studies examining the impact of small changes in staff-to-child ratios have either found no change or a very small improvement in the educational outcomes of children.
  - Previous studies found little difference in educational outcomes between pre-school children taught by university-educated teachers and diploma-educated teachers.
- The stricter staffing requirements in NSW increase the cost of childcare by up to 9 per cent — or \$230 million — and decrease the wages of parents by up to \$180 million annually as they stay at home to look after children. The cost of NSW maintaining requirements above the national standards equates to around \$3,000 a year for each child attending ECEC.
- The **costs of the stricter regulatory requirements likely exceed the benefits**. For the stricter regulations to be economically worthwhile, the benefits would need to be equal to around five months of additional schooling. This does not appear to be the case.
- Even if national standards are adopted in NSW, higher-standard care will likely remain available. ECEC service providers may choose to exceed minimum standards to position themselves as 'higher quality' providers, and families may choose to send their children to these providers.
- The evidence presented in this evaluation will support future reviews into the regulation of the ECEC sector.

# 1 Introduction

This report evaluates the benefits and costs of NSW maintaining stricter early childhood education and care (ECEC) staffing requirements. NSW has adopted stricter student-to-educator ratios and qualification requirements, compared with national standards. An evaluation of the costs and benefits of NSW-specific ECEC staffing regulations where they differ from national standards was recommended in the NSW Productivity Commission White Paper 2021 (recommendation 4.9).

The ECEC sector is changing quickly and substantially. It faces affordability, access, and workforce pressures. Major reforms and investment are underway. This report aims to provide evidence on just one issue within this mix. It does not address the sector's other complex issues in detail.<sup>1</sup>

The evaluation complements the 2022 Women's Economic Opportunities Review, which considered how to improve women's economic security through increased economic participation.

## 1.1 NSW imposes stricter staffing requirements than the National Quality Framework benchmarks

The Council of Australian Governments (COAG) introduced the National Quality Framework (NQF) in 2012. COAG wanted to provide nationally consistent regulatory and assessment arrangements, and these included both minimum educator qualifications and staff-to-child ratios. The NQF also helped implement a quality rating system and developed approved learning frameworks. Box 1 outlines how each state administers the NQF.

Some states, including NSW, maintained their own stricter regulations even after adopting the NQF.<sup>2</sup> NSW, Western Australia and Tasmania are the only states that have not adopted ECEC ratio requirements in line with national standards for children aged 3-6 years. South Australia adopted ratio requirements in line with national standards in 2020. NSW also imposes stricter educational requirements for ECEC staff than required by the national standards and by other states.

As shown in Table 1, the main differences are that ECEC providers in NSW must:

- Operate under a 10:1 student-to-educator ratio for children aged 3-6 years (relative to the national ratio of 11:1).
- Employ more Early Childhood Teachers (ECTs). ECTs hold a Bachelor's degree in early childcare. For example, in NSW, providers with 80 or more children must employ at least four full-time ECTs 100 per cent of the time, compared to the national standard of two ECTs 60 per cent of the time.
- Avoid using 'suitably qualified persons' in lieu of additional ECTs, although this is an option in other states. A suitably qualified person is either registered as a teacher, holds an early childhood education and care diploma, or is actively working towards an ECT qualification.

The rationale for maintaining stricter requirements in NSW is to support the educational outcomes of children. To date, the benefits and costs of the stricter regulatory requirements in NSW have not been assessed.

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<sup>1</sup> Analysis of the regulatory requirements for school aged children, including outside school hours care, broader cost drivers of ECEC and subsidy design is beyond the scope of this evaluation.

<sup>2</sup> For further details see: Division 7 of the Education and Care Services National Regulations (2011).

Table 1: Overview of regulation and options for children aged 3-6 years

Regulation category	NSW regulations	NQF standards
Staff to children ratio	1:10	1:11
Minimum ECTs for services with:		
0 to 24 children	One (20 per cent of the time)	One (20 per cent of the time)
25 to 29 children	One (60 per cent of the time)	One (60 per cent of the time)
30 to 39 children	One (full-time)	One (60 per cent of the time)
40 to 59 children	Two (full-time)	One (60 per cent of the time)
60 to 79 children	Three (full-time)	Two (60 and 30 per cent of the time)
80 or more children	Four (full-time)	Two (both 60 per cent of time)
Ability to substitute additional ECT with 'suitably qualified persons'*	No	Yes

\* A suitably qualified person is either registered as a teacher, holds an early childhood education and care diploma, or is actively working towards an ECT qualification.

Sources: Education and Care Services National Regulations (2011 SI 653); NSW Productivity Commission.

### Box 1: NQF roles and responsibilities

Regulatory authorities from each state and territory administer the NQF. The NSW Department of Education (Early Childhood Education Directorate) is the authority in NSW responsible for regulating childcare services. This regulatory responsibility includes monitoring, compliance, assessment and rating, and approval processes for childcare service providers.

The Commonwealth's main role is to fund the Australian Children's Education & Care Quality Authority (ACECQA). ACECQA is an independent national authority that monitors and promotes the consistent application of the national law in each jurisdiction. This includes assessing and approval of whether educator qualifications are equivalent to those in the NQF.

## 1.2 Major investment and reform in the ECEC sector are underway

In NSW's 2022-23 Budget, the NSW Government announced ECEC reforms to increase women's workforce participation and improve developmental outcomes for children. The reforms are based on findings from the Women's Economic Opportunity Review.<sup>3</sup> In response to the Review, the NSW Government made the Early Years Commitment of \$15.9 billion over the next 10 years to introduce universal pre-kindergarten in the year before primary school for every child by the end of the decade. It also encourages providers to extend their services to more families and provides fee relief for families with children in pre-school. The Commonwealth Government has also announced changes to the childcare subsidy scheme.

As part of implementation of the Early Years Commitment, the NSW Government is commissioning the Independent Pricing and Regulatory Tribunal to review the early learning sector. A national process is also underway and is expected to be completed by mid-2024; it will assess the best path forward for national consistency, considering differences between staffing requirements and challenges faced in meeting these requirements.

The NSW and Commonwealth Governments' commitments to ECEC occur amidst significant workforce challenges. These include labour shortages and industrial action over pay and working conditions. A national survey of 3,800 early childhood educators conducted by the United Workers Union (UWU 2022) highlighted a range of concerns within the industry, including high turnover rates, workloads, and understaffing.

The ECEC policy space is complex and subject to multiple challenges. The NSW Government has signalled its commitment to improving the quality and access of care through evidence-backed reform. The evidence presented in this evaluation may be considered by future reviews in the ECEC sector.

## 2 Need for government intervention

Government intervention in the ECEC sector aims to both support child safety and developmental outcomes and also give parents the flexibility to remain or enter the workforce. At times, the objectives of government intervention in supporting child development and parental workforce participation may enhance each other. For example, an increase in workforce participation can boost the income levels of parents, which are important determinants of child development outcomes (see Section 3.1).

Government intervention can require trade-offs at other times. For example, stricter ECEC requirements may support child developmental outcomes but could also increase the cost and reduce the availability of ECEC, which can hinder the workforce participation of parents. In these situations, both objectives should be carefully considered when setting regulatory standards.

Some forms of government intervention may also be counterproductive. Imposing stricter ECEC regulatory standards that increase the cost of childcare could hinder child development outcomes. This could occur if parents respond to the increase cost of childcare by reducing their use of ECEC, which may in turn hinder the development outcomes of children.

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<sup>3</sup> More information is available at: < <https://www.treasury.nsw.gov.au/women-opportunities-review>>.

This report evaluates the costs and benefits of NSW maintaining ECEC staffing regulations in excess of national benchmarks. Adopting national standards in NSW would marginally increase the student-to-educator ratio requirement for children aged 3-6 years and slightly reduce the educational requirements for ECEC educators.

#### **Box 2: Role of the NSW Government in the ECEC sector**

The NSW Government uses regulatory and fiscal levers to promote high quality, affordable, and accessible childcare.

The NSW Government sets and enforces regulatory requirements. As the NQF does not set binding regulatory requirements, the NSW Government can still elect to impose regulatory requirements that differ from the NQF by using state-specific provisions. The regulatory requirements of the ECEC sector are then monitored and enforced by the NSW Department of Education.

The NSW Government also allocates funding to help improve the quality and affordability of childcare. The NSW 2022-23 Budget provided \$15.9 billion over 10 years to help improve the affordability and accessibility of childcare.

The Australian Government can also influence the out-of-pocket cost of childcare by making amendments to the Commonwealth Child Care Subsidy scheme or Family Tax Benefit (see Box 4 for details).

## **3 Impacts of NSW childcare regulations**

A range of benefits and costs flow from mandating stricter qualification requirements and student-to-educator ratios.

- The key benefits are that stricter standards may lead to children:
  - being safe
  - having better development outcomes.
- The costs include:
  - Parents may pay more for childcare due to higher staffing expenses.
  - Where parents cannot afford increased childcare costs, children will often have poorer development outcomes.
  - Where childcare businesses cannot recruit more educators, the result will be fewer childcare places. One result of this will be that parents spend more time out of the workforce.

Further costs include reduced labour force participation for parents (particularly among women) due to the increased cost of childcare, and a rise in the administrative and regulatory burden on ECEC providers due to stricter staffing and waiver requirements.



### Box 3: Evaluating impacts under uncertainty

Evaluating NSW's childcare regulations confronts the government with the difficulties of evaluating what affects children's development and safety, and how much. This task is inevitably difficult, for at least three main reasons:

- Defining and measuring development and safety outcomes can be done in many ways.
- We have limited information about how the NSW-specific regulations above national standards impact the development outcomes of children over a long period.
- It is hard to tell what lessons NSW should draw from other jurisdictions. In particular, it is hard to draw causal inferences from state-level comparisons, because state-level data are driven by many other factors besides differences in childcare regulations. These factors include demography, income, parents' education, and childcare attendance.

Uncertainty in policymaking is often unavoidable but requires policymakers to carefully consider the evidence available.

A hierarchy of research methods should be used when weighing up evidence with randomised trials being preferred and studies using Australian data likely being more relevant than those using international evidence ([Leigh 2009](#)).

In situations where policymakers face an absence of strong evidence or conflicting evidence, risks can be managed by taking a 'no harm' policy stance ([Wilkie and Grant 2009](#)). This means that in challenging cases where the evidence is mixed, a case can be made for making a change so long as it does not do any harm.

The estimated net benefits of adopting the national staffing regulatory standards in NSW is strong despite the policy uncertainty for several reasons outlined below.

- Evidence from the international literature and state-level data does not provide any clear evidence that adopting national staffing regulations in NSW would do any harm to the development outcomes of children.
- Delaying the time before deciding is unlikely to bring to light new evidence that will provide further insights on the impact of marginal regulatory changes on the development and safety outcomes of children.
- Regulatory standards can be readjusted as new evidence comes to light as part of the regular reviews of the NQF.

The closest thing we have to a trial of NSW's adoption of national standards is the previous experience of South Australia. Like NSW, South Australia previously required early childhood centres to operate with staff-to-child ratios of 1:10 compared to the national standard of 1:11 for children aged 3-6 years. In 2020, South Australia adopted national staffing standards. The South Australia Treasury noted that the change provided flexibility for non-government centre-based services to meet the NQF's staffing requirements. Some providers indicated that they would continue to operate at the previously required ratios.

The South Australian state regulator has not yet undertaken a formal review of the change. But there is no evidence to suggest amending the staffing requirements in line with national standards has undermined children's safety or has had detrimental impacts on the development outcomes of South Australian children.

## 3.1 Benefits: developmental outcomes for children

The stricter regulatory requirements in NSW were maintained following the introduction of national standards to support the educational and developmental outcomes of children. Quantifying the benefits of ECEC regulations is challenging due to data limitations and measurement issues (see Box 3).

Based on the existing literature, publicly available data and datasets currently held by the NSW Department of Education, we are unable to identify a measurable benefit from the stricter regulatory standards on the development outcomes of children in NSW.

Stricter ECEC staffing standards in NSW is likely to have had a counterproductive effect for some children. The stricter regulatory settings impose additional costs (discussed below) which are likely to have reduced the uptake of ECEC services. In turn, this could negatively impact the development outcomes of children who do not attend childcare. Furthermore, the reduced uptake is likely have a larger impact on children from disadvantaged households, who have been found to gain the most from high-quality early childhood education (CESE 2018).

Literature is inconclusive on the impact of marginal changes in student-to-educator ratios on the developmental outcomes of children. Academic literature highlights that the relationship between changes in ratios on child outcomes is non-linear, which makes it difficult to determine the impact of small changes to ratios. On the one hand, studies have found that lower student-to-educator ratios are linked with improved child outcomes ([Sylva et al. 2010](#); [Howes 1997](#)) and higher process quality ([Ghazvini & Mullis 2002](#); [Rao et al. 2003](#)) with these effects remaining after controlling for socio-economic factors (i.e. family income, parental education, etc.). On the other hand, studies examining the impact of small changes in student-to-educator ratios, both before and after a change in a ratio, have found that the change in ratios had mixed results on educational quality (CESE 2018). Other research has highlighted that the benefits of lowering student-to-educator ratios were larger when such ratios were high to begin with ([Phillipsen et al. 1997](#)).

The literature is a little more conclusive on the benefits of stricter qualification requirements. An Australian study ([Warren and Haisken-DeNew 2013](#)) found no benefit for university-educated degree qualified pre-school teachers, compared to pre-school teachers with diploma-level qualifications, on children's educational outcomes. Specifically, they analysed the impact of teaching qualifications, by comparing National Assessment Plan Literacy and Numeracy (NAPLAN) results for children based on the pre-school teacher's they had earlier in childhood. They found:

- If a pre-school teacher had a diploma or degree in early childhood education, children recorded higher NAPLAN results compared with children taught by teachers with a certificate level or no qualification.
- Educational outcomes were similar for children taught by an educator with a teaching degree relative to an educator with a diploma.

International studies have reached similar conclusions (e.g., [Burchinal et al 2008](#)). This suggests that the NSW requirement for more degree-qualified teachers is less likely to support higher educational outcomes for children.

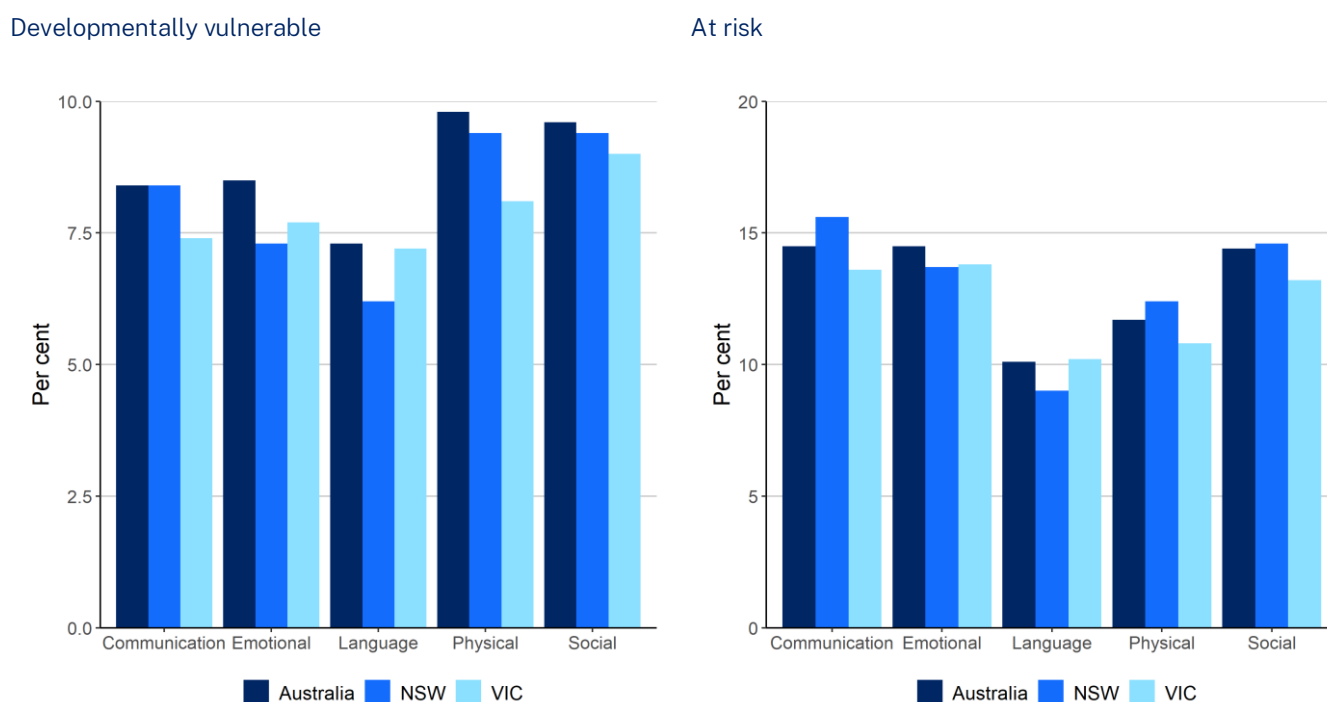
These results should not downplay the valuable skills acquired during an early childhood teaching degree. Diploma-qualified or suitably qualified persons may still benefit from the supervision and program design of degree-qualified staff operating in the same centre.

### 3.1.1 Developmental and educational outcomes are similar in NSW and Victoria despite stricter ECEC regulations in NSW

Results from the Australian Early Development Census (AEDC) and NAPLAN year 3 results have been broadly comparable across NSW and Victoria (Figures 1 & 2). The similar results have occurred despite NSW maintaining stricter childcare regulatory settings than has Victoria. The results suggest that the stricter staffing regulations in NSW may not have had a measurable impact on the developmental and educational outcomes of children. Comparing Victoria's experience with NSW's experience is relevant given the comparable levels of income and adult educational attainment levels, both of which are important factors that influence the educational outcomes of children.

The AEDC measure of the percentage of vulnerable or at-risk children who have attended a pre-school program is broadly similar across NSW and Victoria. The NAPLAN year 3 results across a range of criteria are also broadly similar between NSW and Victoria. The criteria include reading, writing, spelling, grammar, and numeracy.

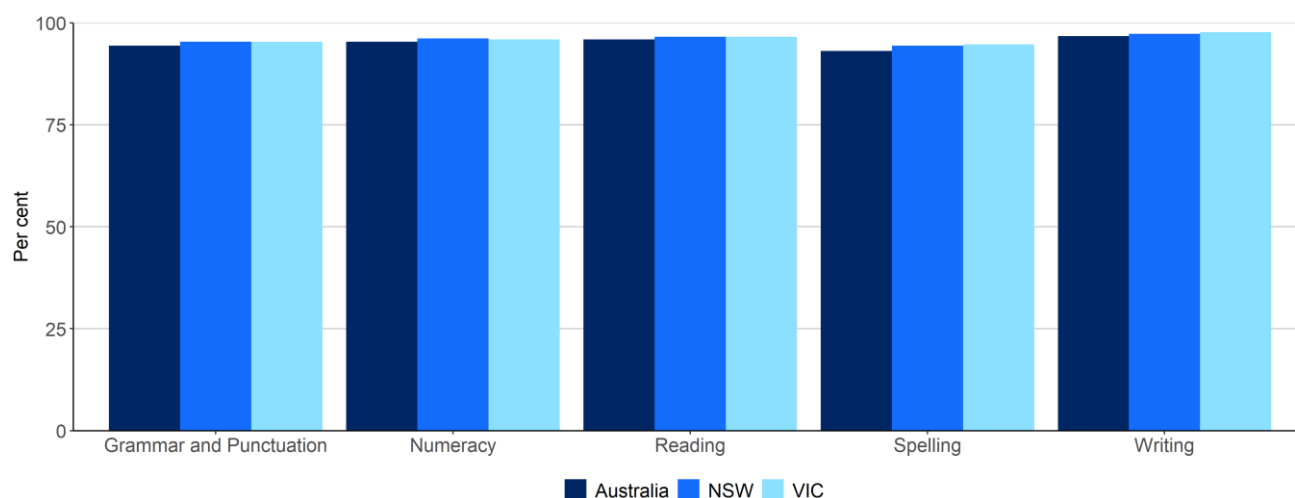
Figure 1: Child development outcomes – percentage of children, 2021



'Developmentally vulnerable' is defined as experiencing several challenges that interfere with children's ability to physically cope with the school day. 'At risk' is defined as experiencing some challenges that interfere with children's ability to physically cope with the school day including poor fine and gross motor skills.

Source: Australian Early Development Census (AEDC), 2021

Figure 2: Child educational outcomes – percentage of children at or above minimum educational standards, 2021



Source: National Assessment Program Literacy and Numeracy (NAPLAN), 2021

The impact of stricter regulatory requirements on the educational outcomes of children from disadvantaged backgrounds and for those from regional areas is unclear. NAPLAN year 3 results suggest that the gap in the educational outcomes across all criteria for children in regional areas versus major cities is larger in NSW compared to Victoria. These results are consistent with the view that the stricter ECEC regulatory settings in NSW have not reduced the gap in educational outcomes of children in regional versus major cities.

Again, here we face the problem of evaluation under uncertainty that was referred to in Box 3 above: state-level results are driven by many factors besides ECEC staffing regulations.

The absence of comprehensive longitudinal data on the developmental and educational outcomes of ECEC services means we are unable to find causal evidence on how stricter childcare staffing regulations affect educational and developmental outcomes. The closest database available is the Longitudinal Study of Australian Children, which is a major study that follows the developments of 10,000 children and families from all parts of Australia. Unfortunately, the data regarding child-to-educator ratios in early childcare settings are measured imprecisely, which prevents analysis on the impact of a marginal shift in child-to-staff ratios from 10:1 to 11:1.

### 3.1.2 Survey-based evidence highlights significant uncertainty over the perceived educational benefits of stricter staffing regulations in NSW

The NSW Small Business Commission undertook a survey more than 200 childcare operators in mid-2022. The survey asked about the potential impact of NSW lowering the child-to-educator ratios in line with national requirements on the learning outcomes of children. Half of the respondents suggested that the lower ratios have had a positive impact on the learning outcomes of children, around 40 per cent suggested that they have had either no impact or a negative impact, and 10 per cent were unsure (Figure 3). Overall, the results highlight significant uncertainty among childcare operators over the perceived benefits of lower ratios.

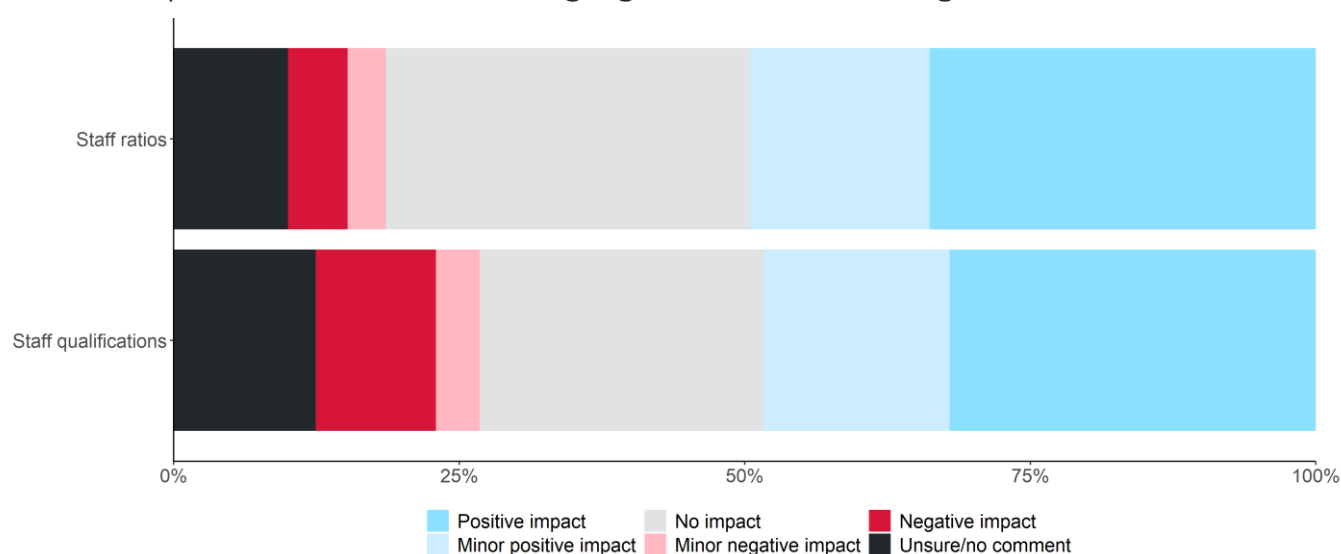
The survey results also suggest significant uncertainty over the perceived benefits of higher educational requirements on the learning outcomes of children. The survey asked respondents for

their views on how the higher educational requirements relative to the national requirements have impacted the learning outcomes of children. Around 40 per cent of respondents suggested the measures have had no or a negative impact, 12 per cent were unsure, and 48 per cent suggested they have had a positive impact.

While the NSW Small Business Commission survey is insightful, it is also important to acknowledge some of the limitations of the data. The survey is exploratory in nature, with a focus on obtaining the sentiments of participants in the ECEC sector. The nature of the questions and methodological considerations means it cannot be used to fully assess the impact of NSW's stricter staffing regulations across the ECEC sector. As a result, the survey data should be taken as one of several important inputs used to assess the impact of NSW's stricter staffing regulations. The NSW Small Business Commission has advised that survey feedback was consistent with other feedback obtained as part of their research.

Figure 3: Childcare operators do not agree on potential impact of NSW staffing regulations

Perceived impact of NSW's stricter staffing regulations on the learning outcomes of children



Source: NSW Small Business Commission

## 3.2 Benefits: safety of children

Imposing stricter staffing regulations should help with harm prevention, as staff have more training on average and fewer children to supervise. Quantifying the impact of harm prevention regulatory requirements, such as staff-to-child ratios, is difficult because there are many ways to measure the level of harm itself.

One measure of child safety is the number of serious incidents per 100 NQF-approved services. Serious incidents are incidents that seriously compromise the health, safety, or wellbeing of children attending ECEC services. They include any occurrences:

- involving the death of a child
- involving serious injury or trauma to a child
- where the attendance of emergency services was sought (or ought reasonably to have been sought)



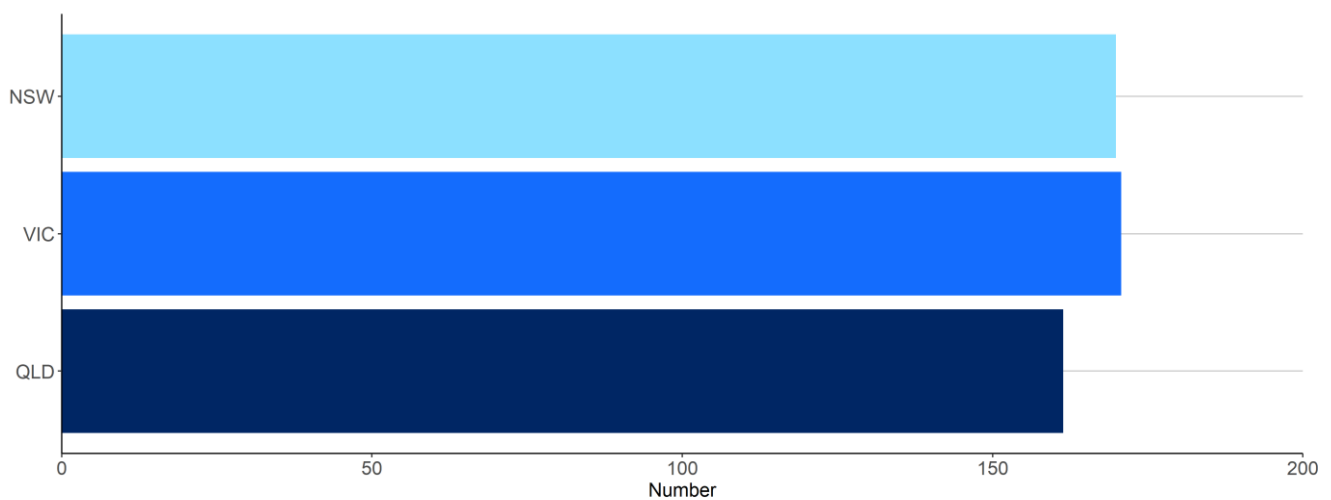
- where a child has been locked in/out, removed from the premises in contravention of regulations, or is unaccounted for.

The number of serious incidents per 100 NQF-approved services is broadly comparable across NSW, Victoria, and Queensland (Figure 4). This metric suggests that NSW has similar levels of safety to other states that have adopted staffing regulatory requirements in line with the national benchmarks.

However, we note some caution should be taken interpreting this data across jurisdictions. Variations may be affected by differences in the number of children, hours of service delivery, and differences in reporting practices of approved providers.

Figure 4: Serious safety incidents do not differ clearly between NSW and Victoria

Serious incidents per 100 NQF approved services, centre-based day care, 2020-21



Source: Commonwealth Productivity Commission

### 3.3 Costs: additional staffing expenses

The stricter NSW childcare regulations are estimated to have increased staffing costs within the sector by up to 9.1 per cent, equivalent to an extra \$1,239 per child per year in childcare costs (Deloitte Access Economics 2021). This reflects an additional \$233 million in additional labour costs (17.5 per cent of staff costs) within the childcare industry each year due to the stricter requirements. The higher staffing costs stem from the need to hire more educators per child and the need to pay more to attract and retain staff with higher levels of qualifications.

The cost of each regulation is estimated below.

- The requirement for services in NSW to maintain a staff-to-child ratio of 1:10 is the largest contributor to costs. This requirement is estimated to increase costs in the sector by \$128 million a year, relative to the costs under the 1:11 national requirement.
- The requirement for services in NSW to employ a higher minimum number of degree-qualified staff increases costs in the sector by \$95 million per year, relative to the national requirements.

- The inability to substitute additional degree-qualified staff with ‘suitably qualified persons’ increases costs in the sector by \$10 million per year, relative to the national requirements.

The higher staffing costs are passed onto parents and government through higher fees and larger childcare subsidy payments respectively.

It may be the case that for certain children or communities the higher ratios and qualification requirements are seen to be beneficial. Some service providers may choose to continue to operate at stricter standards if they and parents believe that it will help deliver higher-quality care to children. As a result, the estimated staffing costs of the regulations can be seen as an upper limit of cost savings that are achievable if all services align to the national requirements. However, the savings are also likely to be skewed towards lower parents in socio-economic groups, as these are likely the most price-sensitive childcare users.

Survey responses from the NSW Small Business Commission found that 52 per cent of respondents report that the stricter ratio requirements in NSW have increased the cost of childcare. The same survey also found that 63 per cent of respondents report the higher educational requirements in NSW have increased the cost of childcare.

### 3.4 Costs: reduced labour force participation of parents

Parents consider the cost of ECEC when they decide how much paid work to undertake. At the household level, higher childcare costs can reduce the economic benefits of parents remaining in or re-entering the workforce. The higher early childcare education costs stemming from the tighter regulatory settings in NSW are estimated to have:

- reduced paid hours worked of primary carers by up to 5.4 million hours per annum across the 390,200 households in NSW with children under the age of five
- lowered the number of primary carers employed by around 2,485
- decreased the collective wages of primary carers by up to \$180 million annually.

These estimates are based on recent NSW Productivity Commission research that assessed how changes in childcare costs affect parents’ decisions about participating in the workforce ([NSW Productivity Commission 2022](#)). The paper found that childcare costs do affect parents’ working decisions: a one per cent increase in hourly fees (excluding childcare subsidies) results in a fall in total hours worked by around 0.16 per cent.<sup>4</sup> This implies that lowering childcare costs could have significant benefits for labour supply.

Increased childcare costs reduce the total hours worked by primary carers through two channels:

- First, they may decide to exit the workforce entirely. Our previous research found that a one per cent rise in pre-subsidy early childcare costs lowers the labour force participation of primary carers by around 0.07 percentage points. That is, it lowers the probability that a parent will remain employed (the semi-elasticity of labour force participation to childcare costs) by 0.07 percentage points.

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<sup>4</sup> NSW Treasury (2022a) research suggests previous Australian studies that have examined the sensitivity of total hours worked to ECEC costs have suggested even larger declines in hours worked of between 0.11 and 0.7 per cent.

- Second, even if they remain in the labour force, they may work fewer hours. For those households whose primary carers remain engaged in paid employment, a one per cent increase in pre-subsidy early childcare costs reduces the number of average paid hours worked by 0.04 per cent.

The labour force impacts of the NSW-specific regulatory requirements are based on the following key assumptions (see Appendix for details on how these were calculated):

- Higher staffing costs are passed on in full in the form of higher childcare prices, rather than being absorbed through profit margins by service providers.
- Regulations increase the price for all forms of formal childcare.
- There are no price effects; the tighter regulations do not impede the availability of childcare places.
- There are no hourly rate caps on childcare subsidies, so that a given percentage point increase in childcare costs is expected to result in a comparable increase in the out-of-pocket cost of childcare for parents.
- The extent to which non-primary carer parents in couple households engage in the labour force is unaffected by changes in childcare prices.

Most of the assumptions would result in the Productivity Commission's estimates of cost impact being higher than what has actually taken place. The one exception is the assumption that the availability of childcare places is unaffected. The current NSW-specific regulations are likely to reduce the number of childcare places available, which could further hinder the labour supply of parents (independent of any changes in childcare prices).

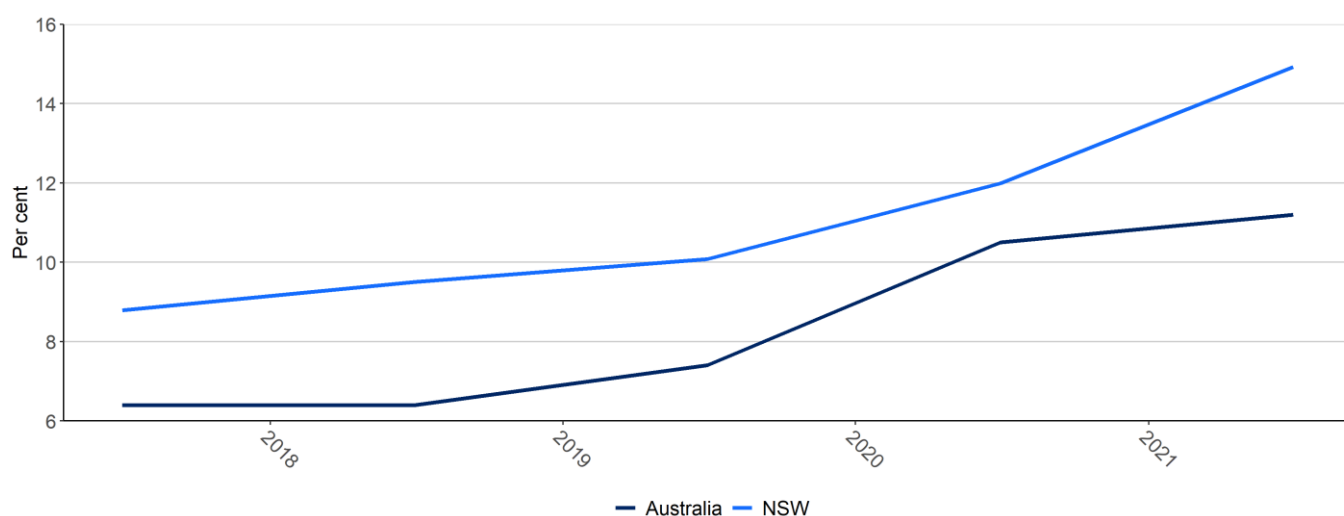
### 3.5 Costs: reduced availability of childcare places and increased administrative burden in NSW

Stricter NSW-specific early childcare staffing requirements are likely to reduce the availability of childcare places and exacerbate the shortage of qualified educators. In addition, the stricter requirements have increased the administrative burden in NSW for both ECEC service providers and regulators.

The shortage of qualified educators in the sector shows in the steady growth in the number of staffing waivers in NSW (Figure 5). Service providers that are unable to secure staff to meet the regulatory staffing requirements can apply for a staff waiver. As of December 2021, around 15 per cent of long day care services had a waiver for an early childhood teacher, because they could not meet the minimum early childhood teacher requirements. The percentage of long day centres with staffing waivers has consistently been higher in NSW compared with the national average. The growth in waivers is also imposing an additional administrative burden on ECEC services providers, which need to apply for exemptions, and regulators, which need to process exemption requests. The challenges of recruiting early childcare teachers have reportedly been more acute in regional and rural areas.

Figure 5: NSW childcare staffing waivers have grown

Staffing waivers - percentage of long day care centres



Figures as of 1 March 2022.

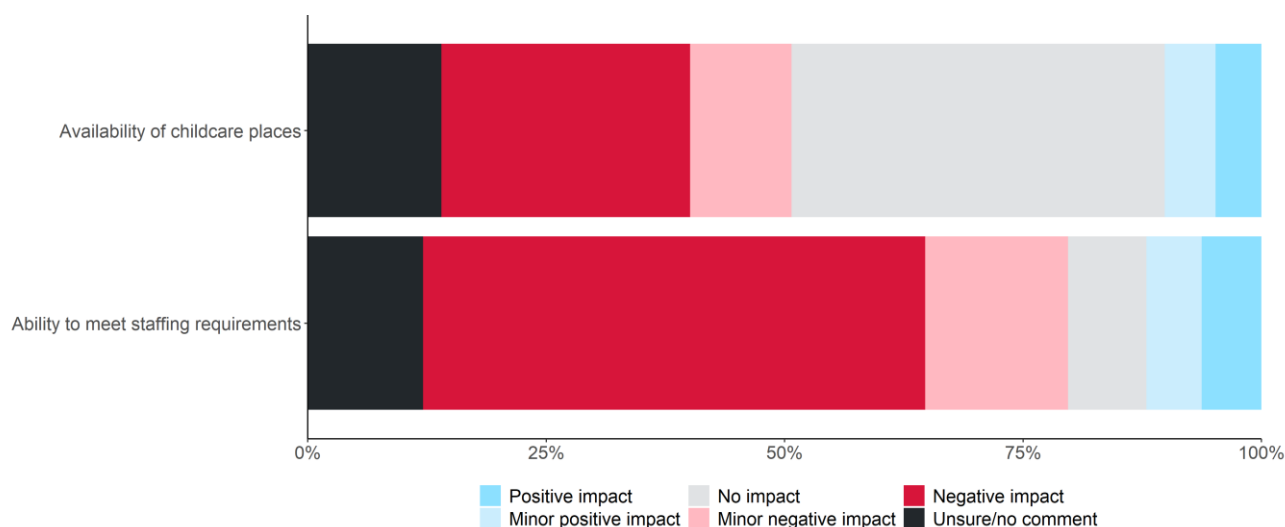
Source: National Quality Agenda Information Technology System (NQAITS), Australian Children's Education & Care Quality Authority (ACECQA).

The ACECQA and the Education Council have been developing a new workforce strategy for 2021-2030 that aims to help attract and retain staff in the ECEC sector (ACECQA 2021). In addition, the NSW Government has announced an Affordable and Accessible Childcare and Economic Participation Fund that will invest up to \$5 billion over 10 years to boost access and affordable childcare (NSW Treasury 2022b). These initiatives, however, currently do not directly address the shortage of qualified staff in the sector.

Survey responses from the NSW Small Business Commission found that 68 per cent of respondents report that the higher qualification requirements in NSW have had a negative impact on ECEC ability to meet staffing requirements (Figure 6).

Figure 6: Many providers say NSW rules make it more difficult to meet staffing requirements

Perceived impact of NSW's stricter staffing qualification regulations



Source: NSW Small Business Commission

Adopting national staffing requirements could help improve the ability of ECEC providers to meet staffing requirements. The national standards provide greater flexibility for ECEC service providers. They allow ECEC operators to employ childcare educators with alternative qualifications where a suitably qualified educator is not available, including someone who is a registered teacher, has an early childhood education and care diploma, or is actively working towards an early childhood teaching qualification. This change could also encourage more people to transition into a career in the early childcare sector, as educational barriers are reduced. The change may also encourage new businesses to enter the ECEC market as staffing barriers may be lessened.

The availability of childcare places could be improved by adopting national staffing standards, as class sizes could be increased slightly for a given number of educators. The increased availability of childcare could have significant economic benefits, as research has suggested that 35 per cent of Australia's population live in 'childcare deserts', which include populated areas where there are more than three children per one childcare place ([Hurley, Mathews and Pennicuik 2022](#)).

### 3.6 Consideration: impact on early childcare staff

Imposing NSW-specific staffing regulatory requirements has increased the demand for individuals with early childhood teaching degrees. Adopting national requirements could result in a slight reduction in demand for staff with early childhood teaching degrees. There is unlikely to be any adverse employment impact on those with a degree qualification in the ECEC sector given the current shortage of educators and the policy driven expansion of the market. For example, the NSW Government has announced plans to introduce universal pre-kindergarten for all children in NSW by 2030 ([NSW Government 2022](#)). Introducing universal pre-kindergarten will likely see the demand for degree-qualified staff in the sector rise.



The demand for degree-qualified staff in the ECEC sector is also expected to remain strong given that some ECEC services will likely continue to operate at staffing levels higher than that required by regulation.

We note that the Commonwealth Government has announced several policies aimed at increasing the supply of early childhood teachers. This includes the *National Early Childhood Education and Care Workforce Strategy 2022-2031*. In addition, the NSW Government is building on the *NSW Early Childhood Education Workforce Strategy 2018-2022* with a landmark investment of \$281.6 million over four years to attract, retain, and develop early childhood educators.

Adopting national standards in NSW could help achieve this aim. Because national standards allow students working towards their degree to also work as early childhood teachers, national standards could make an early childhood teaching degree a more attractive option for students.

The impacts of reducing staff-to-child ratios and requiring fewer degree-qualified staff on staff wellbeing also need to be considered. The proposed regulatory changes, however, could also increase the wellbeing of staff, as they provide greater flexibility for ECEC providers to manage staff shortfalls.

### 3.7 Consideration: simplification and harmonisation of regulations

Simplifying and harmonising regulations across jurisdictions should be considered where possible. ECEC providers that operate across different states and territories are required to comply with varying regulations despite having national standards. Differing requirements can increase the regulatory burden for ECEC providers.

Stricter regulatory requirements in NSW may also reduce the competitiveness of ECEC services that operate close to state borders, as ECEC providers in other jurisdictions have greater staffing flexibility.

The Commonwealth Productivity Commission's (2014) recommendation that "*differences in educator-to-child ratios and staff qualification requirements for children under school age across jurisdictions should be eliminated and all jurisdictions should adopt the national requirements*".

### 3.8 Consideration: distributional impacts

An evaluation of regulatory settings should also consider the distributional impacts, such as the impacts across different socio-economic groups and regions. The costs of the stricter regulatory requirements in NSW have likely had a greater impact on economically vulnerable and disadvantaged households. This may increase the costs (from a public policy perspective) of retaining NSW's stricter regulatory requirements.

The stricter NSW-specific early childcare staffing requirements have likely had a greater impact on parents and children from lower socio-economic backgrounds. This reflects regulatory requirements being less binding on higher-income households as they are more likely to choose ECEC services that operate above regulatory requirements. Households of lower socio-economic status may also be less inclined to use ECEC in response to regulatory standards that increase the cost of ECEC. This can hinder educational outcomes for children from disadvantaged backgrounds, which tend to reap stronger educational benefits from ECEC attendance (CESE 2018). Less childcare is available in

disadvantaged areas, so these households are likely disproportionately impacted by regulations that may further impede ECEC availability (Hurley, Matthews, and Pennicuik 2022).

The costs of the stricter regulatory requirements in NSW are also likely to be larger for households and ECEC businesses in regional areas. Reduced staff flexibility makes it harder for ECEC operators in regional areas, as it may be more difficult to attract or find degree-qualified staff. The added difficulty in recruiting qualified staff could reduce the incentives of establishing childcare businesses in regional areas, which could further hinder the availability and affordability of childcare.

While some parents and providers may support higher qualification requirements and lower ratios, imposing these on the broader sector will likely result in the costs exceeding the benefits. The adoption of national standards in NSW would still provide a safeguard for the safety of children and support their developmental outcomes. By joining the national standard, NSW would provide greater flexibility for ECEC providers to determine whether there is sufficient demand for them to meet the costs of exceeding minimum standards.

### 3.9 Consideration: impact of government subsidies and reforms

The cost of the stricter NSW-specific staffing regulations is likely to be borne mostly by parents. Parents will bear most of the direct cost from the reduction in labour force participation. The higher staffing costs are likely to be passed on by providers to parents, to some extent, through higher childcare fees. Some of the staffing costs will also be borne by the government through the provision of the Child Care Subsidy (CCS)<sup>5</sup> and Additional Child Care Subsidy<sup>6</sup> (see Box 4 for details).

The design of the CCS and Additional Child Care Subsidy mitigates the extent to which parents from disadvantaged backgrounds pay more for NSW-specific staffing regulations. However, the subsidy programs do not stop the tighter NSW regulation from reducing the availability of childcare, particularly in disadvantaged areas.

Announced reforms to the ECEC sector in 2022 will likely result in a greater incidence of the NSW-specific staffing regulations being borne by the government compared to parents. This follows from the provision of fee relief for families with children in pre-school as part of NSW's Early Years Commitment and the Commonwealth Government lifting the childcare subsidy rate.

The announced reforms will increase the demand for ECEC services, which could exacerbate the shortage of qualified educators in the ECEC sector. The potential amendments of staffing regulations in line with national standards could help support the NSW Government's goal in boosting access and affordability of ECEC services.

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<sup>5</sup> For further details see: <https://www.servicesaustralia.gov.au/child-care-subsidy>.

<sup>6</sup> For further details see: <https://www.servicesaustralia.gov.au/additional-child-care-subsidy>.

#### Box 4: Commonwealth Child Care Subsidy and Additional Child Care Subsidy

The CCS assists families with the cost of approved childcare to support workforce participation of parents and meet the early childhood education needs of children. The subsidy amount is dependent on family income, hours worked, the type of childcare selected (centre based or family-based day care), and carer activity levels in terms of work, training, volunteering etc. The CCS also has maximum hourly rate caps that are dependent on the type of childcare used. The scheme is tiered so that lower income households receive larger subsidies. To be eligible for CCS, a carer must be caring for a child aged 13 years or younger who is not attending secondary school, use an approved childcare service, be responsible for paying the childcare fees, and meet residency and immunisation requirements.

The Additional Child Care Subsidy is available to a small number of carers who also receive the CCS. To be eligible for the Additional Child Care Subsidy, carers must be eligible for the CCS and be one of the following:

- an eligible grandparent getting an income support payment
- transitioning from certain income support payments to work
- experiencing temporary financial hardship, or
- caring for a child who is vulnerable or at risk of harm, abuse, or neglect.

## 4 Consultation and implementation

The NSW Productivity Commission has undertaken consultation with NSW Treasury, NSW Department of Education, South Australia Treasury, and ECEC services providers through the NSW Small Business Commission. Broader early childhood stakeholder and sector engagement should take place if the NSW Government decides to progress reforms.

Feedback from stakeholders regarding the potential adoption of national staffing regulations in NSW is mixed.

Stakeholders have commented on the merits of amending NSW-specific staffing regulations as part of the Women's Economic Opportunities Review 2022 and the National Quality Framework Review 2021. Some stakeholders argue that national standards should be applied unless clear and compelling evidence supports the imposition of regulatory requirements above national standards (e.g., [Small Business Commissioner 2021](#)). The submissions argue that the NSW-specific regulatory standards contribute to the following problems:

- Childcare operating costs would rise, without a demonstrated or measurable net positive result for NSW children, parents, or the broader economy.
- Regulatory red tape would become more burdensome, as a large portion of service providers need to apply for staffing waivers.
- Labour shortages would rise in the ECEC sector as more staff are required to be degree-qualified.
- ECT degrees would become less attractive to students, as they are not allowed to be employed as ECTs towards the end of their degrees.

Other stakeholders have argued against the adoption of national standards in NSW due to the following:

- Adoption would compromise children's wellbeing, learning, and development. Stakeholders cite studies showing a general link between educational outcomes and various metrics of early childcare quality, such as ratios and staffing qualification levels.
- Job stress, dissatisfaction, and turnover could all rise among staff in the ECEC sector, reflecting perceptions that the changes could undermine the value of degree qualified staff.
- Adoption would not provide a holistic fix to the labour market shortage in the ECEC sector.

In addition, some stakeholders argue against adopting national standards by emphasising that the primary purpose of the ECEC sector is to support children's learning and development outcomes and not workforce participation of parents. The submissions also argue that further research is needed to quantify the impact of the stricter regulatory standards on children's development outcomes before adopting the national standards.

Adopting national standards in NSW would require change to the Education and Care Services National Regulations ([2011 SI 653](#)). It would require removing:

- section 271 which modifies the educator-to-child ratio for children aged 3 to 6 years
- section 272, which prescribes the tighter qualification requirements in NSW.

The regulations in NSW could be reviewed alongside the broader National Quality Framework periodically. Harmonising regulatory requirements can help streamline the review process of regulations. A review of the National Quality Framework is currently underway, as agreed by COAG in 2019.<sup>7</sup> The 2019 NQF Review recommended several changes<sup>8</sup> including safety requirements, oversight and compliance tools for regulatory authorities, workforce requirements, and improved regulatory guidance which are expected to start from mid-2023 in all states and territories ([Education Services Australia 2022](#)).

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<sup>7</sup> For further details see: [About the NQF Review | National Quality Framework Review](#)

<sup>8</sup> For further details see: [NQF Review 2019](#)

## 5 Conclusion

This report evaluates the costs and benefits of NSW-specific ECEC staffing regulations above national standards. Departures from national standards should not be imposed unless there is evidence that the benefits exceed the costs. Our findings suggest that moving to the national standards could have benefits for NSW of up to \$3.1 billion in net present value terms, or \$410 million per annum. This reflects the estimated reduction in ECEC staffing costs and increase in workforce participation of parents.

The stricter standards would need to increase the projected earnings of affected children by around two per cent for the benefits to equal the costs. This is equivalent to around five months of additional schooling ([Dockery 2005](#)). The evidence to date suggests that the stricter standards have likely had a modest positive to no impact on the educational outcomes of students. In addition, the educational and development outcomes of some children may have been hindered to the extent the stricter standards may have reduced the uptake of ECEC services. As a result, the costs of the stricter staffing standards in NSW are likely to outweigh the benefits.

Adopting national standards in NSW could help to:

- reduce childcare costs
- provide ECEC operators greater flexibility to manage staff shortages
- improve the availability of childcare places
- provide greater opportunities for parents to enter or remain in the workforce.

If changes were adopted, providers would maintain the flexibility to exceed the minimum standards and parents would be free to choose these services.

The evidence presented by this report can inform planned and future reviews in the ECEC sector.



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# Appendix

## 6.1 Calculations of labour market impact of ECEC prices

This section of the report provides further details on the labour market implications of changes in ECEC prices.

### Key inputs:

- 390,200 families in NSW with at least one child aged less than 5 years as of June 2021 (ABS Series ID A124855946R)
- 61 per cent participation rate of primary carers with young children estimated using 2020 HILDA data
- 30.2 hours on average is worked by primary carers as estimated using 2020 HILDA data
- \$33.30 is the median wage of primary carers with young children as estimated using 2020 HILDA data
- A one per cent increase in hourly ECEC fees results in a fall in total hours worked by around 0.16 per cent (NSW Productivity Commission 2022)
- A one per cent rise in pre-subsidy early childcare costs lowers the labour force participation of primary carers by around 0.07 percentage points (i.e., semi-elasticity of -0.07) (NSW Productivity Commission 2022)
- Stricter NSW ECEC regulations increase childcare costs by 9.1 per cent (Deloitte 2021).

### Derived variables:

- Total hours of parents reduced by 5.25 million for households with children aged less than 5 in NSW annually

*Annual hours reduced*

$$= (\text{Population families with young children} \times \text{participation rate} \times \text{average hours} \times 52) \times \text{increase staffing costs of higher regulations} \times \frac{\text{ECEC elasticity}}{100}$$

$$-5.4\text{million} = (378400 \times 0.61 \times 30.2 \times 52) \times 9.1 \times \frac{-0.16}{100}$$

- Lowered the number of primary carers employed by around 2,400 in NSW

*No. fewer employed primary carers*

$$= \text{Population families with young children}$$

$$- \left( \frac{\text{semi-elasticity}}{100} \right) \times \text{increase staffing costs of higher regulations}$$

$$2485 = 390200 - \left( \frac{0.07}{100} \right) \times 9.1$$

- Decreased the collective wages of primary carers by \$180 million annually

$$\text{Lost annual wages} = \text{annual hours reduced} \times \text{average wages of primary carers}$$

$$-\$180\text{million} = -5.4\text{million} \times 33.3$$

Note that displayed numbers may differ slightly from calculations due to rounding.

## 6.2 Calculations of required increase in earnings for costs to equal benefits

This section of the report provides further details on the required increase in earnings for affected children for the benefits to equal costs.

### Key inputs/assumptions:

- 137,873 children aged 3-5 years in centre-based care in NSW according to the 2021 ECEC Census
- \$413 million annual cost (staffing costs and forgone wages) as estimated in this report
- Affected children attend centre-based care from age 3 to 5 years
- 7 per cent discount rate (denoted by  $r$ ) based on long-term average marginal return on capital investment
- Affected children are employed between the ages 20 to 69
- Current total earnings in NSW is \$70,683 (ABS ID: A84994883F) as of May 2022

### Derived variables:

- Cost of tighter regulations per affected child each year

$$\text{Cost per child p.a} = \frac{\text{Regulatory cost}}{\text{No. children aged 3 – 5 years in NSW (centre – based care)}}$$

$$2,996 = \frac{413,000,000}{137,873}$$

- Total cost per child assuming they attend ECEC for three consecutive years where  $r$  is equal to the discount rate

$$\begin{aligned} \text{Total cost per child} \\ &= \text{Cost per child p.a} + \text{Cost per child p.a} * (1 + r)^1 + \text{Cost per child p.a} * (1 + r)^2 \\ 9,630 &= 2,996 + 3,205 + 3,430 \end{aligned}$$

- Estimated cost before children start work (assuming start work at age 20) where  $n$  is equal to number of years before children start working (15 years)

$$\begin{aligned} \text{Total cost before start working} &= \text{Total cost per child}(1 + r)^n \\ 26,570 &= 9,630(1 + 0.07)^{15} \end{aligned}$$

- Required annual payment while working where  $t$  is the years of employment (49 years – aged 20 to 69)

$$\text{Annual cost while working} = \text{Total cost before start working} * \left( \frac{r * (1 + r)^t}{(1 + r)^t - 1} \right) = 1,930$$

- Share of required annual payments relative to current total earnings in NSW

$$\text{Required increase in earnings} = \frac{\text{Annual cost while working}}{\text{NSW total earnings p.a}} = \frac{1,930}{70,684} = 0.027$$

- Robustness check applying discount rate of 4% instead of 7%

$$\text{Required increase in earnings} = \frac{\text{Annual cost while working}}{\text{NSW total earnings p.a.}} = \frac{789}{70,684} = 0.011$$

## 6.3 Calculations of total cost and impact on Gross State Product of adopting national standards

This section of the report provides further details on the total costs and impact on Gross State Product of adopting national standards.

### Key inputs/assumptions:

- 7 per cent discount rate (denoted by  $r$ ) based on long-term average marginal return on capital investment
- Benefits apply over a 10-year period assuming regulations will be subsequently reviewed
- 2.4 per cent increase in earnings from attending childcare (The White House 2014)
- Impact on Gross State Product includes labour force participation effects on parents and the estimated increase in earnings from the additional children attending childcare
- Impact on Gross State Product excludes the estimated reduction in childcare costs as they form part of Gross State Product. The impact on Gross State Product also excludes the potential increase in lifetime earnings of parents, particularly women, stemming from the reduced time spent out of the labour force after having children

### Derived variables:

- Total benefits from adopting national standards

$$\begin{aligned} \text{Total benefits} &= \text{Reduced childcare costs} + \text{Increase in labour force participation of parents} \\ \$413m &= \$233m + \$180m \end{aligned}$$

- Net present value of benefits

$$\text{Net present value of benefits} = \sum_{n=1}^{10} \frac{\text{Total benefits}}{(1+r)^n} = \sum_{n=1}^{10} \frac{\$413m}{(1+0.07)^n} = \$3.1b$$

- Gross State Product Impact in dollar terms

$$\begin{aligned} \text{Gross state product impact} &= \text{Increase in labour force participation} \\ &+ \text{Increase in earnings from the additional children that attend childcare} \end{aligned}$$

Whereby

$$\begin{aligned} \text{Increase in earnings from the additional children that attend childcare} &= \text{Earnings benefits attending ECEC} \times \text{NSW total earnings per annum} \\ &\times \text{Number of additional parents working} \\ \$4.2m &= 0.024 \times 70,684 \times 2,485 \end{aligned}$$



Therefore

$$\begin{aligned} \text{Gross state product impact} &= \text{Increase in labour force participation} \\ &+ \text{Increase in earnings from the additional children that attend childcare} \\ \$184.2m &= \$180m + \$4.2m \end{aligned}$$

- Impact as a share of Gross State Product

$$\begin{aligned} \text{Percentage increase in gross state product} &= \frac{\text{Gross state product impact}}{\text{Gross state product (ABS ID: A2336320R)}} = \frac{\$184.2}{\$643,145m} \\ &= 0.03\% \end{aligned}$$

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