

INVESTING IN AUSTRALIA'S EARLY CHILDHOOD INFRASTRUCTURE

Chifley Research Centre

November 2020

CONTENTS

| | |
|--|----------|
| Foreword | ii |
| Executive Summary | 1 |
| Background analysis | 2 |
| 1. The ECEC context | 2 |
| 2. Key findings from PwC data analysis | 4 |
| Towards ECEC as part of the education continuum | 9 |
| 3. Opportunities for action | 9 |
| 4. Where to next? | 16 |
| APPENDIX 1: PwC data analysis methods and approach | 17 |

FOREWORD

Across so many sectors of Australian society the COVID-19 pandemic and its ongoing effects have highlighted and exacerbated already existing problems and inequalities. Nowhere is this more so than in the delivery of social services. In particular, COVID has exposed the cracks in privately delivered public services in a way that has left many Australians vulnerable. The tragedy of what has transpired in our aged care system is the most obvious example.

Australia's Early Childhood Education and Care (ECEC) sector is another case in point. The system was not perfect before COVID hit – quality is not properly recognised, staff are poorly paid and receive little to no investment in their careers, and fees were very high and getting worse.

The impact of COVID only exacerbated these problems. Australia's ECEC sector is emerging from the worst of the COVID crisis in a severely weakened state with the very viability of many centres under threat. As a society we would be horrified if schools threatened to close during the pandemic due to money and funding problems, but this seems to be a situation we are willing to tolerate in early childhood education.

This is worrisome because Australia's economic recovery from COVID will depend on an affordable and accessible ECEC sector that can help maximise workforce participation. As importantly, our long term economic and social future depends on a quality start to the education of our youngest Australians.

In response to this state of affairs and the problems exacerbated by COVID, the Chifley Research Centre with the research assistance of PwC has undertaken this policy paper on the future of ECEC in Australia.

In particular, we explore what it might mean to consider early childhood education and care (ECEC) as part of the broader education continuum. We set out ideas for investment in Australia's ECEC system that would build the infrastructure required to meet our economic and social needs in the short term and into the future.

Against the backdrop of a strong national quality framework for the ECEC sector, there is a mixed and fragmented market which drives unbalanced market growth and different quality levels and outcomes for children. Given the importance of early childhood education, the recent COVID-19 crisis highlights the need to: better reward and incentivise high quality care; address funding complexity and efficiency in the

context of rising out-of-pocket fees; and examine workforce challenges.

Although analysis is limited by the scarce data available, it is emerging that there is a link between for-profit provision of ECEC and lower service quality. Understanding the factors driving this link requires more investigation, however based on available data we can hypothesise at least some of the connections.

Initial analysis suggests that not-for-profit providers spend a higher proportion of total expenditure on educators than their for-profit counterparts. However, a large proportion of Australian ECEC services are provided by for-profit organisations, and are run on a for-profit basis. As wages are the largest cost component of ECEC services, it is unsurprising that this may create an incentive to reduce expenditure on staff – reducing hours, minimising the number of highly trained educators, and rostering on a high proportion of casual workers. While not all for-profit providers minimise costs to a degree that may compromise quality, the nature of this business model means that there is an inbuilt push in this direction. This is especially the case in markets where lower fees are a key factor in provider financial viability and/or family participation.

Given the well-understood link between educator time, engagement and skill levels and child outcomes, it is therefore unsurprising that a systematic drive to minimise staffing costs would result in lower levels of service quality. We note, however, that the limited available data makes it difficult to understand where spending more might generate value – increased ratios, higher qualification levels, more stable employment arrangements, or some combination of all three.

The findings from PwC's data analysis suggests that some types of ECEC providers deliver systematically lower quality services. It is striking that this provider type and model – for-profit operations – are not permitted in Australia's school systems. In both the government and independent sectors, for-profit provision is considered antithetical to school's core mission – to educate young people and build the future of the nation. It suggests that we accept a system where children are educated and cared for in a highly commercial ECEC system in their pre-school years, but move into a universal and not-for-profit primary school system.

As a consequence, this report calls for a rethink of our fundamental approach to ECEC to ensure that we

have an accessible and high quality ECEC system. It asks us to stop treating our younger children as second class when it comes to the provision of quality education services. We would not put up with this for those in school and we should not put up with it for those pre-school years either.

The report analyses the current data available, recognises gaps that need to be filled in the data but that the evidence clearly points to flaws in our current system. Finally, we conclude with recommendations that draw on lessons from the school system to re-set key ECEC system levers towards a fit-for-purpose approach.

I would like to thank Tom Bowden, Zac Hatzantonis, Leah Tang, Dylan Emmons and Nick Robinson from PwC Australia for their contribution to this report.

All conclusions and recommendations are those of the Chifley Research Centre.

We hope that this policy brief will be an important contribution in developing policy solutions to improve ECEC in Australia.

Brett Gale

Executive Director



EXECUTIVE SUMMARY

This policy brief explores what it might mean to consider early childhood education and care (ECEC) as part of the broader education continuum. We set out ideas for investment in Australia's ECEC system that would build the infrastructure required to meet our economic and social needs in the short term and into the future.

The ECEC sector experienced significant shock as part of Australia's response to the 2020 COVID-19 pandemic. This unprecedented event has reminded economic and social policy experts, as well as those in the broader corporate sector and community, of the important role ECEC plays in the economic and social fabric of the nation. ECEC is not simply one industry among many, it is vital economic and social infrastructure for our present and future national prosperity and wellbeing.¹

There is an increasing consensus that Australia needs accessible and high quality ECEC. To realise the full benefits of this in terms of enhanced longer-term child education outcomes and increased workforce participation we must re-consider how we both view and provide ECEC.

In this policy brief we draw on PwC analysis of sector data which explores interactions between key ECEC system levers – providers; workforce; and funding models. Based on this data analysis, we identify opportunities for action that will support Australia's ECEC system to achieve what we believe should be its core goals: accessibility (so that more children benefit from early years support), quality (so that early years education and care is focused on child development), and sustainability (so that the sector can provide ECEC into the future).

ECEC AS PART OF THE EDUCATION CONTINUUM

The analysis in this report and the available data illustrates a gap between our expectations of early years education and other parts of the education system. In order to achieve the quality, access and participation, and sustainability levels the ECEC system requires, we recommend that this vital infrastructure should be considered as part of the education continuum.

A universally accessible, high quality, publicly funded ECEC sector should be seen as a key part of our social and economic infrastructure. The individual and

societal benefits of early years education for all children, and particularly the most vulnerable groups, are well understood. Extending the beginning of the education continuum to include the pre-school years would recognise the importance of ECEC in providing education alongside care.

KEY FINDINGS

The PwC data analysis finds barriers to achieving these goals, in particular that:

1. **Quality varies by provider type** with fewer for-profit centre-based care providers exceeding national quality standards, and more for-profit services not meeting quality expectations.
2. **We need to better understand the impact educator expenditure levels have on service quality**, as higher spending on educators and teachers appears to be linked to higher service quality
3. **There is a lack of information about key aspects of providing ECEC services** which means we have limited capacity to address issues, such as provider viability and workforce longevity, that are essential for the long term system sustainability.

OPPORTUNITIES FOR ACTION

We must shift how we think about key system levers in the ECEC system. The Chifley Research Centre has identified three key opportunities for action that can help move Australian ECEC to be part of the education continuum. These are illustrated in the figure below. They draw on lessons from the school system to re-set key ECEC system levers towards a fit-for-purpose approach.

Investing in ECEC as vital social and economic infrastructure and part of the education continuum will ensure that all Australians share both its costs and its benefits, now and in the future.



¹ PwC and The Front Project, 2019. A Smart Investment for a Smarter Australia: Economic analysis of universal early childhood education in the year before school in Australia. <https://www.thefrontproject.org.au/images/downloads/ECO%20ANALYSIS%20Full%20Report.pdf>



BACKGROUND ANALYSIS

1. THE ECEC CONTEXT

This policy brief aims to stimulate discussion about the future of early childhood education and care (ECEC) in Australia. We know that there has been significant progress in early years education and care during recent decades. The system has moved from an ad hoc set of local arrangements to a nationally subsidised sector, regulated under the National Quality Framework and used by 45 per cent of all children aged 5 years and under.

The recent impacts of Australia's COVID-19 response on the ECEC system, including the temporary introduction of fee-free childcare, the effects of reduced attendance, and decisions about furlough wages for the educator and teacher workforce, have prompted wide consideration of the future shape of early years education and care in Australia. We applaud planned movement towards universal access to early learning and childcare through a series of funding model and policy reform.

To fully capture ECEC's potential benefits, we know that this social infrastructure must be designed in a way that realises both the future benefits of early years education and present-day benefits to Australian workforce participation. We suggest that lessons from the wider education system – about how to structure provision in ways that balance access, quality and sector sustainability – are valuable when thinking about a fit-for-purpose model for ECEC.

In this section we summarise key features of the current ECEC system in Australia, including participation rates, provider ownership, and funding. We also compare Australia's position with international averages for context.

ECEC services continue to be delivered by a diverse range of providers in a 'mixed market' that includes government (state/territory government, local council), not-for-profit, for-profit and community-based organisations. The sector provides early years learning and care services to families, differing by provision context and child age.²

1.1 PARTICIPATION

During the March quarter 2020, 8,266 approved child care centres operated in Australia.³ Overall, 1,376,470 children and 986,000 families attended a Child Care Subsidy approved child care centre in the March quarter 2020.⁴ In early 2020, 45.1 per cent of Australian children aged 0-5 years used approved child care.⁵

There were 11,990 service providers delivering a preschool program to 3 to 6 year olds in 2019. The majority of these service providers (64% of all preschool program providers) were centre based day care services.⁶ Victoria will be the first state or territory to have funded three year old kindergarten for all children starting in 2021 for a small number of council areas. By 2029, all Victorian 3 year olds will have access to 15 hours of preschool programs.⁷ NSW currently provides subsidised preschool for 3 years olds who are enrolled in community preschools via its Start Strong Funding.⁸

Australia's rate of participation in ECEC among children under 3 years is around 40 per cent, well above the Organisation for Economic Co-operation and Development nations (OECD) average of 26 per cent. Among Australian children aged 3 to 5 years,

² Formal, pre-school early childhood education and care services in Australia can be broken down into centre-based day care services and preschool services. Preschool services deliver highly structured programs that are targeted at children in the year or two prior to commencing primary school. The age of entry to these programs differs slightly across the states and territories of Australia.

³ Of the total 13,370 approved child care services, 8,266 were Centre Based Day Care services (61.8 per cent of all services) and 4,608 Outside School Hours Care services (34.5 per cent). DESE Child Care Australia Report – March quarter 2020. <https://www.education.gov.au/child-care-australia-report-march-quarter-2020>

⁴ In March 2020, 785,040 children attended Centre Based Day Care (785,040), while 107,670 attended Family Day Care. DESE Child Care Australia Report – March quarter 2020. <https://www.education.gov.au/child-care-australia-report-march-quarter-2020>

⁵ DESE Child Care Australia Report – March quarter 2020. <https://www.education.gov.au/child-care-australia-report-march-quarter-2020>

⁶ In total, 335,804 children aged 4 or 5 enrolled in a preschool program in Australia (80% were aged 4 and 20% aged 5). 83% of all 4 year olds were enrolled in preschool programs. ABS Preschool Education key statistics, <https://www.abs.gov.au/statistics/people/education/preschool-education-australia/latest-release>

⁷ Victorian Department of Education and Training, <https://www.education.vic.gov.au/about/programs/Pages/three-year-old-kinder.aspx>

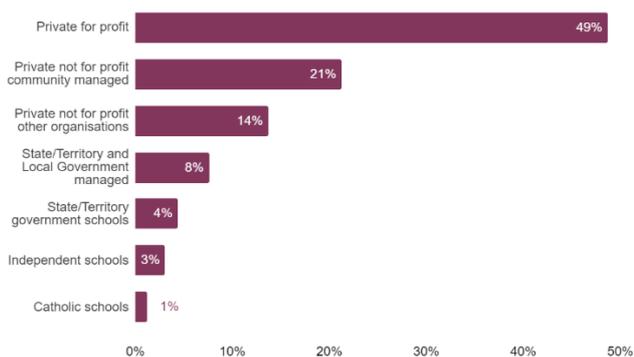
⁸ NSW Government – Education, <https://education.nsw.gov.au/early-childhood-education/operating-an-early-childhood-education-service/grants-and-funded-programs/start-strong/2019-funding-subsidy-update>

ECEC participation is 84 per cent, close to the OECD average of 88 per cent.⁹

1.2 PROVIDER OWNERSHIP

Most ECEC services in Australia are managed by private (non-government) organisations, with most of these operating on a for-profit basis.

Figure 1 Proportion of services by management type in Australia



Source: National Quality Framework Snapshot – Q1 2020.

https://www.acecqa.gov.au/sites/default/files/2020-05/NQFSnapshot_Q1May2020.pdf

The proportion of private providers (including for-profit and not for profit (NfP) organisations) in Australia, at 85 per cent, is notably higher than the OECD average of around one-third. The OECD average reflects high levels of public provision in European Union countries and primarily private provision in Ireland, Japan, Korea and New Zealand.¹⁰

1.3 FUNDING

Total Australian, state and territory real government recurrent and capital expenditure on ECEC was \$9.8 billion in 2018-19, up from \$9.4 billion in 2017-18.¹¹ Government assistance is primarily provided by the Australian Government via the Child Care Subsidy (CCS), a payment to assist families with the cost of child care. Eligible families make a co-contribution to their fees by paying the provider the difference between the child care fee and the subsidy amount. The subsidy percentage to which a family is

entitled is based on family income, results of an activity test and the type of child care service.

The CCS is means tested and based on the child's attendance. The Additional Child Care Subsidy is a top up payment on top of the CCS to provide fee assistance to families and children facing barriers to accessing affordable child care. This measure forms part of the Child Care Safety Net which also includes the Community Child Care Fund, which provides grants to child care services to reduce barriers to accessing early years education and care, particularly in disadvantaged, regional and remote communities.

Delivery and regulation of preschool/kindergarten is primarily a state and territory responsibility (within a national regulatory framework) and differs across jurisdictions. The Australian Government provides funding to the states and territories so that every child can access 600 hours (or 15 hours a week) in the year before school. Total Commonwealth investment in preschool since 2014 has been \$3.2 billion.

Australian families contribute 37 per cent of ECEC costs, compared to the OECD average of 18 per cent).¹²

1.4 ABOUT THIS ANALYSIS

The data analysis on which this policy brief is based explores the hypothesis that service quality, and its variation across different areas of ECEC, is related to provider characteristics. In examining the available data, we identify several areas where the existing ECEC system falls short of what we suggest should be core system goals of accessibility, quality and sustainability. Drawing on these findings and on lessons from other sectors in the education continuum, we identify potential system levers to address these issues.

The analysis has been constrained by the data available, and we note these limitations where they are relevant. In places, we have made assumptions based on the best information available.

Further detail about the methodology, and the data used in the analysis, can be found in Appendix 1.

Key points

Australian families' participation in ECEC is relatively high. The Australian ECEC system is mixed, with a high proportion of privately-run services, funded through public subsidy and family co-contribution to fees.

⁹ OECD 2020. *Education Indicators at a Glance 2020: OECD Indicators..*

¹⁰ OECD 2020. *Education Indicators at a Glance 2020: OECD Indicators..*

¹¹ Productivity Commission – Report on Government Services 2020, <https://www.pc.gov.au/research/ongoing/report-on-government-services/2020/child-care-education-and-training/early-childhood-education-and-care>

¹² OECD 2020. *Education Indicators at a Glance 2020: OECD Indicators..*



2. KEY FINDINGS FROM PWC DATA ANALYSIS

In this section of the policy brief we summarise key findings from the data analysis. These findings highlight several important areas where the current approach to ECEC falls short of what we seek from such a vital social infrastructure.

The PwC analysis finds that:

- 1. Quality varies by provider type** with fewer for-profit centre-based care providers exceeding national quality standards, and more for-profit services not meeting quality expectations.
- 2. We need to better understand the impact educator expenditure levels have on service quality**, as higher spending on educators appears to be linked to higher service quality
- 3. There is a lack of information about key aspects of system sustainability** which limits our capacity to implement supports that will build and maintain provider sustainability and system robustness.

These findings suggest several ways where existing arrangements do not meet the inter-related goals of access and participation; quality; and sustainability that we consider essential for Australia's ECEC system.

1.1 KEY FINDING 1: QUALITY VARIES BY PROVIDER TYPE

The first key finding from the data analysis is that the data shows us variable quality across the ECEC sector.

The analysis of ACECQA data shows that Australia's returns on its ECEC investment are mixed. In particular, quality varies substantially across different provider types, and between the centre-based care and preschool/kindergarten service groups. Finally, many centres are not able to meet the levels of quality provision set out in the National Quality Standards (NQS), introduced in 2012.

Table 1 below sets out the provider groups by quality ratings, across the centre-based care and pre-school/kindergarten service categories. It shows that provision structure differs markedly between the centre-based care (where two-thirds of services are run by for-profit providers) and the pre-school/kindergarten sector (where NfPs represent the largest provider type, followed by substantial minorities of government and school-run services).

Nationally, centre-based care services in the private for-profit group have lower quality service ratings than those run by NfP, government, or school-based providers. Private, for-profit services (who represent 42% of all child care providers) are half as likely as their not-for-profit counterparts to be rated as *exceeding*, and more likely to be *working towards* the NQS. This amounts to 1,121 private for-profit centre-based care services (14% of services nationally) that are currently *working towards* meeting the nationally expected quality standards.

In comparison, only 236 not-for-profit centre-based care services (3% of all services) are rated in this category.

Table 1: ECEC services by quality ratings and provider type

| | Centre-based care services | | | Pre-school / kindergarten | | |
|--|----------------------------|---------------------|-----------------------------|---------------------------|---------------------|-----------------------------|
| | Exceeding or Excellent | Working towards NQS | Total national services (#) | Exceeding or Excellent | Working towards NQS | Total national services (#) |
| Private for profit | 19% | 21% | 5340 | 27% | 22% | 49 |
| Private not for profit community managed | 41% | 14% | 988 | 57% | 7% | 1521 |
| Private not for profit other organisations | 33% | 8% | 1120 | 59% | 3% | 316 |
| State/territory and local government managed | 43% | 11% | 343 | 70% | 3% | 650 |
| State/territory government schools | 63% | 25% | 8 | 44% | 11% | 334 |
| Independent schools | 55% | 12% | 170 | 62% | 5% | 175 |
| Catholic schools | 22% | 14% | 37 | 65% | 4% | 23 |

Source: PwC analysis of ACECQA – National Quality Framework and standards data Q1 2020

To highlight key areas of concern, Table 2 focuses on those provider groups representing a market share greater than 5 per cent, showing provider types with a high proportion of services and with high quality ratings (in green shading) as well as those with a high proportion with lower quality ratings (in pink shading).

It is striking that, in the case of centre-based care, for-profit providers (comprising two-thirds of all services) broadly do not achieve the same service quality outcomes as not-for-profit providers. We can see this both in the proportion of services rated as *exceeding* the national standard, and in the smaller set of

services that are *working towards*, or not currently meeting, the standard.

We also note that there are broadly higher quality outcomes in the pre-school/kindergarten sector than in centre-based care. This is likely due to a combination of factors, including higher teacher qualification levels, lower workforce turnover, the different ownership structures in the sector, the child age group and its impact on service needs, and a more ‘teacher-led’ model of learning. It highlights the complex set of professional, organisational and structural features that shape ECEC service quality outcomes.

Table 2: ECEC services by quality ratings, provider type and market share (colour coded)

| | Centre-based care services | | | Pre-school / Kindergarten | | |
|--|----------------------------|---------------------|--------------------------------|---------------------------|---------------------|--------------------------------|
| | Exceeding or Excellent | Working Towards NQS | Share of national services (%) | Exceeding or Excellent | Working Towards NQS | Share of national services (%) |
| Private for profit | 19% | 21% | 66.70% | | | |
| Private not for profit community managed | 41% | 14% | 12.34% | 57% | 7% | 49.58% |
| Private not for profit other organisations | 33% | 8% | 13.99% | 59% | 3% | 10.30% |
| State/territory and local Government managed | | | | 70% | 3% | 21.19% |
| State/territory government schools | | | | 44% | 11% | 10.89% |
| Independent schools | | | | 62% | 5% | 5.70% |
| Catholic schools | | | | | | |

Source: PwC analysis of ACECQA – National Quality Framework and standards data Q1 2020

Key finding 1: Australian ECEC quality varies by provider type

- Australia-wide, there are higher quality outcomes in the preschool and kindergarten sector.
- Australia-wide, there are lower quality outcomes among for-profit providers of long day care.



KEY FINDING 2: WE NEED TO UNDERSTAND THE IMPACTS OF EDUCATOR EXPENDITURES ON SERVICE QUALITY

While we know theoretically that there are strong links between educators and service quality, we found that there is minimal data available about provider expenditure on educators and teachers and impacts on service quality.

For this analysis, PwC sampled providers to purposively reflect key provider types, assessing whether there are patterns linking educator and teacher expenditures to service quality. Analysis of this sample showed a clear link, suggesting that understanding the nature of this connection will be important for understanding how quality improvement investment should be targeted in future.

The national data about ECEC quality indicates some clear trends among providers:

- More NfP services exceed quality standards than other provider types
- A significant minority of services, disproportionately in the for-profit provider group, do not meet quality expectations
- Overall higher quality outcomes in the preschool/kindergarten sector compared to centre-based care services.

To explore what might be shaping these differing quality outcomes across service types and provider groups, the analysis considered key system levers including provider expenditure and workforce trends.

An extensive literature about providing high quality ECEC would suggest a connection between both skill levels and the amount of time ECEC educators and teachers spend engaging with children, and the benefits to children. However, understanding how this relates to provider practice requires data about service provision – for example, around the

headcount, hours and qualification levels staff spend on direct and indirect education, key provider expenditure categories and levels, and the relationship between these indicators and service types, location, and ownership structure. Much of this information is currently not available in Australia on an ECEC sector-wide basis. There is no single dataset that makes it possible to identify the proportion of total costs represented by staffing in the ECEC sector. For schools, by contrast, this information is readily available.

Given the theoretical and anecdotal evidence about the important role teachers and educators play in quality and student or child outcomes, this seems to be a major gap. For some provider types, particularly smaller services and where public reporting is not required, acquiring information about the costs of provision is especially challenging.

To approximate this information, PwC developed a purposive sample in which example providers (based on available data) have been identified for each provider category. The specific examples here are indicative, however they have been selected based on industry advice, experience and expertise. As such, we are confident that they reflect wider trends in operating models and approaches across the sector. They reveal a pattern of considerably lower percentages spent on wages among comparably sized not-for-profit and for-profit providers.

The analysis of ECEC provider wage expenditure (see Table 3 overleaf) compared the proportion of total costs that can be attributed to wages across provider groups, differentiated according to ownership type and scale. The proportion of total costs spent on teachers in government primary schools has been included as a benchmark comparator; we note though that school provision and cost structures differ significantly and this should be borne in mind.

Table 3: Analysis of expenditure on educator and teacher wages by provider type

| | Not for Profit ECEC providers | | | For profit ECEC providers | | | Primary school |
|------------------------------|---|--|--|--|--|--|---|
| 2019 annual reporting | Large NfP provider 664 services 70,700 children | Medium NfP provider 131 services 12,369 children | Small NfP provider 60 services 10,000 children | Large for-profit provider 379 services 54,000 children | Medium for-profit provider (May 2019) 86 services 7,405 children | Small for-profit provider 21 services No. of children not reported | <i>Australian government primary schools (2017-18)¹³</i> |
| Wages as a % of expenses | 70% | 76% | 66% | 59% | 63% | 61% | 79.5% |

Source: PwC analysis of provider and ACARA data. Note that ECEC expenditure excludes user costs of capital.

As Table 3 illustrates, whilst there is some variation across the ECEC providers considered, there is a clear tendency for the NfP providers to spend a higher proportion of total expenditure on educators and teachers than their for-profit counterparts. We note also that the ECEC providers spend less than the average level of primary school spending on staff, notwithstanding the differences in the ratios and qualification levels of ECEC and schools staff.

Whilst the analysis above is based on a small sample, there is good reason to conclude that the trend it indicates reflects a broader pattern. A large proportion of ECEC services are provided by for-profit organisations, and as expected these are run on a for-profit basis. Of course not all for-profit providers minimise costs to a degree that compromises quality, and many regard investment in services – and in particular, investment in the early childhood educator

and teacher workforce who drive the majority of both costs and service quality – as a central part of their business model.

However, the available data suggests that a model in which providers are systematically incentivised to reduce costs – given the close relationship between educators and quality – tends to facilitate a trade-off between cost and quality.

This initial exploration strongly suggests that further data collection and analysis is required.

Understanding how provider structure and operations shape service quality and child outcomes is of central importance in developing a fit-for-purpose approach to ECEC, and the current arrangements in Australia may not allow this to occur.

Key finding 2: We need to understand how spending on early years educators and teachers impacts on service quality

- There seems to be a correlation between the provider types achieving poor quality outcomes, and those spending less on educators.
- While it appears that spending more on educators and teachers generates higher quality, we do not understand enough about where precisely this investment should be spent.
- We know relatively little about how much providers spend on ECEC services, including expenditure associated with educators and teachers. This means we can't tell whether this is driven by minimising hours, employing lower qualified workers, or spending less on planning or training. There is insufficient information available to underpin robust conclusions about how spending on educators' time and skills might relate to quality.

¹³ ACARA data, <https://www.acara.edu.au/reporting/national-report-on-schooling-in-australia/national-report-on-schooling-in-australia-data-portal/school-funding/government-expenditure-on-government-schools#View1>



KEY FINDING 3: A LACK OF INFORMATION ABOUT SUSTAINABILITY

The last finding leverages analysis from the previous points, concluding that current arrangements result in a lack of information about key aspects of provision and service operations. We have already noted the lack of available data about provision costs and expenditure on wages; this is more broadly applicable to data about provider operations and business models. Whilst there is extensive aggregated and disaggregated data available about ECEC quality as it relates to the NQF, information relating to participation and sustainability is much harder to source and analyse.

Information about demand

Information about key indicators relating to participation - such as the number of places available, fee levels, funding, and subsidies - is widely available for individual centres and families; however, it is challenging to aggregate this for regional or nationwide analysis.

For example, we know how many children access both formal and informal care,¹⁴ but this information tells us little about barriers or enablers to participation. There is similarly limited information available about fees and places. While some details are easily accessible (for example through the www.childcarefinder.gov.au website), this is at a very local level and is challenging to aggregate or analyse on a regional, national or systematic basis. It also does not provide information that lets us understand how fees are driven by cost structures. Largely due to the demand-driven funding model of fee subsidies, this limits our ability to identify the relationships between (for example) educator costs and service quality. It also limits our ability to understand whether certain provider types or operating models may be

more or less vulnerable to external shocks or shifts in demand (such as that presented by the COVID-19 pandemic response).

Information about provision costs

Available data that lets us understand and assess the sustainability of providers within the ECEC market is limited. Whilst some information about operating models and cost structures, particularly relating to large NfP providers, can be gleaned from public reports, a significant part of the sector is completely opaque.

While there is extensive data about quality ratings, equivalent information about the costs of provision is minimal. We do not know, at the national or regional level, or for provider type subsets, what proportion of provider expenditure is spent on staff costs, rent, administrative overheads, surplus etc, and this limits the supports that can be provided to incentivise sustainable service models. We found it difficult to identify an average daily cost for a place in child care, beyond benchmark rates estimated by the Productivity Commission, using data that is now close to ten years old.¹⁵

In contrast, information about funding in the schooling system is more readily available.¹⁶ We know that in 2017, the national average funding for a government school student was \$13,444, equating to around \$67 per day. Alongside sector data about key expenditure categories in schools (including spending on staff), we can develop a much clearer understanding of what it costs to provide education services.

The substantial level of public funding for ECEC should come with greater transparency about what providers spend, and how this contributes to the quality and sustainability of ECEC.

Key finding 3: A lack of information about key aspects of system sustainability

- There is limited data about key aspects of providing ECEC services, reflecting fragmentation and decentralisation of the provider market. This limits our capacity to implement supports that will build and maintain provider sustainability and system robustness.
- Given the extent of public subsidy in the ECEC sector, greater reporting of operational data will support the analysis and decision-making required for a sustainable, fit-for-purpose approach to ECEC.

¹⁴ Australian Institute of Health and Welfare, <https://www.aihw.gov.au/reports/australias-welfare/childcare-and-early-childhood-education>

¹⁵ Productivity Commission, 2015. Childcare and Early Childhood Learning. Appendix I: A benchmark rate for ECEC assistance. Interestingly, the PC also notes that "analysis of sector-provided data found that compared with loss making long day care centres, profitable centres had, on average, around 10 per cent lower costs per place, and around 10 per cent higher revenues per place."

¹⁶ The Australian Curriculum Assessment and Reporting Authority (ACARA) hosts the National Report on Schooling data portal, including financial and other data for government and independent schools in all States and Territories: <https://www.acara.edu.au/reporting/national-report-on-schooling-in-australia/national-report-on-schooling-in-australia-data-portal>. For comparison, Victoria charges international students \$12,218 per year to attend a government primary school, equating to \$61 per day (assuming 200 days in a school year).

TOWARDS ECEC AS PART OF THE EDUCATION CONTINUUM

3. OPPORTUNITIES FOR ACTION

PwC's analysis uses a provider sample that has been selected to reflect the existing ECEC landscape. The patterns found reveal some fundamental issues in the design of Australia's existing ECEC system. The key findings of this analysis were that:

1. **Quality varies by provider type** with fewer for-profit centre-based care providers exceeding national quality standards, and more for-profit services not meeting quality expectations.
2. **We need to better understand the impacts of educator expenditure levels on service quality**, as higher spending on educators and teachers appears to be linked to higher service quality.
3. **There is a lack of data about key aspects of providing ECEC services** which means we have limited capacity to address issues, such as provider viability and workforce longevity, that are essential for the long-term system sustainability.

These findings suggest that, under the current arrangements, some types of ECEC providers deliver systematically lower quality services. They demonstrate a lack of visibility of how ECEC funding is spent, despite the large amounts of public funding for these heavily subsidised services. They suggest that we accept a provision model that in many cases, may be based on minimising costs even where this compromises service quality and sustainability.

At the same time, understanding these deficiencies in the current system design and its operation reveals opportunities for actions that would improve this vital social infrastructure, now and in the future.

In the first instance, the PwC analysis reveals several areas where existing system goals of accessibility and quality inadequately address the sustainability of the ECEC sector. Increasing the breadth of our ambition for ECEC – requiring the system to aim for accessibility, quality and sustainability – would be a valuable start.

Other areas for action include greater transparency about provider operations and the costs associated

with provision of accessible and high quality education and care in the early years; investment in the quality and sustainability of the ECEC workforce; and ensuring that funding models support all three goals of accessibility, quality and sustainability.

Beyond modifications to the current system, it is worth asking why we do not consider early years education and care as part of the education continuum

The issues revealed in PwC's analysis reflect a broader challenge with Australia's existing approach to ECEC. As essential social infrastructure, we need a better model. Thinking about ECEC as a part of the education continuum encourages us to draw on what we know works well in the school system, including the settings for key system levers such as quality, workforces, and well incentivised provider markets. This would involve:

- *Requiring provider transparency about their spending on quality*
- *Investing in a skilled, stable workforce*
- *Developing a fit-for-purpose provision model, supporting accessible, high quality, and sustainable ECEC.*

In the remaining part of this policy brief, we identify three opportunities for action that move Australia's ECEC system towards being part of the education continuum. Each action builds on the idea that investment now in our ECEC infrastructure will ensure that all Australians share both its costs and its benefits, now and in the future.



ACTION 1: REQUIRE PROVIDER TRANSPARENCY ABOUT SPENDING ON QUALITY

Nearly a decade after the introduction of the NQF, there continue to be ECEC services that do not meet national quality standards. The majority of these (over 1,100 of a national total of around 8,000 centre-based care services) are run by private, for-profit operators.

PwC's data analysis suggests that, based on the information available, for-profit providers tend to spend a lower proportion of overall expenditure on educators and teachers. Understanding whether this is the case more broadly will be critical in developing an ECEC system oriented towards accessible, sustainable, high quality outcomes.

We know that quality is, to a significant extent, driven by the ECEC workforce. We know that the ECEC workforce is substantially lower paid (with around 70 per cent on award rates which are much lower than school teacher salaries) than those in the school system, with lower qualifications, and lower proportions in full time work.¹⁷ In 2013, most (around 80%) school teachers were full time, compared to just under one-third (33%) of ECEC workers.¹⁸

Among the providers PwC sampled there is a clear correlation between spending on educators and quality ratings. Sector-wide information would enable us to confirm that this reflects a broader pattern, further supporting the proposition that investing in early childhood educators and their time – in lower ratios, greater employment stability, increased training – can directly affect service quality.¹⁹

To encourage providers – especially those not meeting quality expectations and also not investing

adequately in quality (including the proportion of total expenditure spent on educators and teachers) – we propose a linked set of incentives.

As a basic measure, any existing system incentives for providers to minimise costs at the expense of quality should be removed. Further incentives to invest in quality measures – in particular those involving increased spending on educators' time, career development and security, and professional training – could be introduced. Sanctions should also be introduced; for example, for-profit operators of services consistently failing to meet national standards could be required to show that they spend at or above industry benchmarks for staffing costs.

The ECEC market includes a wide range of for-profit providers, from small owner-operated enterprises to private equity-owned chains; the impact of ownership structures on operational management and expenditure decisions is unclear. A particular challenge in the market is that there is limited availability of the data required to develop industry benchmark levels of provision costs. We know relatively little about how much providers spend including on major expenses such as wages, and disclosure requirements across provider types vary depending on their ownership structure.

We suggest that all providers should be required to disclose key aspects of operational finances, including expenditures on educators and teachers, administrative and corporate overheads, and profits or surplus. In the longer term, making CCS subsidies contingent on these public disclosure requirements seems reasonable given levels of public funding involved.

ACTION 1. Require provider transparency about their investment in quality, particularly educators

- PwC's analysis found that provider data about expenditures on service quality and provision costs, including spending on educators is limited and fragmented. This makes it challenging to develop system-wide incentives for improving provision quality using known levers (such as workforce investment). Among the providers sampled, spending on educators correlates with service quality.
- Providers should be required to disclose their expenditure on key areas that affect service quality, including educator and teacher spending, retention and turnover rates, and operating surpluses
- All providers – but especially those who consistently fail to meet national standards, and are known to spend less than expected on educators – should be encouraged to avoid reducing educator spending to manage costs. Incentives to invest in educators could include a range of in-kind and recognition benefits; sanctions could include additional disclosure requirements.

¹⁷ Irvine, S. Thorpe, K. McDonald, P. (2018) Low-paid "women's work": why early childhood educators are walking out. The Conversation.

¹⁸ ACER, 2013. SiAS; DET, 2017. ECEC National Workforce Census 2016

¹⁹ Harrison et al, 2019. Quality Improvement Research Project. Report commissioned by ACECQA. <https://www.acecqa.gov.au/sites/default/files/2020-05/quality-improvement-research-project-2019.PDF>

ACTION 2: INVEST IN EARLY CHILDHOOD EDUCATORS' AND TEACHERS' HOURS AND CAREERS

A key element of building a fit-for-purpose ECEC system will be recognising the link between early childhood educators' and teachers' time and careers, and the quality of child outcomes. The need to minimise costs and high levels of casualisation among the ECEC workforce make it less likely that providers will invest in educator time and longer-term careers (and the service quality this drives).

While we are confident that increasing expenditure on educators and teachers²⁰ will improve quality, as suggested above, we know that this alone is not enough. We also need to focus on how that money is spent. In large part, this is because there is insufficient data available about many aspects of ECEC provision costs. Given the importance of this link, it is vital that greater transparency about where ECEC funds are spent is encouraged throughout the system. This would provide better answers to questions such as:

- Does spending more (or less) on educator wages result in more (or fewer) educators per child?
- Does spending more on educator wages mean that more-qualified educators who command higher rates are being employed?
- Does spending more on educator wages mean that workers are on more costly, more permanent employment contracts?

In the future, ECEC infrastructure should invest in educators in two ways. First, it should value educators' time by funding adequate hours for preparation, planning and training. Second, it should value their long-term careers by providing stable employment, opportunities for progression, and professional development. Irvine et al identify a clear set of professional and industrial priorities – including addressing the pay disparity between the ECEC and school sectors, but also developing the career pathways, professional development, sector leadership and balance of floor-time with planning and training time – to build the ECEC workforce.²¹

Investing in educator and teacher time

Our analysis has found that there appears to be a general pattern for NfP ECEC providers to spend a higher proportion on educators than their for-profit

counterparts. Proportionately higher total wage costs among NfP providers could be driven by several things. These include:

- employment of higher trained workers
- greater investment in educator training and education.
- less need to 'optimise ratios' and minimise costs
- less sophistication in cost control and staff management

The consistency of this pattern across for-profit and NfP organisations of all scales (small, medium and large) suggests that less sophisticated cost control is unlikely to be driving the pattern we observe.

We know that provision models driven by minimising wage costs generally aim to reduce 'over ratio' time, as well as reduce costs through more flexible employment arrangements with educators. We believe that this approach to managing costs works against a service provision model that prioritises investment in quality ECEC. Whilst of course not being universally the case, the current model encourages many ECEC providers to minimise the amount of time skilled educators and teachers spend with children, building stable relationships and engaging in quality interactions. It also undervalues the time educators and teachers spend on planning, preparation, and peer engagement including supervision and skill building.

Investing in educator and teacher careers

We can also see that the ECEC sector spends less on staffing compared to the primary school system. Clearly there are differences in the system requirements – in staff to child ratios, in the proportions of degree-, diploma- or certificate-trained workers, and in the proportions of time spent 'on the floor' compared to in planning, preparation, or professional development. However, the difference in spending between the two sectors also reflects a fundamental difference in perspectives on the importance of teacher quality.

We know that in the school system, teacher quality is widely understood to be a critical factor in education quality.²² What makes quality teachers is, therefore, a topic of substantial research and policy interest.²³

²⁰ Note that in places we refer to 'educators' – this should be understood as including all early childhood educators and teachers

²¹ Irvine, S. et. al. (2016) Money, Love and Identity: Initial findings from the National ECEC Workforce Study.

²² Hattie 2003. *Teachers make a difference: what is the evidence?* https://research.acer.edu.au/cgi/viewcontent.cgi?article=1003&context=research_conference_2003

²³ See, for example, the overview of international policies in OECD 2005. *Teachers matter: attracting, developing and retaining effective teachers. For ongoing metrics, see OECD 2018. TALIS 2018 Results Teachers and School Leaders as Lifelong Learners (Volume I)* https://www.oecd-ilibrary.org/education/talis-2018-results-volume-i_1d0bc92a-en



Investing in teacher careers adopts a range of approaches used to ensure that teaching is seen as an attractive career option for prospective and existing professionals. This includes:

- attracting and training promising candidates
- valuing teacher time appropriately (including ensuring appropriate classroom ratios, time for preparation, planning and marking)
- mentoring and career development support

- ensuring suitable in-service and external professional development and training, including graduate training and upskilling
- providing attractive career prospects and progression opportunities (including remuneration scales and leadership, and roles in policy and curriculum development).

The school system provides valuable lessons for the ECEC sector about the nature of investment in professional opportunities for early years educators and teachers.

ACTION 2. Invest in early childhood educators' and teachers' hours and careers

- Better data about current provision costs, including the level and nature of expenditure on educators, would underpin more targeted investment in educators' time and careers.
- Investing in educators' time requires a funding model that does not encourage providers to manage costs by cutting over-ratio time and undervaluing planning, preparation, and supervision effort.
- Investing in educators' careers requires employment approaches and professional structures that support stable careers with opportunities to develop, progress and lead.

ACTION 3: A FIT-FOR-PURPOSE PROVISION MODEL

We applaud planned movement towards universal access to early learning and childcare through a series of funding model and policy reform. Addressing barriers to accessing ECEC by making existing services more affordable will undoubtedly increase the number of Australian families who use ECEC. Increased participation in early childhood education will generate economic and social benefits in the near term, particularly through increased workforce participation, and in the longer term for the children attending ECEC.

To ensure that the system is well prepared to meet the likely increase in demand for services – and to ensure that the resulting system provides high quality service, is sustainable, and is used by all groups in society – we need to ensure that the ways we provide ECEC services can meet aspirations of universality. While the current approach to providing ECEC in Australia relies on individual operators responding to market demand, it is likely that an expectation of universal access will require a more systematic approach. In some regions, and for some cohorts of children or families, market-based provision may not provide enough places. An alternative approach, in conjunction with, or instead of, solely market-based provision, will be needed.

Lessons from the NDIS: thin markets and the need for market stewardship

The introduction of the National Disability Insurance Scheme (NDIS) in 2013 replaced historical block-funding with individualised budgets based on participants' service needs. Promoting participant choice and control of their supports, the scheme re-shaped the landscape of disability support services in Australia. Its roll-out revealed the significant challenges this presented for disability support service providers. It became clear that in the absence of intervention, the individualised nature of funding resulted in 'thin markets' – a lack of services some regions and for some service types. Ultimately, this has limited the choices available to participants, who cannot purchase services that do not exist. In recognition of the thin markets issue, the National Disability Insurance Agency (NDIA) has taken on a more active role of market stewardship.

Designing and implementing a fit-for-purpose ECEC provision model is a long-term proposition, needing extensive further analysis. However, based on the PwC analysis in this brief, we identify features of a fit-for-purpose model of ECEC provision.

System feature 1: Shared understanding of balanced goals across the immediate and longer term

We have noted that there is substantial variability in the ECEC data available. This is at least partly because an emphasis on **quality** (as it relates to the NQF) has resulted in this being measured and collected. Similarly, issues of **access** (in terms of the affordability, accessibility, and availability of places) mean that information about fees and availability of places is in theory available for centres across Australia. The voluntary, service by service information on the Childcare Finder website (at www.childcarefinder.gov.au) is, however, partial and provides limited opportunity for aggregated analysis. We also suggest that the lack of data available about important aspects of provision – including average costs of provision and regional or cohort variations, about business models and operating expenditures, and about workforce expenditures as part of provision costs – reflects a lack of emphasis on ongoing service sustainability in the existing conversation about ECEC in Australia. We believe the goals of ECEC should be broader: it is a vital social and economic infrastructure, not just an industry. We need to aim for an ECEC system that balances several goals: access, quality, and sustainability.

To meet the needs of families and society more broadly, we believe that a successful ECEC system must achieve multiple goals across the short and longer term:

- **Quality** reflected in NQF ratings, underpinned by what we now know is the key factor in quality ECEC - a stable, skilled, and engaged educator workforce.
- **Sustainability** of services and of the system, so that providers have a sustainable operating and funding model, and so that funding, workforce and planning is stable at the system level.
- **Access and participation** so that all families who wish their children to attend ECEC can access a place, and a greater proportion of potentially vulnerable cohorts are supported to attend ECEC.

Figure 2: System goals for ECEC



To date, the ECEC system has evolved in a responsive way, now we need to be proactive to set it up for future success. A fit-for-purpose model of ECEC provision would likely look quite different to what we see in Australia today. Building on what we see in school systems, we propose that this would likely involve a series of changes, including shifting provider incentives, funding models, and the ways we think about the educator workforce.

Norway: a wholistic approach to ECEC

Norwegian public spending on early years education and care is among the highest in the OECD. Since 2006, provision of both ECEC and schooling has been integrated and is overseen by the same government department. Approximately half of Norwegian kindergartens are publicly owned and run by municipalities, with privately run services (overseen by the municipalities) receiving similar levels of funding. Municipalities receive block grants from which kindergartens are funded. Fees are capped and have fallen during the last decade. A subsidised ECEC place for 41 hours per week is guaranteed for all children aged 1 to 5. On average, family co-contributions comprise approximately 15% of total ECEC costs, with the remainder publicly funded.

There is very widespread participation in kindergarten (close to 80 per cent for children aged 1 to 2 years, and near 97 per cent for those aged 3 to 5). Norway's female workforce participation rates are high, and the gender pay gap is among the lowest in the world.

Source: OECD, 2015. Early childhood education and care policy review: Norway



System feature 2: ECEC providers need to focus on and invest in child and family outcomes

Currently, a large minority of providers within the ECEC sector operate as not-for-profit enterprises. Our analysis suggests that this ownership model may correlate with higher spending on educators and improved quality. This would align with the hypothesis that in the absence of profit, surpluses are more likely to be spent in ways that increase service amenity and quality.

It suggests that for-profit providers should be required to report on their expenditure strategy and costs of provision, demonstrating that they invest in service quality and in child and family outcomes.

School sector lesson: not-for-profit operations

Schooling in Australia is run on a not-for-profit basis. Whilst around one-third of Australian students attend a non-government school (and there are a larger number of non-government providers overall), the majority are not-for-profit operations. Eligibility for government funding is dependent on this NfP status.

This undoubtedly shapes strategic decisions about expenditure and investment in current and future facilities, resources and services. When schools generate a surplus (through fees, income from assets, or philanthropic donations), they invest this into the school community in ways that will improve the quality of teaching, extracurricular services and pastoral support students receive and the facilities they use.

System feature 3: ECEC workforces and roles must be professionally oriented towards child development and education outcomes

This professional orientation towards education and child development outcomes is not necessarily seen in the ECEC context. ECEC educators report perceptions that their role is often seen as 'just babysitting' and paid accordingly.²⁴ They note that meeting existing quality measures (requirements for qualified teachers, programming around external education frameworks such as the Early Years Learning Framework and the NQF), can be challenging given workforce shortages in the face of this ongoing tension.

School sector lesson 2: professional orientation to student outcomes

School workforces, including teachers, staff and leadership teams, are oriented towards student outcomes, with learning and education at the core of school professional identity. This is evident in the centrality of curriculum to school practice. Other aspects of teaching (including wellbeing and pastoral care) are increasingly a focus of teaching practice and student outcomes.

²⁴ Irvine, S. et. al. (2016) Money, Love and Identity: Initial findings from the National ECEC Workforce Study.

System feature 4: Funding models should balance access, quality and sustainability goals

Realising the benefits of access to ECEC for Australian children will require a funding model that ensures access and affordability, but, does not also compromise quality and sustainability. This will likely mean increased public funding to ensure that investment in educator hours and careers, and the financial viability required for sustainable provider operations, are not passed on to families through higher fees.

Currently, ECEC funding is largely driven by attendance-based fee subsidies. Services set fees, with a capped government subsidy topped up by family co-contribution. Subsidies are calculated based on the hours a child attends the service, with annual caps and family eligibility (most significantly, income and activity restrictions). Beyond a capped hourly amount, any increase in provision costs is generally reflected in higher fees and parent co-contribution. The corollary of this may be that cheaper childcare, whilst being more affordable, may mean cutting costs and reducing quality.

The challenges to sustainability presented by the current Australian model were illustrated during 2020 when, in response to the COVID-19 pandemic, ECEC attendance dropped dramatically. Faced with virtually

no children attending, and thus no funding from either family co-contributions or subsidies, it was feared that significant numbers of providers would become insolvent, with detrimental impacts on the sector beyond the immediate emergency. A range of emergency funding approaches were established, including temporary wage support for staff, temporary block grants, and 'bridging' funding arrangements. This experience illustrates the relative fragility of ECEC provision, in particular its vulnerability to fluctuations in demand under an attendance-driven funding model.

School sector lesson 3: per-student funding to schools

School funding is based on a per student model, with weightings driven by a range of factors (regional, geographical, demographic, schooling age, etc) that are considered to require additional loadings to ensure equitable resourcing. Unlike the ECEC sector, in which attendance is likely to vary across hours, days of the week and the year, school funding is largely based on annual full-time enrolment.

Funding is received by the school at which a student is enrolled. A relatively high proportion of school teaching staff (15 to 22%) are permanent employees.²⁵ All Australian citizens and permanent residents (and their children) are eligible for a place at a government school.

ACTION 3. A fit-for-purpose model for universal provision:

- System goals should include a focus on long term sustainability of provider organisations and educator workforces, to ensure that services are accessible and of high quality
- **Providers** should be more transparent about the costs of provision and how their expenditure strategy reflects investment in these outcomes.
- **Workforce planning and development** should be oriented towards building the capacity needed to achieve child outcomes as set out in an external education framework (for example the Early Years Learning Framework and the NQF), rather than simply meeting immediate existing demand for shifts.
- **Funding** should be premised on universal access but recognise that this cannot compromise quality and sustainability. The existing attendance-driven approach to provision may require re-thinking to ensure that all three goals are addressed. For instance, it will be important to support some provider organisations to continue offering accessible places despite fluctuations in attendance levels.

²⁵ Staff in Australian Schools (SiAS) survey 2013



TOWARDS ECEC AS PART OF THE EDUCATION CONTINUUM

4. WHERE TO NEXT?

We know the importance of the early years in child development

The benefits of early learning for children have been well established through research in Australia and internationally. They include better preparedness for both primary and secondary school, better results at school and greater achievement in life after secondary school.²⁶ PwC and The Front Project analysis also estimated that there is an increase in lifetime earnings for children who have attended a quality early childhood program because higher school achievement leads to higher qualifications and higher earnings throughout life.²⁷ This also reduces the number of early school leavers each year because children are entering primary school with the core skills and capabilities they need to succeed and graduate secondary school.

Evidence suggests that the benefits are even greater for children from disadvantaged backgrounds. This amounts to an increased likelihood of a successful transition into formal schooling and improved performance in standardised test results in the early years of primary school.²⁸ The value of universal access to kindergarten / preschool is well recognised in Australia, with government funded kindergarten available for all 4 year old children in all jurisdictions.

ECEC also supports Australia's economic and social wellbeing through greater workforce participation

Formal education and care for children younger than school age – is vital for our economic wellbeing, in particular through increasing workforce participation especially women's workforce participation.

Recent work from the Grattan Institute highlights that increasing female workforce participation is one of the greatest economic opportunities for governments.

The Grattan Institute estimates that higher workforce participation from an additional \$5 billion spent by government via a range of measures would boost GDP by about \$11 billion a year.²⁹ It also supports the findings of previous Chifley Research Centre work on *Closing the Gender Pay Gap*.³⁰

We know that education builds an adaptable, productive workforce, contributing to individual and societal wellbeing

A universally accessible, publicly funded ECEC sector building basic literacy and numeracy, as well as social and emotional skills in the early years, is a key part of our social and economic infrastructure.

As we have set out in this policy brief, however, on its own universal access is not enough. To maximise the impact of ECEC, both now and in the future, Australia will need a more sustainable model.

Thinking about education and care in our children's early years as part of the broader continuum of education through to adulthood provides some valuable examples of how Australia might build on a tradition of universal education. The options for action set out targeted changes to key ECEC system levers. Individually, they represent small but valuable shifts towards a more universally accessible, higher quality, sustainable system. Together, they present a pathway towards an integrated approach to Australian education, from the very earliest years.

“Early childhood experiences... create the foundations for all future learning, health and wellbeing”

PwC and The Front, 2019. *A smarter investment for a smarter Australia*

²⁶ Pascoe and Brennan, 2017. *Lifting our game: final report*. <https://education.nsw.gov.au/content/dam/main-education/early-childhood-education/whats-happening-in-the-early-childhood-education-sector/media/documents/Lifting-Our-Game-Final-Report.pdf>

²⁷ PwC and The Front, 2019. *A smarter investment for a smarter Australia*, <https://www.thefrontproject.org.au/images/downloads/ECO%20ANALYSIS%20Full%20Report.pdf>

²⁸ Productivity Commission, 2017. *Shifting the dial: 5 year productivity review*, <https://www.pc.gov.au/inquiries/completed/productivity-review/report/3-future-skills-work>

²⁹ Wood, D., Griffiths, K., and Emslie, O., 2020. *Cheaper childcare: A practical plan to boost female workforce participation*. Grattan Institute. As the Grattan analysis suggests, this is on par with the estimated economic benefit of cutting the company tax rate to 25 per cent.

³⁰ Chifley Research Centre, 2019. *Closing the Gender Pay Gap*.

APPENDIX 1: PwC data analysis methods and approach

In this analysis, we explore our initial hypothesis – that service quality varies across different areas of ECEC. Drawing on the available data to explore this hypothesis, we identify several areas where the existing ECEC system falls short of core system goals of access, quality and sustainability. Drawing on lessons from other sectors in the education continuum, we identify potential system levers to address these issues.

A.1 METHOD AND APPROACH

The research question shaping this inquiry was:

“Does quality vary across different types of providers? If so, why?”

Using the Australian Children’s Education and Care Quality Authority (ACECQA) data, we initially observed a relationship between service quality and provider type.

To explore what might be driving this relationship, and to understand what it might mean for ECEC policy, we analysed data to illuminate a series of related questions about provider type, service quality, the ECEC workforce, system sustainability, and the nature of the provider market.

We approached the questions by looking at several snapshots of the sector, with an initial focus on the workforce demographics (including pay, qualification and role), quality of provision (costs of quality and the impact of quality services on a child’s development), market structure (including composition of providers and comparison across equivalent sectors) and access to ECEC provision (focusing on participation and fees).

This helped to clarify what data is available, and identified several data limitations constraining analysis of ECEC and its provision.

A.2 DATA AND LIMITATIONS

Table A.1 overleaf sets out the data used in this analysis. While most has been drawn from public sources, we are grateful to the Australian Parliamentary Library who provided access and summary key information about quality, fees and costs that is not readily available to the public. [DN: check this] See Table 1 below.

Data limitations

The exploratory nature of this analysis meant that there were instances where our questions and answers were limited by insufficient or unavailable data. This meant that in some cases we were

unable to draw robust conclusions about patterns or trends. Where possible, we have triangulated the data available with anecdotal and theoretical hypothesis, and have developed small, purposive samples that reflect key features of providers within the ECEC sector. The data in these samples has been shaped by advice from industry and market experts who have confirmed that the selection of providers is broadly reflective of wider trends.

Overall, we have found very limited information relating to system sustainability; this is especially challenging given it has been an important issue in the recent COVID-19 responses. Whilst we are able to access some data about operating models and cost structures, particularly relating to large not-for-profit providers, information about service provision costs in large parts of the sector is limited.

Non-existent or unavailable data

Information about ECEC provider operations is limited and/or non-existent. Where it does exist, much of this data is disaggregated and inconsistent, with no centralised format or framework for collection and analysis.

In terms of the costs of provider operations, neither government nor providers are required to consistently publish data on the costs of providing care. Estimating costs is made complex by the varying types of care, differing costs depending on the age of children, large providers being able to benefit from economies of scale, and geographical differences in cost structures (e.g. higher rents and wages in some areas). Some estimates on average costs can be derived from annual reports but these are indicative only of the costs for that provider.

For example, one way of estimating the average costs of care is to look at provider expenses as an average of the number of children who received care. This kind of analysis is specific to the provider and has some challenges which include:

- details on attendance and children’s ages are not published in any detail in annual reports
- details on children with special needs/higher costs are not always published
- cost sharing/cross-subsidisation across large providers will mask costs differences for individual service types.



Data comparability and ease of analysis

We have also found that there are varying levels of comparability and ease of analysis in the existing data. For example, information about key indicators relating to accessibility (including the number of places available, fee levels, funding and subsidies available) is widely available for individual centres and families, however it is challenging to aggregate this for regional or nation-wide analysis.

Implications for analysis

The limited and non-existent data described here can be contrasted with the availability of substantial

amounts of aggregated and disaggregated data relating to providers and the National Quality Framework (NQF).

To a significant extent, the lack of data available to analyse key aspects of service provision – operations, provision costs, educator expenditures, fees accessibility – reflects a lack of transparency and of focus around these details. Given the extent of public subsidy in the ECEC sector, we propose that greater reporting of operational data will be vital in future analysis and decision-making about a fit-for-purpose system and policy settings.

Table A.1: Data used in analysis

| Category | Data Value | Source |
|----------------------------------|---|---|
| Childcare fees | <p>Sample of SA3s (22 in total) by state/territory and by selected characteristics. The focus is on the provider type and geography (ARIA). The data was compiled using two main data sources:</p> <ol style="list-style-type: none"> 1. Department of Education, Skills and Employment (DESE), <i>Child care in Australia report December quarter 2019</i> and 2. Australian Children's Education & Care Quality Authority (ACEQA), <i>NQS time series data (Q4 2019)</i>. <p>Additionally, gross childcare fees can be assessed for many types of Australian families utilising the OECD library.</p> | <p>Australian Parliamentary Library</p> <p>DESE</p> <p>ACECQA</p> <p>OECD library</p> |
| Costs of ECEC provision | Data on the costs of ECEC provision is disaggregated and held by the Productivity Commission, DESE, Provider annual reports (Sample taken from online release of annual/financial reports) | DESE, Productivity Commission, Provider Annual/Financial reports |
| Quality of ECEC provision | Quality has been assessed using the National Quality Standard (NQS) Quality ratings of individual services. The three quality categories are set as either 'Exceeding', 'Meeting' or 'Working Towards'. | ACECQA – National Quality Framework and standards data |
| Provider composition | Provider type, including ownership | ACECQA – National Quality Standards Snapshot |
| Participation | Childcare and early childhood education snapshot – How many children are in childcare section and preschool participation section | Australian Government - Australian Institute of Health and Welfare |
| Primary School provision | Data on cost of primary school provision | Australian Curriculum, Assessment and Reporting Authority (ACARA) National Report on Schooling data portal. |