



Recommendations for Early Learning and Childcare Data: Implications for the Early Learning and Childcare Census

August 2017

Table of Contents

1. Introduction.....	2
2. Background to the SG ELC Census	3
3. Scope & Content.....	5
3.1 Scope of the ELC Census.....	5
3.2 Content of the ELC Census	7
3.2.1 Data items suitable for collection via the ELC census	7
3.2.2 Collection of ELC teacher data items.....	10
3.2.3 Data items better suited to other statistical collections.....	11
3.2.4 Data items better suited to non-statistical collections.....	12
3.2.5 Overarching requirements for data collection... 	13
4. Collection Method.....	15
5. Timing.....	17
6. Conclusions and Next steps.....	18
Annex A: List of recommendations.....	19

1. Introduction

The Scottish Government (SG) expanded Early Learning and Childcare (ELC) provision in 2014 with an increase in the number of free hours and flexibility; and, an extension of eligibility to particular 2 year olds. This, alongside plans for further expansion to 1,140 hours of provision by the end of the next parliamentary term, prompted a review of the current provision of data to identify what data are required to effectively manage and monitor ELC in Scotland both now and in the near future.

A national consultation was conducted between 9th November 2015 and 6th January 2016¹ to seek the views of parents, local and national government, and key delivery partners on the type of data they would find useful. Findings from the consultation were published in early 2016.

Since then, and to complement this work, a series of site visits with local authorities and ELC providers have been conducted to provide a more rounded understanding of local data capture and use. The fieldwork asked about specific issues and opportunities for the SG ELC Census, which is one of the primary vehicles used for management of ELC policy, and covered: its scope and content; collection method; and timing. Input from a wide range of expertise across the sector was ensured by creating an ELC Census Development Advisory Group² to oversee the work; the advisory group in turn reported to the wider Strategic Evidence Group.

This paper uses information gathered through these consultation exercises to identify areas for development of ELC data and particularly the SG ELC census so that it better meets current and future data needs. These are set out as recommendations throughout this document – for quick reference, a list of recommendations is provided at Annex A. Where appropriate the recommendations consider implications and outline any further work required to consider their feasibility and implementation.

¹ Details of the consultation and findings are available at:

<http://www.gov.scot/Topics/Statistics/Browse/Children/scotstat/ELCConsult2015>

² The ELC Census Development Advisory Group includes representatives from the Care Inspectorate, Scottish Social Services Council, Education Scotland, COSLA, Scottish Childminding Association, Early Years Scotland, Scottish Out of School Network, NDNA, private nurseries, and local authorities.

2. Background to the SG ELC Census

The Scottish Government (SG) Early Learning and Childcare (ELC) census is an important mechanism for gathering information from all services, with the exception of childminders, that receive local authority funding to deliver the free ELC entitlement. It is vital for the design, implementation and monitoring of both local and national policy, as well as the planning of services.

Timing of the ELC census

The ELC census is an annual exercise. Information requested relates to a specific week in September to coincide with the timing of the school pupil and staff census collections. This allows a comprehensive overview of publicly funded education services from ages 3³ to 18 to be gathered, and, in particular, enables consistent and comparable data to be gathered to provide aggregate teacher numbers, which is important to reflect cross-sector teacher employment. Results are published in December of the same year⁴.

Content of the ELC census

The data currently gathered is designed to satisfy basic reporting requirements for central and local government whilst minimising burden on data providers. It reflects policy priorities from 2007 onwards and has evolved over time to respond to emerging reporting requirements. The content is reviewed annually to ensure continued relevance, as well as incorporating data quality improvements. The current census collects information on:

- **The centre itself**, such as sector, whether they teach in Gaelic medium, when eligible 3 year olds are able to start.
- **Children**. This includes aggregate level data on registrations: total number by age, total number with additional support needs, total number with a non-English home language, total number with a co-ordinated support plan.
- **Teacher access**: percentage of children with access, what the arrangements are for this⁵.
- **Staff (teaching and non-teaching)**: such as job type, FTE, number and manager qualifications. Additional information for teachers is gathered and includes age, gender and GTCS registration number.

Data collection process

The ELC census currently collects information from all settings (with the exception of childminders) that receive funding from local authorities to deliver the free ELC entitlement. Data is requested directly from approximately 2,500 ELC providers

³ Includes 2 year olds who are eligible for funded ELC.

⁴ Published ELC data is available here: <http://www.gov.scot/Topics/Statistics/Browse/Children/Pubs-Pre-SchoolEducation>

⁵ This data is captured to monitor SNP manifesto commitments (2007 and 2011) to ensure that all 3 and 4 year olds (taking up the funded ELC entitlement) should have access to a teacher.

across Scotland and returned via a secure online data capture platform. In recent years, local authorities have had more involvement in, and responsibility for, this collection to ensure data consistency and quality. Local authorities are responsible for ensuring returns are submitted for all centres that they fund to provide ELC.

From 2015, the process was further refined to allow returns to be submitted directly to a named local authority contact for checking in the first instance; this named contact is expected to liaise with data providers to ensure the data return is accurate before submitting this to the SG (which the local authority does on behalf of the provider). Additional quality assurance is undertaken following submission, and any further amendments made before Directors of Education sign off a summary of key data items prior to publication. Over the years, steps taken to enhance data quality including how it is collected (such as the channelling of returns and first stage validations through local authorities), and the introduction of extra validations and quality assurance checks, have resulted in considerable improvements.

Comments received via consultation exercises highlighted two key challenges with the current collection process:

- Local authorities may hold data in a slightly different format (or not at all for partner providers) to that supplied via the ELC return, making it difficult to compare the two sources directly.
- It can be difficult for ELC centre staff to provide returns where they do not have access to the necessary hardware and/or software, or do not have appropriate IT or data training.

3. Scope & content

The consultation explored the scope and content of the Scottish Government (SG) Early Learning and Childcare (ELC) census collection to ensure it is still collecting the most relevant information for the sector. This chapter considers scope and content separately:

- **Scope** – discussion around the coverage of the ELC census and how wide-reaching this needs to be to meet need.
- **Content** – consideration of individual data items and whether they are appropriate for collection through the SG ELC census.

3.1 Scope of the ELC census

Should information be collected for all children in ELC, or just those receiving the funded entitlement?

Information about the ELC sector as a whole is essential for service planning. Work to determine how much extra capacity is required for service expansion has been challenging, largely due to lack of information about current hours children attend ELC in total, especially attendance outwith the funded hours. The consultation sought views on the use and collection of data items for both funded and non-funded ELC to gauge the current use and level of demand for this information. Findings showed that interest was low in data items relating to non-funded ELC and in overall totals (i.e. funded + non-funded), emphasising an interest in information relating to funded ELC only. Consultation findings and site visits with local authorities confirmed that, for at least half of local authorities, they only hold information for those children who they fund, and so providing this for non-funded children would be impossible under current reporting arrangements. To introduce collection of data for non-funded and total hours would therefore require a considerable amount of investment and additional work from local authorities, which cannot be justified given the lack of demand for this information. It is therefore recommended that data is collected in relation to the funded entitlement only.

Recommendation: SG ELC census to continue collecting information about the funded ELC entitlement only.

What about childminders and other providers who are delivering the free ELC entitlement?

There is recognition that childminders can, and are starting to, play a role in the delivery of funded ELC across Scotland, particularly with the expansion to 2 year olds where these younger, potentially more vulnerable children, benefit from this kind of environment. As childminders have seldom (at least routinely) provided the

funded entitlement, this group of providers are outwith the current scope of the SG ELC census. Although this started to change in 2014, use of childminders is still relatively low and they are not yet currently captured in the ELC census. However, it is widely anticipated that with the expansion to 1,140 hours by 2020, this will require an increased role for childminders. Therefore, the omission from the data collection of children receiving their funded entitlement with childminders is likely to result in increasing data gaps over time.

It is recognised that service expansion may require other 'new' delivery models to be in place to meet the demands of increased hours across the sector. Although other such arrangements for ELC provision are not known at this point in time, work is underway to consider what alternatives may be viable and understand how these would work in practice. It is therefore essential that any changes to the ELC collection allows for the capture of information relating to children receiving funded ELC through any and all delivery mechanisms so a complete picture of funded-ELC delivery is obtained. As data providers should hold information for all children for whom they provide ELC funding, regardless of delivery mechanism, the inclusion of these children in the ELC collection would not place additional burden on data providers.

Recommendation: widen reach of SG ELC census so it captures information on children receiving funded entitlement through all delivery mechanisms, including childminders and across mixed models of provision.

What about children who are eligible for ELC, but instead receive alternative services that are more appropriate for their needs?

In some circumstances, ELC is not considered appropriate for all children, particularly those that are younger (i.e. 2 year olds) or more vulnerable (e.g. looked after). These children may instead be in receipt of alternative services, more appropriate to their needs. Although the lack of capture of data on these children may be considered an information gap, it would not be appropriate to include them in a statistical return which focuses on ELC provision if they are not in receipt of this service. In addition, as ELC data providers would not have access to information about children in receipt of other services, it simply would not be possible to capture and provide this information in the context of an ELC data collection.

However, it is recognised that the policy intention of universal access, with priority access for around a quarter of 2 year olds, some of whom may have more individual needs, is still developing and any new data capture plans should be sensitive to this. Further consideration is therefore required as to how to capture information for such children and how this can be used alongside data gathered through the ELC census to provide a holistic picture of children's services. The Strategic Evidence Group has a specific purpose to consider the data and evidence needs across the ELC sector in its entirety and find solutions to addressing these.

Recommendation: ways of capturing information on children with alternative arrangements, based on need, should be explored by the SG Children and Families Analytical Unit.

3.2 Content of the ELC census

The consultation highlighted a list of data items required to manage and monitor ELC in Scotland as we advance towards 1,140 hours. These fall into four categories that are considered in turn in this chapter:

- Those suitable for inclusion in the ELC census
- Those concerned with the capture of teacher information
- Those better suited for collection by another statistical source
- Those that are non-statistical

A number of factors have been taken into consideration when determining their suitability for inclusion. These include: level of demand (obtained through consultation); legislative and reporting requirements; availability of alternative data sources; and ability to provide the information.

3.2.1 Data items suitable for collection via the ELC census

The current census is designed to capture the number of funded registrations with ELC providers. As we move to a more comprehensive offer for state-funded ELC and manage a large scale expansion, it is necessary to understand not just registrations (as this could mask children registered at multiple centres and result in some double counting⁶) but the number of children receiving ELC. The strength of demand for such information was reflected in consultation responses. As individual ELC providers would not be expected to know if a child is receiving funded ELC from another provider, the only way to determine this would be to gather information on an individual child basis. This would enable identification of children across returns (to pick up those registered at more than one setting), something which will become increasingly important if increasing expansion of services and flexibility results in more children receiving ELC from multiple providers. Capture of individual child level data would have the additional benefit of facilitating capture of other data items that would be otherwise difficult to obtain through aggregate level data only.

Recommendation: collect ELC data at individual child level.

For the successful implementation of an individual child level collection, a unique identifier for each child would be required. Possible existing options for consideration are:

⁶ Double count in the current census has been estimated at around 2%.

1. Scottish Candidate Number – would need to be extended downwards to be allocated upon entry to ELC (as opposed to primary, which is the current practice).
2. Community Health Index number – although this would have positive benefits, such as potential to link to health information and better tracking of outcomes associated with ELC in this way, as health information is sensitive the use of this would require careful consideration.
3. Develop a new unique identifier.

Recommendation: explore and consider appropriate unique child identifiers.

The additional benefit to such an identifier is that this would provide the potential to facilitate future development of monitoring of outcomes for children in ELC. Of course, any individual child level collection would require consideration to be given to data protection issues. These are discussed in more detail in section 3.2.5.

On the basis that an individual child level data collection is possible for ELC, the table below outlines the data items recommended for collecting and reporting via the SG ELC census. The table also states the rationale behind these and what further considerations are required before inclusion.

Recommendation: collect the following data items outlined in Table A through the SG ELC census.

Table A: Data items recommended for collection in the SG ELC census

	Data Item	Rationale	New?	Considerations
About settings	Number of settings providing funded ELC	High demand		
	Postcode of setting	High demand		
	Sector of provision	High demand		If need additional variable to pick up type of provision also
	If provide education in Gaelic Medium	Policy requirement		
	Number of children enrolled with funding	High demand		
	Number of free lunches provided by centre	Legislation	NEW	May be difficult to provide. Either measure at setting level (no. provided) or child level (no. receiving or no. registered).
About individual children	Unique child identifier	Data requirement	NEW	To allow for identification of individual children and matching of these across returns
	Child gender		NEW	Not particularly high demand, but information readily available and straightforward to collect
	Child age / Date of birth	High demand		Date of birth readily available and could be used to calculate age. Additional benefit of being used to infer information about start date in relation to eligibility and stage.
	Child home LA / postcode	High demand	NEW	Allow identification of cross-border placements and analysis by home LA as well as LA of setting registered, and SIMD analysis.
	Child home language	High demand		Number with non-English captured currently. Individual child level would enable specific home language to be captured, although there may be quality concerns.
	Child ethnicity	High demand	NEW	Quality concerns likely
	Child disability status	High demand	NEW	Quality concerns likely, particularly if response based on judgement. Could be confused with ASN so must be clear this is different.
	Child Additional Support for Learning (ASN) status	High demand		Changes and better guidance required for more consistent recording.
	If child has a support Plan	High demand		Expansion of categories needed, and clear definitions and guidance required for better data capture.
Children's enrolment	Number of settings child enrolled - funded	Legislation	NEW	
	Sessions child is enrolled - funded	High demand	NEW	Exact definition and requirements to be determined. Could ask for hours/day if data allowed
	Stage enrolled in	High demand	NEW	To be used alongside age to provide more rounded analysis.
	If child enrolled in a setting outwith home LA	Policy requirement	NEW	Captured by postcode of child and setting (no separate data item required)
	Reason 2 year olds eligible	Legislation		

It is recognised that, although some of the new data items for inclusion are already collected and available from data providers, this is not the case for all of them. Those that are available may also need refinement to ensure they are in the correct format and are consistent across providers. Work will therefore be required by data providers, data requesters (i.e. SG) and management information system providers to design, implement and capture any necessary changes or new data items. Although this will create an additional burden initially, this will be outweighed by the benefit of the availability of this data, which consultation has found to be essential for service design, implementation, delivery and monitoring. It is important to ensure that the introduction of new data items in to the SG ELC census does not duplicate work or duplicate information that is already undertaken across the sector.

It will be noted that Table A excludes the collection of information on staff and teachers working in ELC, which is currently collected through the ELC census. The collection of this information is discussed in further detail below.

3.2.2 Collection of ELC teacher data items

Teacher data is currently collected to monitor the SNP's commitment⁷ to ensure each child has access to a teacher in funded ELC. It is also used for national teacher monitoring and teacher workforce planning purposes. Given the importance of ELC teacher data for the national monitoring of teacher numbers, it is required that this still be gathered by Scottish Government.

The school statistics team are responsible for reporting on and publishing⁸ teacher numbers, they currently collect all necessary information for teachers in publicly funded primary, secondary and special schools (as well as some centrally employed ELC teachers⁹). They also undertake the work to cross-reference teachers in schools with those in ELC to check entries for teachers working across both sectors and ensure robustness between the two collections. It is therefore advisable to move the collection of ELC teacher data to the school statistics team, and for this to be incorporated in to their current data capture processes. Although this would increase the scope of the staff census, the additional burden would be minimal due to this being easily absorbed in to the current data capture process (in fact, at the moment, data providers have to undertake work to exclude ELC data from their return). Additionally, efficiencies may also be introduced through the capture of teacher information across sectors being consistent, making the cross-checking process easier and quicker.

Recommendation: ELC teacher data to be collected by the SG schools statistics team (via the existing data capture process).

⁷ In 2007 and 2011, the SNP manifestos included commitments to deliver access to a fully qualified nursery teacher for every nursery age child,

⁸ Data provided by local authorities as part of annual staff census collection.

⁹ Centrally employed home visiting ELC teachers employed by the local authority.

A limitation of this approach is that the school staff census can only gather information about teachers employed by the local authority. This is because the information is gathered directly from local authorities who do not have information available for staff who are employed outwith their own settings. In some cases, local authorities employ ELC teaching staff to work in ELC partner provider settings; details of these teachers would still be available through the census collection. However, for any teachers who are not employed by the local authority, but instead directly by a partner provider setting (approximately 110 FTE teachers in Scotland out of a total of around 14,000), they would not be included in the census return.

Although excluding teachers not employed by local authorities would create inconsistencies in reporting with previous years and not allow for a full picture of teachers within ELC to be obtained via the ELC census, other data collections exist where this information can be collected. The Care Inspectorate annual returns, for example, gather information about (teaching and non-teaching) staff within ELC and there is scope to explore using such collections to address the information gap.

Recommendation: explore alternative sources to determine if suitable to report FTE teachers within non-LA ELC settings.

It has been demonstrated that the delivery of high quality early learning and childcare is dependent on appropriately qualified staff, and not solely on teachers. This has led to the provision of degree level qualifications in childcare practice in Scotland. Therefore, it is equally important to capture data about level of qualification of all staff and not just teachers. Furthermore, ministers announced in Programme for Government, 2016, that an additional graduate will be placed in nurseries in the most deprived areas and funding has been provided to local authorities to support this commitment. Data collection therefore needs to be widened to include information about all appropriate qualifications of staff, and specifically the number of graduates in settings in more deprived areas. Section 3.2.3 discusses in further detail the most appropriate way for gathering and reporting this information.

3.2.3 Data items better suited to other statistical collections

The consultation highlighted that there is a considerable burden placed on data providers, with them having to provide some of the same information multiple times for different collections. A streamlining working group was set up to look at ways of reducing burden by removing duplication across existing information requests where possible and agreeing collectively how to respond to emerging needs so this does not introduce further duplication.

Some duplication is unavoidable, for example, number of children registered / number of registrations and ELC context are often difficult to remove from individual collections as they are fundamental reporting requirements needed at the same point

in time as the other data that is collected. They may also relate to different groups of children e.g. Care Inspectorate collects data of for all children registered with day care of children services (only some of which are funded ELC), but Scottish Government collects information about funded registrations only.

However, there is potential to remove duplication through streamlining the collection of staffing data, which was identified as the biggest area of overlap. As discussed in section 3.2.2, teacher data needs to continue to be collected by the Scottish Government given the importance of national teacher number monitoring and workforce planning, but there is not the same requirement for non-teaching staff. As mentioned earlier, there is now a requirement for ELC centres in the most deprived areas to have an additional graduate. In addition, consultation findings highlighted demand for other staff data such as length of time in post. These additional reporting requirements could only be satisfied by an expansion of the current ELC census which would largely duplicate information which is already collected by other organisations. The Care Inspectorate's (CI) annual return gathers information about daycare of children's services (funded and non-funded) as at 31 December each year. This return captures in-depth information about each member of staff within a service and therefore has a much wider range of staffing information than the current SG data. Additionally, the Scottish Social Services Council (SSSC) holds real-time information for all staff registered with them to work in daycare of children's service, and so is another potential source of staffing information.

It is recommended that the staffing data from the ELC census be removed and replaced by existing data sources. However, before a definite decision can be made to entirely rely on these data sources, the quality and suitability of this information would have to be assessed. It is likely existing collections and management information systems would need to be adapted to fully meet user requirements and address gaps highlighted by the consultation, and so the ability to respond to this would also require consideration. Although initial work with CI and SSSC has indicated that staffing data requirements are able to be accommodated, more thorough exploration is needed. It is also recognised that changes to collections would have time and resource implications for these organisations.

Recommendation: data on staff (hours worked, staff qualifications, length of time in post and additional graduate commitment) to be collected by Care Inspectorate and/or Scottish Social Services Council, with work being done to ensure this is of high enough quality to be suitable for use in management and monitoring policy and practice.

3.2.4 Non-statistical data

The consultation identified a number of data and information gaps that are less about management and operational information and more about perceptions, attitudes and outcomes for children, parents and the workforce. Examples include: how different models of delivery are being used; parents' perceptions of ELC provision; and the

impact of ELC on (child and/or parent) outcomes. (A full list of the requested data items can be found in Annex C of the ELC Data Consultation Findings document¹⁰.)

As the ELC census is a statistical data collection only, this would not be an appropriate vehicle for collecting such information. As this also falls under the wider remit of data and evidence, these gaps are for consideration beyond statistical collections.

Recommendation: Children and families Analytical Unit to consider how best to address evidence gaps.

3.2.5 Overarching requirements for data collection

A strong theme emerging from the consultation and site visits was for clarity on definitions, which would ensure consistency across the sector. These are vital for ensuring that data captured from different sources / settings is recorded and reported in the same way so that comparisons can be made across and between geographical areas.

Guidance materials are currently provided for completing the SG ELC census, with these being reviewed and updated each year. However, there is evidence that these aren't always used, either because data providers aren't aware of them, or find they are not quite fit for their purposes. It would be advisable to give further consideration to how to raise greater awareness of the guidance materials and make them more accessible. In addition, feedback has also suggested that terminology and definitions can differ locally and can also be open to interpretation, lending themselves to inconsistencies in reporting. Some of the proposed new data items could exacerbate the issue. Therefore, it will be essential to have input from across the sector to both review the existing guidance and create guidance for new data items to ensure this is as clear and useful as possible

Recommendation: draw on expertise across the ELC sector to review and provide clear and consistent data definitions for each data item.

If SG were to start capturing information on individual children who are accessing ELC, this would result in more personal data being collected than is currently captured. It should be noted that local authorities already hold this information, and so no additional work would be required to set this up, but it would require compliance from data providers to provide SG with access to such information. The SG would never request any name or address (other than postcode) information, with a unique identifier being used for each child. Personal data requested would

¹⁰ <http://www.gov.scot/Topics/Statistics/Browse/Children/scotstat/ELCConsult2015/ELCConsultPDF>

largely replicate that which is collected for school pupils and the process for data transfer would be highly secure. However, given there would be an increased amount of personal data (e.g. gender, date of birth), and this in turn would enhance the potential for data linkage with other information, any privacy and data access implications would have to be considered in detail. These would include how to obtain informed consent for gathering and publishing data, as well as clearly stating the purpose(s) for which it is to be used. Work would also be required to ensure the data collection was compliant with new General Data Protection Regulation Guidelines.

Recommendation: consider how best to address privacy and data access implications of an individual level collection.

4. Collection method

Most of the data items recommended for inclusion in the reviewed Early Learning and Childcare (ELC) census are generally already readily available at individual child level from local authority management information systems. For children in local authority settings, information is entered directly in to SEEMiS¹¹. For children in partner provider settings the use of data recording systems varies across Scotland, but a large number use the SEEMiS based Nursery Application Management System (NAMS) module. These systems have been designed to store information in a way that assists the running of ELC services within each local authority, and therefore may not be appropriate for reporting specific statistical data items.

A simpler approach to data collection may therefore be to extract information directly from existing local authority management information systems (whether that be SEEMiS, NAMS or something else). This approach would replicate the established data collection process used for the school pupil and staff census collections. This would result in data only having to be collected from 32 central points rather than the 2,500 individual ELC providers as per the current method. It would also mean that ELC settings would be required to provide data only once i.e. to the local authority (which is already a requirement). This would completely remove the need for ELC settings to also respond to an SG census return, eliminating the additional burden that this requires. This would bring efficiency savings to local authorities too as they would not need to invest time in managing settings to provide census returns, freeing up time and capacity to concentrate on verifying the data held on their own systems. The quality assurance process would therefore be limited to checking the information that is held on management information systems (which is already required), significantly reducing the burden on, and workload of, local authority staff.

However, a decision to collect data directly from existing management information systems is not straightforward. Particular concerns that have been raised with the use of existing local authority systems for extracting ELC data are:

- restrictions with access and coverage (some systems, namely SEEMiS, are only available to local authority ELC providers as well as local authorities themselves, so do not cover partnership providers, childminders etc.);
- the suitability for capturing specific ELC data as they often lack the ability to capture the level of detail needed;
- Lack of flexibility and inability to make changes to allow user need to be better met, and to do so in a timely manner. It has been noted that with SEEMiS, the ability to make changes can be hindered by the requirement for agreement across all local authorities before implementation.

Given the limitations of existing management information systems and the requirement for specific ELC data, the idea of a bespoke system for the electronic data capture and provision of ELC information has been suggested. However, this is

¹¹ The electronic management information system used to capture data for local authority managed education establishments. Currently in use by all 32 local authorities across Scotland, although local authorities can change provider at any time.

not ideal as it could potentially create more work for local authorities, who would have to use one system for ELC and another for schools. In addition, the time and cost implications of creating such a system would be considerable, particularly in the short term. Therefore, given that data requirements can largely be met by extraction from existing management information systems currently in use, adapting these would be the most cost-effective solution. However, there is recognition that changes required to fully meet data needs may require a substantial amount of work by SG, system providers and data providers to ensure these can be implemented effectively.

As a starting point, an audit of ELC data currently available is required to assess the suitability of existing systems and the amount of work required to make required changes. The consultation highlighted the need for any data capture system to include an element of flexibility so this could adapt to changing data requirements over time.

Recommendation: investigate suitability of using existing local authority management information systems to extract ELC census data. Specific consideration to be given to:

- ability to capture data for entire population of funded ELC children and all data items required***
- quality and completeness of information available***
- ability to make timely changes to systems to respond to emerging needs as policy develops***

5. Timing

Entry to Early Learning and Childcare (ELC) is phased across the year for 3 year olds (and eligible 2 year old), based on a child's birthday. This means that the current timing of the census (September) allows only information to be gathered for those eligible to attend in term 1 i.e. only half of those eligible across the year. Consultation findings supported anecdotal feedback that data would be most useful if collected at term 3 once all children are registered. This complete picture of service delivery is essential for planning and monitoring purposes.

Recommendation: move the collection of child level ELC data to term 3.

To note, the recommendation to collect ELC teacher data through the schools census would mean this information would still be collected at term 1. As ELC teacher data and ELC child data are generally used separately, and for their own specific purposes, collecting these separately should have no adverse implications for data users. Local authority data contacts are often the same for the ELC and schools data collections and having these returns due at the same time can make it challenging for local authorities to manage resource to accommodate the competing deadlines. Therefore, it is hoped that separating these collections will make it easier to dedicate adequate resource to each collection.

The vast majority of consultation responses expressed a preference for data collection and reporting to be kept to an annual basis. Interest was low in data being available both more and less frequently.

Recommendation: keep collection of ELC data to annual frequency.

6. Conclusion and next steps

Scotland's ambition is for an ELC sector that is high quality, agile, flexible, accessible and affordable. To manage and monitor this sector, we need data and evidence that is complementary in its ambition. The consultation processes captured that ambition and the recommendations set out in this paper demonstrate what changes are required to realise that ambition, particularly for the Early Learning and Childcare (ELC) census but for other stakeholders and evidence providers too. A full list of recommendations is provided in Annex A.

The next steps will be for Scottish Government and delivery partners to consider the recommendations, decide how to respond to these, and set out their priorities for taking these forward.

Annex A: List of recommendations

Recommendation 1	SG ELC census to continue collecting information about the funded ELC entitlement only.
Recommendation 2	Widen reach of SG ELC census so it captures information on children receiving funded entitlement through all delivery mechanisms, including childminders.
Recommendation 3	Ways of capturing information on children with alternative arrangements, based on need, should be explored by the Children and Families Analytical Unit.
Recommendation 4	Collect ELC data at individual child level.
Recommendation 5	Explore and consider appropriate unique child identifiers.
Recommendation 6	Collect the following data items outlined in Table A through the SG ELC census.
Recommendation 7	ELC teacher data to be collected by the SG schools statistics team (via the existing data capture process).
Recommendation 8	Explore alternative sources to determine if suitable to report FTE teachers within non-LA ELC settings.
Recommendation 9	Data on staff (hours worked, staff qualifications, length of time in post) to be collected by Care Inspectorate and/or Scottish Social Services Council, with work being done to ensure this is of high enough quality to be suitable for use in management and monitoring policy (including additional graduate commitment) and practice.
Recommendation 10	Children and Families Analytical Unit to consider how best to address evidence gaps.
Recommendation 11	Draw on expertise across the ELC sector to review and provide clear and consistent data definitions for each data item.
Recommendation 12	Consider how best to address privacy and data access implications of an individual level collection.
Recommendation 13	Investigate suitability of using existing local authority management information systems to extract ELC census data. Specific consideration to be given to: <ul style="list-style-type: none"> - ability to capture data for entire population of funded ELC children and all data items required - quality and completeness of information available - ability to make timely changes to systems to respond to emerging needs as policy develops
Recommendation 14	Move the collection of child level ELC data to term 3.
Recommendation 15	Keep collection of ELC data to annual frequency.