



**Speech, language and
communication needs**

**Whole system mapping
and design**



Type of paper	Commissioning Support Programme paper exploring ways of improving speech, language and communication outcomes for children and young people
Primary audience	Lead members, directors of children's services, strategic commissioning teams, children's partnership boards, head teachers, GP commissioners, health and well-being boards, service providers, children's centres, schools and colleges, parents, carers and young people
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The tools in this suite:

1. About this tool

This tool is designed to help commissioners and others who are asked to contribute to whole system mapping and design activities, and those who are seeking to take a whole system approach to commissioning services to meet speech, language and communication needs (SLCN). It forms part of a suite of tools developed in conjunction with the 16 SLCN Commissioning Pathfinders, which were established as part of the government's Better Communication Action Plan in response to the 2008 Bercow Report¹.

What is the tool for?

Pathfinders have told us why they feel this tool would be useful:

'We ... aim to capture a full picture of what current SLCN provision we have, being provided where, by whom and at which level, so that gaps can be identified, to begin to shape and complete service specification of what is required to meet identified needs.'

It is important for commissioners to consider the whole range of provision, the need for complementary system components and how the parts work together. There needs to be an understanding of services provided by the local authority, schools, health agencies, the voluntary and community sector, and private or independent providers. In other words, commissioners will want to look at what is currently commissioned across all children's services that directly affects outcomes for children with speech, language and communication difficulties.

Commissioners will also find a whole system approach useful in explaining and promoting the importance of the role of universal services in supporting the speech, language and communication needs of children and young people. Commissioners who have a good understanding of the whole children's services system can spot opportunities for integration, support service improvement, reduce gaps and overlaps, move resources, intervene early and increase efficiencies.

Whole system mapping is a crucial first step in developing whole-service design options capable of meeting the needs of children and young people in a holistic way. This tool will provide guidance and signposting to enable commissioners to map the system and identify gaps in provision. The process described here will help

commissioners to identify the factors which they need to take into account when meeting the full range of needs of the population. It should also assist with the identification of volume flows across the local service network.

Who is the tool for?

This tool will be useful to people wanting to understand how the whole system needs to be changed in order to improve speech, language and communication outcomes, as well as those concerned to secure the optimal future for specialist services including speech and language therapy. The tool is primarily designed for strategic commissioners: lead members, directors of children's services, strategic commissioning teams, children's partnership boards, GP commissioners, head teachers and health and well-being boards.

However it will also be useful to the following groups, all of which are able and may sometimes need to work closely with commissioners in order to improve services for children with speech, language and communication difficulties:

- service providers including social workers, speech and language therapists, and health practitioners who work with children and young people with high levels of continuing need as children with disabilities and sometimes as looked after children or youth offenders
- service providers who are part of the preventative services offering coordinated targeted and additional support to around 20 per cent of the population with a view to preventing problems from getting out of hand and helping children and young people with speech, language and communication difficulties to thrive in mainstream education, home and community settings. This is particularly important for the many different practitioners who will be working as lead professionals and need to know how best to participate in the Common Assessment Framework/lead practitioner/team around the child process
- children's centres, schools and colleges who want to improve the way they work with children and young people with speech, language and communication difficulties and those working with them in other parts of the system
- parents, carers and young people who want to influence decision makers to reform the system as active citizens, advocates and expert users of services.

¹ Bercow J (2008) *The Bercow Report: A review of services for children and young people (0-19) with speech, language and communication needs*. Nottingham: DCSF www.dcsf.gov.uk/bercowreview/docs/7771-DCSF-BERCOW.PDF

Why a whole system approach?

The term 'speech, language and communication needs' (SLCN) has become the standard term used to describe a significant range of needs. These needs can range from a delay in emerging skills which resolves with increased experience of communication, to severe and life-long difficulties with aspects of speech, language, communication and/or eating and drinking. Such a diverse group will, not unexpectedly, require a diverse range of responses and rarely will one professional group or agency offer the solution to all of these needs. When commissioning services for this group of children and young people, it is therefore essential to have a whole system approach.

If children and young people with speech, language and communication difficulties are to achieve good outcomes, commissioners need to have a detailed and comprehensive picture of needs and existing provision within a local authority area. This is especially true if there is a wide range of commissioners and providers involved. While local authorities and their partners may have catalogued the full array of local services, the specific contribution by individual providers and/or the aggregate contribution of services in meeting needs may not be well understood.

SLCN pathfinders have told us that they faced barriers to working jointly:

'The challenge exists where commissioning mechanisms exist which are not in themselves joint.'

'At a provision level, the challenge and barriers appear to surround the issue of role identification and unique contribution, with a reluctance to relinquish long held working practices.'

In taking a broad view of speech, language and communication needs (including those children and young people who present with significant speech, language and communication delay possibly linked with circumstance and experience rather than underlying long term need) it is clear that the wider workforce in universal services has to be a key part of the support, working in conjunction with specialist advice from speech and language therapists and specialist advisory teachers. It is important for commissioners, practitioners in the wider workforce and parents to understand the appropriately differing role for speech and language therapists at a universal, targeted and specialist level. It is also essential to understand the current capacity and skills in the wider workforce as well as the capacity of the environment in which the child or young person is spending time (home, nursery or early years setting, school, youth service, FE college). The support required by the individual will vary and the role of the workforce will have to vary accordingly, as the box illustrates (see the Workforce Planning tool for more detail).

The importance of the child's environment

For example, take a child with mild and transient speech, language and communication difficulties that could be described as being at the 'targeted' level. This child might perhaps:

- » have parents who are aware and supportive of their speech, language and communication needs
- » attend a school which has a well developed communication policy
- » be surrounded by staff who have received a basic level of training around speech, language and communication needs (for example via completing the Inclusion Development Programme module on SLCN)
- » be also surrounded by some staff who have received specific additional training in facilitating language in the classroom
- » attend a school where the SENCO is confident of their remit (early identification of children who have speech, language and communication needs and knowledge of basic enabling strategies)
- » attend a school where there is an ongoing relationship with a Link speech and language therapist who visits the school regularly (perhaps weekly) and is available by phone at other times.

If these enabling factors are in place, it is likely that a great deal of effective support for this child can be provided by the supporting environment and the wider workforce within it. The involvement of the speech and language therapist in developing the school environment and wider workforce within the school will reduce the likelihood of this child requiring direct speech and language therapy intervention from the speech and language therapist. However, the same child in different circumstances may not make progress without more direct support from a speech and language therapist, if a number of the enabling factors described in the example above are absent.

This example serves to illustrate that:

- not every child or young person with speech, language and communication needs will need direct speech and language therapy
- service pathways need to be broad enough to capture the whole system contribution to speech, language and communication needs
- the role of the speech and language therapist as an enabler and educator to the wider workforce is crucial.

Yet, despite the availability of information which could be used to construct a whole system map, the establishment of a framework and processes to secure

and monitor the effective and systematic collection and collation of good outcome, service quality and cost data across the whole system of provision remains problematic in many areas.

Service development for children with speech, language and communication needs has historically occurred in isolation and sometimes in an ad hoc way. There continues to be a lack of coherence between the different statutory sectors in coordinated planning and commissioning to ensure best use of finite resources across traditional health, social service and education boundaries. Voluntary and community sector providers play a key role in delivery but are often left out of the planning and commissioning process.

Cohesive provision of services relies on an effective capability and capacity within each tier of provision (universal, targeted and specialist) across the range of needs. A large number of children and young people with speech, language and communication difficulties will not need specialist intervention, but those that do need quick and efficient access to the appropriate expertise. GPs and schools will increasingly need to understand their respective roles in the whole system for speech, language and communication needs as they take on greater responsibility for commissioning support. Intervention within schools and in early years and primary settings will be vital for securing improvements in outcomes for the greatest number of children and young people with speech, language and communication difficulties. Historically the capacity and capability of universal and targeted services to respond effectively to speech, language and communication needs have been underdeveloped.

There is evidence that children and families are offered different levels and standards of care in different local areas, and that those most in need are not always the most likely to get support. Commissioners have not always understood the support needs of those children and young people who fall outside the specialist and additional tiers of need. This lack of early support can exacerbate the numbers of children and families who reach crisis point and need more complex interventions. Furthermore, parents and young people also feel that they are not sufficiently empowered, informed, or involved in service design and development.

2. What is whole system mapping and design?

‘We believe that a continuum of universal, targeted and specialist services designed around the family is needed. ... Those services do not just happen. They have to be commissioned.’ (Bercow Report 2008)

Children’s services have evolved over time into a highly complex system characterised by a wide range of discrete services and multiple boundaries, some of which may function as barriers. One important consequence of this pattern of development is that no specific service or agency within the system has a holistic picture of children’s needs and outcomes.

It is important to work with the principle of designing services around children and young people to improve their outcomes. Whole system mapping and design activities support this principle by promoting an integrated perspective concerning need and identifying the best response to improving outcomes for children and young people with speech, language and communication needs. It requires commissioners to look at existing and potential resources in a broader and more holistic way, to gain a deeper understanding of the interaction between all parts of the system, and the likely effect of changes in the system on outcomes for children and young people.

Commissioners need answers to the following questions:

- What are the typical pathways for children at different ages and with different levels of need?
- What is the whole system contribution to meeting speech, language and communication needs? Which parts of the system contribute in which ways?
- Which services are well aligned with the needs of the population and which services need to change?
- Is there duplication in the system? Are there gaps?
- Is the quality of services good enough?
- What is the cost of services? How effective are they? Does the system and the component services represent good value for money?

To help commissioners answer these questions whole system mapping will need to include the following (some of these are addressed in more detail in other linked tools):

- the mapping of provision and resources through the identification and assessment of the range and scope of provision across universal, targeted and specialist services
- a consideration of whether services effectively target the main areas of identified need and how they do so (see the Needs Assessment tool)

- an identification of any areas of unmet need and gaps in service provision
- a system-wide view of needs, resources and provision and how they compare, as well as potential priorities for the future
- an examination of workforce resources in skills, competences and capability (see the Workforce Planning tool)
- a review of what services cost, where resources are committed and with what effect (see the Evaluating Outcomes tool for help with assessing effectiveness)
- an identification of the strengths and weaknesses in current provision as well as the potential for innovation and development
- an exploration of where and how services might need to be developed or reconfigured
- an examination of the evidence basis for change and improvement
- an understanding of what service users and carers say about the organisation, configuration and quality of services (see the User Involvement and Consultation tool).

Avoid ‘reinventing the wheel’ locally. In identifying what is most effective and redesigning the whole system, commissioners will need to examine good quality evidence from elsewhere as well as looking at local evidence. www.c4eo.org.uk and www.thecommunicationcouncil.org are good places to start.

The appendix to this tool suggests what the key features of an effective SLCN whole system are, and has a case study of how one local area has constructed coherent and effective SLCN provision.

3. Understand – stage 1 of the commissioning process

The first stage in the commissioning process is understanding the needs of the local population and the resources available to meet those needs, setting priorities and agreeing outcomes. This should start with understanding about speech, language and communication and the nature of the needs children and young people may have. It should include mapping and costing existing services, assessing needs, applying evidence of what works to improve outcomes, listening to the views and experiences of service users, and understanding service capacity and what needs to change.

The task of identifying and collating data across providers for children and young people with speech, language and communication needs is a challenge. However, you can take practical steps to improve the classification, integration and compatibility of information and expertise across the system. A number of the actions suggested in the needs assessment tool will be of value to you here and contribute directly to the improvement of mapping activity over time. It is essential to routinely involve stakeholders from different services and service users themselves in this exercise, as each will bring a different perspective and local knowledge to it.

The methodologies and processes that commissioners go through and the output produced at the end of this process may vary. However, the overall objectives for this mapping exercise should include:

- to understand where and how speech, language and communication needs are currently being met
- to identify the potential contribution of different services to meeting speech, language and communication needs, including those services whose contribution may conventionally be seen as indirect
- to identify the main access points to services and the key transition points (for example age or type of need)
- to identify the main gaps in provision and where the service bottlenecks are
- to provide a framework which informs design options and encourages an analysis of the anticipated impact of change within a whole system context.

In this tool we outline an approach to producing a 'service provision map' which helps commissioners identify and describe all the sources of support available to parents and children with their speech and communication needs, where these are located, who provides them and how much they cost.

Step 1. Define speech, language and communication needs

Start with an agreed definition of speech, language and communications needs, for example the one developed to support your needs assessment (see the Needs Assessment tool).

This will help you to define the potential scope of the mapping exercise. From your specific commissioning perspective, you may wish to focus on an element of provision. Whilst this is not problematic in itself, it will be essential to understand how any specific element of provision fits into the wider context of the whole system within an area. For example, if the priority is to commission speech and language therapy services, the mapping required to properly understand the need will have to include the input which is necessary from this group of specialist staff at universal and targeted levels and not just to focus on the specialist tier of provision.

- **Universal level** – These are services that are available to all children and young people or which children and young people may access such as schools, GPs, libraries, leisure centres, and children's centres. The provision of advice and guidance about communication is also an important universal service. Staff in universal settings will need support to ensure they are providing communication-friendly environments. Speech and language therapists (SLTs) will be a valuable source of support in ensuring access to and development of universal services that meet the needs of children with speech, language and communication difficulties.
- **Targeted level** – These are services for children who may have a particular need or be vulnerable to needing specific services in relation to speech, language and communication. In some areas of high deprivation targeted support may be necessary on a 'universal' basis, i.e. available to all or almost all children and young people. Support will need to be provided in addition to the universal services and may require specific training and additional workforce. Children should by definition move in and out of targeted provision, so it is important to ensure good pathways back to universal and up to specialist tiers of support.
- **Specialist level** – These services will support those with particular needs over and above those that can be met by universal and targeted provision. They will include access to a range of support in different settings, adaptations to existing universal settings such as extra facilities in schools, and access to specialist support including speech and language

therapy. Children and young people requiring the specialist tier of support will continue to benefit from universal and targeted interventions and care should be taken not to 'silo' children at this tier.

The term speech, language and communication needs is an umbrella term which is used to describe the needs of a wide range of children and young people. There are important distinctions to be made between three key elements:

- A child with otherwise complex additional needs may not have specialist speech, language and communication needs, and these needs may be met at the targeted level of provision.
- A child with a specific language disorder who has good general learning ability and no other concomitant special educational or medical needs, might appropriately be considered as part of the specialist tier in respect of speech, language and communication needs, whilst otherwise being thought of as in the targeted tier of need.
- Speech and language therapists, who are by definition 'specialists' in speech, language and communication within the workforce, have a specific and differing role to play at all three tiers of provision, universal, targeted and specialist.

An outline description of the children and young people defined by their speech, language and communication needs as opposed to other factors and the potential role of the speech and language therapist across all three tiers can be found in Workforce Planning tool. It is important to note that there will be a range of types of support needed by children, young people and families across all tiers and that some roles will be providing support across all levels, including support from speech and language therapists.

Step 2. Plan your approach

Identify your overall information requirements, together with the approaches, activities and timeline you will use to generate the information.

This might include:

- engagement with existing and potential service providers to gather basic information and provider perspectives
- a review of contract information, service level agreements (SLAs) and grants. For example, which services are commissioned 'in bulk' as a block contract with a provider, which ones are commissioned as individual packages of support for individual children (spot purchases) etc.
- finance and budget analysis and projections

- interviews and focus groups with children, young people and their families², together with additional information derived for example, from:
 - case file reviews to explore the impact of services on the needs and outcomes for children, young people and their families
 - feedback from ongoing user surveys, exit interviews, the complaints and compliments system
 - analysis of some performance indicators or recent service inspections or review
 - discussions with professionals and advocates working with service users on their views of the service user experience.

Step 3. Identify and map provision

Identify and map all provision within the local service system, regardless of provider, which currently meets any level of speech, language and communication needs or provides preventative interventions.

The aim of this mapping is to establish what activity is being carried out which is supporting children and young people with speech, language and communication needs at universal, targeted and specialist levels, by whom and for what outcomes.

This information can be collected and analysed in any number of ways but a mapping template is a useful tool with which to do this. A suite of templates is available within the Balanced System™ framework (Gascoigne, 2008)³.

These templates map provision, the workforce which delivers provision, the funding source and the contribution of the provision to speech, language and communication outcomes for children, at universal, targeted and specialist tiers. In addition there are specific templates to map training and advice provided to parents and carers and the wider workforce.

The Worcestershire SLCN commissioning pathfinder used the Balanced System™ as the basis for their needs analysis, service mapping and subsequent re-design of services (see the box on the next page).

² For more information about gathering information from children, young people and their families please refer to the User Involvement and Consultation tool.

³ This can be accessed at www.mgaconsulting.org.uk/the-balanced-system.

Whole system mapping: Worcestershire case study

Background and process: Balanced System™ approach⁴

The Worcestershire pathfinder has been working to carry out a service mapping exercise for all services to meet speech, language and communication needs across Worcestershire for the 0–19 years population.

The Balanced System™ approach was adopted to identify and map all services, locations and resources where defined speech, language and communication needs are currently met, or could be met, within the local service system. The local Joint Commissioning Group for the review led the project, which includes lead commissioners from the PCT and the local authority and a cabinet member from the local authority.

To populate the Balanced System™ template, different data sets were collected from a range of sources including the local authority and the PCT. Data was captured in several different ways, including stakeholder and consultation meetings with over 25 key stakeholders; two surveys (with an identification and intervention focus) completed by over 700 practitioners; and semi-structured interviews with parents. This allowed the pathfinder to map all current provision at universal, targeted and specialist levels together with information and training provision onto the Balanced System™ templates, resulting in a comprehensive provision map for Worcestershire. A comprehensive needs assessment and service mapping report were also produced, with a set of recommendations to be taken forward to the service re-design phase of the review.

⁴ www.mgaconsulting.org.uk/the-balanced-system

Outputs and impact

The results of the service mapping exercise include:

- » identification of the potential and identified level of services to meet speech, language and communication needs in Worcestershire
- » adoption of an evidence-based approach to inform future commissioning and service re-design
- » identification of gaps and opportunities within the current system.

The systematic approach offered by the Balanced System™ and accompanying guidance and tools have been key to the success of this exercise. These have helped the pathfinder to carry out a comprehensive service mapping exercise assimilating a significant amount of information, including the views of stakeholders and service users. The model enabled an easy to understand explanation to be provided to stakeholders, and helped to identify effective practice, gaps and opportunities within each key element of the service.

Top tips: managing large amounts of data

To manage the data collated from the extensive range of services and stakeholders, and merge data sets from across the local authority and NHS, it is recommended to:

- » use the Balanced System™ as a framework
- » use clinical skills, knowledge and insights as well as research skills to inform the process
- » allocate sufficient time to complete the task
- » engage with local authority and PCT information teams at an early stage.

This framework was also used by the Hartlepool SLCN commissioning pathfinder as the methodology for their needs assessment and whole system mapping. An example of a small part of the universal tier mapping template for the Hartlepool pathfinder is shown in table 1, on the next page.

The use of templates across universal, targeted and specialist provision will provide a qualitative map of the provision available from all providers across the area.

Table 1: The Balanced System™ service mapping template: example

The Balanced System™ service mapping template

MGA: Consulting

What happens? <i>EXAMPLE Sing and Sign</i>	For whom? <i>Any parent and baby 0-2 years</i>	Where? <i>XX Children and Family Centre</i>	UNIVERSAL PROVISION			Outcomes?	Who funds?
			When? (including frequency) <i>Weekly</i>	Who delivers? <i>SLT + Early Years worker</i>			
Mums 2 Be	Parents to be (under 19 years)	X Centre	Weekly (12 week programme)	Teenage Pregnancy Support Services	The programme incorporates sessions on bonding and attachment which impacts upon babies' communication skills.	Children's Centre SLA	
Dads 2 Be	Parents to be	X Centre	Weekly (10 week programme)	Dad's Worker and Midwife	The programme incorporates sessions on bonding and attachment which impacts upon babies' communication skills.	Children's Centre SLA	
Sing and sign, basic baby signs through songs and rhymes	Any parent or carer with children under 5	X Children's Centre	Weekly (term time)	Private facilitator	Parents introduced to concept of communication including gesture and sign. Babies have enhanced communicative experience.	Children's Centre Sure Start Grant funding.	
Baby Clinic drop -in	Any parent and child 0-5 yrs.	X community centre X Centre X children's centre, other venues across town.	Each baby clinic is attended once a month, SLTs work to a rota to attend 4 baby clinics per month.	SLT	Parents are able to access information regarding speech and language development and informal advice, signposting to further services as needed	SLT funded through Children's Centre revenue	
Bookstart	Universal	In home Nursery Reception class	Children 9 months Children 18 months Children 3 years Children 5 years	Health visitors Nursery nurses Library staff	Supports children's learning and competence in communicating, speaking and listening. Introduction to books and reading for pleasure.	Booktrust	
Rhyme time , songs rhymes ,stories and structured activities	Parents and carers with children 0-5 years	X Children's Centre	Weekly(term Time)	EYFS Worker	Improved FSP results Increased language skills. Improved parental confidence. How children develop the ability to distinguish between sounds and become familiar with rhyme, rhythm and alliteration.	Children's Centre Sure Start Grant funding.	

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Step 4. Collect quantitative data

Quantitative data may also be required; much of this will be collected as part of your needs assessment. However it may be useful to have information about the children, young people and families who are accessing the mapped provision in terms of both numbers and demographic information. This will allow a greater depth of analysis.

The precise measures which will be useful will be driven by the local situation. The Needs Assessment tool provides further information about how to access and use existing data. The following measures may be helpful to consider, although not all will be appropriate across all tiers of provision:

- the access arrangements for services (for example, open access, by referral only)
- the numbers of children, young people or families accessing services
- the age, gender, ethnicity and location of those accessing services
- the referral and/or access source/s to the service if appropriate
- the referral numbers to services by the source of referral where it is a referred service
- the average waiting times for services where appropriate
- the rate of non-attendance
- the speech, language and communication needs outcome indicators for services
- user evaluation measure/s for services.

You will need to make sure that all data relate to the same time frame (for instance, the same financial year).

Step 5. Analyse the whole system map

A mapping exercise using, for example, the kinds of templates described above would be able to produce the following:

- the pattern, type, distribution and use of service resources across a continuum of need
- an understanding of where the key service gaps and constraints are likely to be found
- a profile of the children who access services – who they are and from where, how they use services, and what happens to them on leaving services.

Step 6: Understand cost and value

Commissioners need to understand the cost and value of services which contribute to improving speech, language and communication. They may need to analyse costs from all three of the following perspectives:

- top down costing of the whole system surrounding speech language and communication – to understand where resources are currently being used and to enable them to make plans to move resources from one part of the system to another as well as making cuts to budgets. For example, it will help them to understand the amounts of money which are being used by particular groups of children at different ages or with different levels of need
- bottom up costing – case by case – to calculate the total cost of a service or a group of services for one child
- service or system costing – for example using the costing spreadsheet developed by Together for Children for children's centres; this is one of the most useful costing tools and is free from www.togetherforchildren.co.uk and can very easily be adapted for different uses.

Assessing value is much more difficult. Ideally you need outcomes data relating to individual elements in the service. This would enable you to assess the value for money of individual components – the highest cost services do not necessarily provide the worst value for money if they are highly effective. Where various services contribute to an outcome, it may not be feasible or even meaningful to disentangle the contribution of individual services. However, it may be possible to make value for money comparisons where different elements in the service are providing the same outcome in different ways. It will be essential to refer to wider research on the effectiveness of different types of provision.⁵ See the Evaluating Outcomes tool for more information.

⁵ The DfE and the DH has commissioned the Centre for Educational Development, Appraisal and Research (CEDAR), University of Warwick, to deliver a research programme on the cost effectiveness of speech language and communication services. An interim report is available at <http://publications.education.gov.uk/eOrderingDownload/DFE-RR070.pdf> See also <http://www2.warwick.ac.uk/fac/soc/cedar/projects/current/slcn/>

Step 7. Consider options for change

Profiling in this way is likely to generate additional questions. The answers to these questions will start to suggest where priorities should focus and to inform the shape of service transformation options available.

- How many children are accessing support for speech, language and communication needs? Are these fewer than expected from your local prevalence and needs profiles? Is there under- or over-representation of some groups of children and young people? Does the profile of children accessing services reflect local demographics, for example in relation to ethnicity and social disadvantage?
- Where and how do children and young people access the system?
- Are there services or supports that are being duplicated across the system and potentially wasteful?
- Who are the main referring agents across the system? Do patterns of referral and access activity change across the system? Are referrals to services more or less appropriate across the system?
- Where are the conditions for access to the system most restrictive? Do these points correspond to the most significant waiting lists and service bottlenecks? What appears to be the impact of these constraints on whole system functioning?
- Are there additional or alternative locations within the system where needs could be met in a more appropriate way (rather than simply fitting support needs into existing services)?
- Does there appear to be an optimum distribution of staffing and associated resource commitments to speech, language and communication needs across the system? What appear to be the main constraints on service development and transformation that derive from the current distribution of resources?
- Where do the outcomes for children and young people appear to be strongest within the system? Where do they need to be better?
- Are services actually meeting the objectives or achieving the outcomes they say they do, or which users actually want?
- Where should the initial or additional effort on developing integrated care pathways be most effectively deployed?

This concludes the main steps in carrying out a whole system mapping exercise. You may wish to add to this and tailor your approach depending on local resources, circumstances and need. You now need to use the information to bring about change.

4. Useful resources

Whole system mapping and design – essential reading

- Bercow J (2008) *The Bercow Report: A review of services for children and young people (0-19) with speech, language and communication needs*. Nottingham: DCSF
www.dcsf.gov.uk/bercowreview/docs/7771-DCSF-BERCOW.PDF
The report reviews the provision of services for those young children who suffer from speech, language and communication difficulties, and suggests that better understanding of normal speech and language development is needed, making recommendations for universal provision, particularly in the early years. The final report contains 40 recommendations.
- Gascoigne M (2008–2010) *The Balanced System*
A framework to assist the organisation of services to meet the needs of children with speech, language and communication needs.
www.mgaconsulting.org.uk/the-balanced-system
- Commissioning Support Programme (2010) *Good Commissioning: Principles and Practice* introduces the essential characteristics of good commissioning in children's services. Available from
www.commissioningsupport.org.uk
- Children's services mapping (CSM)
An online data collection and reporting system that aims to provide information about services for children and young people in England by collecting data from all relevant agencies. CSM collects information on disability services and investment in them and tracks change as policy is implemented. Currently the questions asked of services for disabled children focus on the provision of a key-worker system, the style of assessments carried out and transition arrangements to adult services.
www.childrensmapping.org.uk/index.php
- ChiMat – The National Child and Maternal Health Observatory provides information and intelligence to improve decision-making for high quality, cost effective services. It supports policy makers, commissioners, managers, regulators, and other health stakeholders working on children's, young people's and maternal health. www.chimat.org.uk/
- The Commissioning Support Programme *A to Z of Commissioning* training materials are organised around 22 online modules. The materials have been developed to help leaders, commissioners, providers and the communities involved in children's services develop a shared understanding of commissioning

and the skills needed to improve children's services commissioning. A to Z of Commissioning materials can be downloaded from the Programme website.
www.commissioningsupport.org.uk/events--training/csp-events--training/development-programme.aspx

The following modules are directly relevant to whole system mapping and design activity:

B2 – Optimising resources. This is designed for all stakeholders who are responsible for finances, the workforce (including team managers), buildings, markets, service provision, participation and engagement. This module aims to help stakeholders to optimise their use of resources and secure outcomes more efficiently and effectively.

B3 – Whole system design. This is aimed at leaders and commissioners who are responsible for designing new systems and gives a practical starting point for service transformation to achieve efficiencies.

B4 – Targeting. This aims to give you an opportunity to think about how you can target scarce resources so that they will have the most positive impact on outcomes for children and young people. It shows the links between targeting, needs analysis, use of evidence, and performance management.

B5 – Data and Intelligence. This module aims to help to explain the requirements for using and applying data. It introduces key concepts in using data effectively (recognising the advantages and limitations of data) and it explores options to use data efficiently and effectively to support sustainable improvements for children and young people's outcomes.

The modules can be downloaded from
www.commissioningsupport.org.uk/events--training/csp-events--training/development-programme.aspx

- C4EO (2010) *Grasping the Nettle: early intervention for children, families and communities*.
www.c4eo.org.uk/themes/earlyintervention/default.aspx?themeid=12&accesstypeid=1

This report outlines the challenges and opportunities arising from early intervention support for children, families and communities, based on effective practice. The key finding is that early intervention clearly works, and the report outlines the critical success factors.

- C4EO (2009) *Narrowing the Gap*. www.c4eo.org.uk/narrowingthegap/documentsandpublications.aspx#leadershipgovernance
This site contains a range of documents and resources developed by C4EO as part of the *Narrowing the Gap* programme.

- OPM (2010) *New models of public service ownership: a guide to commissioning policy and practice*. Public interest research report. www.opm.co.uk/resources/33505. This is a practical guide to commissioning, policy and practice for public services considering moving services to employee ownership.
- OPM (2009) Budget Holding Lead Professional Reports www.commissioningsupport.org.uk These reports outline findings and draw upon OPM's experience of work with budget holding lead professional pilot sites. They are also available on a CD from OPM.

Augmentative and alternative communication

These web links provide information to help commissioners map the whole system for assessment, provision and support in relation to communication aids.

- www.actwmids.nhs.uk/AAC/care-pathway/aac-care-pathway-documentation
- www.communicationmatters.org.uk/page/resources/aac-assessment-services

Whole system mapping and design – general

- SSIA, *Better Outcomes for Children in Need* This suite of materials published by the SSIA in Wales has been designed to improve local arrangements for the commissioning of children's services. The *Resource Book* contains tools to support resource mapping and understanding service quality and impact and can be accessed at www.ssiacymru.org.uk/media/pdf/g/b/BOCIN_-_Complete_document.pdf
- Pratt J, Gordon P and Plamping D (2005) *Working whole system: putting theory into practice in organisations*. King's Fund: London. This publication takes the view that organisations work as living systems with parts that interact and evolve, and provides methods for using this approach. It explains how this metaphor works, describes its principles, relates an account of using the whole system theory, and explains partnership, dialogue and how it is applicable to many organisations.
- NHS Evidence – innovation and improvement (formerly a Specialist Library of the National Library for Health) www.library.nhs.uk/Improvement/ViewResource.aspx?resID=320267 The 'whole system thinking' page has a number of links to helpful material including frameworks and toolkits to evaluate and support whole system approaches to health and social care.

Mapping support resources

- CCfR (2008) 'Extending the Cost Calculator for all Children in Need: Mapping services for children in need and identifying child level data for those services'. *Evidence Issue 12*, Loughborough University. Details the findings of two complementary studies forming the basis of the extended Cost Calculator methodology: *The Mapping of Children in Need Services and Guidance for the New Children in Need Census*. www.lboro.ac.uk/research/ccfr/Publications/35688%20Evidence%20-%20Issue%2012.pdf

Appendix: Characteristics of an effective whole system

The table below gives a whole system description which can be used to illustrate the range of a potential system. The examples given are not prescriptive or exhaustive but provide useful signposting to key areas which need to be considered as part of the whole system.

Characteristics of an effective whole system

System component	Outcome	Description	Best practice quality markers
Prevention/ Universal	<ul style="list-style-type: none"> – Families know how to promote children’s speech, language and communication (SLC) development, recognise where children have difficulties and know where to go for help – The children’s workforce know how to promote children’s SLC, recognise where children have difficulties and know where to go for help – Home, setting and school environments are communication-friendly 	Easily accessible services that provide information and training for families and the children’s workforce on how to promote children’s SLC and when/where to get help	<ul style="list-style-type: none"> – There is a local community-wide awareness raising strategy for families about how to promote children’s SLC – There is a plan for auditing workforce skills/ needs and providing training – Information to help families and the workforce recognise where children have difficulties and where to go for help is made available – Training and awareness raising is delivered by an integrated specialist workforce of speech and language therapists and advisory teachers/ early years consultants – SLC is included in local Children’s Workforce Plan, parenting strategy, and other relevant local strategies such as play, behaviour, narrowing gaps/ equalities – Settings and schools regularly access training on how to adapt the curriculum for children and young people with SLCN, and on how to create communication-supportive environments
Identification	Children have their SLCN identified at no later than aged 3, except in acquired or late onset disorder	There is an effective system for identifying the majority of SLC in children’s first three years of life	<ul style="list-style-type: none"> – The one year and 2-2 ½ year Healthy Child Programme developmental checks take place for all children – All parents/ carers are provided with easily accessible information and guidance to enable them to know if their child’s language development is not following a normal trajectory – Training is provided to the children’s workforce to enable them to identify children whose language development is not following a normal trajectory – Children and young people with behaviour difficulties, at risk of exclusion or in the youth justice system are routinely screened for SLCN – Identification processes clearly signpost child and family to the appropriate form and level of intervention (targeted, specialist and/or a referral on to other appropriate agencies)

System component	Outcome	Description	Best practice quality markers
Assessment	Children receive timely assessments that inform intervention	There are well planned and evaluated systems for providing in-depth assessment of children's SLCN	<ul style="list-style-type: none"> – Assessments are undertaken by adults with xx level of competence (SLCN framework) – Children with low incidence needs will be assessed by a practitioner with advanced specialist skills in, for example physical impairment, alternative and augmentative communication (AAC), autism, learning difficulties, hearing impairment, stammering, cleft palate, severe speech impairment, paediatric dysphagia, paediatric neurology, severe specific language impairment and voice and ENT – or by a practitioner supported by such a high-level specialist – Assessment for children with very low incidence needs will where necessary be supported by very specialist services organised on a regional or sub regional basis – Practitioners are able to use the most up-to-date, evidence-based assessment tools – Assessment follows best-practice standards (for example, involves views of child/parents/ others in child's environment, produces clear profile of child's strengths and needs, and the specific resources required to meet those needs)
Targeted intervention	Children with general language delay, immature speech or listening/ attention control difficulties, are enabled to catch up with their peers	<p>Schools and settings routinely deliver evidence-informed small group interventions delivered by practitioners with the required level of skill</p> <p>Schools and settings have on their staff (or share access to) expert practitioners such as teaching assistants with specialist SLC qualifications</p>	<ul style="list-style-type: none"> – Specialists support schools and settings in delivering high quality targeted interventions via training, modelling, coaching and advice – There is a local system for providing accredited training to enskill expert specialist teaching assistants/ speech and language therapy assistants who work in settings and schools – SLT and inclusion services jointly plan which interventions will be supported with a training programme – there is a SLC provision map – There is a system for evaluating the impact of the selected interventions using pre and post intervention measures, and using evaluations to inform future planning – Schools and settings are supported in using best practice principles for interventions (carefully matching interventions to assessed needs, clear entry and exit criteria, including parents/ carers, ensuring interventions link in to the children's classroom work, monitoring intervention delivery)

System component	Outcome	Description	Best practice quality markers
Specialist intervention	Children who will not make progress without direct involvement of a specialist receive early, effective intervention that helps them reach defined outcomes – which may be improved language skills, improved functional communication, or improved well-being/ quality of life	Specialist services that are able to provide timely effective intervention	<ul style="list-style-type: none"> – There is collaborative delivery of intervention, involving the family and the setting/ school – Interventions are delivered by integrated teams of practitioners with appropriate specialist expertise – Interventions are routinely evaluated and service provision adjusted in the light of evaluation – Intervention for children with low-incidence needs are supported by local SLTs with advanced specialist skills in, for example physical impairment, alternative and augmentative communication (AAC), autism, learning difficulties, hearing impairment, bilingualism/ English as an Additional Language, stammering, cleft palate, severe speech impairment, voice and ENT, paediatric dysphagia, paediatric neurology, and severe specific language impairment – Interventions for children with very low incidence needs are supported by highly specialist services organised on a regional or sub regional basis (for example the provision of high-tech AAC assessment/ equipment/ support, severe specific language impairment, severe specific speech impairment, and persistent stammering) – Services have a skill mix that enables cost-effective and skilled support – for example, they include technicians and occupational therapists for AAC, and may include speech and language therapy assistants – There is a joint commissioning approach for AAC equipment, with an identified joint budget – No child has to wait more than 18 weeks between referral and intervention, and children for whom rapid intervention is vital (swallowing difficulties, stammering) receive intervention within a specified number of weeks – There is a continuum of educational provision for children with different levels of need, ranging from blocks of specialist intervention within mainstream schools/ settings, through to more intensive support via part or full placements in SLCN resourced provision or intensive outreach from such provision, through to full-time teaching by specialist education staff in a special school or mainstream setting

Below is an example of one area describing its whole system provision.

Bolton's whole system provision

Bolton has a large speech and language therapy service, an inclusion support teaching service, and a specialist educational psychologist with dedicated time for helping children and young people with speech, language and communication needs. There are primary and a secondary additionally resourced mainstream provision for speech, language and communication needs, as well as for autism, and a special school providing outreach. The local authority and PCT commission services jointly, with aligned budgets. The local authority contributes part of the costs of the speech and language therapy service.

SLTs and education staff work closely together. Every Child a Talker is an example: the consultant post is shared between a speech and language therapist and a member of the inclusion support teaching service. Together they provide a well-regarded model of training (ELKLAN) to practitioners, help settings audit their environment and develop their work with parents, and model a small-group programme called Nursery Narrative. The settings involved have made an 18 percentage point improvement in children's personal, social and emotional development at age five, and a 12 per cent improvement in communication, language and literacy skills, between 2009 and 2010 – well ahead of national improvements.

The Healthy Child Programme (HCP) operates effectively to support the early identification of need. Health visitors and midwives are wherever possible co-located with children's centres. A timeline has been developed, showing the HCP points of contact with a family from

the antenatal period onwards. Children's centres receive information on every new birth in the area, and for each child note whether the family accessed services at each contact point on the timeline. Where there are gaps, this will be discussed at the children's centre multi-agency 'resource panel'. The appropriate professional will be identified to make contact with the family.

Speech and language therapists provide a rolling programme of training for health visitors, and a screening tool for use at the 2 ½ year development checks. A speech and language therapist works across all the children's centres and provides training to staff, such as family support workers, so that they can work with individual parents or groups of parents on how to support children's language development.

The local authority used the principles of Every Child a Talker in its pilot of 15 hours daycare provision for two year olds in socially deprived areas. Children were screened using the Healthy Child Programme checklist and their settings were supported with targeted training in speech and language.

For school-aged children speech and language therapists and inclusion support teachers provide training for staff and direct intervention where children need this. There are no gaps in provision; all age groups including secondary are served, and in addition the LA and PCT currently fund an SLT to work with the youth offending team. The inclusion service has developed a small-group intervention for secondary pupils modelled on the successful primary 'Talking Partners' programme.