

Title:

Disadvantaged Two Year Olds' Entitlement to Early Education: Options for Extended Eligibility

Lead department or agency:

Department for Education

Other departments or agencies:

Impact Assessment (IA)

IA No:

Date: **02/08/2011**

Stage: Development/Options

Source of intervention: Domestic

Type of measure: Secondary legislation

Contact for enquiries:

Sophie Faber

Summary: Intervention and Options

What is the problem under consideration? Why is government intervention necessary?

The Government seeks to enable disadvantaged children to access high quality early education, from age two (a year earlier than the current universal free entitlement). Evidence suggests that only 31% of the most deprived quintile of children access formal childcare at age 2. This excludes many disadvantaged children from the benefits of early education and contributes to gaps in achievement of a "good level of achievement" at age 5 which persist at Key Stages 1 and 2. An initial impact assessment (IA) was completed for the Education Bill 2010-11 (clause 1 provides for regulations which would introduce an entitlement). This consultation stage IA accompanies a consultation document which will seek views from the sector and public to inform further policy development and regulations.

What are the policy objectives and the intended effects?

The policy is intended to improve the cognitive, social and behavioural development of two year olds from disadvantaged backgrounds, closing the achievement gap between poorer children and all children (59% of children not eligible for Free School Meals (FSM) achieve a good level of development at age 5 compared to 39% of children known to be eligible for FSM, Early Years Foundation Stage Profile 2010). Evidence demonstrates the likelihood of subsequent increases in their achievement at Key Stages 1 and 2 and in lifetime earnings. There are also positive, although less quantifiable, impacts - modelling of positive parenting behaviours; the increased ability of parents to provide a positive home learning environment; and a stronger parent-child relationship.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

Option1) - Do Nothing - no additional support for disadvantaged two year olds. Current funding intended for two year olds would cease.

Option 2) Allocate funding for disadvantaged 2 year olds and allow local authorities total discretion over how the funding is targeted

Option 3) Introduce a national entitlement setting out which two year olds as a minimum are entitled to free early education and provide funding to accompany this entitlement. extent (hours)

Option 3 is preferred. Option 1 does not address the concerns outlined above. Option 2 may not always target the poorest families (see evidence from Two Year Old Pilot Evaluation) does not provide an easily understood national entitlement, so risks lower take up, confusion and a reduction in the economic benefits of the policy.

Will the policy be reviewed? It will be reviewed. **If applicable, set review date:** 08/2016

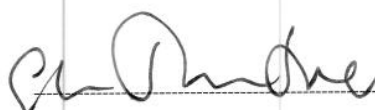
What is the basis for this review? PIR. **If applicable, set sunset clause date:** Month/Year

Are there arrangements in place that will allow a systematic collection of monitoring information for future policy review? Yes

Ministerial Sign-off For consultation stage Impact Assessments:

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister:

 Date: 8/11/11

Summary: Analysis and Evidence

Policy Option 1

Description:

Preferred Option (Option 3): Provide funding intended for early education for two year olds backed by regulations setting out which children, as a minimum, are entitled.

Price Base Year	PV Base Year	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: £1,767	High: £2,597	Best Estimate: £2,182

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	£216	£216	£1,863
High	£290	£290	£2,504
Best Estimate	£252	£252	£2,183

Description and scale of key monetised costs by 'main affected groups'

In the preferred option, the vast majority of the funding (£380m) will go directly towards paying for free early education places for the most deprived quintile of two year olds. Consultation responses may ask that smaller, overlapping groups of disadvantaged two year olds are granted an entitlement. Some funding is also likely to be needed by LAs to drive capacity and quality in the sector and to administer payments.

Other key non-monetised costs by 'main affected groups'

This policy will be a statutory duty for local authorities but, as such, will support their existing responsibilities to reduce inequalities between children at age 5 and Key Stages 1 and 2. There will be input to the policy from outreach workers in Children's Centres and from Health Visitors in identifying children who are eligible for the offer. This is not an additional burden - these workers are already employed to link children to suitable developmental opportunities offered locally.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	£424	£424	£3,649
High	£594	£594	£5,121
Best Estimate	£509	£509	£4,385

Description and scale of key monetised benefits by 'main affected groups'

Key monetised benefits accruing as lifetime economic benefits to children receiving the additional pre-school education at age 2, and the increased likelihood of continuing to age 3 and 4 preschool

Other key non-monetised benefits by 'main affected groups'

Research (see Annex) has established that early years interventions can narrow the gap between disadvantaged and other children in terms of their cognitive, social and behavioural development and increase peer sociability. The two year old pilot also demonstrated additional benefits for families of reduced stress; modelling of positive parenting behaviours; an increased ability to provide a more stimulating home learning environment; and a stronger parent-child relationship.

Key assumptions/sensitivities/risks

Discount rate (%) 3.5%

There are three key assumptions/sensitivities, on:

1. Take up - an assumption has been made that take up will be within a range of 60% to 80%. Central assumption is 70% - higher take up will increase the gross benefits of the policy and the NPV.
2. Quality - the assumption made is that 78% of provision is high quality with regulation.
3. Focus upon the most disadvantaged - The policy would not meet its stated objectives if provision is not focused primarily on the most deprived quintile of two year olds. The assumption is that the preferred Option maximises this focus, increasing the focus by 10% compared to Option 2.

Direct impact on business (Equivalent Annual) (£m):			In scope of OIOO?	Measure qualifies as
Costs: £0m	Benefits: £0m	Net: £0m	No	NA

Enforcement, Implementation and Wider Impacts

What is the geographic coverage of the policy/option?			England			
From what date will the policy be implemented?			01/09/2013			
Which organisation(s) will enforce the policy?			DfE			
What is the annual change in enforcement cost (£m)?			£0m			
Does enforcement comply with Hampton principles?			Yes			
Does implementation go beyond minimum EU requirements?			N/A			
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)			Traded: NA		Non-traded: NA	
Does the proposal have an impact on competition?			No			
What proportion (%) of Total PV costs/benefits is directly attributable to primary legislation, if applicable?			Costs: 0%		Benefits: 0	
Distribution of annual cost (%) by organisation size (excl. Transition) (Constant Price)		Micro	< 20	Small	Medium	Large
Are any of these organisations exempt?		No	No	No	No	No

Specific Impact Tests: Checklist

Set out in the table below where information on any SITs undertaken as part of the analysis of the policy options can be found in the evidence base. For guidance on how to complete each test, double-click on the link for the guidance provided by the relevant department.

Please note this checklist is not intended to list each and every statutory consideration that departments should take into account when deciding which policy option to follow. It is the responsibility of departments to make sure that their duties are complied with.

Does your policy option/proposal have an impact on...?	Impact	Page ref within IA
Statutory equality duties¹ Statutory Equality Duties Impact Test guidance	Yes	14
Economic impacts		
Competition Competition Assessment Impact Test guidance	No	18
Small firms Small Firms Impact Test guidance	No	18
Environmental impacts		
Greenhouse gas assessment Greenhouse Gas Assessment Impact Test guidance	No	
Wider environmental issues Wider Environmental Issues Impact Test guidance	No	
Social impacts		
Health and well-being Health and Well-being Impact Test guidance	No	
Human rights Human Rights Impact Test guidance	No	
Justice system Justice Impact Test guidance	No	
Rural proofing Rural Proofing Impact Test guidance	No	
Sustainable development Sustainable Development Impact Test guidance	No	

¹ Public bodies including Whitehall departments are required to consider the impact of their policies and measures on race, disability and gender. It is intended to extend this consideration requirement under the Equality Act 2010 to cover age, sexual orientation, religion or belief and gender reassignment from April 2011 (to Great Britain only). The Toolkit provides advice on statutory equality duties for public authorities with a remit in Northern Ireland.

Evidence Base (for summary sheets) – Notes

Use this space to set out the relevant references, evidence, analysis and detailed narrative from which you have generated your policy options or proposal. Please fill in **References** section.

References

Include the links to relevant legislation and publications, such as public impact assessments of earlier stages (e.g. Consultation, Final, Enactment) and those of the matching IN or OUTs measures.

No. Legislation or publication

- 1 Smith, R., Purdon, S., Schneider, V., La Valle, I., Wollny, I., Owen, R. and Bryson, C. (2009), 'Early Education Pilot for Two Year Old Children Evaluation
- 2 Springate, I., Atkinson, M., Straw, S., Lamont, E. and Grayson, H. (2008) *Narrowing the gap in outcomes: early years (0–5 years)*, Slough: NFER
- 3 Ofsted Annual Report 2010 (Crown Copyright 2010) <http://www.ofsted.gov.uk/Ofsted-home/Annual-Report-2009-10>
- 4 Sylva, K., Melhuish, E., Sammons, P., Siraj-Blatchford, I. and Taggart, B. (2004), 'The effective provision of pre-school education (EPPE) project: final report', DfES
- 5 Sammons, P et al. Effective pre-School and Primary Education 3-11 (EPPE 3-11): Influences on Children's Development and progress in Key Stage 2; Social/ behavioural Outcomes in Year 6. DCSF Research Report RR049. 2008
- 6 Smith, R., Poole, E., Perry, J., Wollny, I. Reeves, A., and Bryson, C, with Coshall, C., d'Souza, J. (2009), 'Childcare and early years survey of parents 2009', DfE Research Report 054
- 7 Department for Education (DfE) (2010) *Achievement of children in the EYFSP*, RR-034 London: DfE
- 8 Education Bill 2010-11 (clause 1) and impact assessment for it at www.ialibrary.bis.gov.uk (search under DfE impact assessments 2010-11)

+ Add another row

Evidence Base

Ensure that the information in this section provides clear evidence of the information provided in the summary pages of this form (recommended maximum of 30 pages). Complete the **Annual profile of monetised costs and benefits** (transition and recurring) below over the life of the preferred policy (use the spreadsheet attached if the period is longer than 10 years).

The spreadsheet also contains an emission changes table that you will need to fill in if your measure has an impact on greenhouse gas emissions.

Annual profile of monetised costs and benefits* - (£m) constant prices

	Y ₀	Y ₁	Y ₂	Y ₃	Y ₄	Y ₅	Y ₆	Y ₇	Y ₈	Y ₉
Transition costs										
Annual recurring cost										
Total annual costs										
Transition benefits										
Annual recurring benefits										
Total annual benefits										

* For non-monetised benefits please see summary pages and main evidence base section



Microsoft Office
Excel Worksheet

<http://communities/sites/SPR/PPD/Lists/WorkplaceDocuments/Jenny%20and%20Louisa/Work%20in%20progress/IA%20-%20Eligibility%20NPV%20270711.xls>

Evidence Base (for summary sheets)

Problem under consideration

The Government seeks to enable disadvantaged children to access high quality early education, from age two (a year earlier than the current universal free entitlement). We know there are significant advantages to early education starting at the age of two and yet take up is lowest amongst more disadvantaged families. An initial impact assessment (IA) was completed for the Education Bill 2010-11 (clause 1 provides for regulations which would introduce an entitlement). **This IA accompanies a consultation document which will seek views from the sector and public to inform further policy development and regulations.**

Rationale for intervention

Children's experiences in their early years strongly influence their outcomes in later life, across a range of areas from health and social behaviour to their employment and educational attainment. (59% of children not eligible for FSM achieve a good level of development at age 5 compared to 39% of children known to be eligible for FSM)ⁱ. A strong start in the early years increases the probability of positive outcomes in later life; a weak foundation significantly increases the risk of later difficulties.

There is a strong body of evidence that shows good quality early education, especially from age two upwards, has positive benefits on children's all round development and that these benefits last through primary school to age 10/11.ⁱⁱ Most children who are developing well at the end of their early years go on to exceed expectations in reading and maths at the end of Key Stage 1 (KS1).ⁱⁱⁱ These results also show that children in the lowest achieving fifth in terms of their learning and development at the end of the Early Years Foundation Stage are six times more likely to be in the lowest fifth at KS1.^{iv}

The benefits of good quality early education are especially important for disadvantaged children. A recent review of research has established that early years interventions can narrow the gap between disadvantaged and other children in terms of their cognitive, social and behavioural development.^v The evaluation of the Early Education Pilot for Two Year Olds^{vi} (where local authorities were asked to target disadvantaged two year olds) found that children made more progress in each of these areas where the pilot operated than in a control group who were not offered free early education, and there was also a positive impact on language ability and on parent-child relationships. The Effective Pre-School Education Study (EPPE) (2004)^{vii} provides further evidence of the benefits of early entry into early education, including greater cognitive gains and peer sociability, particularly where the early education quality is high.

Unfortunately, take-up of formal early education by two year olds is lower amongst the more disadvantaged groups for whom it is considered most beneficial. 31% of two year olds in families earning under £16,200 were reported to be receiving some formal childcare when surveyed in 2009 compared to 53% of all children^{viii}. This figure, which equates to 46,000 two year olds nationally, includes approximately 20,000 two year olds who would have been funded through the Two Year Education Old pilot and those who receive other funding from local authorities.

Low take up amongst the most deprived families is partly because of the high cost of early education. According to one report, the cost of 15 hours of nursery education for a two year old is, on average, around £58 per week^{ix}. This figure is calculated from the Independent Survey of childcare costs (by the Daycare Trust) which found that the average cost of a nursery place in

England to be £94 for 25 hours a week.¹ 24% of parents also say they find it difficult or very difficult to cover the costs of early education or childcare^x. The proportion of families finding it difficult to pay for early education or childcare is also significantly higher in lower income families^{xi}. Take up of formal childcare is particularly low amongst the 20% most disadvantaged families where 15% of children aged 0-2 experience formal childcare, compared to 55% of their most advantaged peers^{xii}.

Low awareness of the current free entitlement (from age 3) is also a barrier to the most disadvantaged families taking up the entitlement at age 3^{xiii}. Any offer of free early education needs to be easy to understand to enable outreach workers, health visitors and early education providers to encourage parents to take up their entitlement. A national entitlement (set out in regulations) would create transparency in the offer which should make it easier for professionals and families to identify eligibility for the offer. It would also determine which two years benefit from the free places - ensuring the vast majority are from the most deprived quintile of families. Without a national entitlement there is a greater possibility that some two year olds that benefit from the free education will be from better off families. For example, in the Two Year Early Education Pilot a notable minority (10%) of two year olds that took up places were from relatively affluent families with an income of £30,000 or more^{xiv}.

This impact assessment lays out the benefits of improved targeting of the 2 year old offer on the most disadvantaged children, and the consultation will seek to develop the best option for a focused offer. We will also consult on whether there should be guidance on how local discretion might complement this targeted, regulatory approach for children not granted an entitlement through regulations.

Policy objective

This Government intends to invest in early education for disadvantaged two year olds in order to improve their cognitive, social and behavioural development and close the gap between the most disadvantaged and better off children.

Recent research, including Graham Allen's *Early Intervention Next Steps*^{xv} points to the way that children's neurological pathways develop before the age of 3 and the benefits of early support and intervention to ensure all children develop the social and emotional foundations they need

Options

Three options have been considered in developing proposals for addressing these objectives. This IA appraises the impact of the policy from September 2013 until 2022. Funding has been allocated from 2011 as part of this 2010 spending review to support local authorities to develop capacity for the new entitlement and to ensure momentum started under the two year old pilot continues.

Option 1 – Do nothing

Do not to introduce any additional support for two year olds -This would mean that current funding intended for free early education for two year olds could cease. LAs might choose to continue to support some particular children or groups of children but, in the current economic climate, our working assumption would need to be that there is no provision.

¹ It should be noted that costs of childcare vary. We have used the Daycare Trust figures as a guide figure for costs in this IA.

Option 2 – Allocate funding for disadvantaged 2 year olds: Local Authorities have complete discretion over funds

Provide funding for early education for two year olds and allow LAs to target this funding appropriately – £380m funding per year from 2014-15 would be distributed using a formula which takes into account the number of disadvantaged two year olds in each local authority. (£64m in 2011-12, £223m in 2012-13, £331m in 2013-14 was allocated for a gradual scaling up to the full two year old offer from Sept 2013). Decisions about whether this is used to support an offer of early education for two year olds; how many/ which two year olds actually receive funding; how many hours they receive; and what quality criteria providers are judged by (if any) become the responsibility of the LA or are delegated to local professionals on an individual basis.

Option 3 – Targeted funds with some Local Authority discretion

Introduce a national entitlement setting out which two year olds, as a minimum, should be entitled to free early education and provide funding to accompany this entitlement – A national entitlement is introduced through regulations to certain groups of disadvantaged children for a set number of hours of provision per annum. This is accompanied by funding of £380m from 2014-15, distributed between local authorities based on the numbers of children who will gain an entitlement through regulations. It would be supported by a Code of Practice (which is statutory guidance) which would set out the quality criteria for deciding which settings can offer the new free entitlement.

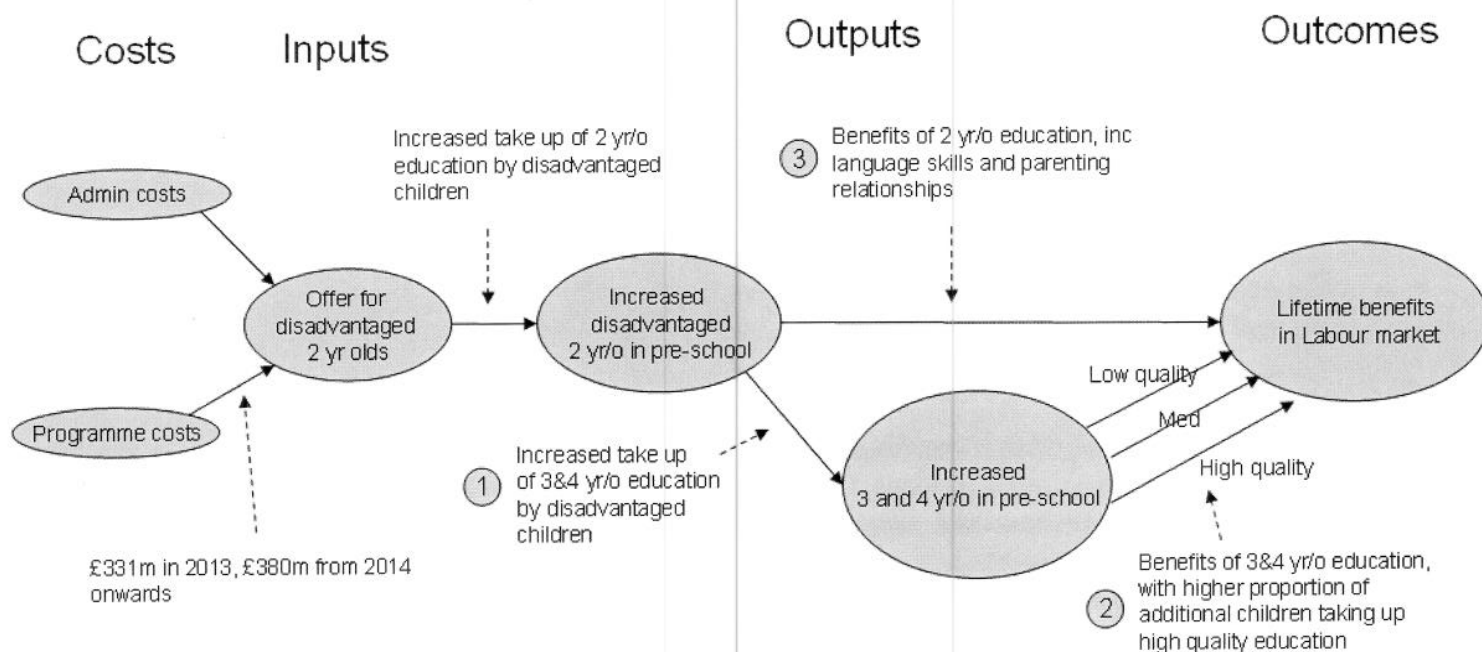
Entitlement would be based on primarily economic grounds, for example, mirroring the criteria used to decide eligibility for free school meals (i.e. families in receipt of certain benefits and, in the future, upon receipt of a set level of Universal Credit^{xvi}). Subject to the outcome of consultation, it may also include a much smaller number of children who are disadvantaged in other ways (e.g. Disabled Children, Looked After Children, or Children in Need (as defined by the 1989 Children Act) and could include a level of local discretion to give freedom to local authorities to expand the entitlement using funding not absorbed by meeting the needs of those with a national entitlement.

Economic Appraisal

Benefits of the 2 year old offer

The inputs of the programme are translated into outputs and outcomes as in the log-frame below. We expect there to be a range of benefits accruing from improved take up of 2 year old places. Here we calculate the benefits on the following drivers:

1. Increased take up of 3&4 yr old places
2. Increased take up of *high quality* 3&4 yr old places
3. Improved cognitive skills due to take up of 2yr old place



3&4 year old pre-school education has been shown to have a significant lifetime economic benefit (internal analysis based on the EPPE study). We expect to see an improvement in take up of the free entitlement for 3 and 4 year olds. If there is an increase in take up of education at 3 and 4 due to the 2 year old offer, there will be an increase in lifetime economic benefits accruing indirectly from the 2 year old offer.

The returns to education at 3 and 4 have been shown to be greater, the higher the quality of setting. If there is an increase in take up of higher quality settings at age 2 due to the Code of Practice encouraging LAs to provide funding for higher quality settings, then it is likely that a child will stay in the same setting from age 2 until ages 3 and 4, the quality of 3 and 4 year old education will also improve. There will therefore be an increase in lifetime economic benefits accruing indirectly from the 2 year old offer.

We expect there to be a direct effect on lifetime economic returns due to the 2 year old offer, over and above the improved take up of the free entitlement at ages 3 and 4. Evidence from the evaluation of the 2 year old offer pilot showed improvements in language skills and parenting relationships.

The total discounted costs and benefits are calculated over 10 cohorts of children. The benefits in each year represent the discounted lifetime benefits of children affected that year, applied for 10 years.

Assumptions used for costs and benefits

Programme costs

Funding for the two year old entitlement builds on the current pilots and funding has been announced as £64m in 2011-12, £223m in 2012-13, £331m in 2013-14 and £380m in 2014-15. The gradual increase is designed to allow LAs time to build quality and capacity of early years providers and to test the level of demand for take-up and unit cost to attract providers.

We have not put aside programme costs to support identification of the two year olds who are entitled to the offer. Sure Start Children's Centres and an increasing number of health visitors are already engaged in outreach work with disadvantaged families and are already tasked with helping them take up local opportunities for their child. The two year old offer will form another

opportunity for those two year olds.

Funds that are not spent on the funding of 2 year old places, and the associated administrative costs, are given to the LA for discretionary spending. This is treated as a transfer payment to LAs. In calculations of costs and benefits, these transfers have not been included explicitly as they enter equally in both costs and benefits. Therefore, in calculations of programme costs, the funds not spent on 2 year old places are not included as they are exactly balanced by transfers to LAs.

Baseline

In 2009 31%^{xvii} of two year olds in families surveyed who had an income of less than £16,200² used some formal childcare, which may have been for less than 15 hours per week. Scaled up to the 136,000^{xviii} two year olds that HMRC report as living within a household whose income makes them eligible for FSM (and so potentially meeting the criteria for the two year old offer), this equates to approximately 42,000 two year olds. 20,000 children would have been funded by the Two Year Old Education Pilot leaving a baseline of 22,000 children or 16% of two year olds receiving formal early education that was not funded by the pilot. We know that local authorities pay for early education for two year olds from other funding sources but we cannot quantify the proportion of these children whose place was funded from the public purse rather than from private funding. There will therefore be some deadweight, or transfer payment, for those children in this group who are already receiving early education or childcare. This transfer, however, is made to the most disadvantaged quintile, and therefore has a strong equity component.

Take up rates

2 year old places

There are about 136,000 2 year olds that fall into our targeted group. Due to the inherent uncertainty in estimating take up of a new policy, combined with the fact that take up will increase in the first few years after the introduction of an entitlement, we have used a range for likely take up figures. These are 10% higher for Option 3 than for Option 2 as a result of the increased drive and clarity that a national entitlement brings. For Option 2 a range of 50%, 60% and 70% is used. For Option 3 a range of 60%, 70% and 80% is used. This is based on:

- 43% of the most disadvantaged two year olds already receive some formal early education (although this may be for less than 15 hours a week of potentially variable quality and about 20,000 places are funded through the existing two year old pilot) so we hope to have at least a 17% increase as a result of the policy.
- The 2009 Early Years Parents' Survey^{xix} estimates that current take-up by disadvantaged three year olds is 87%^{xx} for a universal benefit, and we believe this is slightly higher than we would achieve initially for a non universal benefit.
- When the three year old offer scaled up from the most disadvantaged children to being a universal offer - take up amongst all three year olds increased from 44% to 93%^{xxi} over a four year period.

Furthermore, for option 2, we assume that on top of a lower take up rate compared to option 3, 10% of those who do take up the offer have come from outside the targeted group. Therefore, if the take up rate of option 2 is 50%, then 5% of those would not have come from the core targeted group.

² The criteria for eligibility to FSM is household income that does not exceed £16,190,
http://www.direct.gov.uk/en/Parents/Schoolslearninganddevelopment/SchoolLife/DG_4016089

For each of options 2 and 3, we estimate the following scenarios for different take up rates:

	Option 2			Option 3		
Take up	50%	60%	70%	60%	70%	80%
Disadvantaged group take up %	45%	54%	63%	60%	70%	80%
Disadvantaged group take up #	61,200	73,440	85,680	81,600	95,200	108,800
Non disadvantaged group take up #	6,800	8,160	9,520	-	-	-

These take up scenarios assumptions will be further strengthened by consultation response.

Take up of 3 & 4 yr old places

There is evidence to suggest that increased take up of 2 year old places may increase take up at age 3 and 4. The pilot evaluation of the 2 year old offer suggests that take up may increase by up to 7% points (8.6%): 88% per cent amongst pilot parents, whereas, based on the matched comparison group we estimate, it would have been just 81%. This increase is only statistically significant at 12%, but we take this as indicative.

There is further evidence to show that disadvantaged children are less likely to take up the 3 and 4 year old entitlement. Secondary analysis of the Childcare and Early Years Survey of Parents (2009) shows that while 93% of three year olds are already accessing at least part of their free entitlement, children from disadvantaged families are less likely to take up their free place. Parents from the most disadvantaged families are also more likely to have more negative views about the availability of childcare locally^{xxii}. The report on "Universal early year's provision: analysis of take-up by disadvantaged families from recent annual childcare surveys" found an 11% point difference in take up of the 3 year old offer between disadvantaged children and the national average. Moreover, children from families experiencing the highest level of multiple disadvantage were less likely to receive full amount of hours in the free entitlement than children from less or non-disadvantaged families (25%, compared with 35-39% respectively).

As outlined in the preceding section on take up of the 2 year old offer, we expect that option 2 will not enable as close targeting on the core disadvantaged group as option 3. We expect that 10% of take up will be from outside the disadvantaged group. We do not estimate an increase in take up of the 3 and 4 year old offer for this group.

Drop out

The two year old pilot evaluation reported that 10% of families who were offered free places dropped out of using formal early education during the pilot^{xxiii}. However the 10% of the 'additional' new starters who drop out are assumed to accrue a proportion of both the costs and benefits, depending on how long they remain in provision. For example, if a child dropped out after receiving half of the provision available in a given year, they would gain half of the benefit at half of the cost of a full place. We further assume that the cost saving from drop out allows places to be funded, again accruing similar benefits and costs. While the rate of attrition needs to be recognised and would, in reality, have a more complex impact, these working assumptions imply a neutral impact on the NPV estimate.

Increased take up of high quality places

The monetised benefits are based upon the assumption that in Option 2 the quality of provision reflects the overall quality of provision of early education in deprived areas in England. Therefore it assumes that 68% of early education and childcare is high quality (rated outstanding or good by Ofsted)^{xxiv}. That is, 68% of new places offered through the 2 yr old offer will be in high quality settings. The level of take up in high quality settings is likely to remain the

same as and if the child enters 3&4 yr old places. This is because if a child enters a setting at 2, they are likely to remain in the same setting as they progress to later years.

For Option 3 we anticipate that two year olds will be more likely to attend a higher quality setting because it will be supported by a Code of Practice (which constitutes statutory guidance). Local authorities currently use the Code of Practice for the 3 and 4 year old entitlement to justify to providers their role in helping providers to improve quality. A Code of Practice for two year olds would enable the Government to stipulate that two year olds receiving the free entitlement are only placed in higher quality providers (as defined by the quality criteria set out in the code). Without statutory guidance there is a risk that pressures on LA budgets in other areas could mean some LAs divert resources away from supporting quality improvements.

We think it reasonable that children at high quality setting at age two will remain there at ages 3 and 4. We have assumed that the use of provision to support the two year old offer is skewed towards higher quality provision with 10% more high quality used in the best guess scenario. This would reflect the existence of a code of practice encouraging LAs to use their better quality provision for the offer.

Returns to early education

To apply the estimated lifetime returns associated with high, medium and low quality settings, we need to estimate the quality profile associated with provision under each of the three options described above. These calculations of benefits to early education are indicative of scale only, particularly for the direct benefits of the 2 year old offer, rather than precise estimates.

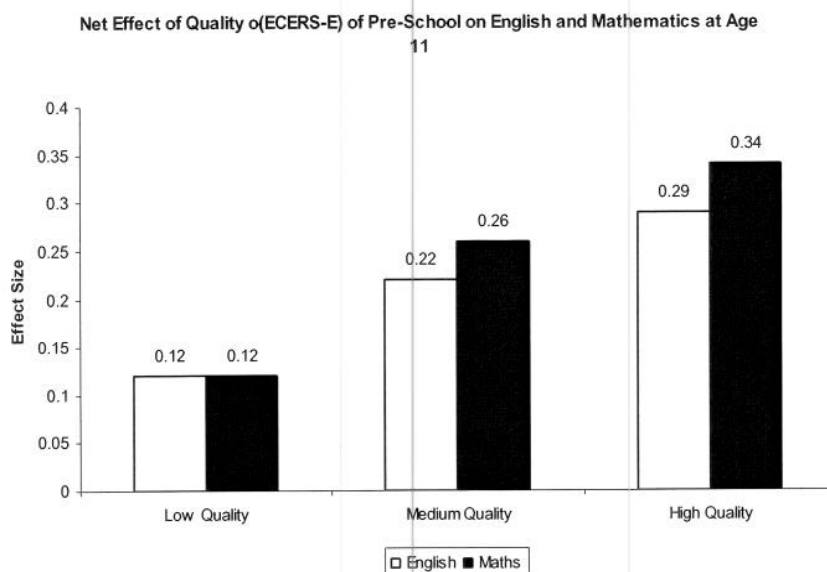
As a baseline, we use the latest Ofsted ratings for 2009/10, which found that 68% of settings were of "high" quality (either outstanding or good) and a further 29% were "medium" (satisfactory), leaving around 3% that can be described as low. While the trend demonstrates that quality may not be stable over time, we assume that in the absence of any further measures to drive quality improvement, this is an appropriate baseline for provision for disadvantaged two year olds over the next ten years. Trends in improvement of settings (Ofsted annual report 2009-2010) are in *Fig 1* of Annex 2.

We have estimated the total economic benefit to early years education by combining evidence from the EPPE study with the evidence on the economic benefits of age 10 literacy from Machin and McNally (2008). The economic benefits are the total lifetime wage benefits for children benefiting from early education. They are expressed as a present value in 2010 prices.

Estimation of impact of early education on cognitive outcomes

The impact of early education on later cognitive outcomes is taken from the EPPE final report on the primary phase.^{xxv} Adjusting for background factors there are significant net effects on attainment in English and mathematics from attendance at pre-school compared to no pre-school. This is an effect that increases with the quality of pre-school attended.

Figure 1: The impact of early education on Key Stage 2 English and maths



The high quality of pre-school is especially beneficial for the most disadvantaged pupils (as measured by the Income Deprivation Affecting Children Index IDACI) and pupils of low qualified pupils. However the extra beneficial effects for disadvantaged pupils are only found for mathematics, not English, and so are noted as a possible additional benefit but are not included in our headline analysis as our link to age 30 earnings is expressed through improvements in literacy, not numeracy.

Estimation of economic benefits to early education

As part of their analysis of the Literacy Hour Machin and McNally^{xxvi} estimated the impact of reading scores (age 10) – expressed as effect sizes – on labour market earnings at age 30 from the 1970 British Cohort Study and convert these returns into presented discounted value of lifetime earnings.

Machin & McNally find a 0.083 increase in the standard deviation of reading scores corresponds to a present discounted value of lifetime earnings of £3924 (2001 prices)^{xxvii}. We have calculated a 95% confidence interval around this estimate to provide us with a lower and upper bound of the likely true impact. Before using the Machin and McNally estimates for our analysis we make 2 further adjustments. First, we express the values in 2010 prices using the GDP deflator. We then express the lifetime benefits as per 1 standard deviation in reading scores (rather than per 0.083 standard deviations).

Table 2: Economic Benefits

Converting Machin and McNally Estimates		
Effect size		0.0834
Central LT earnings		3924
Upper LT earnings		4562
Lower LT earnings		3286
Central 2010 prices		5010
Upper 2010 prices		5824
Lower 2010 prices		4196
Central per SD	£	60,071
Upper per SD	£	69,830
Lower per SD	£	50,312

Combining early education impact with economic benefits

There are a number of steps outlined in Table 3 to estimate a range of lifetime earnings assumptions, associated with early education at Age 2. Starting with the impacts described

above for a one Standard Deviation impact of improved English scores at KS2, we estimate the impact of a 0.12, 0.22 and 0.29 standard deviation improvement for low, medium and high quality early education settings respectively. Note that the estimated impact of a low quality setting (£6,037) conflates both the assumption of poorer effectiveness (0.12) and the low end of the 95% confidence interval. Similarly, the high quality setting assumes a higher impact and the higher bound of the confidence interval.

This provides a range of £6,037 to £20,251 associated with the impact of pre-school education associated with the quality of provision for 3 and 4 year olds.

Table 3 Estimating the lifetime earnings impact of Early Education

Impact	Quality of setting		
	Low	Medium	High
Lifetime earnings increase (1 St. Dev. improvement in KS2 English)	£50,312	£60,071	£69,830
Impact of age 3&4 provision on KS2 reading score	0.12	0.22	0.29
Estimated impact of age 3&4 provision on lifetime earnings	£6,037	£13,216	£20,251
Impact of age 2 provision on KS2 reading score	0.03	0.06	0.07
Estimated impact of age 2 provision on Lifetime Earnings	£1,509	£3,304	£5,063

The evidence of an impact of provision at age 2 on reading scores (and thus KS2 attainment) is less clear. We know that children in the two year old pilot in high quality settings (those that achieved a rating of at least 4 in the pilot's quality scale) improved their naming vocabulary scores from 45.8 to 49.4 on average, equivalent to moving from the 34th percentile to the 46th percentile for language development.^{xxviii}

This provides an initial indication that we anticipate improvement in development due to the place at 2 years old. We also expect complementarities between education at 2, 3 and 4. To estimate the benefits of age 2 provision over and above provision at ages 3 and 4, we make a conservative working assumption that the benefits are 25% of that of the 3 and 4 year old provision. As the 2 year old offer is by definition only half as long as the 3 and 4 year old offer, we initially halve the effect size compared to the 3 and 4 year old offer. We further halve it again due to lesser strength of evidence around the benefits of the offer. This gives us a working estimate of impact of 25% of the 3 and 4 year old offer. We think this is a reasonable, if conservative, estimate as research is showing the importance of the benefits to early child development at age 2.

Equalities Assessment

An Equalities Impact Assessment has been completed and shows a positive impact upon children from underachieving ethnic groups who are often over-represented within the most deprived groups of two year olds; amongst disabled and SEN children; and amongst women in terms of approving their ability to work and creating employment in a sector which is dominated by female employees.

Option 1 – Do nothing

Benefits

This removes any requirements relating to the two year old offer entirely.

Costs

This option will have no additional programme costs.

Wider costs and benefits

By removing the funding for two year old places altogether it is likely that, in the short term at least, parents of the most deprived families will no longer be able to afford or will choose not to pay for early education for their 2 year old. Low income families are far more likely to say they find it difficult or very difficult to meet early education costs compared with families on higher incomes. In the short term this could mean a loss of business /staff layoffs for some early years providers – this loss of business might be disproportionately higher in more deprived areas (where it is likely the highest proportion of places are currently supported).

Option 2 – Allocate funding for disadvantaged 2 year olds: Local Authorities have complete discretion over funds

Benefits

Increased take up of 3 and 4 year old places

As laid out in the assumptions section, we have assumed an increase in take up of 3 and 4 year old places as 8.6% for disadvantaged groups. We apply the 8.6% uplift to the take up of the disadvantaged group, net of the children who would have been in early education and childcare without the offer (16%, as outlined in the assumptions section). As further laid out in the assumptions section, we assume that the quality of settings is the same as the average distribution for deprived areas. We split out these additional children taking up the 3 and 4 year old offer into the distribution of quality settings. The benefits are calculated using figures in Table 3. The full table is shown in *Figure 2* in Annex 2

	Option 2		
Take up scenario	50%	60%	70%
Total additional # entering 3&4	3,977	5,146	6,316
Total benefits to additional 3&4 yr old provision	70,721,079	91,521,396	112,321,713

Improved cognitive skills due to take up of 2 year old place

As laid out in the assumption section, we make the working assumption that the 2 year old places have 25% of the impact of the combined 3 and 4 year old offer. We apply these benefits from Table 3, to the additional children taking up the 2 year old place (whether in the disadvantaged group or not). We do not apply these benefits to children who would have taken up the place anyway (16%). The full table is shown in *Figure 3* in Annex 2

	Option 2		
Take up scenario	50%	60%	70%
Total additional # entering 2yr old place	46,240	59,840	73,440
Total benefits to additional 2 yr old provision	205,584,531	266,050,570	326,516,608

We also include the transfer to parents who are currently paying for formal childcare (16% of disadvantaged group). In all scenarios, this is £47.9m.

Total annually recurring benefits:

	Option 3		
Take up scenario	60%	70%	80%
Total recurring benefits	324,264,650	405,531,006	486,797,362

Costs

Programme Costs of funding 2 year old places

The costs of funding 2 year old places will depend on the take up rates:

	Option 2		
Take up scenario	50%	60%	70%
Disadvantaged group take up %	45%	54%	63%
Number of 2 yr/o places funded	68,000	81,600	95,200
Costs of providing 2 yr/o places (£)	149,872,000	179,846,400	209,820,800

Funds that are not used for providing 2 year old places are given to LAs as discretionary funding. These are treated as transfers to LAs, and therefore enter as both costs and benefits (net zero).

Administrative costs

This option delegates the decision making and administration of the offer to LAs. In this scenario we would need to assume that LAs develop and consult upon their own criteria and then continue the practice seen in the Two Year Early Education Old Pilot of taking application forms for each place and verifying eligibility themselves. This would be in addition to increasing the capacity and quality of the early years sector to create suitable places for two year olds and further work processing payments (based on provider returns) and inputting to the Early Years Census. There may be some economies of scale that can be achieved locally by joining some of the administration of the two year old offer and the 3 and 4 year old entitlement – but in the initial stages it is likely dedicated staff time will be needed.

Based on this, the potential administrative implications of the options are below. We recognise that these costs are not robust and will be using the feedback from consultation to develop them further to ensure that any additional burdens are fully funded from 2013 onwards.

One off administrative costs

- Under this option local authorities would need to factor in set up costs to agree their application/decision making process, agree the local eligibility criteria, and familiarise with the process. As an illustration of the costs we could assume that this would require at least 6 months senior staff time (at £28per/hour) which equates to £3.2 million across 152 LAs. This includes time for familiarisation.

- The existing on-line tool available to schools to enable them to verify eligibility for FSM can be adapted to check eligibility for the two year old offer and made available nationally this should be a one-off cost of no more than £30K per LA equating to £4.5million across all 152 LAs.

Annual recurring administrative costs: We assume that annual recurring cost will be staff costs for local authorities. An estimate of these costs would be:

- 2 x senior FTE in each LA to work on increasing capacity and quality in the sector as well as negotiating with providers. (at a rate of £28 per hour^{xxix} this roughly equates to £43K a year and £13.1 million across 152 LAs)
- About 0.5 FTE for an administrator to process applications for places and answer enquires (at £9^{xxx} per hour this roughly equates to £1.1 million across 152 LAs)
- About 0.1 x FTE of a finance office to process payments (at £9 per hour^{xxxi} which roughly equates to about £210K across 152 LAs)
- Maintaining the existing on-line tool available to schools to enable them to verify eligibility for free school meals for adaptation to check eligibility for the two year old offer requires an additional £30K per LA per year equating to £4.5million across all 152 LAs.

	Option 2
One off	
Senior LA FTE (£)	3,277,120
Computerised online tool (£)	4,560,000
Total	7,837,120
Annual recurring	
Senior LA FTE (£)	13,108,480
Administrator LA FTE (£)	1,053,360
Finance LA FTE cost (£)	210,672
Computerised online tool (£)	4,560,000
Total	18,932,512

Non-programme costs of funding 3 and 4 year old places

This is the additional funding required by the universal 3 and 4 year old offer for the additional children entering 3 and 4 year old places. The unit cost of places is between £2900 and £3300 depending on the quality of the setting. This is laid out in the attached spreadsheet. These are NOT part of the programme costs.

	Option 2		
Take up scenario	50%	60%	70%
Disadvantaged group take up %	45%	54%	63%
Number of 3&4 yr/o places funded	3,614	4,784	5,953
Costs of providing 3&4 yr/o places (2 years) discounted (£)	22,296,365	29,512,017	36,727,669

Total costs

- Total programme costs are £331m in 2013/2014, and £380 from 2014/15 onwards.
- The costs of funding the 2 year old places are between **£150m and £210m** (best estimate **£180m**) annually,
- Total annual cost of administering the offer across 152 local authorities is estimated to be approximately **£18.9m**
- Total one-off costs is approximately **£7.8 million**
- The difference between this and the allocated programme cost is a transfer to the LA.
- Non-programme costs of funding the additional 3&4 year old places are between **£22.3m and £36.7m** (best estimate **£29.5m**)

Total one off costs – £7.8m

Total recurring costs (best estimate) – £180m + £18.9m + £29.5m

Wider costs and benefits

Parents

The introduction of free early education for disadvantaged two year olds could indirectly impact on parents in three particular ways:

- Equity transfer – If parents were currently buying formal early education for their two year olds they could be saving up to £2,204 as a result of this policy (£58 a week^{xxxii} for 38 weeks). The reality is that for many parents they will be paying less than this for local playgroups or that provision might currently be funded by the local authority through other routes, but to some parents there will still be a distinct economic advantage to the two year old offer. This is not an efficiency benefit, but one based on equity of a funds transfer to disadvantaged parents.
- Work – another indirect benefit of this policy for some parents may be that it enables them to consider returning to work. Whilst the incidence of this was low in the pilot (where 1% of parents said it had enabled them to work^{xxxiii}) changes to Universal Credit may make this more possible.
- Stress – evidence from the Two Year Old Pilot found that disadvantaged parents could benefit from reduced stress and thereby improved parent-child relationships when the child had access to free early education

Providers

Both Options 2 and 3 provide an opportunity expand the early education market, with the potential to create up to 136,000 part time places. It is also likely that parents will choose to keep their children in the same setting to take up their 3 and 4 year old entitlement place. In terms of additional burdens, it is likely that the administration of processing payments to a local authority will be equal, if not less than processing payments with parents, with the added benefit of greater reliability and so increased sustainability for providers. We do not believe that the policy will in any way limit the number or range of providers across the whole market or their ability or incentives to compete.

Small firms make up a large portion of the market for EY provision. However participation in the two year old offer is voluntary. There is no new regulation, inspection or reporting required of any business that does not choose to take up the opportunity of delivering the two year old free early education places.

Value for Money

NPV and BCR estimates over 10 years are shown the below table for each scenario.

	Option 2		
Take up scenario	50%	60%	70%
Discounted benefits	£2,791,168,453	£3,490,683,768	£4,190,199,083
Discounted costs	£1,672,027,681	£1,992,147,991	£2,312,268,300
NPV	£1,119,140,772	£1,498,535,778	£1,877,930,783
BCR	1.67	1.75	1.81

The central estimate is 60%, with a BCR of 1.75.

Option 3 - Targeted funds with some Local Authority discretion

Benefits

Increased take up of 3 and 4 year old places

As in option 2, we apply the 8.6% uplift to the take up of the disadvantaged group, net of the children who would have been in early education or childcare without the offer (16%, as outlined in the assumptions section).

Increased take up of increased quality 3 and 4 year old places

As further laid out in the assumptions section, in this option we uplift the quality distribution of settings is compared to the average distribution for deprived areas (22% medium and 78% high quality). We split out these additional children taking up the 3 and 4 year old offer into the distribution of quality settings. The benefits are calculated using figures in Table 3. The full table is shown in *Figure 4 in Annex 2*

	Option 3		
Take up scenario	60%	70%	80%
Total additional # entering 3&4	5,146	6,316	7,485
Total benefits to additional 3&4 yr old provision	96,250,036	118,125,044	140,000,053

Improved cognitive skills due to take up of 2 year old place

This is as before, applied to the additional 2 year old places taken up, net of the children who would have taken up places anyway (16%). The full table is shown in *Figure 5 in Annex 2*

	Option 3		
Take up scenario	60%	70%	80%
Total additional # entering 2yr old place	59,840	73,440	87,040
Total benefits to additional 2yr old provision	279,796,617	343,386,757	406,976,897

We also include the transfer to parents who are currently paying for formal childcare (16% of disadvantaged group). In all scenarios, this is £47.9m.

Total annually recurring benefits:

	Option 3		
Take up scenario	60%	70%	80%

Total recurring benefits	424,005,693	509,470,841	594,935,990
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Costs

Programme Costs of funding 2 year old places

The costs of funding 2 year old places will depend on the take up rates:

	Option 3		
Take up scenario	60%	70%	80%
Disadvantaged group take up %	60%	70%	80%
Number of 2 yr/o places funded	81,600	95,200	108,800
Costs of providing 2 yr/o places (£)	179,846,400	209,820,800	239,795,200

Funds that are not used for providing 2 year old places are given to LAs as discretionary funding. These are treated as transfers to LAs, and therefore enter as both costs and benefits (net zero).

Administrative costs

This option would require LA commitment to increasing the capacity and quality of the early years sector to create suitable places for two year olds as well as further work processing payments based on provider returns and inputting to the Early Years Census. If the eligibility criteria are based on the same criteria as that for the eligibility to FSM, then there is the potential that further administration to verify children's eligibility could be minimal. A simple on-line tool is available to schools to enable them to verify eligibility for free school meals and this can be adapted to check eligibility for the two year old offer and made available nationally at no cost³. (Providers could use this tool, and LA databases to verify postcodes, to allocate places in line with the national entitlement. We would then need to consider the process and resource demands of verifying eligibility for any other groups of children who may be included in a national entitlement.

Based on this, the potential administrative implications of the options are below. We recognise that these costs are not robust and will be using the feedback from consultation to develop them further to ensure that any additional burdens are fully funded from 2013 onwards.

One off costs

- It is unlikely that there would be significant one off costs for Local Authorities in the first year because consultation/decisions upon eligibility criteria and design of new processes would not be required. One week for familiarisation with national guidance equates to a one off cost of £148,000 across 152 LAs

Annual recurring administrative costs: We assume that staff costs for Option 3 would be lower than for Option 2 as a result of automated processes: Therefore an estimate of costs would be:

- 1 x senior FTE in each LA to work on increasing capacity and quality in the sector as well as negotiating with providers. (at a rate of £28 per hour^{xxxiv} this roughly equates to £43K a year and £6.6 million across 152 LAs)
- About 0.1 x FTE of a finance office to process payments (at £9 per hour^{xxxv} which roughly equates to about £210K across 152 LAs)

³ Subsection 3 of the Education Bill (in the current session) seeks an amendment to legislation to allow local authorities to check parental eligibility for free nursery education for disadvantaged two year olds against

Total administrative costs

- Total annual cost of administering the offer would be **£6.8 million** across 152 LAs (assuming 25% for staff overheads on top of staff costs)

	Option 3
One off	
Senior LA FTE (£)	148,960
Total	148,960
Annual recurring	
Senior LA FTE (£)	6,554,240
Administrator LA FTE (£)	-
Finance LA FTE cost (£)	210,672
Total	6,764,912

Non-programme costs of funding 3&4 yr old places

This is the additional funding required by the universal 3&4 yr old offer for the additional children entering 3&4 yr old places. The unit cost of places is between £2900 and £3300 depending on the quality of the setting. This is fully laid out in the attached spreadsheet.

	Option 2		
Take up scenario	60%	70%	80%
Disadvantaged group take up %	60%	70%	80%
Number of 3&4 yr/o places funded	3,743	4,912	6,082
Costs of providing 3&4 yr/o places (2 years) discounted (£)	29,806,997	37,094,771	44,382,546

Total costs

- Total programme costs are £331m in 2013/2014, and £380 from 2014/15 onwards.
- The costs of funding the 2 year old places are between **£180m and £240m** annually,
- Total annual cost of administering the offer across 152 local authorities is estimated to be approximately **£6.7m**
- Total one-off costs is approximately **£0.15 million**
- The difference between this and the allocated programme cost is a transfer to the LA.
- Non-programme costs of funding the additional 3&4 year old places are between **£29.8m and £44.4m**

Total one off costs – £0.15m

Total recurring costs (best estimate) – £209.8m + £6.7m + £37m

Wider costs and benefits

Parents

The introduction of free early education and early education for the most disadvantaged two year olds will indirectly impact on parents in three particular ways:

- Equity transfer – If parents were currently buying formal early education for their two year olds they could be saving up to £2,204 as a result of this policy (£58 a week^{xxxvi} for 38 weeks). The reality is that for many parents they will be paying less than this for local playgroups or that provision might currently be funded by the local authority through

other routes, but to some parents there will still be a distinct economic advantage to the two year old offer.

- Work – another indirect benefit of this policy for some parents may be that it enables them to consider returning to work. Whilst the incidence of this was low in the pilot (where 1% of parents said it had enabled them to work^{xxxvii}) changes to Universal Credit may make this more possible.
- Stress – evidence from the Two Year Old Education Pilot found that disadvantaged parents could benefit from reduced stress and thereby improved parent-child relationships when the child had access to free early education

Providers

Both Options 2 and 3 provide an opportunity expand the early education market, with the potential to create up to 136,000 part time places. It is also likely that parents will choose to keep their children in the same setting to take up their 3 and 4 year old entitlement place. In terms of additional burdens, it is likely that the administration of processing payments to a local authority will be equal, if not less than processing payments with parents, with the added benefit of greater reliability and so increased sustainability for providers.

Small firms make up a large portion of the market for EY provision. However participation in the two year old offer is voluntary. There is no new regulation, inspection or reporting required of any business that does not choose to take up the opportunity of delivering the two year old free early education places.

Value for Money

NPV and BCR estimates over 10 years are shown the below table for each scenario.

Take up scenario	Option 3		
	60%	70%	80%
Discounted benefits	£3,649,708,082	£4,385,365,287	£5,121,022,491
Discounted costs	£1,882,456,491	£2,203,197,607	£2,523,938,722
NPV	£1,767,251,591	£2,182,167,680	£2,597,083,769
BCR	1.94	1.99	2.03

The central estimate is 70%, with a BCR of 1.99.

Value for Money between option 2 and option 3

The benefits of regulation can be seen by looking at the sensitivity of value for money of option 3 over option 2. The key difference between the two options is the take up rate. If the take up rate of the regulated option is indeed 10% higher, at 70% rather than 60%, the NPV is £672,620,366 higher over 10 years. However, if the take up rate of the regulated option is no higher than the unregulated option (both at 60%), and then there is still an increase in NPV over 10 years of £293,225,361. This is due to the improved targeting on the most disadvantaged group, and the improvement in quality of additional places. This suggests that if regulation failed to improve take up, it would, through improved targeting, still lead to a significant benefit over that of the unregulated option.

Preferred Option

Our preferred option is Option 3. In accordance with the VfM decision rules, it secures an entitlement for, and provides the funding to support, the 20% most disadvantaged two year olds

(which equates to about 136,000 children) with 570 hours a year of early education (or 15 hours a week for 38 weeks of the year).

This has significant advantages over Options 1 and 2 in terms of securing the policy objectives:

- It determines which two year olds benefit from free early education, ensuring the vast majority of these are in the most deprived quintile of families rather than being their more affluent peers. In the Two Year Early Education Pilot (which was not underpinned by regulations or statutory guidance) a notable minority (10%) of two year olds were from relatively better off families with an income of £30,000 or more^{xxxviii}
- By providing an entitlement it maximises take up of eligible children, encouraging parents to ask for it and ensuring local authorities direct the funding intended to support the offer into places. Offering a national entitlement creates transparency in the offer which should make it easier for professionals and families to identify easily eligibility for the offer. Low awareness of the free entitlement (for 3 and 4 year olds) is a barrier to the most disadvantaged families taking up a place^{xxxix}.
- It mirrors the existing entitlement for three and four year olds, meaning that eligible children can receive early education for three years from age two until four
- It sets an entitlement to 15 hours of free early education – evidence from the EPPE study indicated that children's cognitive gains are similar whether they attend full-time or part-time provision^{xl} making part time provision more cost effective.
- It enables statutory guidance (the Code of Practice) setting out minimum quality criteria for providers offering the free places (LAs must have regard to statutory guidance)- the evaluation of the Two Year Early Education Old Pilot found that there was only an impact on children's cognitive and social development when children attended high quality settings.^{xli}
- It would offer Providers greater reassurance about the sustainability of the funding for two year provision (since it would be a legal entitlement for some children).

By securing these principles, Option 3 maximises the monetisable benefits of the policy as described above. Implemented in this way, the policy could potentially deliver NPV of between £1.6bn and £2.5bn over the 10 year period 2013-2022.

Option 1 - whilst being cost neutral, Option 1 does not attempt to address the policy objectives as stated above. Take up of early education at age two would be likely to fall amongst the most disadvantaged families (without the 20,000 places funded by the Two Year Old Pilot) with the associated risk that the gap in the achievement of a good level of development between the most disadvantaged five year olds and their more affluent peers could widen further.

Option 2 - would put funding into the system at a level which has the potential to provide the 20% most disadvantaged two year olds with 570 hours a year of early education. However without the introduction of regulations setting out an entitlement for the most deprived children supported by a statutory Code of Practice setting out the quality criteria for providers the policy delivers a reduced NPV in comparison to Option 3 of between £1bn and £1.7bn over the 10 year period 2013-2022..

We believe that regulation can maximise the value of the spend, by reaching more disadvantaged 2 year olds through better targeting and greater transparency in the offer and by ensuring more two year olds attend higher quality settings. We have made assumptions over the potential benefits that regulation can bring to this policy, and the consultation will investigate the ways in which this potential can be reached.

Risks

Capacity of the early years sector – There is a risk that it takes time for the capacity of the early years sector to grow to create the number of part time places that are needed (136,000 places) and that this limits the availability of the offer to parents and the benefits associated with children receiving provision. There will be challenges for providers in building capacity, recruiting new staff and adapting premises. The consultation will help us better understand these challenges and the funding that LAs are receiving in advance of 2014 is critical to enabling this build up to start, enabling LAs/providers to test demand and unit cost to inform local funding levels. Funding is also available through the Early Implementation Grant to support the sufficiency and quality of provision locally.

Take Up – There is a risk that take-up could be lower than we anticipate, particularly in the first few years of the offer. Local authorities will need to communicate effectively the free entitlement to eligible parents– we anticipate that take up will rise as the offer becomes established. This risk has been reflected in the assumptions behind that range of take up options. Local authorities will be able to build on the outreach channels that were developed during the pilot phase and investment before 2013 will allow LAs to prepare for a scaling up from the numbers of two year olds involved in the pilot.

Quality – There is an associated risk that LAs cannot secure enough provision of a high enough quality to secure the maximum benefits outlined above. This risk has been reflected in the assumptions behind the monetised benefits by assuming a mix of high and medium quality provision is used. We will be consulting on the extent to which this risk will be mitigated by the development of a basket of quality measures for providers which will be set out in a new Code of Practice for two, three and four year olds. Increasing investment in the years before 2013 will allow local authorities and providers to prepare.

Demographic and economic shifts – The affordability of giving 570 hours a year of free early education has been established using the latest data on the two year old population and the number of two year olds who would be eligible if the criteria for this offer reflected the eligibility criteria for free school meals. Any increase in the birth rate and/or economic downturn which brought more families into eligibility would increase the pressure upon funding. This risk is being mitigated by ensuring that there is sufficient funding available to manage reasonable shifts in these factors.

Annexes

Annex 1 should be used to set out the Post Implementation Review Plan as detailed below. Further annexes may be added where the Specific Impact Tests yield information relevant to an overall understanding of policy options.

Annex 1: Post Implementation Review (PIR) Plan

A PIR should be undertaken, usually three to five years after implementation of the policy, but exceptionally a longer period may be more appropriate. If the policy is subject to a sunset clause, the review should be carried out sufficiently early that any renewal or amendment to legislation can be enacted before the expiry date. A PIR should examine the extent to which the implemented regulations have achieved their objectives, assess their costs and benefits and identify whether they are having any unintended consequences. Please set out the PIR Plan as detailed below. If there is no plan to do a PIR please provide reasons below.

Basis of the review: [The basis of the review could be statutory (forming part of the legislation), i.e. a sunset clause or a duty to review, or there could be a political commitment to review (PIR)];

The policy will be reviewed as part of the (non-statutory) post legislative scrutiny of the Education Bill. Clause 1 provides for regulations to introduce the entitlement for disadvantaged two year olds (as defined in the regulations) to free early education.

Review objective: [Is it intended as a proportionate check that regulation is operating as expected to tackle the problem of concern?; or as a wider exploration of the policy approach taken?; or as a link from policy objective to outcome?]

Review of the policy will be two fold:

- i) to evaluate take up of the national entitlement and feedback from providers and local authorities with a view to establishing that the policy is being implemented as expected, and
- ii) to continue to evaluate the impact of the free entitlement upon the achievement of two year olds as they progress through the education system.

Review approach and rationale: [e.g. describe here the review approach (in-depth evaluation, scope review of monitoring data, scan of stakeholder views, etc.) and the rationale that made choosing such an approach]

The review will draw upon data and insights from:

- a proposed new indicator of take up of funded places for two year olds in the Early Years Census and Schools Census
- longitudinal research upon effective pre-school and primary education
- ongoing interaction with the early education sector, for example through an established Co-Production group and through an annual survey of early education providers.

This approach will allow a combination of monitoring data, stakeholder views and evaluation of impact.

Baseline: [The current (baseline) position against which the change introduced by the legislation can be measured]

We will take the baseline to be the number of disadvantaged two year olds that would receive places without any additional funding by central government (i.e. excluding funding for the 2 year olds pilot/trials and excluding funding for two year olds devolved to local authorities through the recent spending review).

Steve can you add to this please - picking up on the action last week about baseline figures and the deadweight analysis

Success criteria: [Criteria showing achievement of the policy objectives as set out in the final impact assessment; criteria for modifying or replacing the policy if it does not achieve its objectives]

- Improved results by disadvantaged children in the Early Years Foundation Stage.
- Longitudinal improvement of outcomes for disadvantaged two year olds.
- Higher take-up of the 3 and 4 year old entitlement by disadvantaged families (currently lower than for affluent families)

Monitoring information arrangements: [Provide further details of the planned/existing arrangements in place that will allow a systematic collection systematic collection of monitoring information for future policy review]

Take-up of the disadvantaged two year olds' entitlement will be measured using the Early Years Census and School Census which are conducted in January each year and count the number of children receiving funded early education in maintained, private, voluntary and independent settings. Longitudinal improvement of outcomes for disadvantaged two year olds measured through the successor to the Effective Provision of Pre-school Education (EPPE) Project (options currently being explored by the DfE).

Reasons for not planning a review: [If there is no plan to do a PIR please provide reasons here]

Not applicable

Annex 2 – Supplementary tables

Fig 1– Trends in improvement of settings (Ofsted annual report 2009-2010)

Year	% Outstanding	% Good	% Satisfactory
09/10	10	58	29
08/09**	9	56	30
07/08	4	52	39
06/07	3	55	38
05/07	2	55	38

** EYFS introduced in September 2008 which may account for rapid increase. We could assume similar trajectory from 2008 if do nothing.

Fig 2 – Option 2: Benefits from take up of 3 and 4 year old offer

	Option 2		
Take up scenario	50%	60%	70%
Disadvantaged group take up %	45%	54%	63%
Total additional # entering 3&4	3,977	5,146	6,316
% Low quality 3&4 yr old setting	3%	3%	3%
% Medium quality 3&4 yr old setting	29%	29%	29%
% High quality 3&4 yr old setting	68%	68%	68%
Additional # children in low quality	119	154	189
Additional # children in medium quality	1,153	1,492	1,832
Additional # children in high quality	2,704	3,499	4,295
Benefits to low quality places	720,262	932,103	1,143,945
Benefits to medium quality places	15,240,591	19,723,118	24,205,645
Benefits to high quality places	54,760,226	70,866,174	86,972,123
Total benefits to additional 3&4 yr old provision	70,721,079	91,521,396	112,321,713

Fig 3 – Option 2: Benefits from take up of 3 and 4 year old offer

	Option 2		
Take up scenario	50%	60%	70%
Disadvantaged group take up %	45%	54%	63%
Total additional # entering 2yr old place	46,240	59,840	73,440
% Low quality 2 yr old setting	3%	3%	3%
% Medium quality 2 yr old setting	29%	29%	29%
% High quality 2 yr old setting	68%	68%	68%
Additional # children in low quality	1,387	1,795	2,203
Additional # children in medium quality	13,410	17,354	21,298
Additional # children in high quality			

	31,443	40,691	49,939
Benefits to low quality places	2,093,784	2,709,603	3,325,422
Benefits to medium quality places	44,304,044	57,334,646	70,365,247
Benefits to high quality places	159,186,703	206,006,321	252,825,939
Total benefits to additional 2 yr old provision	205,584,531	266,050,570	326,516,608

Fig 4 – Option 3: Benefits from take up of 3 and 4 year old offer

	Option 3		
Take up scenario	60%	70%	80%
Total additional # entering 3&4	5,146	6,316	7,485
% Low quality 3&4 yr old setting	0%	0%	0%
% Medium quality 3&4 yr old setting	22%	22%	22%
% High quality 3&4 yr old setting	78%	78%	78%
Additional # children in low quality	-	-	-
Additional # children in medium quality	1,132	1,389	1,647
Additional # children in high quality	4,014	4,926	5,839
Benefits to low quality places	-	-	-
Benefits to medium quality places	14,962,365	18,362,903	21,763,441
Benefits to high quality places	81,287,671	99,762,141	118,236,612
Total benefits to additional 3&4 yr old provision	96,250,036	118,125,044	140,000,053

Fig 5 – Option 3: Benefits from take up of 3 and 4 year old offer

	Option 3		
Take up scenario	60%	70%	80%
Total additional # entering 2yr old place	59,840	73,440	87,040
% Low quality 2 yr old setting	0%	0%	0%
% Medium quality 2 yr old setting	22%	22%	22%
% High quality 2 yr old setting	78%	78%	78%
Additional # children in low quality	-	-	-
Additional # children in medium quality	13,165	16,157	19,149
Additional # children in high quality	46,675	57,283	67,891
Benefits to low quality places	-	-	-
Benefits to medium quality places	43,495,249	53,380,532	63,265,816

Benefits to high quality places	236,301,368	290,006,225	343,711,081
Total benefits to additional 2yr old provision	279,796,617	343,386,757	406,976,897

ⁱ <http://www.education.gov.uk/rsgateway/DB/SFR/s000979/index.shtml>, p5

ⁱⁱ Sylva, K et al. The Effective Provision of Pre-school Education (EPPE) Project: Findings from the Early Primary Year. November 2004(b)

ⁱⁱⁱ Department for Education (DfE) (2010), *Achievement of children in the EYFSP*, RR-034 London: DfE. To note that 94 percent of children who achieved a good level of development at the end of the EYFS in 2007 – as shown by their EYFS Profile results – went on to exceed expectations in reading and in maths at the end of Key Stage 1.

^{iv} DCSF (2008), *How strong is the relationship between Foundation Stage Profile (2005) and Key Stage 1 (2007)*, DEP2008-1634, Deposited in House of Commons Library

^v Springate, I., Atkinson, M., Straw, S., Lamont, E. and Grayson, H. (2008) *Narrowing the gap in outcomes: early years (0–5 years)*, Slough: NFER

^{vi} Smith, R., Purdon, S., Schneider, V., La Valle, I., Wollny, I., Owen, R. and Bryson, C. (2009), 'Early Education Pilot for Two Year Old Children Evaluation', DCFS Research Report RR134

^{vii} EPPE, Sylva, K et al. The Effective Provision of Pre-school Education (EPPE) Project

^{viii} Speight, S. Smith, R. La Valle, I. Schneider, V and Perry, J. with Coshall, C. and Tipping, S (2009), 'Childcare and early years survey of parents 2009', DCSF Research Report 136

^{ix} Childcare Costs in 2011, Daycare Trust, 2011

^x Speight, S. Smith, R. La Valle, I. Schneider, V and Perry, J. with Coshall, C. and Tipping, S (2009), 'Childcare and early years survey of parents 2009', DCSF Research Report 136

^{xi} Speight, S. Smith, R. La Valle, I. Schneider, V and Perry, J. with Coshall, C. and Tipping, S (2009), 'Childcare and early years survey of parents 2009', DCSF Research Report 136

^{xii} *Families Experiencing Multiple Disadvantage: Their Use and Views On Childcare Provision*, National Centre for Social Research, 2010, pp 17

^{xiii} (Speight, S. Smith, E and Lloyd, E (2010) 'Families Experiencing Multiple Disadvantage: Their Use of and Views on Childcare Provision', DCSF Research Report RR191

^{xiv} Early Education Pilot for Two Year Olds, DCSF Nov 2010, p41

^{xv} Allen, G, 'Early Intervention: The Next Steps', (DWP, Jan 2011), p14 -15

^{xvi} DWP plan to phase in Universal Credit (UC) between 2013 and 2017) . The Social Security Select Committee is looking at all passported benefits and UC and is expected to give preliminary options in September 2011 and a final report in January 201

^{xvii} DfE internal analysis from 'Childcare and early years survey of parents 2009', DCSF Research Report, 136 Speight, S. Smith, R. La Valle, I. Schneider, V and Perry, J. with Coshall, C. and Tipping, S (2009),

^{xviii} Internal analysis, HMRC

^{xix} The Parents survey collects the amount spent on childcare at a household level. It does not collect data on how much is spent on each individual child.

^{xx} Internal DfE analysis of the Childcare and Early Years Survey of Parents 2009

^{xxi} DfE Statistical First Release: Provision for Children Under Five Years of Age in England

^{xxii} Speight, S. Smith, E and Lloyd, E (2010) 'Families Experiencing Multiple Disadvantage: Their Use of and Views on Childcare Provision

^{xxiii} Smith, R., Purdon, S., Schneider, V., La Valle, I., Wollny, I., Owen, R. and Bryson, C. (2009), 'Early Education Pilot for Two Year Old Children Evaluation', DCFS Research Report RR134, p.48

^{xxiv} Ofsted Annual Report 2010, Her Majesty's Chief Inspector (Crown Copyright, Nov 2010), p19

^{xxv} Sylva, K., Melhuish, E., Sammons, P., Siraj-Blatchford, I., Taggart, B., (2008) *Effective Pre-school and Primary Education 3-11 Project (3-11): Final Report from the Primary Phase: Pre-School, School and Family Influences on Children's Development during Key Stage 2 (7-11)*. DCSF RR-061

^{xxvi} Machin, S., and McNally, S. (2008) 'The Literacy Hour' *Journal of Public Economics* Vol. 92 pp.1441-1462

^{xxvii} We use specification 2 of table 7 of Machin and McNally (2008) which includes basic controls (gender and region) and family background controls.

^{xxviii} Smith, R., Purdon, S., Schneider, V., La Valle, I., Wollny, I., Owen, R. and Bryson, C. (2009), 'Early Education Pilot for Two Year Old Children Evaluation', DCFS Research Report RR134, p.111

^{xxix} Cost assumptions based on hourly earnings, *Annual Survey of Hours and Earnings UK 2009*, Office for National Statistics

^{xxx} Cost assumptions based on hourly earnings, *Annual Survey of Hours and Earnings UK 2009*, Office for National Statistics

^{xxxi} Cost assumptions based on hourly earnings, *Annual Survey of Hours and Earnings UK 2009*, Office for National Statistics

^{xxxii} *Cost of Childcare 2011*, Daycare Trust, 2011

^{xxxiii} Smith, R., Purdon, S., Schneider, V., La Valle, I., Wollny, I., Owen, R. and Bryson, C. (2009), 'Early Education Pilot for Two Year Old Children Evaluation', DCFS Research Report RR134

^{xxxiv} Cost assumptions based on hourly earnings, *Annual Survey of Hours and Earnings UK 2009*, Office for

National Statistics

^{xxxv} Cost assumptions based on hourly earnings, *Annual Survey of Hours and Earnings UK 2009*, Office for

National Statistics

^{xxxvi} *Cost of Childcare 2011*, Daycare Trust, 2011

^{xxxvii} Smith, R., Purdon, S., Schneider, V., La Valle, I., Wollny, I., Owen, R. and Bryson, C. (2009), '*Early Education Pilot for Two Year Old Children Evaluation*', DCFS Research Report RR134

^{xxxviii} Early Education Pilot for Two Year Olds, DCSF Nov 2010, p41

^{xxxix} Speight, S, Smith, E and Lloyd, E (2010) 'Families Experiencing Multiple Disadvantage: Their Use of and Views on Childcare Provision', DCSF Research Report RR191)

^{xl} EPPE, Sylva, K et al. The Effective Provision of Pre-school Education (EPPE) Project

^{xli} DCSF evaluation of the rollout of 2 year old places, 2010