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IDENTIFICATION AND INTERVENTION FOR SPEECH, LANGUAGE AND COMMUNICATION IN THE EARLY YEARS:

A summary for the Early Outcomes Fund project
in Leicester, Derby & Nottingham cities

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1. EXECUTIVE SUMMARY

This report was commissioned as part of the early outcome fund project across Leicester, Derby and Nottingham cities.

During the course of the project which ran from April 2019 to June 2020, the unprecedented COVID-19 pandemic caused significant and long lasting disruption and change to every aspect of life in the UK and around the world.

The impact for children and young people in general and those vulnerable or presenting with speech, language and communication needs in particular will continue to emerge long after the conclusion of the project.

The information presented in this report necessarily describes identification methodologies and interventions that are likely to need to be adapted in their delivery for some time to come and some which may never be entirely appropriate in the future. However, the **outcomes focus** throughout the evaluation provides a mechanism for reviewing the information drawn from past research in the future context.

The outcomes of needing to be able to identify those communities where children may be at higher risk of SLCN, those with transient and those with persistent SLCN remain appropriate as are the outcomes around enabling all those in children's lives, parents and carers, the wider workforce, as well as specialists, to provide intervention that is functional and in most appropriate, (and realistic) context to effect change.

None of the reported research in this paper will have been carried out within the constraints of social distancing, home learning and school and setting closures. Whilst these are not permanent conditions, a time frame of six months or a year in the life of a pre-schooler is a significant window. Therefore, the strategic decisions made by the three cities in terms of identification and interventions need to keep the outcomes which stand the test of time and circumstance at the centre and build the resilience in the system to take account of immediate and longer term context.



Identification recommendations within Leicester, Derby and Nottingham Cities

The best information available at the time of writing suggests that the Early Language Identification Measure (ELIM) due to be published late 2020 will provide a useful addition to the ASQ3 currently used by Health Visitors as part of the national surveillance programme for two-year olds.

However, Public Health England have stated that the ELIM will not be mandatory and therefore Local Authority and Health Partners in each area will be free to choose whether to adopt the ELIM, introduce another identification measure for SLCN or continue with their current arrangements. Prof Law has indicated that interventions to follow on from the ELIM are also being developed but it is not clear whether these would be universal advice and strategies for families or more targeted interventions delivered by the early years workforce in some way.

There has also been mention of the possibility of the ELIM being used as the basis of the integrated early years review which would make it more central to the processes around identification in Local Authorities but as yet there is no clear guidance on this matter.

The Annex to this paper which presents links to a wide set of identification tools that have been evaluated in the UK and beyond, provides a comprehensive set from which to draw. Table 1, above, provides a 'short-list' summary of those most commonly used that all have merits. Additionally, there will be the new ELIM at some point during 2020.

The key conclusion is that in the absence of a mandatory set of processes beyond the ASQ3, each Local Authority will need to decide with partners what is going to best meet the needs of the population.

This EOF project has used the Balanced System® as a common strategic framework and therefore meeting Identification Strand **Outcomes** at universal, targeted and specialist levels may help in framing the **identification strategy** for the three cities as opposed to seeking a particular screening, identification or assessment **input**.

The following may prove useful in this process:

- 1.** Ensuring basic knowledge for all practitioners around early speech, language and communication expected levels and milestones
- 2.** Ensuring basic knowledge among all practitioners around the key risk factors for a child in the early years in respect of SLCN
- 3.** Taking an outcomes focused approach to identification – having local outcomes statements indicating the shared responsibility for identification and requiring early years settings and practitioners to deploy identification checklists, processes and tools to observe, measure and track children’s SLC
- 4.** Taking an outcomes focused approach to the ‘so what?’ of identification – that is – that there must be a range of universal and targeted interventions available for all those who are identified as having any level of need – identification with no follow up is the worst possible scenario
- 5.** LAs may choose to recommend one preferred tool. In this case the important factor will be the sensitivity and specificity to the population served and the link to the appropriate follow up intervention for those identified as needing additional support



Intervention recommendations within Leicester, Derby and Nottingham Cities

As with the conclusion to the identification section of this paper, using the Balanced System® Outcome descriptors for the Intervention Strand may prove a useful way of framing the choice of a suite of intervention methodologies.



IN1. UNIVERSAL Homes, settings and schools are supported to develop the language and communication skills of all children and young people through language enrichment and supportive activities.



IN2. TARGETED Children and young people benefiting from targeted interventions will have access to evidence based targeted interventions to develop core speech, language and communication skills delivered in the **most appropriate functional context**. These might include 1:1 and / or small group interventions that are typically designed by specialist practitioners and delivered by those with appropriate training.



IN3. SPECIALIST Children and young people needing specialist intervention for their SLCN receive appropriate and timely provision in the most functionally appropriate context for their needs. Progress measures will include activity, participation and well-being goals in addition to goals relating to their core SLC impairment.

In choosing a suite of interventions to recommend as part of this EOF project the following considerations should be taken into account:

1. To achieve the universal intervention outcomes a programme of professional development, training and coaching, recommended resources for supporting speech, language and communication and confidence building amongst parents and early years practitioners will be key activities.

These will almost certainly be achieved through developing and enhancing existing workforce activity such as health visitor support and early years practitioner confidence in supporting families. The Pathway for SLCN being developed as part of this EOF project should provide the necessary links to information and accessible resources for those conversations.

2. To achieve the targeted outcome, the three cities should consider not only the **choice** of targeted interventions but the **process** by which they will be established and embedded in the early years community of practice.
3. The support of specialist practitioners is key and **training of the wider workforce alone cannot be assumed to result in impact on children** through embedded targeted interventions consistently offered.
4. Practitioners' confidence in the chosen interventions is also paramount. If a particular programme is chosen at a Local Authority level without the confidence of the early years sector the process issues of delivery and impact will be problematic.
5. As with the choices for identification, each LA will need to make a considered decision based on the context including the availability of a specialist offer to support practitioners.

2.

INTRODUCTION

The Early Outcomes Fund project across Leicester, Derby and Nottingham Cities includes a number of strands of work all contributing to the overall outcome of improving outcomes for children in the Early Years across the three cities.

As part of this work, Better Communication CIC were asked to provide an overview of the widely used identification and intervention tools and to facilitate an options appraisal within the project as a whole and within each City with its unique context that would allow City Leads to make decisions regarding endorsement or adoption of any particular approaches or tools which in turn would influence plans for training and workforce development in the Cities.

A child's ability to communicate in the Early Years is widely recognised as being a predictor of life chances. Children who do not develop their speech, language and communication skills as expected are less likely to meet their full potential.

Law et al (2017) in a paper commissioned by the Early Intervention Foundation¹ highlight that a wide body of evidence shows that children's early language capabilities are highly associated with later academic, social, emotional and behavioural outcomes stating that language in early childhood impacts on school readiness at 5 and also in longer term academic attainment; employment; mental well-being and reduced likelihood of engaging in criminal behaviour.

Gascoigne & Gross (2018) bring together evidence of the impact of poor language and communication skills not only on life chances but also under-identification, the interaction between disadvantage and poor language and communication, readiness for school, and beyond school into employment using datasets from 2016 – 2017 to illustrate the potential impact of these issues².

This paper has been asked to focus on providing a summary that will allow all three Local Authorities to take a view as to their approach to identification and intervention for children in the early years. Any approach has to include existing national initiatives such as the Health Visitor mandatory check and the Integrated Early Years Review.



¹<https://www.eif.org.uk/report/language-as-a-child-wellbeing-indicator>

²<http://www.thecommunicationtrust.org.uk/resources/resources/resources-for-practitioners/talking-about-a-generation/>

Key drivers for considering these elements include:

- Evidence from other projects in one of the partner cities of under-identification by the HV screen suggesting better identification processes are needed
- A lack of confidence amongst early years practitioners and families in knowing when to be concerned about a child's SLC
- A lack of strategy in the interventions offered by early years practitioners to support speech, language and communication development
- Very different and disparate commissioning of support for children with speech, language and communication needs across all three cities
- A desire to commission a consistent training and workforce development offer in order to build the workforce skills and competence as well as enhance the early learning environments in which they spend time



3. IDENTIFICATION

This report will outline the methodological issues around identification from national and academic perspectives as well as locally sourced data. A directory of identification tools has been collated which provides a comprehensive overview of identification processes and tools and a summary table of those most commonly used. The debate around the cost – benefit analysis of screening as surveillance vs identification is also presented.

Prevalence

Evidence base surrounding the prevalence of speech, language and communication needs and the risk factors associated with late or delayed speech and language development continues to develop. There are broadly two approaches to calculating the predicted need in a given population: a diagnostic category approach and a population based approach.

The Bercow Review reporting in 2008, commissioned a team of researchers to review the literature across both approaches and the prevalence figures which emerged suggested that within any given area, 1% of children entering school would have severe and pervasive speech, language and communication needs usually as part of a complex profile of need, 7% would have primary speech and language needs of a significant nature including those with, in the terminology of the day, specific language impairment, whilst up to 50% of children at

school entry in the most disadvantaged areas of the UK could be expected to have measurable, identifiable SLCN though not all requiring speech and language therapy as opposed to improved opportunities for language development³.

The SCALES study⁴ in 2016 reported on the first cohort of a longitudinal study in Surrey which identified that 7.58% of the school entry population presented with a developmental language disorder of unknown origin (ie not linked to any other developmental or disability issues). Alongside the SCALES study an international collaborative co-ordinated by Prof Dorothy Bishop redefined the terminology around those children with a primary speech, language and communication need and the term 'developmental language disorder' (DLD) came into use.⁵ Despite these redefinitions over time two key prevalence rates remain consistent.

³ Law, J., et al. in Bercow, J. (2008) *The Bercow Review*. HMSO London https://dera.ioe.ac.uk/8405/7/7771-dcsf-bercow_Redacted.pdf

⁴ Norbury, C. F., Gooch, D., Wray, C., Baird, G., Charman, T., Simonoff, E., Vamvakas, G. and Pickles, A. (2016). The impact of nonverbal ability on prevalence and clinical presentation of language disorder: evidence from a population study. *J Child Psychol Psychiatr*, 57: 1247–1257. doi:10.1111/jcpp.12573

⁵ Bishop et al (2016) CATALISE: A Multinational and Multidisciplinary Delphi Consensus Study. *Identifying Language Impairments in Children* <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0158753>



Firstly that we can expect a percentage in the region of 7% - 10% of children at school entry to have primary speech, language and communication needs in any population regardless of demographic and secondly that in areas of significant economic disadvantage the percentage of children entering school with significant needs over and above the 7-10% that might be expected in any population can be as high as 50% and in local area reports from teachers, potentially higher.

In the Early Outcomes Fund project within Leicester, Derby and Nottingham Cities, the Balanced System® prediction of SLCN tool has been used which takes account of the population size, the demographic and the evidence base to produce indicative percentages and figures at ward level tailored to the demographic.

This suggests the following potential SLCN in each of the three Cities. In each case the table shows the predicted need as a % in the 0-4 and 5-9 populations - so the likelihood of SLCN in the early years and up to 9 whilst the map shows the predicted number (so an interaction between the population and the % across the whole 0-18 age range).



Identification:

LEICESTER



Figure 1: Map of Leicester by ward showing predicted SLCN numbers

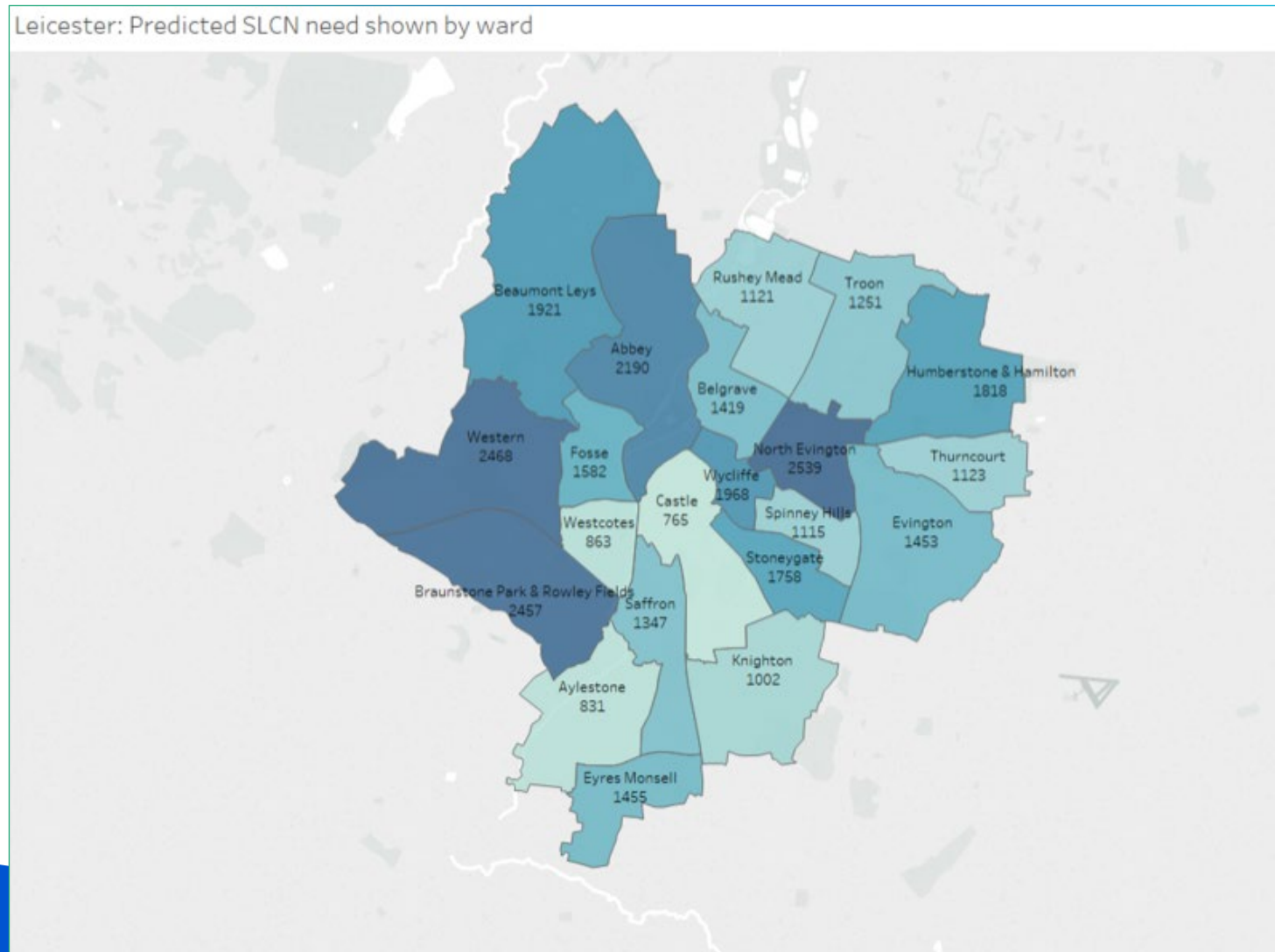


Figure 2: Predicted SLCN for Leicester by ward showing predicted % for 0-4 and 5-9 years

	0-4 years	5-9 years
Abbey	54%	53%
Aylestone	39%	40%
Beaumont Leys	47%	48%
Belgrave	47%	47%
Braunstone Park & Rowley Fields	52%	55%
Castle	47%	45%
Evington	45%	43%
Eyres Monsell	59%	60%
Fosse	55%	54%
Humberstone & Hamilton	39%	42%
Knighton	35%	34%
North Evington	53%	52%
Rushey Mead	38%	41%
Saffron	55%	55%
Spinney Hills	39%	37%
Stoneygate	38%	39%
Thurncourt	49%	49%
Troon	43%	41%
Westcotes	42%	45%
Western	51%	52%
Wycliffe	52%	52%



Identification:

DERBY



Derby City Council



Figure 3: Map of Derby by ward showing predicted SLCN numbers

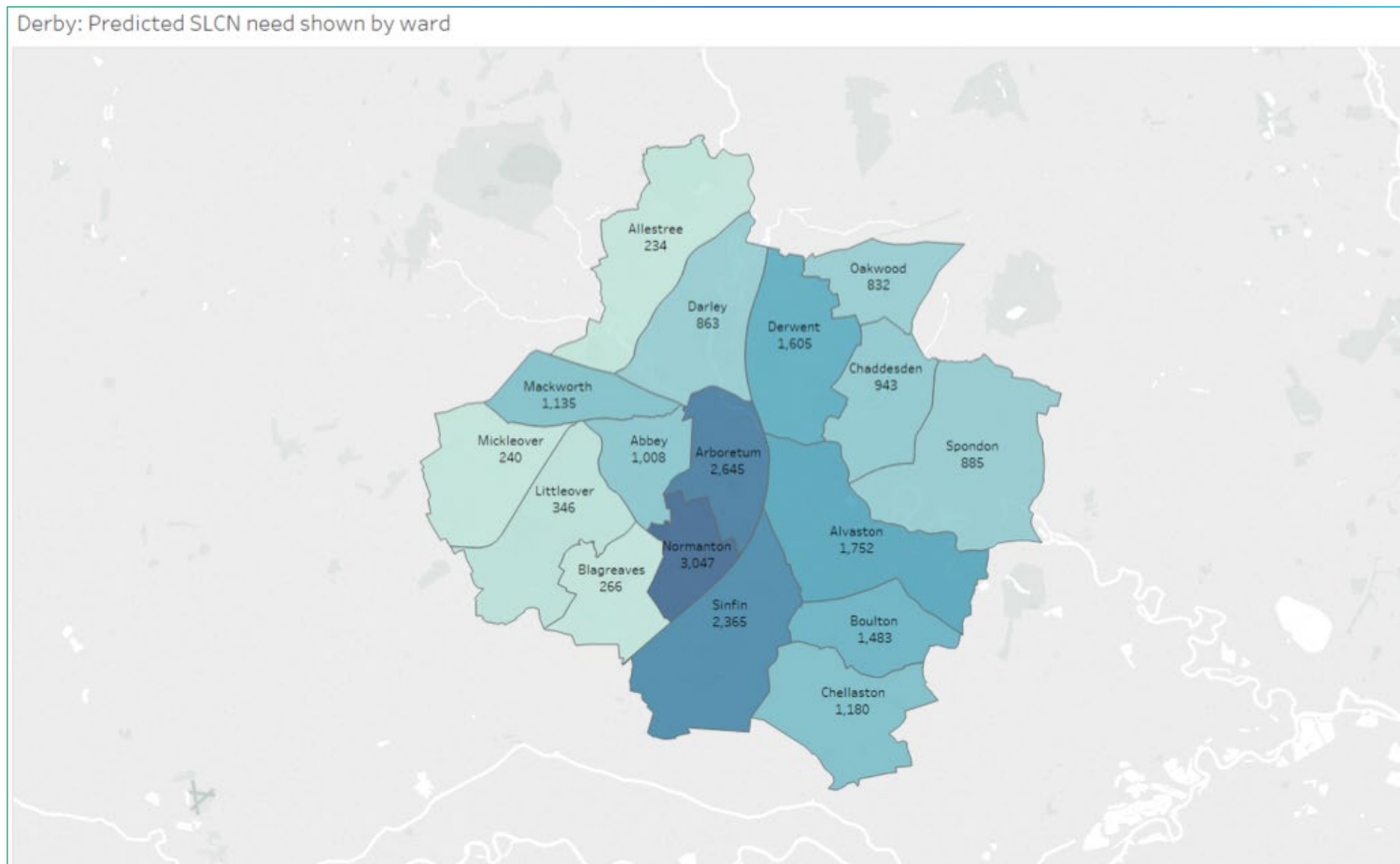


Figure 4: Predicted SLCN for Derby by ward showing predicted % for 0-4 and 5-9 years

	0-4 years	5-9 years
Abbey	40%	39%
Allestree	8%	8%
Alvaston	52%	55%
Arboretum	60%	64%
Blagreaves	9%	8%
Boulton	56%	57%
Chaddesden	39%	37%
Chellaston	40%	38%
Darley	43%	45%
Derwent	53%	50%
Littleover	9%	9%
Mackworth	43%	44%
Mickleover	9%	9%
Normanton	61%	61%
Oakwood	40%	38%
Sinfin	60%	60%
Spondon	48%	48%



Identification:

NOTTINGHAM⁶



⁶ The wards used in this analysis are the electoral wards that were in operation pre-April 2019. In April 2019 there was a significant change in the organisation of Nottingham electoral wards, which lead to almost all wards being changed although the total number of wards remained constant at 20.



Figure 5: Map of Nottingham by ward showing predicted SLCN numbers

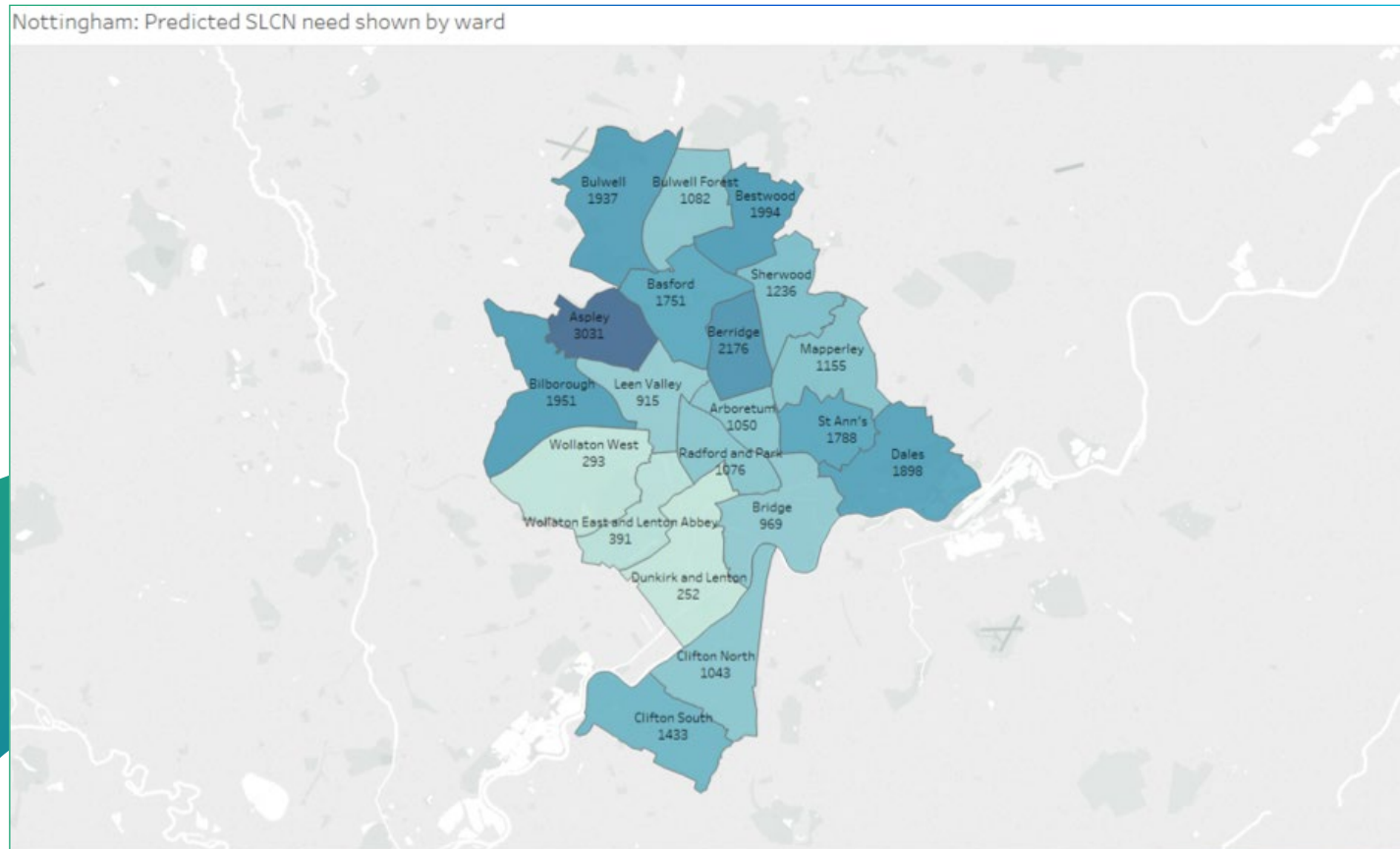


Figure 6: Predicted SLCN for Nottingham by ward showing predicted % for 0-4 and 5-9 years

	0-4 years	5-9 years
Arboretum	55%	53%
Aspley	57%	57%
Basford	54%	52%
Berridge	54%	51%
Bestwood	53%	54%
Billborough	57%	55%
Bridge	46%	48%
Bulwell	56%	57%
Bulwell Forest	49%	49%
Clifton North	45%	49%
Clifton South	57%	55%
Dales	51%	54%
Dunkirk and Lenton	34%	44%
Leen Valley	36%	36%
Mapperley	42%	43%
Radford and Park	46%	43%
Sherwood	47%	47%
St Ann's	53%	54%
Wollaton East and Lenton Abbey	46%	34%
Wollaton West	8%	8%



Identification and under-identification

Despite the high levels of prevalence predicted nationally and in the three cities related to this project, it is widely documented that SLCN is under-identified. The Bercow 10 Years On⁷ report suggests that more than half of young children do not have their SLC needs identified and that this may be in part due to insufficient knowledge and skills in the workforce.

The report highlights the importance of all professionals working with children (GPs, health visitors, early years and school-based staff) knowing and recognising the early signs of SLCN and includes information from a Communication Trust workforce survey⁸ showing that fewer than half of respondents felt the expertise of the wider workforce in identifying and supporting children and young people's speech, language and communication was 'good' or 'excellent'.

The Bercow 10 Years On report highlights several factors impacting on under identification of the most vulnerable children.

The report recommends identification of SLCN as part of mandatory systems as well as transformation of SLT services that have non-attendance policies that result in the most vulnerable children not accessing services that can identify need and consequently not receiving appropriate advice and support. Finally, the report also suggests that tracking and sharing data from early years to school to other services is a crucial mechanism that needs to be developed.

⁷ Bercow: Ten Years On. An independent review of provision for children and young people with speech, language and communication needs in England. ICAN & RCSLT 2018

⁸ Professional development in speech, language and communication: Findings from a national survey, The Communication Trust 2017



All of these factors are addressed as part of the Early Outcomes Fund Project for Leicester, Derby and Nottingham Cities. In looking at other local datasets, the impact of potential under-identification of SLCN can be implied from the local EYFSP data for the cities.

This shows significant numbers of children do not achieve expected levels at the end of the Early Years Foundation Stage for Communication and Language and Literacy, despite many provisions being judged good or outstanding in their practice. This suggests core SLCN irrespective of the provision available.

Furthermore, when looking at the same cohort using the Balanced System® prediction of need calculation, higher percentages of SLCN are predicted than those not achieving the expected level in Communication and Language and Literacy. This observation could be attributed to a number of factors including the possibility that practice in the early years is ameliorating the predicted need, the possibility that the predicted need is estimating above the actual need, the possibility that some children being identified as having a 'good level of development' in fact do have unidentified SLCN or SLCN that have yet to emerge.



Figure 7: Number of children who did not achieve expected levels in Communication and Language and Literacy 2019⁹

	Total Children		Girls		Boys	
	%	Count	%	Count	%	Count
Derby	28.6%	932	21.0%	341	36.1%	590
Nottingham	32.8%	1226	25.4%	470	40.1%	757
Leicester	31.8%	1496	26.2%	591	37.0%	906

Figure 8: Predicted need in the same EYFSP cohort¹⁰

	Total Children	
	%	Count
Derby	43%	1391
Nottingham	49%	1830
Leicester	47%	2219

⁹ <https://www.gov.uk/government/statistics/early-years-foundation-stage-profile-results-2018-to-2019>

¹⁰ Using the Balanced System® prediction of need calculations



Identification vs screening vs assessment

These three terms are widely used and yet mean quite different processes with different implications for how services are configured to meet the needs of children and young people within a given population. Some simple definitions are drawn from various sources:

- **Identification** of needs is a process of identifying needs in a targeted population that might include a number of strategies including the use of specific tools but guided by a set of principles. It is not usually conducted with a whole cohort without a specific factor indicating that this is appropriate.
- **“Screening** is the process of identifying healthy people who may be at increased risk of disease or condition. Screening refers to the use of simple tests across an apparently healthy population in order to identify individuals who have risk factors or early stages of disease, but do not yet have symptoms¹¹” (WHO). So screening in the purest form is a universal offer that everyone accesses with no specific factors guiding the process.
- **Assessment** is defined as “the act of judging or deciding the amount, value, quality, or importance of something, or the judgment or decision that is made”¹². So in the context of speech, language and communication needs, assessment would be the process by which quite detailed judgements are made about the level of SLCN and the appropriate response.

Identification therefore might include screening or assessment or indeed be made up of a number of other processes including use of professional practitioner judgement and parental concern measures.

¹¹ <https://www.gov.uk/guidance/nhs-population-screening-explained>

¹² <https://dictionary.cambridge.org/dictionary/english/assessment>



Screening - the debate

Screening programmes that require a whole population group or cohort to be subject of a simple process to determine their potential risk of a problem are used in a range of areas of public service.

For example, in the UK, the newborn hearing screening programme tests every newborn baby for congenital hearing loss in order to immediately offer the appropriate support and ensure that any children with identified deafness at birth are provided with a range of potential options including cochlear implants which require surgery and long term care from a multi-disciplinary team.

There are a wide range of tools that exist for assessing children's language development. These include both comprehensive psychological assessments and short-form screening instruments. Psychological assessments incorporate aspects of child language in their battery of measures whereas the short-form screening instruments are intended to identify initial language problems.

Many tools are 'norm referenced', meaning that they have been standardised against a population average as a point of comparison for an individual child's score. However, they have often not been standardised on British populations, meaning that their accuracy within the UK may be limited. Furthermore, most do not take account of children growing up in linguistically diverse homes.

Screening exists to identify children whose language skills are below what would be expected for their age - they are not appropriate for diagnosing specific language disorders. Screening can take place through direct processes that make use of a specific instrument or indirect processes that include parental reports or observations made by a practitioner. Indirect processes are advantageous in that they provide a practical means of identifying children with potential problems and referring them on to additional services. However, they are reliant on the judgment of the parent or practitioner, which is likely to be subjective and prone to inaccuracies.



Direct screening measures do have the potential to provide population-level information on the prevalence of language difficulties in a way that is consistent and trackable over time. However, there can be both practical and psychometric drawbacks that need to be considered.

Practical issues include factors affecting administration, such as who will administer the test and analyse the data. Psychometric issues include those pertaining to their precision and accuracy. Accuracy is most often understood in terms of a measure's sensitivity and specificity. Sensitivity describes the extent to which a screening tool can reliably identify children with a diagnosable language problem. Specificity determines the extent to which a tool reliably identifies children without a language problem. Greater sensitivity increases the likelihood that children with language problems will be identified.

However, it also increases the rate of 'false positives', meaning that some children without language problems will be identified as requiring support. This has practical implications for how services respond to language problems identified through screening.

The majority of screening instruments lack the sensitivity and specificity to accurately identify child language problems at the individual level. Prof Courtenay Norbury has summarised the 'not to screen' view in a blog which pulls together these arguments¹³. Her particular interest is the identification of Development Language Disorder (DLD), which is a significant part of broader Speech, Language and Communication Needs (SLCN). The recent multinational and multidisciplinary Delphi consensus study 'Criteria and Terminology Applied to Language Impairments: Synthesising the Evidence' (Catalise)¹⁴ recommended that the term 'Developmental Language Disorder' be used to describe children with the most severe language difficulties. There is ongoing debate as to the best methods of assessment for DLD but the consensus is that children with DLD are not reliably identified in the Early Years.

There have been many calls for a comprehensive screening programme for speech, language and communication needs at critical points in the early years, most recently in the Bercow Ten Years On report outlined above. However, academics are cautious about supporting screening as opposed to taking an identification approach with some citing evidence from the Early Language in Victoria Study (ELVS), a longitudinal study of children born in Victoria, Australia.¹⁵

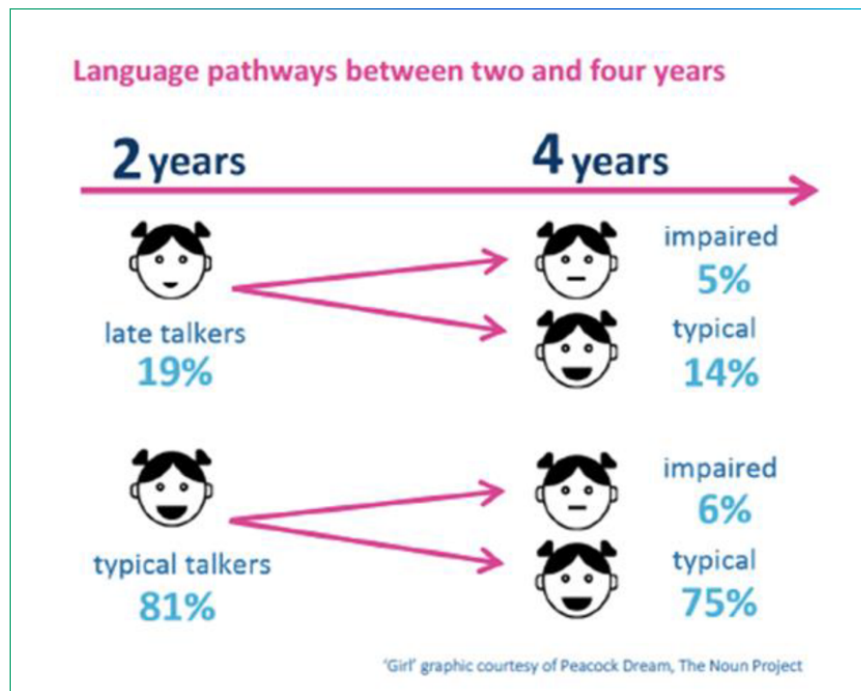
¹³ <http://www.lilac-lab.org/news-post/to-screen-or-not-to-screen-important-factors-to-consider/>

¹⁴ Bishop D V, Snowling M J, Thompson P A, Greenhalgh T. CATALISE: A Multinational and Multidisciplinary Delphi Consensus Study. Identifying Language Impairments in Children. <https://www.mcri.edu.au/research/projects/early-language-victoria-study-elvs>

¹⁵ <https://www.mcri.edu.au/research/projects/early-language-victoria-study-elvs>



Figure 9: Figures from ELVS study (Reilley, S., McKean, C., and Levickis, P., 2014)¹⁶ reported in Law et al 2017



The ELVS assessed children at two years of age and then again at four years of age. At two years of age 19% of children were identified as demonstrating delayed speech, language and communication and classified as 'late talkers'. 81% were identified as 'typical talkers'.

At 4 years of age, 11% of children were identified as having impaired speech, language and communication and 89% to be demonstrating typical SLC skills. However, crucially – the 11% were not all made up of children who had been identified at 2 years old. Figure 9 illustrates the detail and shows that of the 19% identified as 'late talkers' aged 2, only 5% continued to be in the impaired group at age 4, whereas of the 81% with typical language skills age 2, 6% were found to have previously unidentified SLCN.

The implications of this study for screening of speech, language and communication are significant. If the 19% of children identified age two were offered a specific pathway as a consequence it would emerge that only 5% of them actually needed it whilst 6% would remain unidentified and emerge with later developing difficulties at four years old.

Similar findings have been reported by other researchers around the world¹⁶.

¹⁶ (Reilley, S., McKean, C., and Levickis, P., 2014) - <https://www.mcri.edu.au/research/projects/early-language-victoria-study-elys>

¹² https://educationendowmentfoundation.org.uk/public/files/Law_et_al_Early_Language_Development_final.pdf

Identification – the way forward?

The implications of the screening debate are intrinsically linked to taking an identification approach and focusing on the offer that is available at a universal and targeted level in the communities being explored.

In reviewing identification processes, the Early Intervention Foundation¹⁸ highlights that measures of language increase in predictive validity as children develop over time and measures of language before 2 years of age are not predictive. It proposes that:

- Children are assessed from 2.5 years and offered support where needed
- Assessment takes place on an annual basis.

Law et al advocate for a **targeted approach** in terms of identifying children in need of additional support. Targeting children using universal screening assessments only based on single factors such as child language ability, use of gesture, or social risks can be problematic and mean that children continue to be missed or under-identified.

As a solution, Law et al propose that there should be an element of 'over-servicing' at a population level for children at risk rather than 'diagnosis' of individual children and propose using the following factors when considering utilising a continuum of response to a continuum of need:

- **Integrate** child, family and parenting factors to estimate a child's level of risk
- **Identify** children with multiple vulnerabilities such as both speech and language difficulties or social and emotional difficulties
- **Monitor** the child's rate of progress over time.

When considering risk factors, the Early Intervention Foundation¹⁹ states that they are: genetics (7%); birth order; maternal age; premature birth; toxic substances in the womb; social disadvantage (low income, high poverty); EAL pre 3 years.

The EIF²⁰ also recognises the following protective factors: high quality infant-directed speech; high quality joint attention; degree educated parents; book sharing; birth order (first born).

It states that the combination of parent mental health AND poverty highly increases impact on SLCN.

In order to identify all children with language delay, Law et al state: "there is a need to develop and evaluate models of services wherein the continuum of risk is acknowledged and there is an accompanying continuum of response in terms of the amount and type of intervention offered."

The Balanced System[®] approach to tailoring the amount of targeted support in a given area to the predicted needs of the population is an example of a response to a continuum of needs as described above.²¹

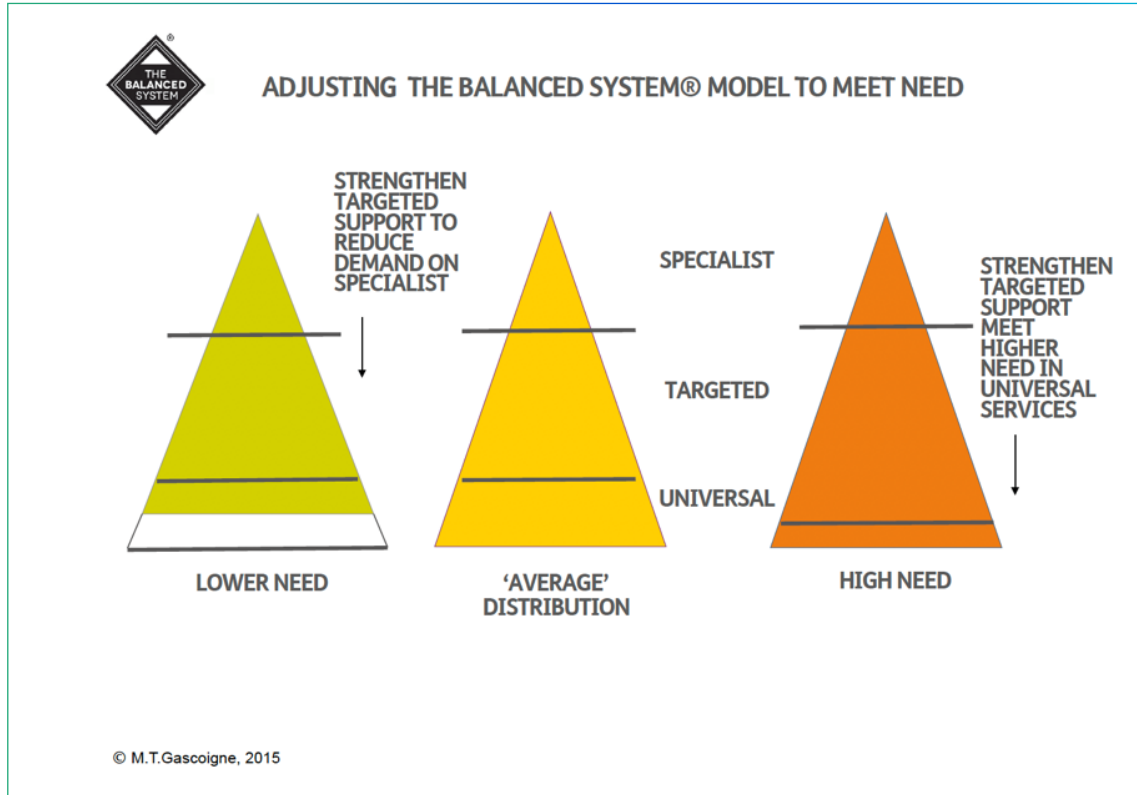
¹⁸ EIF Language as a child wellbeing indicator September 2017 James Law, Jenna Charlton – Newcastle University; Kirsten Asmussen – Early Intervention Foundation

¹⁹ <https://youtu.be/ujJqUNOwWT4> EIF webinar understanding the evidence on early language ²⁰ <https://www.eif.org.uk/report/key-competencies-in-early-cognitive-development-things-people-numbers-and-words>

²¹ Gascoigne, M. & Gross, J., (20018) Talking about a generation The Communication Trust: London - <http://www.thecommunicationtrust.org.uk/resources/resources/resources-for-practitioners/talking-about-a-generation/>



Figure 10: Balancing the offer to meet need



Public Health England are currently supporting the roll out of health visitor training specifically in support of identification and have commissioned the development of a new tool to be used in conjunction with the Ages and Stages Questionnaire that is currently used by Health Visitors as part of the two year old developmental check.

The Early Language Identification Measure (ELIM) is based on a rich body of research that includes the ELVS study but also research into risk factors which, when identified early, have greater or lesser predictive power for later speech, language and communication skills.²²

The ELIM, therefore is not a screening tool as such, it is offered as part of an identification strategy led by Health Visitors. It will not be available within the active life of this Early Outcomes Fund Project but this summary from Professor James Law, who is leading the research team provides a summary:

“The Early Language Identification Measure” or the ELIM is a measure being developed by a team under the leadership of Professor James Law as a part of the work currently commissioned by the Department of Education (DfE) and Public Health England (PHE). The measure was developed during 2019 and through until 2020. The final report will be published in July 2020. The ELIM is intended for use by Health Visitors at the 27 month review when all children in the UK visit their health visitor for a developmental check. All children currently receive the Ages and Stages Questionnaire and the idea is the ELIM will help Health Visitors refine their judgment about who most needs further help by having the ELIM conversation with parents. We are also developing interventions to go alongside the ELIM.

At the moment the ELIM comprises five sections including observations, parental report and risk factors and we will be comparing it to a standard test of oral language skills the Preschool Language Scale (PLS5) and refining the ELIM so that it picks up the children with the lowest language scores. This will mean shortening the ELIM measure so that only the most useful items will be included in the final measure. The revised ELIM will be published by PHE alongside their Speech Language and Communication Needs (SLCN) pathway and underpinned by the cascaded SLCN training which has been rolled out across England to thousands of health visitors during 2019/2020 and these in turn will feed into the English Government's Social Mobility Strategy.²³

The ELIM is intended to supplement the Ages and Stages Questionnaire (ASQ) currently used by Health Visitors in recognition of the emerging evidence that the ASQ is not a sufficiently sensitive measure. There has been comment within the sector that DfE are interested in the ELIM being used by Early Years Practitioners as part of the integrated review but the research team led by Prof Law have not been involved in these discussions at this point.

²² McKean C, Reilly S, Bavin E, Bretherton L, Cini E, Conway L, Cook F, Eadie P, Prior M, Wake M, Mensah F. Language outcomes at 7 years: early predictors and co-occurring difficulties. *Pediatrics* 2017, 139(3), e20161684.

²³ Prof. James Law, personal communication with the author 21st March, 2020



Current identification and screening methods in Leicester, Derby and Nottingham

The needs analysis conducted as part of the Early Outcomes Fund Project included qualitative mapping of the offer to children and families and the workforce including childminders, settings and schools in each of the cities.

The Balanced System® Five Strands include the Identification strand and therefore qualitative information was captured around the identification strategies and tools in use across the three cities. In addition, there is additional information available from Derby City as a result of work across the Derby Opportunity Area over the past two to three years which, given the similarities between the three cities in this project is relevant to consider.

Table 1 below, summarises the most commonly reported identification methodologies across the three cities and the areas they address.

In Derby City, a specific report was commissioned as part of the Opportunity Area work in 2018 to consider the effectiveness of identification in the City. This work was carried out by Clarity (TEC) Ltd and was submitted as part of the Derby Opportunity Area pilot project.²⁴

Clarity found that in Derby in 2018 96.6% children at two years of age received the ASQ3 from a HV as part of their universal developmental check. Of those children, 92% of children across Derby were reported to be at the expected level for Communication resulting in identification of 8% who were not at the expected level. Nationwide, the average identification rate at this 2-year check in this year was approximately 10-12%. The study then asked health visitors in one ward with significant levels of social disadvantage to also use an additional measure, the UK Bilingual Toddlers Assessment Tool (UKBTAT).²⁵

This tool showed that the children that were positively identified in the target ward by the ASQ3 had language levels at or below the 10th centile using the UKBTAT. These would be considered severe speech, language and communication needs and the ASQ3 as a surveillance tool would be expected to identify a wider cohort of children with a broader range of SLCN. These locally specific data to this Early Outcomes Fund project are therefore particularly relevant. The UKBTAT has not been included in the table below as it was used only for this specific project but it does have the benefit of addressing linguistic diversity.

²⁴ The Clarity Report, 2018, Pilot project examining methods to identify children aged 0-5 years with speech, language and communication needs and investigating evidence-based interventions which can support speech, language and communication development, unpublished report for Derby City Council

²⁵ <http://www.psy.plymouth.ac.uk/UKBTAT/>



Inconsistent approaches to gathering information about first language development and lack of workforce knowledge in understanding indicators of language learning difficulties in bilingual children leads to children learning EAL with SLCN being missed or identified later. These children do not achieve as well as children whose first language is English in achieving the expected level of development.

Figure 11: Number of children who did not achieve expected levels across all Early Learning Goals 2019²⁶

	Children whose first language is English			Children whose first language is other than English		
	Girls	Boys	Total	Girls	Boys	Total
Derby	20%	36%	28%	28%	42%	35%
Nottingham	25%	42%	33%	30%	42%	36%
Leicester	25%	37%	31%	28%	42%	35%

Children whose first language is not English are over-represented in samples of children with SLCN compared with monolingual English speakers.²⁷

However, the disproportionate number of children with EAL who have SLCN in the community is not reflected in SLT service statistics.²⁸ Certain population characteristics are associated with SLCN but they are not consistently used as flags to plan and provide additional services or monitor children’s progress.

Of particular note for the three cities in this project is the poor outcomes for boys whose first language is other than English and the commonality of these data across the cities which is in contrast to the outcomes for girls. WellComm has gained popularity with early years practitioners locally and nationally. Crucially WellComm provides strategies for intervention that are consequent on the initial tool’s findings.

The intervention strategies deal with the key challenge to a screening approach of being able provide targeted interventions to any of those identified even if they might be in the group for whom matters would have resolved.

²⁶ <https://www.gov.uk/government/statistics/early-years-foundation-stage-profile-results-2018-to-2019>

²⁷ Dockrell, J., Lindsay, G., Roulstone, S., and Law, J. (2014). Supporting children with speech, language and communication needs: an overview of the results of the Better Communication Research Programme. *International Journal of Language and Communication Disorders* 49, 543–557

²⁸ Hambly, H., Wren, Y., McLeod, S., and Roulstone, S. (2013). The influence of bilingualism on speech production: a systematic review. *International Journal of Language and Communication Disorders*. 48, 1–24



Development Matters²⁹ is widely used amongst education providers.

This is non-statutory guidance which supports all those working in early childhood education settings to implement the requirements of the Statutory Framework for the EYFS.

All practitioners working to support the early learning of young children can use Development Matters as part of daily observation, assessment and planning. It can also be used at points during the EYFS as a guide to making best-fit summative judgements in relation to whether a child is showing typical development, is at risk of delay or is ahead for their age. In order for this to become a strategic tool there would need to be agreed protocols for data collection and associated guidance.

Early Talk Boost tracker is appropriate only for the older end of the early years population but has the benefit of being wide ranging across skills with the exception of speech development and also leads into a targeted intervention for those highlighted as in need, whilst the Every Child A Talker monitoring tool is still favoured by many but in most areas is no longer accompanied by the ECAT programme in settings.



²⁹ Development Matters in the Early Years Foundation Stage (EYFS). (2012) Department for Education



Identification tools and processes - Table 1

	Age (years)					Area of development assessed					Intervention included	Cost	Training required
	0-1	1-2	2-3	3-4	4-5	Attention & Listening	Understanding	Talking	Social Communication	Speech			
ASQ3	✓	✓	✓	✓	✓		✓	✓				£300	Yes - free online
WellComm	✓ (from 0:6)	✓	✓	✓	✓		✓	✓	some questions embedded in other sections		✓	£449 + £82 reporting Wizard	Yes - free online
Development Matters	✓	✓	✓	✓	✓	✓	✓	✓	✓		general support strategies	No cost	No
Early Talk Boost Tracker				✓	✓	✓ (up to 4:6)	✓	✓	✓		✓	£500 plus training cost	Yes - cost variable
ECAT Child Monitoring Tool	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		No cost	No
Speech Link					✓						✓	£330 year one; £180 subsequent years	Yes - free online
Infant Language Link					✓		✓				✓	£425 year one; £275 subsequent years	Yes - free online
Self-developed checklists	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		No cost	No
Progression Tools Age 3				✓		some questions embedded in other sections	✓	✓	✓	✓		£29.99	No
Progression Tools Age 4					✓	some questions embedded in other sections	✓	✓	✓	✓		£29.99	No



Identification recommendations within Leicester, Derby and Nottingham Cities

The best information available at the time of writing suggests that the Early Language Identification Measure (ELIM) due to be published late 2020 will provide a useful addition to the ASQ3 currently used by Health Visitors as part of the national surveillance programme for two-year olds.

However, Public Health England have stated that the ELIM will not be mandatory and therefore Local Authority and Health Partners in each area will be free to choose whether to adopt the ELIM, introduce another identification measure for SLCN or continue with their current arrangements. Prof Law has indicated that interventions to follow on from the ELIM are also being developed but it is not clear whether these would be universal advice and strategies for families or more targeted interventions delivered by the early years workforce in some way.

There has also been mention of the possibility of the ELIM being used as the basis of the integrated early years review which would make it more central to the processes around identification in Local Authorities but as yet there is no clear guidance on this matter. The Annex to this paper which presents links to a wide set of identification tools that have been evaluated in the UK and beyond provides a comprehensive set from which to draw. Table 1, on the previous page, provides a 'short-list' summary of those most commonly used that all have merits. Additionally, there will be the new ELIM at some point during 2020.

The key conclusion is that in the absence of a mandatory set of processes beyond the ASQ3, each Local Authority will need to decide with partners what is going to best meet the needs of the population. This EOF project has used the Balanced System® as a common strategic framework and therefore meeting Identification Strand Outcomes at universal, targeted and specialist levels may help in framing the identification strategy for the three cities as opposed to seeking a particular screening, identification or assessment input.



The following may prove useful in this process:

- 1.** Ensuring basic knowledge for all practitioners around early speech, language and communication expected levels and milestones
- 2.** Ensuring basic knowledge among all practitioners around the key risk factors for a child in the early years in respect of SLCN
- 3.** Taking an outcomes focused approach to identification – having local outcomes statements indicating the shared responsibility for identification and requiring early years settings and practitioners to deploy identification checklists, processes and tools to observe, measure and track children’s SLC.
- 4.** Taking an outcomes focused approach to the ‘so what?’ of identification – that is – that there must be a range of universal and targeted interventions available for all those who are identified as having any level of need – identification with no follow up is the worst possible scenario
- 5.** LAs may choose to recommend one preferred tool. In this case the important factor will be the sensitivity and specificity to the population served and the link to the appropriate follow up intervention for those identified as needing additional support.



4. INTERVENTION

Having considered the issues and options around identification, this section of the paper moves on to outline key factors for consideration when selecting effective interventions.

It presents findings and recommendations summarised from the research base and includes a summary table of interventions most commonly used across the cities based on the information supplied as part of the needs assessment mapping exercise. There are several excellent reviews of evidence-based practice in the Early Years^{30,31} and this paper does not attempt to replicate these but rather draw on their key messages through linking with the most commonly reported practice in the three cities.

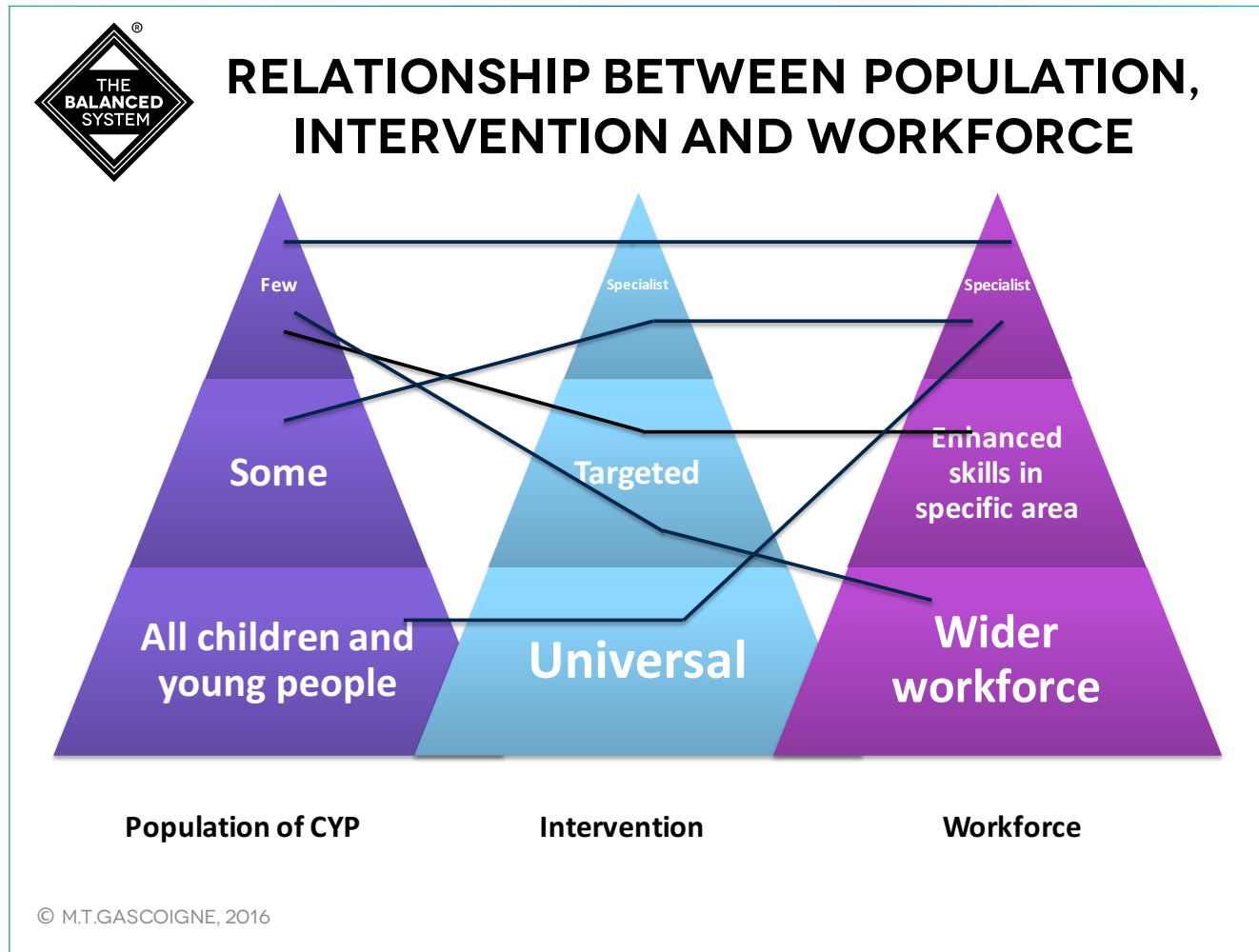
Interventions to support and develop speech, language and communication can be described across the universal, targeted and specialist continuum. These terms were first introduced to the speech and language therapy profession within the RCSLT Position Paper in 2006³² and have been further defined in the intervening years. Crucially, there is a need to distinguish between the interventions described as universal, targeted or specialist and the population of children for whom they might be appropriate. Figure 12 below clarifies the independence between how we identify children's needs, the continuum of interventions and the workforce to deliver these interventions.



³⁰ https://educationendowmentfoundation.org.uk/public/files/Law_et_al_Early_Language_Development_final.pdf ³¹ <http://www.thecommunicationtrust.org.uk/whatworks>
³² Gascoigne, M.T., (2006) Supporting children with SLCN within integrated children's services RCSLT London



Figure 12: Relationship between population, intervention and workforce



Universal interventions are appropriate for a whole population, however, defined. A good universal offer to support speech, language and communication will include high-quality language learning opportunities and interactions delivered by a skilled and knowledgeable workforce.

Children with no underlying difficulties make expected progress when receiving high-quality provision at this level. Development Matters in the EYFS is an example of universal provision that is nationally available whilst other provisions such as Early Word Aware could be described as excellent interventions to be available to all children but may or may not be part of a particular universal offer in an area.

Targeted interventions are provided either to specific children where a need has been identified that requires additional support or to families or in settings where there are identified risk factors for speech, language and communication need.

Examples of interventions falling into this category include the WellComm intervention for supporting the development of language understanding or talking and Early Talk Boost to develop attention, listening and language and preventative family support programmes such as the PEEP Learning Together Programme. Speech and language therapists have a role in both the delivery of targeted interventions and establishment of targeted interventions by others within the wider workforce.

Specialist interventions are provided to a minority of children within a given population. Specialist interventions should always be viewed as part of a wider package of support that includes the universal offer and targeted interventions.

Specialist interventions are typically delivered by or overseen by a specialist practitioner which for speech, language and communication may be a speech and language therapist or possibly an educational psychologist or specialist teacher. Specialist interventions may be delivered by assistant practitioners where a speech and language therapist is overseeing the programme of delivery and monitoring outcomes.

The intervention provided is dependent on the area of need identified for support rather than diagnostic category and is likely to change over time in accordance with both the child's response to intervention and their changing profile of needs.

Law et al³³ reported that language interventions are often devised by specialists and often delivered by non-specialists such as parents, early years practitioners and teaching assistants in the context in which children spend most of their time.

They highlight that much work needs to be done looking at the long-term benefits of interventions and evaluations of the combinations of interventions, looking at evidence '... in terms of the child's experiences of a pathway through services rather than a single intervention.'. Interventions need to be multi-faceted covering support for a wide range of key language and communication skills such as facilitating dialogic book reading; scaffolding classroom interactions; fostering narrative skills and teaching vocabulary.

Their report specifies the key importance of staff training to ensure fidelity to the intervention and to replicate the results from the effectiveness studies which have been carried out on them. The interventions must also feed into the development of literacy, for example developing phonological awareness support; whole word decoding and spelling; developing narrative skills to support children's ability to generate and write stories.

The universal, targeted, specialist conceptual framework is established in both health and education services and underpins the Code of Practice graduated approach to support where intervention is provided and the child's response to support evaluated.

Table 2 below summarises the interventions included in the qualitative mapping process as part of the needs analysis conducted across the three cities. At a universal and targeted level, programmes or approaches are primarily mentioned, whereas at a specialist level contributors identified some programmes or interventions but also simply stated the practitioners delivering specialist interventions without elaborating on the scope of the interventions themselves. This is an interesting reflection on the association with specialist interventions being defined by being delivered by specialist practitioners which is not necessarily the case.

³³ https://educationendowmentfoundation.org.uk/public/files/Law_et_al_Early_Language_Development_final.pdf



Table 2: Interventions reported in the mapping exercise across Leicester, Derby and Nottingham Cities

	Leicester	Derby	Nottingham
Universal	School Counsellor	Launchpad to Literacy	PEEP
	PEEP	Primary Word Aware	Word Aware
	Restorative Practice	-	-
	Displays	Early Word Aware	Fun Time
	Forest Schools	-	-
	Stay and play sessions	-	-
	Positive Peaceful Places	-	-
Targeted	Emotions in Motion	Infant Language Link	Makaton
	Better Reading & Writing Partners	Speech Link	Video Interaction G
	Peer mentoring	Early Talk Boost	Theraplay
	WellComm	-	-
	Let's Get Talking	-	-
	Fun-time	-	-
	Theraplay	-	-
	Early Talk Boost & Talk Boost	-	-
	Knowledge Transfer Centre (KTC) Early Words Project.	-	-
	Dr Suess with Specialist TA	-	-
Mindfulness	-	-	
Specialist	NHS SLT	NHS SLT	NHS SLT
	Family Fun	Hearing Impairment advisory teacher	Applied Behavioural Analysis (ABA) for children with autism
	Inference training	Physical needs advisor	Intensive Interaction
	VI support	Advisory teacher for Visual Impairment	PECS
	Build to express	Social communication and autism advisory team	Educational Psychology
	Drawing and Talking	Early Intervention Team advisors	More Than Words
	Emotional Wellbeing in Education project	-	Alternative and Augmentative Communication support
	Play therapy	-	-
TEACCH programme for children with autism	-	-	



Evidence for interventions

In response to the Bercow Review of provision for children and young people with speech, language and communication needs published in July 2008, The Better Communication Research Programme reviewed the effectiveness of interventions that were in use or published in the research literature.

The reviews took into account the aims and objectives, how the intervention was delivered, target group (speech, language, communication or complex needs), and age range of children receiving the intervention. Some of the interventions were for use at only a universal, targeted or specialist level – some could be adapted to meet the need of children at different levels.

As a result of this initial research, a moderated online library of evidenced intervention for supporting children’s speech, language and communication - What Works – has been developed³⁴. It has been designed to help early years practitioners, teachers, school leaders and speech and language therapists find appropriate evidence-based interventions for the children they work with supporting their decision-making in what will work best for both them and the children.

The user is able to select interventions by searching on by target group, age range, focus of the intervention, who it's delivered by and in what type of format. The evidence for each intervention is rated as 'strong', 'moderate' or 'indicative' as determined by an academic moderating group, with a summary of the evidence base and academic references provided.

What Works provides a speech, language and communication focused resource of collated evidence around a set of interventions and more recently training programmes. However, there are a number of caveats and challenges that need to be taken into account when using What Works. Firstly, since the original dataset was collated any additional interventions to be included have to be proposed and meet criteria around the amount of research based evidence there is for the intervention regardless of the outcome of this research evidence. So, for example, a new intervention will by definition not meet the criteria for inclusion until it has been the subject of empirical research or, if exceptionally it is considered it will by definition not meet the criteria for having the best levels of evidence.

However, conversely a well researched intervention could show that there is a high level of research evidence even if it is not positive evidence! Secondly, impairment focused and prescriptive interventions lend themselves more easily to research and therefore the evidence base is potentially skewed by virtue of the body of evidence being dominated by what is 'easy to measure' not necessarily what is most impactful in a functional context.

Finally, the research conditions for the intervention studies typically reflects 'best conditions' in the delivery and fidelity to the model. Even those interventions with empirical evaluation have not matured sufficiently for there to be numbers of replication studies to explore these issues.

The conclusion here is, to quote Prof Law, 'to remember that the lack of evidence is not the same as poor evidence' and to seek to build a culture of evidenced informed practice where practitioners of all persuasions, schools and setting leaders build impact measures for their children and families into their offer.

³⁴ <https://www.thecommunicationtrust.org.uk/whatworks>



This approach is supported by the Early Intervention Foundation (EIF)³⁵ review of a broader evidence base around early learning and looked at how it is applied in practice.

It has reviewed the evidence for school readiness looking at 4 overlapping domains - physical; cognitive; social and emotional and behavioural - and effective and ineffective interventions for children's early language development. Within the cognitive domain, the EIF consider children's knowledge of objects; people; number and words.

In their review they state that the characteristics of effective early interventions are those that:

- Start early, for example the Family Nurse Partnership starts pre-birth
- Are targeted on the basis of need, for example family income
- Are long in duration – effective interventions are at least 30 weeks long
- Lead by qualified staff and supervised practitioners

The EIF also recommend when providing interventions supporting SLC:

- Consider intensive home visits
- Interventions individualised to need and provided regularly
- Interventions delivered by workforce trained to offer advice on strategies for both parent-child interaction and improving the home learning environment

For interventions to be effective, the EIF recommend that providers consider the need to provide a level of intensity; targeting based on family income and to be focused at families who can benefit the most from them. They also require ongoing evaluation of impact at a local level.

Following their review of factors that don't make an impact on SLC skills that are often quoted as being risk factors they report frequent ear infections; dummies; book gifting; buggies do not have adequate empirical evidence to link them to SLCN.

³⁵ EIF webinar: Understanding the evidence on speech & language development



An Education Endowment Foundation funded review (Law et al)³⁶ carried out a review of early language interventions using a educational, psychological and health literature. The parameters of the review included studies that had incorporated a rigorous methodology – either a randomised control trial or quasi-experimental. The four specific outcomes of the interventions were: phonological; expressive and receptive vocabulary; expressive language and comprehension.

The aim of the intervention review section was to identify studies that focused on whole populations rather than populations of children with a specific clinical need.

45 studies met the review criteria and were summarised using criteria from the What Works database combined with an evidence rating system to capture robustness of the literature. The studies were classified according to focus of the interventions; whether the studies were programmes or practices; who delivered the intervention; the location of the interventions; the intensity and duration of the interventions; and the effect size of the intervention.

The review also included 'top down' case studies of areas where the Balanced System[®] was used to map provision in order to triangulate practice in five authorities with the evidenced based review of interventions meeting robust academic and empirical criteria.

In respect of interventions two important conclusions were drawn. Firstly, that parent-child interaction approaches prior to nursery age should be further explored in a systematic way and compared to routine care from the early years system such as Health Visitor surveillance and other early years community offer.

The second that there is a need for further evaluation of the efficacy of training early years practitioners to deliver targeted interventions in early years settings when compared with 'routine care' and targeted interventions led by speech and language therapists.

³⁶https://educationendowmentfoundation.org.uk/public/files/Law_et_al_Early_Language_Development_final.pdf



Since the publication of the Law et al review for the EEF, the outcomes of a large scale study using the Nuffield Early Language Intervention (NELI) has been published (April, 2020).

The NELI was first developed in 2010 by Professor Maggie Snowling and a team from the University of York in partnership with ICAN and funded by the EEF. The initial small scale trial concluded that the intervention was 'promising' but small sample and the number of other targeted interventions being developed that relied on training of the teaching assistants resulted in a lack of uptake by the sector.

The EEF however funded a large scale study which reported in April, 2020. Prof Snowling and team now based at the University of Oxford led the research this time using the Elklan trainer network to increase the scale and reach of the research.³⁷ The NELI has now been given a 'five padlock' rating by EEF (highest rank) whilst being described as low cost at £43 - £58 per pupil.

It should therefore be considered amongst the range of interventions for the three cities even though there are no current reports of its use and this latest validation is for reception class not nursery age range.

The common thread to both these recommendations is the importance of a coaching relationship which facilitates adjustments and changes in behaviour by the key change agent (parent or early years practitioner) who spends time with the child. The implications are then that the impact of the intervention continues way beyond a 'session' or 'dose'.

This point has been addressed in the recent NELI trial which involves ongoing support to the teaching assistants beyond the two day training.

In respect of the whole systems approach the key messages were that there needs to be a systematic focus on evaluating outcomes in local areas which adopt a clear pathway of support taking into account risk factors at identification and building a continuum of support in the early years offer to systematically respond to identified need.

Therefore, a menu of specific interventions alone will not provide the flexibility of response within the system, there needs to be an integrated whole system offer.

³⁷ <https://educationendowmentfoundation.org.uk/projects-and-evaluation/projects/nuffield-early-language-intervention-1/>



Universal and Targeted interventions for the Leicester, Derby and Nottingham cities

Table 3 below summarises the most frequently reported interventions currently in use across the three cities with similar parameters as for the identification table but with the addition on an evidence rating.

The evidence rating is problematic as outlined above given the lack of a comprehensive source of comparable information for rating evidence of impact in a system. A number of locally developed resources were reported and these have not been included due to the diversity and lack of any objective means of commenting on the evidence base for these.

It should also be noted that the interventions do not include training programmes with the primary aim of raising skills and confidence of parents or practitioners (such as ELKLAN) which is being included in the Early Years Professional Development Programme nationally or improvement programmes aimed at encouraging a strategic approach to schools or settings embedding a whole systems approach to speech, language and communication such as the Balanced System® Scheme for Schools and Settings which has been delivered to 80 schools and settings in the eight most disadvantaged wards in Derby as part of the Talk Derby Opportunity Area.



Universal & Targeted Intervention - Table 3

	Age (years)					Area of development supported					Level	Cost	Training required	Evidence base ^{38*}
	0-1	1-2	2-3	3-4	4-5	Attention & Listening	Under- standing	Talking	Social Communication	Speech				
WellComm	✓ (from 0:6)	✓	✓	✓	✓		✓	✓	some activities included		Targeted	£449 + £82 reporting Wizard	Yes - free online	**
Development Matters	✓	✓	✓	✓	✓	✓	✓	✓	✓		Universal	No cost	No	
Early Talk Boost				✓	✓ (up to 4:6)	✓	✓	✓	✓		Targeted	£500 plus training cost	Yes – cost variable	***
PEEP	✓	✓	✓	✓	✓	✓	✓	✓	✓		Universal/ Targeted	£85 plus training cost	Yes – cost variable	***
Speech Link					✓					✓	Targeted	£330 year one; £180 subsequent years	Yes - free online	*
Early Word Aware			✓	✓	✓		✓	✓			Universal	£40 / book plus training cost	Yes	*
Word Aware					✓		✓	✓			Universal	£40 / book plus training cost	Yes	*
Infant Language Link					✓		✓	✓			Targeted	£425 year one; £275 subsequent years	Yes - free online	**
Nuffield Early Language Intervention (NELI)					✓	✓	✓	✓	✓		Targeted	£870 for one form entry school / £1290 for two form entry school	Yes	***

³⁸ *small scale / local research; ** medium scale research; *** included on national evidence databases



As with the conclusion to the identification section of this paper, using the **Balanced System®** Outcome descriptors for the Intervention Strand may prove a useful way of framing the choice of a suite of intervention methodologies.



IN1. UNIVERSAL Homes, settings and schools are supported to develop the language and communication skills of all children and young people through language enrichment and supportive activities.



IN2. TARGETED Children and young people benefiting from targeted interventions will have access to evidence based targeted interventions to develop core speech, language and communication skills delivered in the most appropriate functional context. These might include 1:1 and / or small group interventions that are typically designed by specialist practitioners and delivered by those with appropriate training.



IN3. SPECIALIST Children and young people needing specialist intervention for their SLCN receive appropriate and timely provision in the most functionally appropriate context for their needs. Progress measures will include activity, participation and well-being goals in addition to goals relating to their core SLC impairment.

In choosing a suite of interventions to recommend as part of this EOF project the following considerations should be taken into account:

1. To achieve the universal intervention outcomes a programme of professional development, training and coaching, recommended resources for supporting speech, language and communication and confidence building amongst parents and early years practitioners will be key activities.

These will almost certainly be achieved through developing and enhancing existing workforce activity such as health visitor support and early years practitioner confidence in supporting families.

The Pathway for SLCN being developed as part of this EOF project should provide the necessary links to information and accessible resources for those conversations.

2. To achieve the targeted outcome, the three cities should consider not only the choice of targeted interventions but the process by which they will be established and embedded in the early years community of practice.
3. The support of specialist practitioners is key and training of the wider workforce alone cannot be assumed to result in impact on children through embedded targeted interventions consistently offered.
4. Practitioners' confidence in the chosen interventions is also paramount. If a particular programme is chosen at a Local Authority level without the confidence of the early years sector the process issues of delivery and impact will be problematic.
5. As with the choices for identification, each LA will need to make a considered decision based on the context including the availability of a specialist offer to support practitioners.

5. **CONCLUSION**

In conclusion, this report sets out a synthesis of the most relevant information in respect of identification and intervention for the early years in order to support strategic decision making across the three cities engaged in this Early Outcomes Fund project.

The context that is 2020 as outlined in the introduction will undoubtedly influence decision making but the key principles of being outcomes focused and the need for sector wide adoption of the proposed tools remain crucial to systemic change and improvement.



Annex:

SUMMARY OF IDENTIFICATION TOOLS



Using the parameters that need to be considered for effective identification, Better Communication has reviewed the following screening and diagnostic identification tools:

- identified in the Balanced System® mapping tool for the 3 LAs
- identification tools known to be used widely in the EY to assess SLC
- indicated as assessing language on the EEF Early Years Measures database



Identification Tool: Language Development Survey	
Assesses	Expressive vocabulary and beginning word combinations
Age range	18-35 months
Can be delivered by	Parent report
Training required to use the tool	Not indicated
How long to administer	10 minutes
Evidence on accuracy	Excellent reliability as assessed by Cronbach's alpha and test-retest techniques
Positives	Excellent sensitivity and specificity for the identification of language delay; can be used to assess bilingual children

Identification Tool: ASQ3	
Assesses	Communication, gross motor, fine motor, problem solving, and personal-social
Age range	1-66 months
Can be delivered by	Any professional
Training required to use the tool	Training videos available
How long to administer	15 minutes
Evidence on accuracy	<p>Concurrent validity - 74% for the 42-month; 100% for the 2-month and 54-month questionnaires (86% overall agreement).</p> <p>Sensitivity - 75% for the 6-month questionnaire; 100% for the 4-month, 14-month, 54-month, and 60-month questionnaires (86% overall agreement).</p> <p>Specificity - 70% for the 14-month questionnaire; 100% for the 2-month, 16-month, and 54-month questionnaires (with 85% overall agreement).</p>
Positives	Easy to administer
Negatives	Communication section inconsistent in identifying mild - moderate SLCN



Identification Tool: <u>British Ability Scales</u>	
Assesses	20 areas of knowledge, thinking, skills
Age range	3-17:11
Can be delivered by	Educational Psychologist and Clinical Psychologist
Training required to use the tool	Not indicated
Cost	£1325 for full set – would need to look at which parts needed
How long to administer	30-45 minutes
Evidence on accuracy	EEF Psychometry 3/3; Implementation 1/3
Positives	Free access to a scoring and reporting service

Identification Tool: <u>British Picture Vocabulary Scale</u>	
Assesses	Receptive Vocabulary
Age range	3-16
Can be delivered by	SLT; Educational Psychologist and; experienced teacher
Training required to use the tool	No
How long to administer	10-15 minutes
Evidence on accuracy	EEF Psychometry 3/3; Implementation 1/3
Positives	Easy to administer



Identification Tool: <u>Bus Story</u>	
Assesses	Expressive language discourse – information; sentences; grammar
Age range	3:06-8
Can be delivered by	Not indicated
Training required to use the tool	Yes, training advised if not delivered by SLT
Cost	£45.90
How long to administer	10
Evidence on accuracy	EEF Psychometry 2/3; Implementation 2/3
Positives	Normed at monthly intervals to allow comparisons
Negatives	Unreliable scoring

Identification Tool: <u>New Reynell Developmental Language Scales</u>	
Assesses	Understanding and production of selected vocabulary and grammatical features
Age range	2-7:06
Can be delivered by	SLT
Cost	£665 per set
How long to administer	45-60 mins
Evidence on accuracy	EEF Psychometry 3/3; Implementation 1/3
Positives	Standardised accurate assessment



Identification Tool: <u>Preschool Language Scales</u>	
Assesses	Oral language: pre-verbal, interaction-based skills; comprehension; expressive language; early literacy
Age range	Birth-7:11
Can be delivered by	SLT; Occupational Therapist; trained health professionals
Cost	£495
How long to administer	45-60 mins
Evidence on accuracy	EEF Psychometry 3/3; Implementation 1/3
Positives	Scoring clear and transparent

Identification Tool: <u>Test for Reception of Grammar</u>	
Assesses	Receptive grammar
Age range	4-87 years
Can be delivered by	Professional trained in delivering standardised tests
Training required to use the tool	No
Cost	£240
Training provider	N/A
How long to administer	10-20 mins
Evidence on accuracy	EEF Psychometry 3/3; Implementation 2/3
Positives	Scoring clear and transparent



Identification Tool: <u>Word Finding Test</u>	
Assesses	Expressive vocabulary
Age range	3-8 years
Can be delivered by	Professional trained in delivering standardised tests
Training required to use the tool	No
Cost	£47.99
How long to administer	10-15 mins
Evidence on accuracy	EEF Psychometry 2/3; Implementation 2/3
Positives	Scoring clear and transparent

Identification Tool: <u>CELF Preschool</u>	
Assesses	Receptive and Expressive Language
Age range	3-6 years
Can be delivered by	SLT; Educational Psychologist
Training required to use the tool	No
Cost	£470
How long to administer	30-45 minutes
Evidence on accuracy	EEF Psychometry 3/3; Implementation 1/3
Positives	Reliably diagnoses and classifies language disorders



Identification Tool: <u>Diagnostic Test of Articulation and Phonology</u>	
Assesses	Screen; articulation; phonology; oro-motor
Age range	3-6:11 years
Can be delivered by	SLT; Educational Psychologist; health professional
Training required to use the tool	No
How long to administer	5 minutes screening; 10-15 minutes articulation; 10-15 minutes phonology; 5 minutes oro-motor screen
Evidence on accuracy	EEF Psychometry 3/3; Implementation 1/3
Positives	UK norm reference
Negatives	Complex scoring system

Identification Tool: <u>Early Repetition Battery</u>	
Assesses	Phonological and morphosyntactic processing
Age range	2-6 years
Can be delivered by	SLT
Training required to use the tool	No
How long to administer	10-15 minutes
Evidence on accuracy	EEF Psychometry 3/3; Implementation 2/3
Positives	Clear and transparent scoring



Identification Tool: <u>Grammar and Phonology Screening Test</u>	
Assesses	Grammar; Phonology
Age range	3:6-6:6 years
Can be delivered by	Both professionals and non-professionals
Training required to use the tool	Not indicated
How long to administer	10 minutes
Evidence on accuracy	EEF Psychometry 3/3; Implementation 3/3
Positives	Clear and transparent scoring

Identification Tool: <u>MacArthur Bates Communicative Development Inventories</u>	
Assesses	Gestures and Words; Words and Sentences
Age range	8-37 months
Can be delivered by	Any practitioner
Training required to use the tool	No
Cost	£125
How long to administer	20-40 minutes for parent to complete; 10-15 minutes to score
Evidence on accuracy	EEF Psychometry 3/3; Implementation 1/3
Positives	Parent completes



Identification Tool: <u>Children's Communication Checklist</u>	
Assesses	Structural and expressive language
Age range	4-16
Can be delivered by	SLT; Educational Psychologist; Occupational Therapist;
Training required to use the tool	No
Cost	£173 + £58 per additional pack of 25 checklists
Training provider	N/A
How long to administer	5-15 minutes
Evidence on accuracy	EEF Psychometry 2/3; Implementation 2/3
Positives	Checklist completed by respondent

Identification Tool: <u>WellComm</u>	
Assesses	Receptive and expressive language
Age range	6 months-6 years
Can be delivered by	Any practitioner
Training required to use the tool	Yes, online training available
Length of training	Not indicated
Cost of training	None – self-directed learning
Cost	£449 + £82 reporting Wizard
Training provider	Online included in purchase
How long to administer	10-15 minutes
Evidence on accuracy	EEF Psychometry 2/3; Implementation 2/3
Positives	Includes intervention resource; WellComm Primary also available to track and support over time. Some usage currently in Leicester and Derby. Evidence of impact on the Derby population in the Derby pilot project and Derwent Stepping Stones project.



Identification Tool: Action Picture Test	
Assesses	Expressive vocabulary; grammatical features
Age range	3-9 years
Can be delivered by	SLT
Training required to use the tool	No
Cost	£30
How long to administer	10-15 minutes
Evidence on accuracy	EEF Psychometry 3/3; Implementation 1/3
Positives	Norm referenced
Negatives	Complex scoring system

Identification Tool: Every Child a Talker Child Monitoring Tool	
Assesses	Attention and Listening; Comprehension; Expression; Social Communication; Speech
Age range	0-5 years
Can be delivered by	Any practitioner
Training required to use the tool	No but training in assessment advisable
Cost	Free resource
How long to administer	Can be incorporated into EYFS tracking
Evidence on accuracy	Not indicated
Positives	Red flags at 11, 12, 16, 18, 24, 30 and 36 months; links with EYFS age band
Negatives	Wide age bands reduce accuracy of assessment



Identification Tool: <u>Early Talk Boost Tracker</u> NB this links to a free download checklist	
Assesses	Attention and Listening; Understanding; Speaking; Personal, Social and Communication
Age range	3-4
Can be delivered by	Any practitioner
Training required to use the tool	Yes
Length of training	As part of ETB training – 5 hours
Cost of training	Variable
Cost	£480
Training provider	ICAN Licensee
How long to administer	20 mins
Evidence on accuracy	Not standardised, based on norms
Positives	Easy to interpret RAG rating

Identification Tool: <u>Speech Link</u>	
Assesses	Speech sounds
Age range	4-7
Can be delivered by	Any practitioner
Training required to use the tool	Yes – online video walk through available with package
Length of training	Not indicated
Cost of training	Included in price of package
Cost	£330 year one; £180 subsequent years
Training provider	Speech Link
How long to administer	15 minutes
Evidence on accuracy	Impact report features Derby City – use of Speech Link improving speech sounds https://speechandlanguage.info/resources/perch/pdf/impact-report-1.pdf
Positives	Includes training on speech sound development; includes intervention; function to demonstrate impact of intervention



Identification Tool: <u>Infant Language Link</u>	
Assesses	Language
Age range	4-7
Can be delivered by	Any practitioner
Training required to use the tool	Yes – online video walk through available with package
Length of training	Not indicated
Cost of training	Included in price of package
Cost	£425 year one; £275 subsequent years
Training provider	Speech Link
How long to administer	15 minutes
Positives	Junior Language Link and Secondary Language Link also available allowing monitoring of SLC development over time. Includes intervention

Identification Tool: <u>Stoke Communication Screen</u>	
Assesses	Early language
Age range	2-5 years
Can be delivered by	Any practitioner
Training required to use the tool	Optional – training available from Stoke Speaks Out. In Stoke, a SLT is also allocated to each setting to train and support to use the tool.
Length of training	1 day
Cost of training	Not indicated
Cost	£140 from Stoke LA – includes photocopiable test forms
Training provider	Stoke Speaks Out
How long to administer	5-10 minutes
Evidence on accuracy	https://docs.wixstatic.com/ugdada5ca_760ce227b77240b4aaad329e9067fdf6.pdf?index=true It has been validated against the New Reynell Developmental Language Scales 3 to ensure its accuracy.
Positives	Currently under evaluation from CREC as part of an EOF project – what makes settings sustain their practice in screening is under evaluation. Easy to interpret RAG rated results.



Identification Tool: <u>UK Bilingual Toddlers Assessment Tool</u>	
Assesses	Expressive vocabulary
Age range	24 months
Can be delivered by	Any practitioner
Training required to use the tool	Free online training
Length of training	Not indicated
How long to administer	Variable depending on method of administration
Evidence on accuracy	Predictive scores used
Positives	Accessible and available in for the bilingual population
Negatives	Reliability only in age range of 24 month plus/ minus 2 weeks

Identification Tool: Children's Centre Speech and Language Screen (Derby specific tool)	
Assesses	Language
Age range	2 years
Can be delivered by	Any practitioner
Training required to use the tool	No
How long to administer	Approximately 15 minutes
Evidence on accuracy	No research conducted into accuracy; home-grown tool based on the Sure Start Language Measure



