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Speech and Language Therapy Service Evaluation Report

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Meeting needs, making changes, improving outcomes

Evaluation of the Speech and Language Therapy Service of Tallaght West Childhood Development Initiative



Early Intervention Speech & Language



2012

CHILDHOOD DEVELOPMENT INITIATIVE



Evaluation of the Speech and Language Therapy Service of Tallaght West Childhood Development Initiative

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Centre for Social and Educational Research, Dublin Institute of Technology



2012

CHILDHOOD DEVELOPMENT INITIATIVE



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Minister's Foreword

For several years now, the Government, most recently through my own Department, has demonstrated a serious and significant commitment to the area of prevention and early intervention. Since 2007, we have, in partnership with The Atlantic Philanthropies, made a significant investment in the Prevention and Early Intervention Programme (PEIP), which constitutes the Childhood Development Initiative, Young Ballymun and Preparing for Life, Darndale.

Speech and language development is central to children's potential to enjoy and benefit from their educational opportunities, their engagement in peer relationships and individual self-confidence. We know that in disadvantaged communities, up to half of all children will require a speech and language assessment, and also that this is an area which causes great concern for parents and teachers alike.

This early intervention approach, which was developed by CDI and evaluated by the Dublin Institute of Technology, engages both parents and teachers in a meaningful partnership via a three-pronged approach, whereby the therapist works with the child and the parent/carer and the Early Years practitioner or teacher. We have long recognised in other domains, such as youth crime prevention, that no single agency or discipline can fully resolve difficulties and this learning has been integrated here to inform an innovative and effective model that brings added value, minimises stigma and employs an early identification and engagement approach to ensure that children receive a service when they first need it and therefore require less intervention.

We live in straitened times, but we know that a deeper understanding of what works for children and families is critical, not only for the health and well-being of the nation, but also for its economic recovery. That is why I am determined that the new Child and Family Support Agency will have a strong focus on prevention and early intervention.

This model of speech and language therapy epitomises this approach, in that it works to develop capacity amongst parents and practitioners; it identifies need at an early stage in a child's development and ensures that interventions are accessible and responsive. This report offers important learning and insights not only on speech and language interventions, but more widely in terms of collaboration, connections and comprehensive responses.

I very much welcome this evaluation report and the knowledge it offers us about making positive change in the lives of children and families.

Frances Fitzgerald, TD

Minister for Children and Youth Affairs

CDI Response to the Evaluation of the Speech and Language Therapy Service

On behalf of the Board of the Childhood Development Initiative (CDI), I am delighted to receive, endorse and welcome this report.

CDI is one of three sites that constitute the Prevention and Early Intervention Programme (PEIP), a joint initiative of the Department of Children and Youth Affairs (DCYA) and The Atlantic Philanthropies. The three sites (CDI, Young Ballymun and Preparing for Life) were set up with the objective of 'testing innovative ways of delivering services and early interventions for children and young people, including the wider family and community settings' (DCYA, 2011).

Based in Tallaght West, CDI is the result of the professionalism, passion and persistence of a group of 23 concerned individuals and organisations living and working in the community who had a vision of a better place for children. Through innovative partnerships, they brought together an approach which drew on both the science and the spirit of best practice in order to meet the identified needs of children and families. A partnership was agreed between the Government and The Atlantic Philanthropies, and the consortium's first piece of work was a needs analysis entitled *How are our Kids?* (CDI, 2004). A number of priorities were agreed based on this research, one of which was to establish and incorporate CDI. This was completed in 2007 and following this a range of programmes have been designed, delivered and independently evaluated.

CDI's programmes are the Early Years Programme; the *Doodle Den* Literacy Programme; the *Mate-Tricks* Pro-Social Behaviour Programme; the *Healthy Schools* Programme; Community Safety Initiative; the Safe and Healthy Place Initiative; Restorative Practice; the Quality Enhancement Programme; and, of course, the Early Intervention Speech and Language Therapy Service, which is the focus of this evaluation report.

All CDI programmes are evidence-informed and incorporate elements for children, families and the practitioners working with them, and are delivered through existing services and structures. CDI has a core role in promoting quality, capacity and value for money. All elements of our work are rigorously and independently evaluated, and we are committed to sharing the learning and experiences from Tallaght West in order to inform and shape future policy, practice, training and curriculum development. This report is one strand in a comprehensive dissemination process aimed at doing just that.

A core element of CDI's Early Years service, the Early Intervention Speech and Language Therapy (SLT) model evolved further through work being undertaken under the auspices of our *Healthy Schools* Programme (CDI, 2012), in which school principals repeatedly identified the need to establish effective and accessible supports for those very young children experiencing difficulty in achieving related milestones. CDI was in the privileged position of being able to extend the existing speech and language therapy service beyond the Early Years service into primary schools, targeting Junior Infant children (4 and 5 year-olds). It quickly became apparent that this service was engaging well with a range of parents on both a formal and informal basis, but importantly was also providing training, skills and knowledge to the practitioners working with the children. It is this three-pronged approach (child-parent-practitioner), alongside the local delivery of the service, that appears to have been so central to the positive outcomes and experience of engagement described in this report.

We believe that this model and the contents of the report illustrate the fundamental value of, and rationale for, prevention and early intervention. Identifying children at a younger age is key to the success of such a programme because those around the child know what to look for and how to manage a concern; having ready access to a service that knows the community and is able to respond quickly; delivery in schools and Early Years settings, which facilitates the

non-stigmatisation of a specialist intervention, while also minimising disruption for the child – these are all elements of CDI’s Early Intervention Speech and Language Therapy model. The potential cost benefits of this early engagement will be carefully considered in a follow-up study recently commissioned by CDI.

We are delighted that the approach continues to be delivered in Tallaght West, with the ongoing and central support of the Health Service Executive (HSE) and more recently the involvement of South Dublin County Childcare Committee, so offering a replicable model for other areas. As with all CDI’s work, this report represents the beginning of a comprehensive dissemination process, in which we will seek to share the learning from the approach, maximise the investment in both service development and rigorous evaluation, and support the integration of those elements that are proven, cost-effective and provide added value.

The service described in this report is a model of engaging both the ‘science and the spirit’ of best practice, bringing together the evidence and understanding from professionals and researchers, alongside the instincts and insights of the teachers, Early Years practitioners and parents caring for and working with young children. We are very proud of this development and grateful to all those who have been part of this initiative.

Joe Horan

Chair

CDI Board

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We are particularly grateful to the research participants: children; parents and speech and language therapy agencies in south County Dublin who gave up their time to become involved.

We would like to acknowledge the support of our colleagues in the Centre for Social and Educational Research and the Department of Social Sciences, Dublin Institute of Technology, and Professor Iram Siraj-Blatchford, Institute of Education, University of London.

The research team would also like to acknowledge The Atlantic Philanthropies and the Department of Children and Youth Affairs whose generous support made this evaluation possible.

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Glossary

CDI	Childhood Development Initiative of Tallaght West
CDI Early Years Programme	An initiative which provided a specialised, 2-year pre-school programme to children aged from 2.5 years in 9 pre-schools in Tallaght West
Healthy Schools Programme	Programme delivered in designated primary schools in Tallaght West by the Childhood Development Initiative, which aimed to improve children's health outcomes and access to services through a holistic whole-school approach to health promotion
Early Years Practitioners	Staff trained to work with children of pre-school age
SLT	Speech and Language Therapist
CDI Speech and Language Therapy Service	An initiative which provided on-site, intensive speech and language intervention for children attending either the Healthy Schools Programme or the Early Years Programme and which trained their parents and educators to support speech and language development



Executive Summary

Introduction

The Childhood Development Initiative (CDI) Speech and Language Therapy Service was a component of two other CDI programmes – the Early Years Programme and the *Healthy Schools* Programme. Both these programmes were part of a series of programmes implemented by CDI in its 10-year strategy to improve outcomes for disadvantaged children in Tallaght West, based on research and needs identified in the area. The Early Years Programme aimed to improve children's school-readiness by targeting children, parents and their environment through the provision of quality pre-school care, education and access to health services. The *Healthy Schools* Programme, which was based on the Delivering Equality of Opportunity in Schools (DEIS) Programme, aimed to improve children's health outcomes and access to services through a holistic whole-school approach to health promotion.

The Speech and Language Therapy Service was an original component of the Early Years Programme and an addition to the *Healthy Schools* Programme. In both cases, the service was implemented in response to an identified need for additional speech and language therapy services in Tallaght West.

Research indicates that speech and language difficulties can be of particular concern in disadvantaged areas such as Tallaght West, where children may be more at risk of suffering from multiple disadvantages. The Speech and Language Therapy Service sought to promote children's speech and language development and provide intervention, where necessary. It also aimed to provide training to staff and parents of both the Early Years and the *Healthy Schools* programmes and to promote speech and language therapy within programme settings. Dedicated Speech and Language Therapists (SLTs) worked with the children and families within the educational settings targeted by these programmes. Assessment and intervention for children and training took place within the settings. Some training also took place in CDI and community settings. This report presents findings on children, parents and staff involved in the Speech and Language Therapy Service and other relevant service providers.

Methodology

A retrospective evaluation of the CDI Speech and Language Therapy Service was undertaken. The design consisted of two strands. The first was quantitative and examined the referral, uptake and outcomes of the service. The second was qualitative and looked at the implementation (concurrently where possible and retrospectively when required) of the programme from the perspective of Early Years and school staff, SLTs, parents and CDI staff. As an added layer to the evaluation process, data from other local speech and language services were obtained to provide a point of comparison for the CDI service design. The following sources of information were used: the CDI Speech and Language Therapy Service records; parent focus groups and interview data; staff interview data; and data collected from other speech and language therapy services through questionnaires and interviews. Speech and language therapy providers serving the Tallaght area also provided information on their services. This provided a context for the service provided by CDI. There were 6 Health Service Executive (HSE) primary speech and language therapy services, one HSE hospital-based speech and language therapy service, and 3 specialist non-HSE services that provide speech and language therapy to children with disabilities.

Research questions

The primary aim was to evaluate speech and language therapy intervention as it was delivered in the CDI Early Years and *Healthy Schools* programmes. The main research questions are organised in the report according to implementation of the programme; uptake and accessibility; and outcomes.

Key Findings

- Significantly more boys (n=120, 62.5%) were referred to the CDI Speech and Language Therapy (SLT) Service than girls (n=72, 37.5%). 87% of boys (n=104) and 73.6% of girls (n=53) were accepted for therapy, giving a total of 157 children in SLT. 13 boys (12.5% of boys accepted) and 15 girls (28.3% of girls accepted) were discharged from the CDI SLT Service with their speech and language within normal limits after therapy. Significantly more boys than girls required ongoing therapy after transitioning from the CDI service.
- Most of the children referred to the CDI SLT Service (54.6%-60%) had not been previously referred to other speech and language therapy services.
- The CDI SLT Service saw children at a significantly younger age than HSE community services.
- The CDI SLT Service had a shorter waiting time than all other services except for in-patient speech and language services.
- The number of new referrals, average age and waiting times suggest that without the CDI SLT Service children would not yet have received therapy or even been identified as having a need.
- Children were most commonly referred to the CDI SLT Service by their parents (n=143, 74.5%). The most common reason for referral was because of a number of concerns about both the child's speech and language development (n=89, 46.4%).
- The referral process was scaffolded by the training provided by CDI SLTs to practitioners and parents, and by the support of parents by practitioners.
- Information on severity of difficulties was available or relevant for 130 children. Of these, most children had initial difficulties in the mild range (n=64, 49.2%). A quarter of the children had severe difficulties initially (n=33, 25.3%); 19 children (14.6%) had moderate difficulties; and 14 children (10.7%) had multiple difficulties, with differing degrees of severity.
- 18% of children (n=28) were discharged from the CDI SLT Service because their speech and language had reached normal limits after intervention. These children required an average of less than 6 weeks of speech and language therapy to reach normal limits.
- Half of the 28 children who were discharged due to reaching normal limits in their area of need had had initial difficulties in the mild range (n=14, 50%), while 3 had moderate difficulties (10.7%) and another 3 had severe difficulties. For the remainder (n=8, 28%), there was no severity label available. All of these 28 children had one difficulty in speech and/or language only.
- This finding must be considered as particularly positive in the context of Tallaght West, which has an over-representation of children at risk of suffering from multiple disadvantages (CDI, 2004 and 2005). The intervention removed one further risk factor from the lives of a proportion of these children, some of whom had presented with severe difficulties (n=3).
- A further 30.6% (n=48) were still in receipt of the CDI SLT Service and may have been discharged within normal limits.

- The final 49.7% (n=78) of children transitioned from the service (i.e. no longer attended an eligible setting) with ongoing speech and language needs and were referred to other speech and language services, primarily the HSE community services.
- 39 children were also referred by CDI SLTs to various allied health services, the most common of which were ear, nose and throat (n=12), audiology services (n=7) and to psychologists for an assessment of need (n=8).
- The CDI SLT Service had similar parental attendance rates at direct therapy than most other services involved in the research.
- The CDI SLT Service held at least 100 hours of training through 28 events for staff and parents between September 2008 and June 2011. Training included one-off sessions and courses. When the number of training sessions run by the 10 comparison speech and language therapy services was combined, the number of events was significantly lower than in the CDI service (12 events per year altogether).
- Staff in schools and pre-schools who received the service reported a better understanding of speech and language issues and more confidence in responding to children with additional needs. They reported developing a deeper understanding of speech and language.
- Staff felt training and support provided by the CDI SLTs was beneficial in supporting children's speech and language development. Staff reported changes in their own practice as a result of the training provided by the CDI SLTs. Staff also viewed the CDI service as more accessible than alternatives.
- Staff felt that the CDI SLT Service benefited the children who required intervention and had more general benefits for all of the children in the service. This was due to their increased ability to promote speech and language and the greater potential for early identification of needs.
- As the evaluation was retrospective and largely descriptive, it was not possible to capture any potential long-term benefits of the CDI SLT Service, which may have resulted from the combination of earlier than usual intervention and on-site intensive therapy provision and the three-pronged approach (child–parent–practitioner). Such factors have been identified as supporting resolution of speech and/or language difficulties in other studies (Ward, 1999; Morris and Stein, 2005) and to result in longer term benefits for children (Conti-Ramsden *et al*, 2001; Clegg *et al*, 1999; Gallagher *et al*, 2000; Leitao and Fletcher, 2004; Knox, 2002; Snowling *et al*, 2001).
- Parents of children who had received speech and language therapy felt they had developed a better understanding of speech and language issues and were more confident in responding to their child's difficulties. As research shows, engaging parents in their child's education can be beneficial to the child (Siraj-Blatchford and Sylva, 2004; Sylva *et al*, 2004) and to the parent (Pagani *et al*, 2006), which, in turn, can benefit their other children. Moreover, studies have found that meaningful parental involvement in the therapy process, in particular, is crucial (Lyons *et al*, 2010; Miron, 2012) and can be beneficial for the children.
- Parents felt the school/pre-school based nature of the CDI SLT Service benefited the children both in terms of their development and was less disruptive for children than alternatives.
- Parents felt that their child was more ready for school as a result of the speech and language therapy received and, in particular, that this would result in a lower likelihood of their child being bullied or being singled out for being different.
- The CDI SLT Service had a short-term positive impact on the waiting times for other community speech and language therapy services. At least 20 children from one HSE-funded agency were moved from the HSE waiting list to be seen by CDI SLTs and another HSE-funded agency indicated that it had transferred some children to the CDI SLT Service from the waiting list, although the exact number was not available from the HSE.

Conclusion

The CDI Speech and Language Therapy Service aimed to assess referred children in the Early Years and *Healthy Schools* programmes, and intervene with regard to their speech and language development, where required. It also aimed to support Early Years practitioners, teachers and parents in these programmes, and to promote speech and language generally. The results of this evaluation suggest that the service succeeded in receiving referrals, assessing and intervening with 192 children in Tallaght West at an age when they were extremely unlikely to have been seen by any other local service and without waiting for a long period of time. As a result, 18% of these children no longer required speech and language therapy after intervention, meaning that a smooth transition to school and positive longer life outcomes are likely (Conti-Ramsden *et al*, 2001; Clegg *et al*, 1999; Gallagher *et al*, 2000; Leitao and Fletcher, 2004; Knox, 2002; Snowling *et al*, 2001). Those who required ongoing therapy and who were referred on to other services (49.7%), were likely to have benefited from the intensive period of initial therapy that they received at an earlier than normal age.

Parents echoed these findings by reporting that their children were more ready for school as a result of the intervention. Parents and staff were in agreement that the model was a positive and welcome alternative to traditional clinic-based therapy delivery, in terms of its on-pre-school site location, which meant the SLTs were literally and figuratively accessible to children, parents, practitioners and teachers. It also de-mystified speech and language need and therapy through the training and information sessions offered by the SLTs.

The results of the evaluation of the CDI Speech and Language Therapy Service suggest that integration of services such as SLT within the community and/or educational system meets the needs of the community in a way that traditional clinic-based services do not. Also, the service offers a model of delivery that is fulfilling and satisfying for speech and language therapists since therapy is delivered in a more immediate way than is possible in most clinic-based services due to long waiting lists and the policy of delivering therapy in blocks. Finally, given that the service was located in an area where some children are at risk due to multiple factors, the service can be said to have effectively removed another risk factor from the lives of a proportion of these children. The CDI SLT Service ensured that children's speech and language needs were treated early and intensively, which has been shown in international research studies to be a protective factor in children's lives in both the immediate and long term (Adams and Lloyd, 2007; Gray, 2004; Jones *et al*, 2005).

Chapter 1: Introduction



Early Intervention Speech & Language



1.1 The CDI Speech and Language Therapy Service

Research suggests that the population of Tallaght West has experienced economic disadvantage. The Governmental initiative called RAPID (Revitalising Areas by Planning, Initiative and Development) was designed to support Ireland's most disadvantaged urban areas through targeted investment. It identified Tallaght West as being eligible for RAPID status and research has indicated that Tallaght West has an over-representation of families affected by poverty and disadvantage. Three out of 5 children in the area live in poverty (CDI, 2004 and 2005). Locke *et al* (2002) found that over half of the disadvantaged pre-school children in their study had a language delay compared with the UK prevalence rates of 5% (Law *et al*, 2002). Research also indicates that early speech and language difficulties have a long-term negative impact on children's literacy and learning (Conti-Ramsden *et al*, 2001; Leita0 and Fletcher, 2004). In addition, speech and language difficulties can have negative social ramifications in the short and long term (Clegg *et al*, 1999; Gallagher *et al*, 2000; Knox, 2002; Snowling *et al*, 2001). Moreover, the long-term effects of speech and language difficulties are much greater when difficulties are not resolved by the time a child attends primary school (Bishop and Adams, 1990).

It is important to remember that such research findings have implications at a societal level as well as at an individual level. In particular, these findings combine to indicate that although speech and language prevalence is under-researched in an Irish context, children in disadvantaged areas in Ireland are also likely to be at a heightened risk of suffering from speech and language difficulties, and, in turn, of experiencing the long-term and wide-ranging effects of such difficulties.

The Childhood Development Initiative (CDI) developed a 10-year strategy to improve outcomes for the children of Tallaght West. The aims of this strategy were:

- to develop new services to support children and families;
- to encourage better integration of education, social care and health provision;
- to promote community change initiatives to improve the physical and social fabrics of the neighbourhoods in which children live, play and learn.

The CDI Speech and Language Therapy (SLT) Service was developed as a part of this strategy and was just one of a range of funded targeted projects rolled out in Tallaght West by CDI. The SLT Service was an original component of the Early Years Programme and was later added to the *Healthy Schools* Programme. In particular, the SLT Service focused on the first two aims of the strategy: (1) it sought to promote speech and language development for children in Tallaght West and to provide interventions, where necessary; and (2) it aimed to provide education for parents regarding speech and language, training and education for Early Years practitioners and primary school teachers within the Early Years and *Healthy Schools* Programmes, and to promote speech and language therapy within the Early Years and *Healthy Schools* programmes.

Speech and language therapy was included in the Early Years Programme due to identified need in Tallaght West. Although speech and language therapy services are provided by the HSE in the area, demand exceeded supply of the service (source: CDI staff). Waiting times for speech and language therapy in the HSE service are long (15-18 months currently), although the process is under revision (source: HSE SLT). Research indicates that speech and language difficulties are a particular problem among disadvantaged children and that these can have long-term educational and social ramifications (Locke *et al*, 2002; Knox, 2002). Early intervention may help to off-set problems related to disadvantage (Schweinhart *et al*, 2005). As a result, speech and language therapy was a core component of the CDI Early Years Programme. This was not the case for the *Healthy Schools* Programme. Significant speech and language needs, which were not being catered for by the HSE service provision, were flagged by the *Healthy Schools* Steering Committee (which included school principals, the HSE and CDI representatives). Schools in the *Healthy Schools* Programme are all in the Delivering Equality of Opportunity in Schools (DEIS) Programme and may be more likely to have pupils who experience speech and language difficulties.

The reduction of HSE SLT provision in an area of Tallaght West compounded these concerns. As a result, CDI negotiated with the *Healthy Schools* Programme schools to expand the CDI SLT Service to include *Healthy Schools* on a part-time basis (source: CDI staff).

The CDI SLT Service began in September 2008. A dedicated Speech and Language Therapist (SLT) was assigned to work with the children, parents/carers and practitioners of the Early Years Programme. A second dedicated SLT was later employed with the expansion of the service to work with the *Healthy Schools* Programme. Both SLTs were funded by CDI and employed by An Cosán, a local community-based organisation. They received role support from the HSE community SLT Service, as well as reporting to CDI's Quality Services Officer.

This novel interagency approach was developed as a result of considerable groundwork and planning by CDI and marked a significant step towards using interagency consultation, cooperation and communication to meet the needs of an ever-changing population. Moreover, the delivery mode of the service was novel, in the sense that it was child- and family-centred, targeting children for intervention in their pre-school and school settings, rather than requiring that parents take them out of pre-school or school to attend health centres. In addition, the interagency organisational structure allowed for interprofessional collaboration between Early Years practitioners and SLTs, firstly through the training and information offered by SLTs to Early Years practitioners and school teachers. Secondly, the mode of delivery allowed for the sharing of information on children's needs, progress and outcomes through a feedback loop facilitated by the regular presence of SLTs in the Early Years services and schools.

The first Speech and Language Therapist (SLT 1) worked with the service from September 2008, prior to leaving in February 2010. The role was refilled in June 2010 (by SLT 3). The second Speech and Language Therapist (SLT 2) worked with the service from September 2009 (when it was incorporated into the *Healthy Schools* Programme) and left in August 2010. A replacement Speech and Language Therapist commenced work in October 2010 (SLT 4) (source: CDI staff). The *Healthy Schools* SLT also worked with Early Years settings.

The CDI SLT Service operated in 14 settings. Four of these were in the *Healthy Schools* Programme and the rest were part of the Early Years Programme. The present evaluation focused on the CDI SLT Service in both programmes. (Data from the evaluation of the Early Years Programme were available to this evaluation, *see Appendix 15*).

1.2 Focus of the CDI Speech and Language Therapy Service

The CDI Speech and Language Therapy (SLT) Service operated in 14 settings, all in Tallaght West. There were 3 primary schools and 10 Early Years services involved in service delivery. One of the primary schools also had an Early Start pre-school¹ on-site, which availed of the CDI SLT Service. The service was intended to target children who required intervention, as well as supporting parents/carers and practitioners and teachers in promoting children's speech and language development. The role of the SLTs was to assess children and, where necessary, to provide intervention. Intervention took one of two forms: direct therapy (provided by SLTs to individuals or groups of children within the school and pre-school settings) and indirect therapy (SLTs provided parents and staff with activities to do with children in the form of home and pre-school programmes). The SLTs also provided training for parents and staff on speech and language development and needs, mostly within the school and pre-school settings but also in CDI and community settings.

¹ Early Start is a Department of Education and Skills pre-school. The *Healthy Schools* Programme activities were open to Early Start parents, although they were not specifically targeted by the programme. Early Start children were seen by the *Healthy Schools* speech and language therapist in a *Healthy Schools* setting and are therefore included in the results of the *Healthy Schools* evaluation report (CDI, 2012).

CDI SLTs liaised with the Parent/Carer Facilitators², key workers and managers in Early Years Programme pre-schools. This allowed for the organisation of training sessions. It also helped Early Years practitioners to promote attendance at therapy. The client group in Early Years services consisted of children aged between 2 years and 6 months and 4 years and 9 months (mean age of 3 years and 4 months) at initial assessment. They were seen because they were attending the relevant Early Years service and were referred to the SLT service.

In *Healthy Schools* Programme schools, the CDI SLTs worked with the *Healthy Schools* Coordinator to organise events to promote speech and language therapy and training. They liaised with class teachers regarding therapy sessions and attendance. The *Healthy Schools* client group consisted of children in the relevant schools who were referred to the service, with Junior Infant children being targeted in particular to allow for intervention as early as possible within the school system. The Early Start class was targeted due to the early intervention focus of the service and needs identified by the school and agreed with the CDI SLT. Overall, 19 Junior Infant children, 6 Senior Infant children and 13 Early Start children were referred from the *Healthy Schools* Programme. These children were aged between 3 years and 8 months and 5 years and 8 months (mean age of 4 years and 7 months) at initial assessment.

1.3 CDI Speech and Language Therapy Service Referral Process

The CDI SLTs gave information to parents and staff about how and when to refer to the service. A straightforward and user-friendly referral form was provided. This allowed those referring children to the service to indicate their concerns and other information simply and easily. Early Years children were primarily referred by their parents (n=118, 64.9%). Children could also be referred by the Early Years practitioners (n=20, 12.9%). SLTs noted that Early Years practitioners played a significant role in encouraging and supporting parents to refer children to the service. 65% of *Healthy Schools* Programme children were referred by their parents (n=25) and 23.6% (n=9) were referred by the school staff. Early Years practitioners, teachers and, in particular, the Parent/Carer Facilitators in Early Years services scaffolded the referral process by supporting and informing parents. In doing so, they raised concerns with parents and/or CDI SLTs, supported parents in understanding the need for a referral or carried out the referral themselves, when necessary. One *Healthy Schools* Coordinator also reported following up on referrals, while Parent/Carer Facilitators reported that this was a part of their work with parents. Parents and Early Years practitioners also reported that they often were supported in the referral process by the Parent/Carer Facilitator in their particular service.

² Parent/Carer Facilitators occupied a unique role within CDI-funded Early Years Programme services, which involved working intensively and often individually with the parents of the Early Years children to improve parental engagement, provide parental support and advice, and strengthen the link between home and pre-school. They also delivered a parent training course and conducted home visits.

Chapter 2: Literature Review



Early Intervention Speech & Language



2.1 Early speech and language difficulties and their impact

Research indicates that speech and language difficulties are among the most common neuro-developmental disorders of childhood (Law *et al*, 2000). Estimates of prevalence vary due to differing definitions and the variations in children's development (Lindsay and Dockrell, 1998). In a large-scale and inclusive study of 7,000 children, Chazan *et al* (1980) found that 8% had a severe speech and language difficulty and 18% had a mild difficulty. More recently, in a review of the literature, Law *et al* (2000) reported a median prevalence rating of 5.9%. Nelson *et al* (2006) note that prevalence rates of combined speech and language difficulties in pre-school children range from 5% to 8%, while studies of language delay alone report prevalence rates from 2% to 19%.

Prevalence figures in Ireland are less clear. The Census of Ireland (2006) indicates that there are 33,256 children aged under 14 years with a disability. The National Sensory and Physical Disability Database recorded 2,656 people with a primary speech and language difficulty in 2009.

Lindsay and Dockrell (1998) argue that age is an important factor when considering the prevalence of speech and language difficulties as prevalence studies usually look at pre-school children. There is evidence to suggest that difficulties sometimes resolve spontaneously (Enderby and Emerson, 1996). Roulstone *et al* (2003), however, found that speech and language difficulties did not improve in 70% of children. Also, there appears to be a link between speech and language difficulties and long-term education and social problems, both for those whose difficulties were resolved and persisted (Snowling *et al*, 2001; Knox, 2002; Lindsay *et al*, 2002). This, in turn, has a negative impact economically since it reduces individuals' employment and earning potential.

Evidence also indicates, however, that a wide range of speech and language therapy interventions can improve outcomes for children with difficulties. Law *et al* (2010) conclude that interventions may improve outcomes for children with expressive phonological and vocabulary difficulties. Interventions may be effective whether delivered by speech and language therapists, or by specially trained non-therapists (Boyle *et al*, 2009). This has implications for cost-effectiveness. Boyle *et al* (2009) note that '*indirect group therapy was the least costly, with direct individual therapy the most costly*' (i.e. therapy provided to a group of children by a non-therapist is cheaper than therapy provided one-to-one by a therapist). Similarly, Gibbard *et al* (2004) argue that parent-based interventions '*could potentially save costs for healthcare providers*'. They suggest, however, that initial additional costs are likely.

Overall, evidence indicates that speech and language difficulties are common in childhood and can have long-term effects. A range of interventions have been shown to benefit children with speech and language difficulties. Early intervention in education has been shown to have considerable economic benefits for society (Schweinhart *et al*, 2005). Effective speech and language therapy interventions improve children's speech and language, and may lessen the educational and social impact of difficulties. Cost-effective speech and language interventions have similar benefits to those seen in early education.

2.2 Models of speech and language therapy

Traditionally, speech and language therapy is considered a healthcare profession and speech and language therapists (SLTs) are primarily employed by health services. The traditional model of speech and language therapy is based on this. Therapy is primarily provided by a SLT to clients on a one-to-one basis within a healthcare setting. Among the advantages of the traditional approach, according to Hartas (2004), is that the SLT could independently set a context to maximise children's development within sessions. Therapy tends to be provided individually, supporting both the therapist's management of complex cases and children's privacy, while also focusing on easing the difficulties of individual children.

However, a number of developments created the need for an alternative approach to the provision of speech and language therapy. Firstly, the traditional model depended on the concept that language consisted of discrete units. This concept has since given way to a focus on the socio-cultural and communicative functions of language (Jowett and Evans, 1996). This conceptualisation suggests that children with speech and language difficulties are likely to benefit from exposure to the language and behaviours of peers and teachers in a mainstream classroom. Moreover, evidence-based development changes in legislation have also impacted on the delivery of speech and language therapy. In the UK, for example, changes in education provision have resulted in more children with special needs attending mainstream schools and increased school-based speech and language therapy (Law *et al*, 2002). Increased mainstreaming has also occurred in Ireland in recent decades (O'Toole and Kirkpatrick, 2007), although speech and language therapy remains largely clinic-based. Pragmatic concerns, such as children missing out on school due to attending clinic-based therapy, together with the potential stigmatisation of children with difficulties underlie these developments. The traditional model also relies solely on qualified speech and language therapists. Law *et al* (2000) argue that this is unsustainable given the limited numbers of SLTs and the caseloads they typically carry. These pragmatic, philosophical and evidence-based developments are mirrored both in other areas of speech and language therapy (Lidz and Peña, 1996) and in other disciplines (Dickinson, 2000).

2.3 Consultation model

The consultation model of speech and language therapy has emerged as an alternative to the traditional model. The consultation model essentially involves speech and language therapists (SLTs) focusing more on work with parents, teachers and speech and language or classroom assistants, and less on direct intervention with children. There is considerable context-dependent variation, however. The model allows for SLTs to work directly with some children, but indirectly with others, for example. Therapy may also be done in groups or individually (Law *et al*, 2002).

Although the consultation model is a useful alternative, Law *et al* (2002) suggest that it brings its own problems. Consultation itself implies an imbalance of power and may compound tensions between different professional groups. The success of the consultation model relies on a number of factors, including support structures for communication, co-working within settings and positive professional relationships between staff from all disciplines. Successful consultation may develop into collaboration between staff, with increased benefits for both staff and children (Mercrow *et al*, 2010; Hartas, 2004). A key advantage of this model is that larger numbers of children can receive interventions.

2.4 Speech and language interventions

Evidence suggests, however, that the perception of consultation as a cheaper, lower-value service is common, especially among parents. Although understandable, research indicates that this is not an accurate perception. Law *et al* (2010) concluded from a meta-analysis of randomised controlled trials that there were no significant differences between interventions which were administered by SLTs and those administered by parents. Gardner (2006) trained learning support assistants in specific therapy skills and found improved interactions and better outcomes for the children. In a randomised controlled trial, Boyle *et al* (2007) found that direct and indirect therapy were equally effective. Adams and Lloyd (2007) found that direct intervention by a SLT together with consultation with school staff resulted in improvements in children's pragmatic language. Mercrow *et al* (2010) found improvements in children's language after intensive intervention by a trained non-therapist working in a collaborative school setting. McCartney *et al* (2009) found somewhat different results in a randomised controlled trial of 152 children based on the 2009 study by Boyle *et al*. Although there was little difference in the impact of interventions delivered by SLTs or assistants, interventions delivered by school staff were less effective. This highlights the need for ongoing communication and collaboration between SLTs and schools. It also underlines the need for realism in the consultation approach, particularly with regard to workloads of teachers. There are strengths and weaknesses to both the traditional and consultative approaches. Evidence suggests, however, that both are effective in dealing with speech and language difficulties in school and pre-school children.

2.5 Short- and long-term effects of speech and language interventions

Early intervention has been proposed in speech and language therapy due to the long-term consequences for children whose speech and language difficulties persist into school. The effectiveness of early intervention must be examined systematically, however (Ward, 1999). Among the factors impacting effectiveness is the specific difficulty being treated. A meta-analysis carried out by Law *et al* (1998) found that speech and language therapy interventions were effective for children with expressive vocabulary and phonological problems, although less support was found for other difficulties. The impact of intervention on receptive difficulties, for example, was found to be very slight. The meta-analysis, however, included studies with participants aged up to 15 years, rather than early childhood interventions only.

Gillon (2000) found that intervention is effective for 5-7 year-old children with phonological delay and early reading delay. Two years later, the same author found that the effects had persisted at an 11-month follow-up (Gillon, 2002): children who had received phonological awareness intervention were reading at the level expected for their age, while the control children, who had not received the intervention, had not progressed since the initial study. Jones *et al* (2005) carried out a randomised controlled trial of a stuttering intervention in pre-school children and found that children who received the intervention significantly improved.

Ward (1999) has examined the effects of speech and language intervention in a sample of 122 children aged 8-22 months with early signs of language delay. Children were assigned to the experimental group (which received intervention) or the control group (which received no intervention). The children were followed up a year and two years later. The experimental group showed significantly better language ability than the control group. 85% of the control group showed delayed language compared to 5% of the experimental group, and 30% of the control group had been referred for speech and language therapy. Re-assessments were not blind to the children's initial group, however. Further longitudinal study is also necessary. Ward's 1999 study does, however, provide compelling evidence for the benefits of early intervention, both in terms of child outcomes and resource management. It is particularly useful given that the age of the children allowed for a control that did not receive any intervention, which is usually not possible due to ethical concerns. Evidence for the effectiveness of intervention is mixed and suggests that some speech and language problems are more amenable to therapy than others.

Similarly, a large-scale review by Law *et al* (1998) did not find any significant differences in interventions delivered by SLTs or trained parents, nor were there differences between group and individual interventions. In a randomised controlled trial with school-aged children, Boyle *et al* (2009) found intervention to be effective for expressive language. Their results provide further evidence that numerous methods of intervention are effective. No differences were found between therapy that was delivered individually or in groups, or that was delivered by SLTs or trained assistants. Intensive therapy was found to be more effective than that provided to the control group. The control group received standard speech and language intervention as they would have regardless of the study; however the lack of additional details makes comparison between groups tenuous. Other evidence suggests that therapy delivered by teachers may be less effective than that delivered by speech and language professionals (McCartney *et al*, 2009). In general, however, research indicates that there is little impact of the model or method of intervention on its outcome. A variety of types of interventions are effective.

Many studies of the effectiveness of intervention focus on specific interventions and may be delivered intensively (Gillon, 2000; Boyle *et al*, 2009). Glogowska and Campbell (2000) examined the impact of pre-school intervention as it is routinely provided. Children aged less than 3 years were referred for speech and language therapy, and assigned to receive therapy immediately or to be monitored for a year. The children in the 'Therapy now' group received intervention as they would have under normal circumstances. The parents in the monitored 'Therapy later' group were given general advice on speech and language development only. Differences in outcomes between the groups were explored using

five primary speech and language outcomes. Of these, significant differences between groups were only found for expressive language. The outcomes for the 'Therapy later' group were examined in detail by Glogowska *et al* (2002). The outcomes over time varied with the initial diagnoses, underlining the finding elsewhere that some speech and language difficulties are more amenable to therapy and more likely to spontaneously resolve than others. Children with general language difficulties were more likely to still have speech and language needs than children with expressive language or phonological difficulties. Over 70% of all the children still had a speech and language need, based on their scores in a speech and language test and the clinical judgement of the SLTs. Although further follow-ups may have shown more resolution of problems over time, these results indicate that, with or without intervention, many children will not resolve their difficulties before starting school and then are potentially subject to the development of myriad further problems.

The desired effect of early speech and language intervention is to resolve, improve or pre-empt difficulties children have (Ward, 1999). Research indicates that this effect varies primarily according to the type of difficulty and possibly the intensity of the intervention. The long-term benefits of speech and language therapy are less clear.

Early intervention generally is well-supported in the literature, probably in large part due to the availability of very long-term research. It has been shown not only to improve long-term outcomes for individuals, but also to be highly cost-effective (Schweinhart *et al*, 2005). Early speech and language therapy difficulties have been shown to have long-term negative impacts on individuals' education, self-esteem and socialisation, all of which have major potential ramifications economically. Evidence indicates that children with speech and language difficulties go on to experience negative educational and social outcomes compared to their typical peers. As yet, there is little evidence to suggest that interventions impact on this. However, a broad perspective on early intervention, together with evidence of more immediate effects of speech and language therapy, suggests that longitudinal research may reveal long-term benefits for individuals and also economic benefits.

2.6 Parental engagement and uptake of appointments

A great deal of evidence indicates that parental engagement is vital to children's learning and development (Desforges and Abouchar, 2003). Parental involvement in early intervention is commonly recommended (Guralnick, 1997). When children receive speech and language therapy, parents are routinely involved in delivering interventions. Indeed, their involvement is widely considered vital to the therapy process. Despite this, there has been little research on parents' perceptions and involvement (Glogowska and Campbell, 2000).

Evidence suggests, however, that certain factors are vital to the successful engagement of parents in a variety of settings. Socio-economic status has repeatedly been shown to have a major impact on parents' engagement in children's learning. Harris and Goodall (2008) argue that a number of factors facilitate parental engagement in school. These include access to childcare and transport, and parents feeling that they are on an equal footing with teachers. These factors are much more likely to apply to parents of middle and high socio-economic status. Lack of time due to work commitments, lack of social support and inaccessibility of childcare, on the other hand, all hinder the engagement of disadvantaged parents. Parents from ethnic minorities are further hampered due to language and cultural barriers, and the assumption underlying initiatives to promote engagement that all families are the same (Crozier *et al*, 2000). Most communication between parents and education and healthcare agencies is written and poses additional challenges to parents who have literacy problems or speak a different first language.

Similar factors impact parents' engagement in speech and language therapy, whether it takes place in a clinic or a school environment. Morris and Stein (2005) investigated the reasons for non-attendance in a diverse and disadvantaged UK sample. Waiting times contributed to parents' disillusionment with the service prior to therapy even being received and was a problem for those who attended and those who did not. Parents felt that contact letters in their own first language

and reminders about sessions would have facilitated their attendance. Tailoring the therapy location and timing it so that it was as convenient and comfortable for parents as possible also emerged as a facilitating factor. Issues like working full time or having young children and little access to childcare or transport could potentially be overcome in this way. The need for greater publicity and education regarding the value of speech and language therapy emerged due to parents' lack of awareness about, or misunderstanding of, the service.

Glogowska and Campbell (2000) explored parents' perceptions of the therapy process and their own involvement. Therapy was seen as a process – from referral to therapy to eventual discharge. For many parents, the actual therapy process was very different from their initial perceptions. Although most expected, and wanted, to have a role, they were often surprised at the level of involvement therapists expected them to have. A lack of communication about the therapy process contributed to parents' uncertainty and, at times, dissatisfaction. The beginning and end of the therapy process, in particular, were characterised by uncertainty and an imbalance of power between an expert therapist and parents. This may be a particular issue for disadvantaged parents. The study findings by Glogowska and Campbell (2000) indicate the need for clear and consistent communication between therapists and parents throughout the therapy process. Difficulties may be further compounded if therapy takes place in a school environment since parents who are at risk of disengaging from therapy may also be at risk of disengaging from school. However, the evidence indicates that parents' involvement is not only crucial to therapy; it is also what parents want. Evidence also indicates that parental engagement can be facilitated through communication, flexibility and education, and is of particular importance in disadvantaged populations.

2.7 Staff engagement and confidence

The need for staff in schools and pre-schools to be able to respond effectively to speech and language difficulties is becoming increasingly clear. The prevalence of speech and language difficulties among pre-school children and the potential long-term impact makes this an opportunity to increase early identification and intervention. Pre-school staff need to be able to identify and respond to potential speech and language difficulties. Hall and Elliman (2003) argue that appropriately trained pre-school staff can effectively identify when speech and language intervention is required. Considerable evidence indicates that pre-school staff do not believe they are sufficiently informed about speech and language development. Letts and Hall (2003) found that over 70% of pre-school staff surveyed in a UK sample had not received any initial training on speech and language difficulties.

Mroz (2006) found that 70% of pre-school teachers given a case study of a child with speech and language difficulty did not identify the need to refer to a speech and language therapist. She interviewed 25 pre-school staff. Of these, 24 wanted more speech and language training. Almost half had received no speech and language training in the 3 years prior to the study. Mroz notes that participants primarily want to be able to identify with confidence children who need intervention and they want time and opportunities to develop working relationships with SLTs. The pre-school staff in this study felt increasingly responsible for identifying children with speech and language needs, but did not feel they had the appropriate training to do so.

Similarly, research suggests that primary school teachers feel insufficiently trained to identify and deal with speech and language difficulties. Lindsay and Dockrell (2002) reported a wide range of views on speech and language difficulties among their sample primary school teachers: 40% of the teachers felt they could not provide any information about speech and language difficulties. This is of concern given that the vast majority of speech and language therapy provision in the UK happens within schools (Baxter *et al*, 2009). Primary school teachers have little formal training in speech and language (Sadler, 2005) and this affects the service provided to children with speech and language difficulties entering school.

This evidence suggests that a lack of basic training may be hindering school and pre-school staff from working effectively with children with speech and language needs. This, together with findings that indicate collaboration between teachers and therapists is beneficial for children and staff, suggests that more opportunities for teachers and therapists to work together are needed. There are more issues at play, however, relating to more general difficulties with interprofessional collaboration (McCartney, 1999). Speech and language therapy and education traditionally have very different working practices and philosophical underpinnings. McCartney (1999) suggests that the differences between health and education services are so great that it is surprising that successful collaboration occurs at all. Barriers to collaboration include the fundamental differences between the services: education is an 'allocating' service in which all children receive a set amount, while speech and language therapy is a 'commissioning' service in which children receive intervention that is prioritised and rationed according to a balance between needs and resources. These differences are likely to create tensions at an individual and service level. Furthermore, the collaborative setting is almost exclusively the school, in which a SLT may neither feel nor be perceived as part of the team; indeed, the SLT is more likely to be seen as the 'consultant' or expert advisor in such settings (Law *et al*, 2000). Furthermore, different working hours and conditions for school staff and SLTs may create tensions. The potential loss of confidentiality may also be a concern for SLTs working in schools. Conversely, staff may find it difficult to share space and time with other professionals and are unlikely to have much experience of doing so. These issues have the potential to create tension and power imbalance, and to hamper effective working. McCartney *et al* (2009) argue that sensitive management and continuity over time are required to overcome these barriers to effective service.

The above differences are fundamental barriers which emerge when the wider context of the child is considered. McCartney *et al* (2009) argue that families may have more experience with traditional clinic-based speech and language therapy and may not see the benefits of school-based therapy. There is evidence to suggest that this is the case (Law *et al*, 2000). Furthermore, even when school-therapist collaboration is effective, parents may be excluded. The investigation by Band *et al* (2002) of parents' perceptions similarly found that parents have little role in the school-therapist partnership and often feel that the education and therapy services have less interaction than they should. The barriers to SLTs and school and pre-school staff working together automatically hamper opportunities for training and improving the capacity of staff to deal with speech and language needs.

Hartas (2004) investigated features of collaboration between teachers and SLTs. The setting was a specialist school in which teachers and SLTs work full time. Features of this setting were likely to support collaboration. Speech and language therapy services were provided continuously by SLTs, who were not considered visitors but rather part of the school staff. Furthermore, due to the needs of the children, speech and language therapy plays a wider role in the school than it would elsewhere. A sample of 25 teachers and 17 SLTs provided information on the factors affecting collaboration. Both groups raised similar issues, focusing on compatible values and personality as key aspects of effective collaboration. A crucial motivating factor for both groups was the understanding that child development is too complex to be dealt with by one discipline alone. The importance of communication as a means of shared understanding and practice, as well as information transmission, was also highlighted. Insufficient organisational support was raised as an issue, particularly the lack of time to collaborate. The problems brought up by teachers and SLTs included power and professional status. This evidence suggests that even in an integrated environment, collaboration between teachers and SLTs poses serious challenges. Crucially, however, the teachers and SLTs in this study by Hartas (2004) not only discussed shared understanding and goals, but also learning from each other. The author describes this as 'reciprocal consultation'. The equality implicit in this suggests that some of the problems associated with the consultative model can be alleviated by providing time for teachers and therapists to work together.

Similarly, in an Irish context, O'Toole and Kirkpatrick (2007) have examined interdisciplinary training as a means of building collaboration in a specialist setting. They found that participants felt more confident in dealing with speech and language difficulties and developed more realistic expectations of the role of SLTs, although the impact was small. Collaboration seemed to be highly valued by both therapists and others even before the training. The training was therapist-led, rather than allowing full collaboration which may have limited its impact.

Challenges to providing training and opportunities for collaboration are even greater in mainstream schools and pre-schools. It is arguably even more important that mainstream staff can confidently deal with speech and language issues. Wren *et al* (2001) discuss a speech and language therapy service based and funded in mainstream primary schools. From a collaborative perspective, it aimed to increase understanding between therapists and teachers of each other's work. As a result of the training provided, most of the teachers and classroom assistants reported feeling more confident in their ability to identify and deal with speech and language difficulties. Training also impacts on the confidence of pre-school staff in responding to speech and language issues. Furthermore, training pre-school staff on speech and language issues has been shown to improve children's language (Ahsam *et al*, 2006). This suggests that opportunities for training and collaboration, and increased contact between school and pre-school staff and SLTs, are crucial to improving staff confidence and outcomes for children.

2.8 Conclusion

Overall, evidence from a range of sources indicates that speech and language difficulties are highly prevalent (Law *et al*, 2000) and have long-term effects for individuals and society (Snowling *et al*, 2001). A range of speech and language therapy interventions is effective in dealing with difficulties. Facilitating the involvement of parents/carers and schools and pre-schools is likely to improve outcomes and can be done through communication and providing opportunities to work together.

Chapter 3: Methodology of evaluation of Speech and Language Therapy Service



Early Intervention
Speech & Language



3.1 Research design

The evaluation of the Speech and Language Therapy (SLT) Service employed both qualitative and quantitative methods for gathering and analysing data. The quantitative strand sought to determine if the service had succeeded in its aim, which was to lessen difficulties in speech and language for children with an identified need. In doing so, quantitative data on the number, type and outcome of referrals to the service were collected. It was also concerned with quantifying aspects of service provision, such as waiting times, onward referrals and amount and type of training offered to practitioners, teachers and/or parents. Although embedded in a randomised controlled trial, the evaluation of the SLT Service itself was not carried out under these conditions. There were no matched controls nor were there consistent pre- and post-test data for analysis. This limited the scope of quantitative analyses that was possible.

The qualitative strand of the research was termed a process evaluation and it sought to examine the implementation of the programme from the point of view of those implementing it and also those receiving intervention (parents). Since this research was commissioned in the third year of service implementation, some of the process evaluation data were retrospective rather than concurrent. As an added layer to the process evaluation, data from other local speech and language services were obtained to provide a point of comparison for the CDI service. This allowed for the location of the CDI service in a geographical context and for the examination of the implementation process in terms of key differences and similarities between it and other programmes, towards an aim of identifying aspects of programmes that offered the best outcomes for the client group.

Therefore, the methodology incorporates quantitative and qualitative strands in order to provide as complete a view of the programme as possible. It includes a summary of findings, compared, where relevant, to other speech and language therapy services, together with a qualitative exploration of the key issues for those involved.

3.2 CDI consultation process

In line with best research practice, CDI introduced a consultation process which brought together a 'Reflection Group' to consider the final evaluation report. Any key points or recommendations arising from this reflection process were discussed and, where relevant, synthesised into the existing report in preparation for the final draft. The role of the Reflection Group was:

- to assist the evaluation team in understanding the context of programme delivery;
- to inform the final evaluation report;
- to consider the implications of the findings for CDI and Tallaght West;
- to support CDI in identifying key messages for policy and practice.

Participation in the Reflection Group was drawn from:

- the CDI team;
- CDI SLTs;
- HSE SLTs;
- the Implementation Support Group;
- other CDI governance structures, including the Board;
- CDI-commissioned services;
- parents whose children received the intervention;
- CDI programme/manual developers;
- CDI funders.

In summary, members of the Reflection Group:

- received an executive summary or full evaluation report from CDI;
- received a presentation on the key findings from the evaluation team;
- reflected on the findings and learning;
- participated in identifying key messages for policy and practice.

3.3 Research questions

Research suggests that speech and language intervention is effective in dealing with speech and language difficulties (Law *et al*, 2010). Interventions based in educational settings and those which involve education staff and parents have been shown to be effective (Adams and Lloyd, 2007; Roberts and Kaiser, 2011). The primary aim of the research was to evaluate the effectiveness of the CDI Speech and Language Therapy Service as it was provided to children, parents and staff. Its impact was also investigated with regard to other speech and language services in the area. The evaluation centred on the following themes:

Implementation of programme

- What interventions were offered to children?
- What support was offered to parents?
- What was the role of the Parent/Carer Facilitator, *Healthy Schools* Coordinator and other key staff with regard to the speech and language service?
- What support was offered to school teachers and Early Years practitioners?

Uptake and accessibility

- Did parents, Early Years practitioners and teachers engage with the service?
- Were children referred earlier to the CDI service than to other services? Had they been seen by other services previously?
- What were the differences between the CDI service and the standard clinic-based service?
- How accessible were the other agencies to parents and children?

Outcomes

- What were the outcomes for children attending the service?
- What were the benefits of the programme for parents and children?
- Did Early Years practitioners and teachers have a better understanding of speech and language issues after the service?
- Did parents have a better understanding of speech and language issues after the service?
- What was the impact of collaboration between schools/Early Years services and the speech and language service?
- Did the CDI service have an impact on waiting times experienced by clients of other agencies?
- What was the impact of collaboration (if it occurred) with CDI on the other agencies?
- What was the impact of collaboration between schools/Early Years services, the CDI SLTs and the HSE?

3.4 Instruments

The quantitative data were gathered retrospectively from the CDI Speech and Language Therapy Service files and information provided by other agencies. Data templates and interview schedules were designed for the purposes of the evaluation and reflected issues raised by CDI in the Call to Tender. The research questions were identified in the Call to Tender and their inclusion in the research proposal was due to the fact that they reflected issues identified by research and mapped onto the aims of the service (e.g. early intervention, school/Early Years-based services, education). Full details of the instruments and details of their use are provided in Appendices 1-9.

3.5 Participants

3.5.1 Parents

In total, 49 parents were consulted as part of the research. Two parent focus groups were held, with 6 parents scheduled to attend each; 2 parents attended the first group and 4 attended the second. Additionally, 13 parent interviews were held, one face-to-face and the others over the telephone. Parent interviews conducted as part of the Early Years evaluation were also available to the evaluation (*see Appendix 15*); the views of 30 parents were incorporated from these. All of these participants had at least one child who had received the CDI Speech and Language Therapy Service. Two parents had more than one child that attended the service and 6 parents had other children who had received speech and language intervention from other services. 41 participants were mothers, 7 were fathers and one was a grandmother. 33 participants were from Ireland and 16 had moved to Ireland from a number of African countries, including Nigeria and the Republic of Congo. 14 of the participants had daughters who attended speech and language therapy, one had a granddaughter and 34 had sons who attended speech and language therapy.

3.5.2 Schools and pre-schools

Schools involved with the CDI Speech and Language Therapy Service were contacted and all agreed to participate. Telephone interviews were conducted with 2 school principals and one primary school teacher. Face-to-face interviews were conducted with a school principal and vice-principal, 3 primary school teachers and 2 Early Start teachers. Telephone interviews were also conducted with 2 *Healthy Schools* Coordinators and 4 Parent/Carer Facilitators. Focus groups which had already been conducted with pre-school staff and management as part of the Early Years evaluation were available to the current evaluation. These included specific questions on the CDI Speech and Language Therapy Service.

3.5.3 Other speech and language therapy agencies

Agencies providing speech and language therapy in the Tallaght area were contacted, having been identified using a triangulation of consultation with knowledgeable professionals working in the local area (speech and language therapists, CDI staff, Early Years practitioners), an Internet search of local and Government health services' websites and through prior knowledge developed as a result of previous research team work in the local area. All agencies that were identified were contacted (n=12). Of the 3 that did not participate, 2 reported that they were not directly responsible for comparable speech and language therapy provision, and one service, although responsible for speech and language provision, did not return the questionnaire. The 9 agencies that agreed to participate included 3 specialist non-HSE speech and language therapy services. The HSE community speech and language therapy service provided information on 6 settings: 2 in Tallaght West and 4 in the surrounding areas that also serve the Tallaght West community.³ A HSE service providing in-patient and out-patient speech and language therapy also participated. In all cases, data were gathered by the services themselves using a questionnaire developed by the evaluation team. A HSE service representative also provided qualitative feedback on the relationship between the HSE and CDI speech and language therapy services.

³ Although these agencies are located outside of Tallaght West, many of the families that attend them live in Tallaght West.

The rationale for contacting these agencies was to allow for points of comparison to be made with CDI Speech and Language Therapy Service in order to facilitate the answering of some key research questions. These questions covered the referral rate and point of referral, waiting lists, uptake and accessibility of the CDI Speech and Language Therapy Service as compared to other local speech and language agencies. It also allowed for the comparison of models and modes of delivery across the CDI service and other local services to determine the extent to which the CDI model was already being delivered in the community and whether aspects of the CDI model were more or less successful in terms of point of referral, waiting list, accessibility, uptake and parent or practitioner training. This would allow for location of the CDI service within the local community context, while also providing an opportunity to identify positive and negative aspects of the service as it compared to other models of service delivery in the community.

3.5.4 CDI SLTs and CDI staff

A face-to-face interview was conducted with both CDI Speech and Language Therapists (SLTs). Other members of CDI staff (particularly the Quality Specialist) were contacted as necessary for information or clarification, but were not formally interviewed.

3.5.5 Children

Although children receiving speech and language therapy did not directly participate in the evaluation, their data were central to the design. Information on referrals, assessments, interventions and outcomes from the CDI SLT Service as a whole was gathered retrospectively using the SLTs' records of the 192 children referred to the service since it began. More detailed information was collected retrospectively from the SLTs' files on a subset of children whose parents had consented to this (n=95).

3.6 Data analysis

3.6.1 Quantitative data analysis

The completed SLT programme data template was analysed statistically using SPSS 17.⁴ Parts of the child profile data template were also transferred to a SPSS file for analysis. These analyses summarised data on the implementation of the programme and included the number of referrals received and accepted. Waiting times, reasons for referral and intervention, types of intervention received and post-intervention outcomes were also analysed.

3.6.2 Qualitative data analysis

Summaries and transcripts of interviews and focus groups were stored electronically and analysed using the nVivo computer program (which allows for the storage and management of qualitative data). The program allows for initial coding of data and the development of categories and themes based on the data. Thematic analysis was used, which is a qualitative method for identifying, analysing and reporting themes or patterns within data. Data were coded by two members of the evaluation team to ensure consensus and validity. The following steps for thematic analysis, identified by Braun and Clarke (2006) were followed:

- generating initial codes;
- searching for themes;
- reviewing themes;
- defining themes.

⁴ SPSS 17 is a statistics program designed for use in social science research.



Chapter 4: Findings



Early Intervention Speech & Language



4.1 Organisation of the CDI Speech and Language Therapy Service

The CDI Speech and Language Therapy Service was the result of a three-pronged interagency collaboration. The CDI Speech and Language Therapists (SLTs) were funded by CDI, employed by An Cosán and supported by the HSE. The Speech and Language Therapy Service was the result of considerable planning and groundwork carried out by CDI. It was established due to the identification of a need for additional speech and language therapy services in the Tallaght West area. It was implemented in both the Early Years and *Healthy Schools* programmes and, in both cases, collaboration with other agencies was vital. CDI engaged extensively with the HSE in implementing the service. This included the development of dual policies and procedures, and a Memorandum of Understanding (see Appendix 16). The CDI SLTs attended HSE team meetings and training, and received role support from the HSE Principle SLT. Moreover, Early Years CDI SLTs were based in HSE health centres. This collaboration supported CDI and HSE SLTs in working together and ensured that a consistent service was offered to children (regarding, for example, transition between services and children with multidisciplinary needs).

The initial set-up of the CDI SLT Service within the Early Years Programme meant that working together was implicit in the design. Service agreements were drawn up between the CDI SLT Service and individual Early Years services and primary schools to formalise the working arrangements and collaborative process (see sample in Appendix 17).

The CDI SLT Service was added to the *Healthy Schools* Programme after it had been implemented, however. Collaboration between CDI and the *Healthy Schools* Programme schools was vital in agreeing the working conditions of the CDI SLT Service and in establishing roles of the SLT and the schools within the service. This was especially important in agreeing training for teachers and the role of teachers in supporting the service. The *Healthy Schools* Coordinator in one school supported the organisation of staff training (source: CDI staff and documentation, interviews).

4.2 Implementation of CDI service in Early Years services and schools

4.2.1 Demographic characteristics of children

In all, 192 children were referred to the CDI SLT Service between September 2008 and June 2011. Children were referred from the Early Years and *Healthy Schools* programmes (see Table 4.1).

Table 4.1: Demographic characteristics of children in Early Years and *Healthy Schools* settings

Demographic	Whole Sample		Early Years		Healthy Schools	
	No.	%	No.	%	No.	%
No. of boys	120	62.5	96	62.3	24	63.2
No. of girls	72	37.5	58	37.7	14	36.8
Total	192	100	154	100	38	100

There were 154 children referred from the Early Years Programme services. Of these, 96 (62.3%) were boys and 58 (37.7%) were girls. They were aged between 2 years and 6 months and 5 years and 4 months, with a mean age of 3 years and 5 months. There were 19 children in the SLT programme from the *Healthy Schools* Programme Junior Infants classes. They were aged between 4 years and 5 months and 5 years and 8 months, with a mean age of 4 years and 10 months. There were also 6 children from the *Healthy Schools* Programme Senior Infants classes. Half were boys and half were girls. They were aged between 4 years and 9 months and 5 years and 7 months, with an average age of 5 years and 1 month. 13 children were referred from an Early Start pre-school based within a *Healthy Schools* Programme school. 8 (61.5%) were boys and 5 (38.5%) were girls. They were aged between 3 years and 5 months and 4 years and 5 months, with an average age of 3 years and 9 months.

4.2.2 Referral process

Most referrals were accepted by the CDI SLTs after an initial assessment. Of the 154 children referred from the Early Years Programme, 122 (79.2%) were accepted for therapy. Most of the children who were not accepted for therapy did not require it (n=25) or were attending another speech and language therapy service (n=5) or the reason was not provided (n=2). 60% of referred Early Years children had not been previously referred to other speech and language therapy services (n=92).

92% of all referrals received in the *Healthy Schools* Programme were accepted (n=35). All of the children whose referrals were not accepted did not require therapy (n=3, 7.8%). At least 34.2% (n=13) of referrals in the *Healthy Schools* Programme were for children who had not been referred previously to an SLT and it was unknown whether 10 additional children had previously been referred to an SLT due to missing data.

At least 54.6% (n=105) of the whole sample of children referred had not been previously referred to speech and language therapy. There were a further 10 children however, for whom this information was unknown. Therefore, at least 54.6% and up to 60% (n=115) of all referrals were new referrals (*see Section 4.2.3 below for more detail on the source of referral*).

4.2.3 New referrals and source of referral

Table 4.2 provides information on the source of referral and the breakdown of referral sources across the programmes. Overall, most children were referred by parents (74.5%). The next most common source of referral were Early Years practitioners (10.9%) and then teachers (4.6%). Evidence from parental focus groups, and interviews with teachers, practitioners and SLTs indicate that programme personnel themselves (including the CDI SLTs, Parent/Carer Facilitators, teachers and Early Years practitioners) played a crucial role in scaffolding the referral process through the support and information provided to parents to make an initial referral.

Table 4.2: Source of referral of children in Early Years and *Healthy Schools* settings

	Whole Sample		Early Years		Healthy Schools	
	No.	%	No.	%	No.	%
Parents	143	74.5	118	76.6	25	65.7
Early Years practitioners	21	10.9	20	12.9	1	2.6
Teachers	9	4.6	–	–	9	23.7
Other	5	2.6	3	1.9	2	5.3
Unknown	14	7.3	13	8.4	1	2.6
Total	192	100	154	100	38	100

4.2.4 Reasons for referral and intervention

Overall, the majority of referrals reflected a combination of reasons for referral regarding the child's speech and/or language (see Table 4.3). 51% of Early Years referrals were due to a combination of concerns (n=79). 18% of Early Years referrals were due to speech concerns (n=28). There were 5 referrals for stammering (3.2%) and 5 for concerns due to understanding language (3.2%). 4 Early Years children were referred due to their voice (2.6%) and one child was referred as a result of hearing concerns (0.6%). Of the *Healthy Schools* Programme referrals, 26.3% were due to a combination of concerns (n=10), with 18% of these referrals being due to speech (n=7).

Table 4.3: Reasons for referral in Early Years and *Healthy Schools* programmes

Reason for referral	Whole Sample		Early Years		Healthy Schools	
	No.	%	No.	%	No.	%
Speech	35	18.2	28	18.2	7	18.4
Stammering	5	2.6	5	3.2	–	–
Voice	4	2.1	4	2.6	–	–
Hearing	1	0.5	1	0.6	–	–
Understanding language	6	3.1	5	3.2	1	2.7
Using language	1	0.5	1	0.6	–	–
Combination of these	89	46.4	79	51.3	10	26.3
Other*	38	19.8	22	14.3	16	42.1
Unknown**	7	3.6	3	1.9	4	10.5
Missing	6	3.1	6	3.9	–	–
Total	192	100	154	100	38	100

* The option 'Other' was provided on the referral form and was chosen without need for expansion by those referring (mostly parents).

** On occasion, the person completing the referral form did not indicate their reason for concern as requested and data were missing on the entire form for 10 children.

In line with the variety of reasons for referral, children were accepted for therapy for different reasons (see Table 4.4). Almost half of children receiving therapy in the Early Years Programme required intervention for multiple difficulties with speech and/or language (n=55, 45.1%). 27% of Early Years Programme children had a phonological difficulty that required intervention (n=33). The majority of children receiving intervention in the *Healthy Schools* Programme had a phonological difficulty (n=17, 48.6%). 11 *Healthy Schools* Programme children required intervention due to multiple difficulties (31.4%).

Table 4.4: CDI SLTs' reasons for providing therapy

Reason for therapy	Whole Sample		Early Years		Healthy Schools	
	No.	%	No.	%	No.	%
Expressive language	9	5.7	6	4.9	3	8.6
Receptive language	9	5.7	8	6.5	1	2.9
Core language	11	7.1	8	6.5	3	8.6
Phonological	50	31.8	33	27.1	17	48.6
Articulation	1	0.6	1	0.8	–	–
Fluency	1	0.6	1	0.8	–	–
Voice	5	3.2	5	4.1	–	–
Multiple reasons	66	42.1	55	45.1	11	31.4
Other	1	0.6	1	0.8	–	–
Missing	4	2.5	4	3.2	–	–
Total	157	100	122	100	35	100

4.2.5 Nature and severity of children's difficulties

On analysis of the nature of children's difficulties, delays in speech and language were found to be most common (n=101, 70.1%), as seen in Table 4.5. This was followed by disorders (n=27, 18.7%) and then by the presence of both together (n=16, 11.1%). Three-quarters of the Early Years Programme children who required intervention had a delay in speech and/or language, a further 15.4% had a disorder (n=17) and 9.1% had both delays and disorders (n=10). Most of the *Healthy Schools* Programme children who required intervention also had a delay in speech and/or language (n=18, 52.9%); a further 29.4% of *Healthy Schools* programme children had a disorder (n=10) and 17.6% had both delays and disorders (n=6).

Figure 4.5: Types of difficulties in the Early Years and *Healthy Schools* programmes*

Difficulty type	Whole Sample		Early Years		Healthy Schools	
	No.	%	No.	%	No.	%
Delay	101	70.1	83	75.4	18	52.9
Disorders	27	18.7	17	15.4	10	29.4
Both	16	11.1	10	9.1	6	17.6
Total	144	100	110	100	34	100

* CDI SLTs classified difficulties in terms of delays and disorders. This was not available or not relevant for all 192 cases.

For the whole sample, most difficulties were classified as mild (49.2%), followed by severe (25.3%) and then moderate (14.6%) (see Table 4.6). 11% of the whole sample had multiple levels of severity of difficulties (n=14). 43% of Early Years Programme children who were accepted for therapy had a mild difficulty (n=42), a further 26.8% had a severe difficulty (n=26) and 14.4% had multiple difficulties of differing severities (n=14). Well over half of the children accepted for therapy from the *Healthy Schools* Programme had mild difficulties (n=22, 66.6%), a further 21.2% had severe difficulties (n=7) and 12.1% had moderate difficulties (n=4).

Figure 4.6: Severity of difficulties in the Early Years and *Healthy Schools* programmes*

Severity	Whole Sample		Early Years		Healthy Schools	
	No.	%	No.	%	No.	%
Mild	64	49.2	42	43.3	22	66.6
Moderate	19	14.6	15	15.5	4	12.1
Severe	33	25.3	26	26.8	7	21.2
Multiple	14	10.7	14	14.4	–	–
Total	130	100	97	100	33	100

* The severity label relates to the classifications used by the CDI SLTs. Severity was not available or applicable in all cases.

4.2.6 Interventions provided by the CDI Speech and Language Therapy Service

A key aspect of the CD SLT Service for children was the implementation of interventions. The CDI SLTs provided direct and indirect therapy (see Table 4.7). Direct therapy refers to an individual child or group of children receiving therapy from the CDI SLTs in their school or Early Years service. Indirect therapy refers to a home programme provided by the CDI SLTs to parents or staff.

Direct therapy was considered in terms of 6-session blocks. A mixture of both direct and indirect therapy was most common overall (n=119, 82.1%), followed by direct therapy (n=17, 11.7%). Over 75% of children receiving therapy in the Early Years Programme had both direct and indirect therapy (n=86, 77.5%); a further 14.4% received direct therapy only (n=16) and 8.1% received indirect therapy only (n=9). All but one child receiving therapy in the *Healthy Schools* Programme had both direct and indirect therapy (n=33, 97.1%).

Figure 4.7: Type of therapy provided in the Early Years and *Healthy Schools* programmes*

Therapy type	Whole Sample		Early Years		Healthy Schools	
	No.	%	No.	%	No.	%
Direct only	17	11.7	16	14.4	1	2.9
Indirect only	9	6.2	9	8.1	–	–
Both	119	82.1	86	77.5	33	97.1
Total	145	100	111	100	34	100

* Data were missing on 12 children.

4.2.7 Summary of findings from the individual Child Profile Templates

The parents of 94 children gave consent for their child's specific data from SLT records to be used in the research. Children whose speech and language were within normal limits and did not receive speech and language therapy were not included in this analysis, leaving 83 children (*see Appendix 10*). The Child Profile Templates provided additional information on children's assessments, diagnoses and progress, and give a more detailed picture of the CDI SLT Service (*see Appendix 7*).

4.2.8 Assessment information from the individual Child Profile Templates

All of the children had an initial assessment. A recent (or in some cases, final) assessment was available for just over half of the children ($n=42$, 50.6%). Children's speech and language were assessed in different ways (formally with a standardised instrument or informally) depending on their abilities and difficulties. The different methods of assessment are described in Appendix 11.

A variety of formal tests were also used in assessments. Different subtests of each test were used with differing frequency. Moreover, the same tests were not always used to assess and re-assess the same cases.⁵ A full breakdown of tests and subtests is included in Appendix 12.

4.2.9 Initial and subsequent diagnoses from the individual Child Profile Templates

There was a great deal of variety in both initial and subsequent diagnoses, a breakdown of which is given in Appendix 9. Information was available on the severity of initial diagnoses for 64 children (*see Table 4.8*). Of these, 28 children (43.7%) had mild difficulties, 15 (23.4%) had moderate difficulties and a further 15 (23.4%) had severe difficulties. 6 children (9.4%) had multiple difficulties at different levels of severity.

⁵ The variety of tests meant that statistical difference testing for pre- and post-intervention was not feasible. This is considered further in Chapter 5 (*see Section 5.4*). 7 children were assessed twice on the same statistically usable test, but sample sizes were too low for meaningful analysis.

Figure 4.8: Severity at initial diagnosis from the individual Child Profile Templates

Severity	No.	%
Mild	28	43.7
Moderate	15	23.4
Severe	15	23.4
Multiple	6	9.4
Total	64	100

Post-intervention severity diagnoses varied and were available for 35 children only at the time of writing (see Table 4.9). There were 6 children whose speech and language had reached normal limits. Of those for whom there was recent or subsequent diagnoses available, 9 children (31%) had mild difficulties, a further 9 (31%) had moderate difficulties and 6 (20.7%) had severe difficulties. There were 5 children (17.3%) who had multiple difficulties at different levels of severity.

Figure 4.9: Severity at subsequent diagnosis from the individual Child Profile Templates

Severity	No.	%
Mild	9	31
Moderate	9	31
Severe	6	20.7
Multiple	5	17.3
Total	29/64	100

4.2.10 Implementation of training provided by CDI SLTs

Providing training and support to Early Years practitioners, teachers and parents was an important component of the CDI SLT Service. The service aimed to promote speech and language therapy and to improve staff and parents' capacity to manage difficulties. This was implemented through training courses, workshops, information sessions and coffee mornings. At least 100 hours of training and information was provided by CDI SLTs. 5 training sessions were held in 2009 and 21 sessions during 2010 and 2011 (source: CDI SLT records). Parents of children receiving direct therapy were also given advice and activities to support their children's speech and language development at home. Details of the training provided are given in Appendix 13.

Practitioner and teacher training was a core and necessary element of the CDI SLT Service as planned. Implementing the training and ensuring attendance required initial and ongoing collaboration between the CDI SLTs and Early Years practitioners and teachers. In the *Healthy Schools* Programme, principals agreed that teachers would participate in two 2-hour sessions on 'Identifying children with speech and language needs' and 'Supporting children with speech, language and communication needs in the classroom'. Additional training was optional and depended on the schools' needs (source: CDI documentation). Training was also scheduled flexibly in conjunction with staff. Early Years practitioners, for example, mentioned that early morning training sessions had been arranged to suit their schedule; as a result, training was well attended. The integrated nature of the service within the programmes was vital to a high uptake of training as

it was reasonably clear to staff that certain training was necessary/available. This is likely to be a distinct advantage of the service. Other SLT services reported providing training on request (*see Appendix 14*), but staff may not have been aware of this or have had the structures necessary to organise it.

4.2.11 Discontinuities in implementation of service

There were two periods of discontinuity of the programme due to SLTs leaving the service. There was a month-long discontinuity between September and October 2010 and a 4-month discontinuity between February and June 2010. These gaps were due to recruitment of, and notice procedures for, new SLTs. This impacted on some children waiting for assessment and intervention, particularly as the new SLT was appointed just as children began their summer break and they would not be available for initial assessment until the following September when pre-school resumed. There were 19 initial referrals during the 4-month period. Of these, 15.8% (n=3) were seen within a month. Over 40% (n=8) were assessed in less than 3 months of referral. Approximately another 40% of cases (n=8) waited 4 months or more between referral and initial assessment. In comparison, 48.5% of overall cases (n=80) were seen within a month and 35.7% (n=59) were seen in less than 3 months. Overall, 18% (n=21) of cases waited 4 months or more between referral and initial assessment.

The CDI SLTs completed reports on individual children. In 6 of these, discontinuities are specifically mentioned. In 4 cases, it was highlighted that parents would be kept informed regarding the discontinuity. Two of these cases were recommended to have further speech and language therapy in April and May, at which point the position had yet to be filled. In 2 cases, the discontinuity accounts for a long waiting time. In one, it is indicated that a child waited 6 months for initial assessment and the reason given for this was the month-long gap in provision during which a new SLT was being recruited. This indicates that even brief periods can have a serious impact on individual child assessment and therapy provision. The discontinuity of service was reported as having had an impact on one parent interviewed and was also an issue for some Early Years practitioners.

4.3 Uptake of the CDI SLT Service

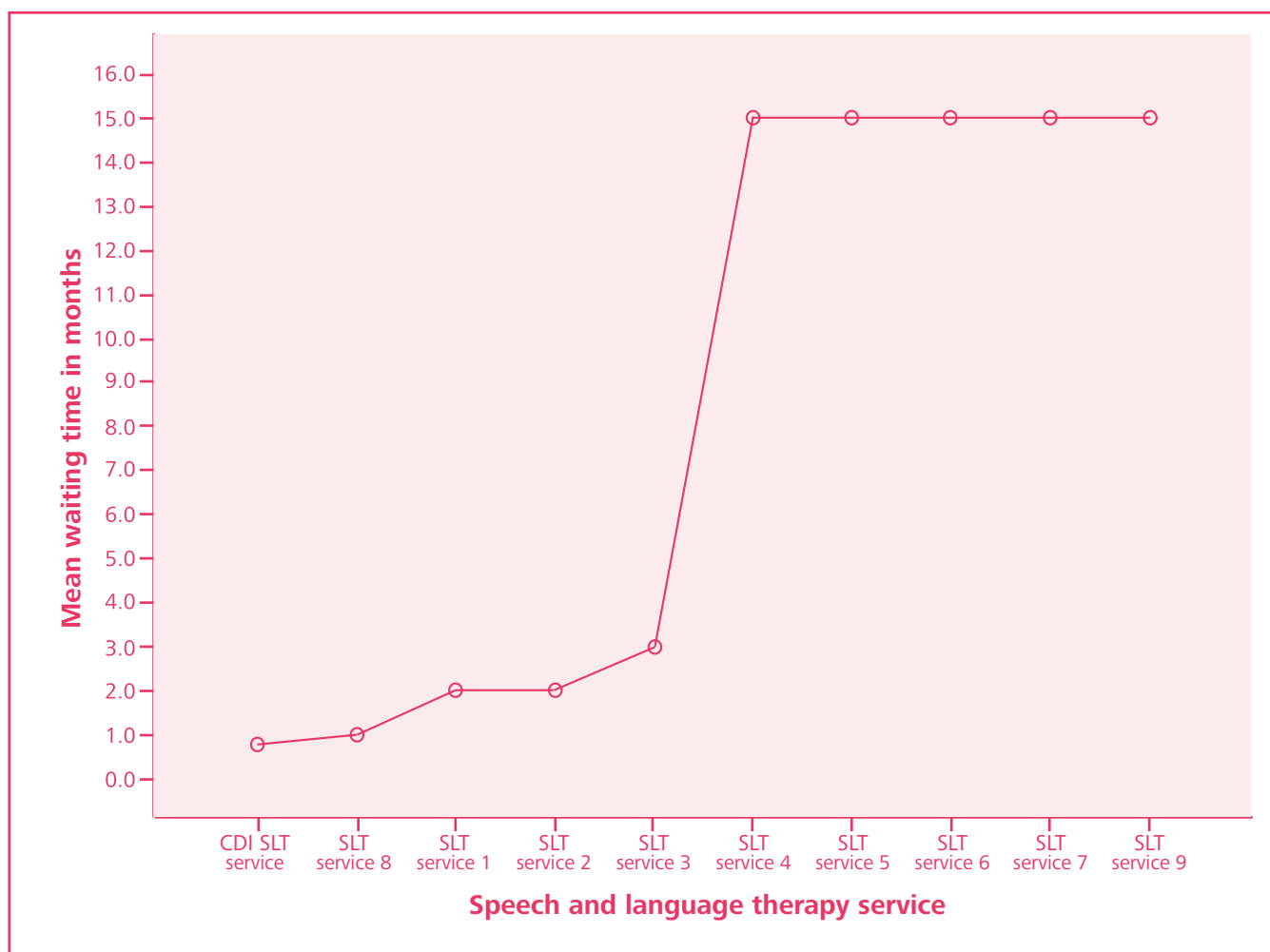
4.3.1 Waiting times between referral and assessment

The dedicated nature of the CDI Speech and Language Therapy (SLT) Service meant that waiting times between referral and assessment were reasonably short. This was important given the high demand for speech and language therapy services in the area and the long waiting times in some other services (*see Figure 4.1*). 30% of children in the Early Years Programme (n=39) were seen within 2 weeks of referral and a further 43.4% (n=53) within 2 months. 19 children (15.5%) waited 3-5 months for assessment, while 8 children (6.5%) waited 4-6 months. Data were not available on the waiting times for 3 Early Years children.

Waiting times were also short in the *Healthy Schools* Programme. 33% of children (n=12) were assessed within 2 weeks of referral. 36% of children (n=13) were seen within 8 weeks. 7 children (19.4%) waited up to 3 months for assessment, while 3 children waited 4, 6 and 8 months respectively between referral and assessment. Longer waiting times were mainly the result of workload build-up due to staff turnover, which when it coincided with the summer break meant children could be waiting for the entire summer and into late Autumn to be seen.

In the comparison SLT services, one setting had an average waiting time of one month. This setting was comparable to the CDI SLT Service in its pre-school delivery model, reflecting the accessibility of such services to their client group. Of the settings that had shorter waiting times of 2-3 months, these services were targeted specialist services rather than community services. The SLT services that had longer waiting times of 15 months were HSE community services, one of which was also school-based.

Figure 4.1: Waiting times in CDI SLT Service and other services



4.3.2 Attendance at direct therapy

The attendance of children at direct therapy is shown in Table 4.10. Over 80% of children attended at least 75% of appointments. There was only one child (0.7%) who attended less than 25% of appointments. Children’s attendance rates were similar in both the Early Years and *Healthy Schools* programmes.

Table 4.10: Children's attendance at direct therapy in the Early Years and *Healthy Schools* programmes

Attendance	Whole Sample		Early Years		Healthy Schools	
	No.	%	No.	%	No.	%
0%-25%	1	0.7	1	1.0	–	–
25%-50%	8	5.9	6	6.0	2	5.9
50%-75%	14	10.4	11	11.0	3	8.8
75%-100%	111	82.8	82	82.0	29	85.3
Total	134	100	100	100	34	100

The attendance of parents at direct therapy is shown in Table 4.11. Parents' attendance rates were lower than those of their children. Over half of all parents in the study (53.7%) attended sessions 75% of the time or more. Some 20% of all parents attended between half and a quarter of the time, while less managed to attend between 50% and 75% of the time (14.9%). 17 parents (12.6%) attended between 0% and 25% of the time.

Table 4.11: Parents' attendance rates in the Early Years and *Healthy Schools* programmes

Attendance	Whole Sample		Early Years		Healthy Schools	
	No.	%	No.	%	No.	%
0%-25%	17	12.6	15	15	2	5.9
25%-50%	25	18.6	18	18	7	20.6
50%-75%	20	14.9	17	17	3	8.8
75%-100%	72	53.7	50	50	22	64.7
Total	134	100	100	100	34	100

Parents' attendance rates at direct therapy in other services were largely similar to the CDI SLT Service. All but one other service reported that typical parental attendance rates were 75% or more. It is important to note that parents did not have to attend direct therapy with their children in the CDI SLT Service. This is not the case in other speech and language therapy services and is a distinct feature of the CDI service.

There are, however, differences in attendance rates at initial assessment in the CDI and other SLT services. Parental attendance rates at initial assessment in the CDI SLT Service were close to 100%. Other similar services reported much lower attendance at initial assessment (source: CDI and HSE SLTs). This may be related to the longer waiting times of these services, their physical location and less integrated approach. This is also a distinct advantage of the CDI SLT Service since children are much more likely to attend their initial assessment and therefore receive appropriate support.

4.3.3 Parents' attendance at training

The dedicated nature of the CDI SLT Service meant that it could provide considerably more parental training (i.e. additional to that provided at direct therapy) than other services. 20 events were held for parents and were generally well attended. Although some events had specific target audiences, others (such as the Speech Carnival and Reading Week events) were related to the service's aim to promote speech and language development within the Early Years and *Healthy Schools* programmes generally. This was a distinct feature of the service compared to the specific training provided by other agencies in the area (see Appendices 13 and 14 for details).

4.3.4 Perspectives on uptake and accessibility

Although parents' attendance rates in the CDI SLT Service were not higher than in other local SLT services, there was a consensus that the CDI service was more accessible than the HSE community service. All of the staff interviewed felt that the CDI SLT Service was more accessible. It was generally felt that, from the families' perspectives, the waiting times were better and the service was easier to attend:

"There aren't really barriers to the service we have ... There's no parent that doesn't want to go ... but if it's in school ... on campus and sometimes 6-8 sessions will do it ... I've yet to meet a parent who won't go if they can at all."

(Principal 2)

Similarly, the CDI SLTs felt the service was very accessible:

"It's very accessible to the categories it's open to."

(CDI SLT)

"Assessment is easier here than elsewhere ... quicker process ... SLTs are on site ... more accessible to teachers, parents than the HSE."

(CDI SLT)

The CDI SLT Service took steps to deal with barriers to attendance. This involved regular contact between the CDI SLTs and the settings. Setting staff (particularly Parent/Carer Facilitators, Early Years practitioners and class teachers) could remind parents about appointments and follow-up on non-attendance. Parent/Carer Facilitators could assist parents in organising their attendance at appointments. The *Healthy Schools* Coordinators reported having little role regarding attendance due to the integrated and accessible nature of the service, although one *Healthy Schools* Coordinator reported following up to ensure referrals had been made. It was felt by practitioners and teachers that parents were more likely to attend this service than others. Parental involvement and attendance remained a concern for some, however. There were differences between, and within, settings in this regard. The fact that the service was accessible to children even if parents could not attend was mentioned as beneficial by several staff members:

"And the child still got the service with or without the parents being there."

(Parent/Carer Facilitator 2)

Parents also described the CDI SLT Service as accessible. Of the 60 parents interviewed, only 2 were unhappy with the waiting time. 20 parents compared their wait favourably with other experiences of waiting for speech and language services. Parent 16's experience of waiting times elsewhere was: *"Two years on the waiting list and [the child] was an emergency case ... very frustrating."* In contrast, she reported that she was satisfied with the CDI service's waiting time.

Similarly, Parent 8, when asked about the waiting times, said: *"The wait was grand, it was brilliant ... he was seen in a matter of weeks ... never heard back from [other service]."* Parent 20 felt that *"The waiting time for the SLT was substantially reduced [compared to other services]."* Parent 4 compared her experiences with CDI to the therapy received by her other child elsewhere: *"It's in the playschool you're getting it ... But I've been on the other hand where it's not in the playschool with my other son and it's [i.e. what he gets in the other service] just not enough."*

The convenience of attending speech and language therapy in Early Years services and schools compared to elsewhere was noted as a positive by most parents. 30 parents noted the convenience of the CDI SLT Service being delivered in pre-school settings as compared to attending clinics or hospitals which are further removed. Speech and language therapy could also be fitted into a pre-established school schedule, which minimised disruption to all concerned. Related to this was the unique flexibility of the CDI service, whereby parents did not have to attend. Parent 15, for example, was facilitated in attending every alternate appointment due to her work commitments without her child missing out on sessions. Although it was generally agreed by staff that parental non-attendance was not ideal, they nonetheless felt that the ability of the CDI service to facilitate this was a distinct and extremely beneficial element for both parent and child.

4.3.5 Uptake and accessibility as compared to other speech and language services

The CDI SLT Service is one of a number of agencies providing speech and language therapy to children in the Tallaght area. Information was gathered from these agencies in order to provide points of comparison to the CDI service and a summary is provided in Table 4.12 (*see also Chapter 3, 'Methodology', for more detail on agency selection and profile*).

Table 4.12: Data on CDI and other speech and language therapy services*

SLT service	CDI	Service A	Service B	Service C	Service D	Service E	Service F	Service G	Service H	Service I
Referrals received	72	26	35	34	197	99	279	106	11	12
Referrals accepted	72	16	21	34	195	95	275	–	11	10
Children in direct therapy	59	50	47	16	38	30	154	81	17	16
No. of SLTS per service	2	3.6	1.5	1.5	0.5	2.7	1.8	0.3	0.3	1.5
Mean no. of therapy sessions per child	4.7	7.9	7.8	7.1	6.5	3.9	2.6	3.1	6.7	7.8
Average age	2 yrs 9 mths	2 yrs 6 mths	18 mths	5 yrs	7 yrs 9 mths	7 yrs 4 mths	6 yrs 5 mths	7 yrs 3 mths	3 yrs 4 mths	7 yrs 6 mths
Attendance of children with parents	75%+	75%+	75%+	75%+	50%+	75%+	75%+	75%+	75%+	75%+
Waiting time	2 wks 6 mths	2 mths	2-10 mths	3 mths	15-18 mths**	15-18 mths	15-18 mths	15-18 mths	1 mth	15-18 mths

* The data above refer to the period October 2010 to June 2011, with the exception of Service B which could only provide data from February 2011 to June 2011. SLT Service J could not provide the data necessary and so is not included in the table.

** A waiting time of 15-18 months was due to referrals being dealt with in 4-month blocks every 3 months. Referrals received in April-July 2010 to be seen January-March 2012.

4.4 Outcomes of the CDI SLT Service

4.4.1 Outcomes for children

The outcomes for children who received the CDI SLT Service varied.⁶ Overall, about half of the children who had received intervention required ongoing speech and language therapy after transition from the service (*see Table 4.13*). 18% of children left the service with their speech and language within normal limits (i.e. no ongoing need for intervention). On average, their therapy took 6 weeks before the problems had resolved. These children mainly had mild needs (n=14, 50%) and none had suffered from multiple difficulties, which helps to account for the successful resolution of their difficulties. 3 children (10.7%) had moderate difficulties and 3 (10.7%) had severe difficulties. For the remainder (n=8, 28%), there was no severity label available.

⁶ Children were discharged from the service if they no longer required speech and language therapy. Children were also discharged if they were no longer eligible for the service (due to no longer attending an Early Years or Healthy Schools setting), but they were then referred onward to another service if they had an ongoing speech and language need.

Table 4.13: Child outcomes of the CDI SLT Service

Outcome	Whole Sample		Early Years		Healthy Schools	
	No.	%	No.	%	No.	%
Discharged within normal limits	28	17.8	21	17.2	7	20
Ongoing speech and language needs	78	49.7	68	55.7	10	28.6
Still in receipt of service	48	30.6	31	25.4	17	48.6
Missing data	3	1.9	2	1.6	1	2.9
Total	157	100	122	100	35	100

It is important to note that, at time of writing, 30.6% (n=48) of children were still in receipt of the CDI SLT Service and decisions about their transfer to another service or ceasing within normal limits were yet to be made. Over half of Early Years children who received therapy had ongoing speech and language needs (n=68, 55.7%). 17% (n=21) were discharged within normal limits and 30.6% 25.4% (n=31) were still in receipt of the service. 20% of *Healthy Schools* Programme children (n=7) were discharged within normal limits. A further 28.6% (n=10) still required intervention after transitioning from the service. However, almost half of the *Healthy Schools* Programme children (n=17, 48.6%) were still in receipt of the service.

Children who transitioned from the CDI SLT Service with ongoing speech and language needs were almost exclusively referred to the HSE. All of the *Healthy Schools* children who transitioned with ongoing SLT needs and 92% of the Early Years children (n=63) were referred to the HSE. A further 2 children were referred to specialist services (2.9%) and the parents of 3 children did not consent to referral (4.4%).

A secondary outcome for children treated by the CDI SLT Service was referral to other services for a range of additional needs. The CDI SLTs made or initiated referrals of 39 children (19.8% of those referred and 24% of those treated) to other services. All but one of these children were also accepted for speech and language therapy. Most referrals were to Ear, Nose and Throat specialists (n=12, 30.8%), followed by psychologists for Assessment of Need (n=8, 20.5%) and audiology (n=7, 17.9%).

4.4.2 Factors affecting children's outcomes

Relationships between certain variables were explored using cross-tabulations. There was a significant association between children's sex and their need for ongoing intervention after transition from the service.⁷ The odds ratio indicated that the odds of needing further speech and language therapy after transition were 3.07 times higher for boys than for girls.

There was a significant association between the severity of children's diagnoses and their need for ongoing intervention.⁸ Children with more severe difficulties were more likely to require ongoing speech and language therapy than those with mild difficulties. This association had a medium effect size.⁹

⁷ $\chi^2(1) = 5.84, p < 0.05$

⁸ $\chi^2(3) = 9.65, p < 0.05$

⁹ Cramer's V = 0.34, $p < 0.05$

4.4.3 Perspectives on children's outcomes

Parents' perspectives on the outcomes for children were positive. All of the parents felt that pre-school and school-based speech and language therapy was better than the alternatives. CDI speech and language therapy helped children in a number of ways. 20 parents felt that the familiarity of the setting was advantageous in reducing stress and anxiety for the children. They felt that children were in a familiar environment, without the potentially stressful feeling that they had a problem. Parent 14 felt that having the service in the pre-school "*made going to therapy more natural for him [the child].*" 35 parents felt their children had become more confident and talkative as a result of their speech and language therapy. Parent 26 noted: "*Her identity has come out more since she began ... she's more confident and less clingy.*" They also felt that intervening when the children were very young meant that bullying would not be an issue. Parent 9, for example, felt that her child "*won't get slagged now*" when she goes to school.

Having speech and language therapy in the schools and pre-schools also minimised the time children missed from their daily educational and play routine. This was an important point, particularly but not exclusively, for parents of children in primary school. Parent 11 was glad that speech and language therapy did not "*disrupt his [child's] school work*". 15 parents felt having speech and language therapy in the pre-schools was beneficial to their children's education, either by not disrupting their routine or by improving their readiness for school.

Similarly, Early Years practitioners and school teachers felt that the CDI SLT Service had a number of beneficial outcomes for children. The close contact between the service, settings and parents promoted attendance. The service's ability to work with settings and still provide support to children whose parents did not attend was seen as a major advantage over other services. Throughout, Early Years practitioners and teachers mentioned the relatively short waiting periods as an advantage.

"We probably would have accessed [speech and language therapy], but not as fast as with CDI ... not all the kids would have got seen."

(Early Years Practitioner 1)

Staff felt children benefited through receiving speech and language therapy, and some particularly noted the benefits of receiving it quickly and holistically. Related to this, early intervention was seen by staff as important for children. All teachers consulted felt that speech and language difficulties impacted on children's confidence and learning. They reported that children's confidence, willingness and ability to speak improved through speech and language therapy. All teachers reported clear improvements in children and felt that children may benefit long-term.

"[Therapy] has an impact ... [it is] crucial to get it early ... the severe case [i.e. child with severe need in her class] wasn't caught early and the other three children [with speech and language need in her class] ... [their] difficulties all corrected successfully ... I don't hear a difference anymore ... If it had been later, it mightn't have been as easy to get rid of."

(Teacher 4, Junior infants)

Early Years practitioners also reported improvements in children. Several practitioners felt that speech and language therapy improved the lives of children and their families, and helped prepare them for school. An additional advantage of early intervention according to 4 Early Years practitioners was that difficulties could be rectified before children were at risk of bullying:

"It will help their learning ... If they're not understood ... impacts confidence and self-esteem, talking to their peers ... all kinds of social spin-offs. And here they don't mimic each other ... they're too young ... It's all just parallel play, but later on that can be a problem."

(Early Years Practitioner 2)

The accessibility of the CDI SLT Service to staff also meant that even children who were not receiving speech and language therapy from the CDI service benefited as described by one teacher:

"[The SLT was] definitely ... approachable. Even if a child was not on the SLT's list, the teacher found that she could still consult with the SLT for ad hoc help and advice."

(Teacher 3, Junior infants)

Such informal and flexible support and advice provided by the CDI SLTs was helpful to teachers and widened the impact of the service.

4.4.4 Outcomes for Early Years practitioners and teachers

The CDI SLT Service was in a position to provide support formally and informally. The formal training provided was seen in a positive light by staff:

"[It's] positive ... this isn't really covered in teacher training ... so it's good to get it."

(Principal 2)

All Early Years practitioners and teachers felt that they were more informed about speech and language concerns. The training provided varied across settings and this is reflected in the different reports of some practitioners and teachers. For most, the training was sufficient. This, together with the ongoing support of the SLTs, helped staff deal more confidently with children's speech and language difficulties.

"We were given the knowledge and confidence to follow up [on speech and language concerns, etc]."

(Early Years Practitioner 3)

One Early Years practitioner noted that since receiving the SLT Hanen training¹⁰, there was a greater awareness of the importance of a print-rich environment:

"And we created prints, a print-friendly environment, thanks to the course as well. It was really good."

(Early Years Practitioner 10)

¹⁰ Accredited training that helps teachers learn to apply key strategies to provide a rich and stimulating language learning environment for young children, that encourages language development, builds early literacy skills and provides a physical and social environment that encourages peer interaction.

Many Early Years practitioners noted that the speech and language training taught them to look deeper at children and their needs, and to understand the spectrum of need that can exist. One practitioner voiced her experience:

"If you had said to me, do you know any kids in here that need speech and language, you'd only think of the kids that have the obvious, like say a lisp, or a child who has struggles with some words. But you never ever would have looked deeper than that, when they're [the SLTs] saying it's [the children's] understanding and listening [too]. I never would have looked at that side of it."

(Early Years Practitioner 11)

A staff member from a different setting echoed this sentiment:

"One thing that really stuck out for me was when you have a social child and a non-social child. But there's a middle area that you wouldn't really have considered, that ... although they're sociable, they're not really that sociable with other children at times. So you kind of forget that that's a third place there."

(Early Years Practitioner 12)

Staff reported changes in their own practice with the children as a result of learning from the CDI SLT. For example:

"Referring the children to each other – like if they are asking you something ... to get them to communicate more with their peers."

(Early Years Practitioner 5)

"I suppose reading to them as well ... sitting in from front of the children instead of beside you."

(Early Years Practitioner 4)

It is likely that these practice changes promoted speech and language development within the whole Early Years service since they were not restricted to children with particular needs.

Staff described the content and implementation of the training positively:

"The operation, the organisation, everything was just really very good."

(Early Years Practitioner 5)

"There was a full staff meeting on language development and a talk on voice care for the teachers themselves ... Good ... more ideas of what to expect ... tips and ideas on language development ... how to help."

(Teacher 5)

For others, the training was helpful, but did not prepare them sufficiently for the added responsibility of supporting parents:

"I think training around approaching parents is needed ... saying, I think your child has emotional difficulties, that's hard for staff ... and we're not qualified."

(Early Years Practitioner 6)

Early Years practitioners in one focus group felt that their training did not match parents' expectations and that this was difficult:

"Training could've been better ... it was more of an overview of speech and language ... But you're thrown in there ... telling parents you're trained ... especially early on when we had less regular contact with the SLT."

(Early Years Practitioner 7)

This suggests that more specific training on speech and language and on engaging with parents would have been helpful for at least some practitioners, along with clarity about what level of skill practitioners could expect to reach.

Early Years practitioners also reported a gap in service delivery due to staff turnover. One practitioner described the impact of an SLT leaving the service:

"When [the SLT] left, we were in complete limbo with speech and language therapy."

(Early Years Practitioner 8)

Several Early Years practitioners in other settings concluded the service had been 'patchy' at times. They recounted that:

"From [date omitted–date omitted, i.e. a 6-month period], we'd no SLT at all ... nobody until [new SLT] came. But then [new SLT] wasn't seeing our kids [at first]."

(Early Years Practitioner 9)

This impacted on both children and staff according to practitioners in that setting.

Overall, however, the majority of those who were consulted were positive about the service. The CDI SLTs supported Early Years practitioners and teachers in working with children with speech and language needs and in promoting speech and language development generally. Teachers, in particular, noted the approachability of the CDI SLT. The regular access to the SLT for staff was helpful, both for practical and moral support. Generally, staff reported feeling supported and informed by the CDI SLTs and that they had a better understanding and ability to deal with speech and language difficulties in children.

4.4.5 Outcomes for parents

Parents felt the CDI SLT Service had resulted in positive outcomes for them. Most parents reported feeling supported by the speech and language therapists (SLTs), practitioners, teachers and Parent/Carer Facilitators. They also developed a better understanding of their children's needs and how to help them. Over half of parents reported finding the advice and home-based activities provided by the SLT helpful. Other parents, 20 in all, also mentioned receiving help and support from other members of pre-school or school staff in relation to supporting their child's speech and language. Almost all of the parents found interacting with the SLTs and other staff beneficial. Most parents said they found they understood their children's difficulties better as a result of speech and language therapy and found that they learned better ways to help their children from the SLTs. Parent 9 mentioned that the SLT showed her how to help her child by "*[not] telling her how to do it in a certain way ... not give out ... give her options*". Parent 14 found meeting the SLT "*very beneficial*" because they discussed her child's "*progress and advice about speech and language*". Parent 16 described the SLT as "*very involved with me ... not just my son*".

Twenty parents mentioned feelings of worry prior to their child being seen by the SLT. Children's attendance at speech and language therapy was reassuring for all parents who were consulted. Looking back to before the speech and language therapy, Parent 11 said, "*I think we realised his talking was different ... [we were] so afraid ... that he'd be bullied*". Parent 1 also recalled her worries about her son and the impact on her: "*It is the most painful thing when he is not communicating, but I have to try to understand as a mother.*"

All of the parents reported that their feelings about their children's difficulties had improved as a result of the speech and language therapy and the support received.

4.4.6 Outcomes for other services

The CDI Speech and Language Therapy (SLT) service was closely linked to HSE community speech and language therapy services in Tallaght West. The collaboration between CDI and the HSE in developing the service was central to service delivery. Moreover, the CDI SLT Service and the HSE community services were both primary speech and language therapy services.¹¹ This furthered the potential for beneficial relationships to develop.

A relationship was developed between the CDI SLT Service and the two HSE agencies (Agencies D and E) in Tallaght West, whereby eligible children on the agencies' waiting lists were transferred to the CDI service. Agency D transferred 20 children to the CDI service. Agency E also referred children to the CDI service where they would be seen quicker. This transfer was beneficial to both agencies and to the children involved. Children were also referred back to the HSE from the CDI service when they were no longer eligible for the latter. Both Agency D and the CDI SLTs reported difficulties in this process. Similar concerns were raised by the HSE Principal SLT with regard to transition from CDI and HSE school-based services. Agency D and the CDI SLT Service held a joint meeting to educate parents about the transition. However, this was not attended by any parents, which may have been due to timing factors or because parents did not feel a need to attend such a meeting because they were satisfied about the amount of information they had already received from CDI SLTs. The CDI SLTs then began to meet with parents regarding the transition process and it was hoped that this would promote a smooth transition. At the time of writing, however, it was too soon to determine if this had been effective. Generally, the CDI SLT Service appears to have had a positive outcome on similar services in the Tallaght West area.

¹¹ They generally work with clients who only have a speech and language difficulty and not clients who have a speech and language difficulty as well as another disability.

Chapter 5: Discussion



Early Intervention
Speech & Language



5.1 Implementation and outcomes for children

The CDI Speech and Language Therapy (SLT) Service had a number of beneficial outcomes for children. The primary benefit for children was the early age at which they received intervention. Research indicates that early childhood intervention can offset the effects of disadvantage (Schweinhart *et al*, 2005). Moreover, research indicates that children whose speech and language difficulties resolve by the age of 5 are unlikely to experience long-term effects (Centre for Excellence and Outcomes in Children and Young People, 2010). Children whose difficulties are not resolved by this time, however, are likely to experience long-term academic and/or social difficulties (Bishop and Adams, 1990). Crucially, the average age of children referred to the CDI SLT Service was 3 years and 6 months. This is between, at a minimum, 6 months and, at a maximum, 4 years younger than the average child referred to HSE community services. The average age of children in several other SLT services was 7 years. This strongly suggests that CDI children would not have received speech and language therapy elsewhere during the time that they were seen by CDI speech and language therapists (SLTs). Aside from the advantages of early intervention, the children benefited from the fact that they were receiving intervention in the first place.

The early intervention was advantageous to all of the children who were eligible for the CDI SLT Service. As 54.6%-60% of referrals to the service were new referrals (i.e. children who had not been seen by any other service previously), the children were also availing of a service which they not only needed, but which they would have been unlikely to receive had the CDI service not been developed. The specific outcomes of the service varied. 28 children (18.1%) who were accepted for therapy in the CDI service were discharged with their speech and language within normal limits after an average of 6 weeks of therapy. This is consistent with research which indicates that early speech and language intervention can have a significant preventative impact (Ward, 1999). These children may have required later referral to other services had they not attended the CDI service. This suggests that the CDI SLT Service benefited these children by supporting their development to normal limits and by preventing a worsening and compounding of their difficulties over time. Half of those children (n=14) had difficulties that were labelled as 'mild' initially, although 3 had 'moderate' difficulties and 3 were labelled as 'severe'. Regardless of the initial label that their diagnosis had received, all of the 28 children were effectively removed from waiting lists elsewhere. This was beneficial both for the individual children and at a community level given that it removed the strain on existing local services, both in the immediate term and into the long term.

Given that Tallaght West has been found to have an over-representation of families at risk due to multiple disadvantage, such as poverty, early school-leaving or lone-parent families (CDI, 2004 and 2005), the intervention was particularly welcome for local families and children. The CDI SLT Service effectively resulted in the amelioration of at least one risk (i.e. speech and/or language risk) for a proportion of children in the area. Those children who left the intervention within normal limits were more prepared for school and less likely to experience learning or literacy difficulties as a result of the therapy they received (Conti-Ramsden *et al*, 2001; Leitao and Fletcher, 2004; Snowling *et al*, 2001). Research also indicates that they will be less likely to have social or behavioural issues as teenagers or be unemployed or imprisoned as adults (Clegg *et al*, 1999; Gallagher *et al*, 2000; Knox, 2002; Snowling *et al*, 2001). Moreover, staff training and parental education is likely to have a mediating and positive effect on the speech and language of future children in Tallaght West, both at the family level and at the larger pre-school community level.

There were also positive aspects of the intervention for those children with a remaining speech and language difficulty. Of those still requiring intervention, 38% (n=48) were still eligible to attend the CDI SLT Service. Roulstone *et al* (2003) argue that children's difficulties may still resolve even if they have persisted for some time. Most of the children still receiving the CDI service were in pre-school and many were only referred since January 2011. It is possible that some of these children will reach normal limits by the time they transition from the service. The 18% who no longer required intervention should be seen as the absolute minimum number of children to reach normal speech and language limits as a result of the CDI SLT Service.

Over half of the children (n=78) still required speech and language intervention after transitioning from the service. Some children's difficulties had not improved at the time of the evaluation. This is consistent with the finding by Glogowska *et al* (2002) that most children with early speech and language problems will require ongoing help. This does not, however, suggest that these children did not benefit from the service. The CDI SLTs repeatedly noted that children had made progress even when this was not reflected in a change of diagnosis (source: individual Child Profile Templates). Moreover, as Roulstone *et al* (2003) argue, a lack of progress over the course of a research study does not mean that progress will not happen. The average age at referral (*see above*) and the waiting times (*see Section 4.3.1*) indicate that it is unlikely that the needs of these children would have been identified without the CDI SLT Service. These children are likely to benefit from ongoing intervention and/or the onward referral process, in particular the 'back-dating' approach of the HSE speech and language therapy services. This approach, developed through collaboration between the HSE and CDI, ensured that children were not discriminated against when they transitioned from the CDI SLT Service back onto the HSE waiting list since their previous place on the list was reserved for them, rather than having to go to the end of the list and effectively start again.

The holistic approach adopted by the CDI SLT Service also had benefits for children. Parents and staff were educated to promote children's speech and language development. This meant that children received extensive, as well as intensive, early intervention. Moreover, Gardner (2006) suggests that staff training can improve speech and language outcomes for all children, not just those with a speech and language need.

Research also indicates that exposure to different styles of language and different peers and adults, such as in the Early Years or school environment, benefits children with speech and language problems (Law *et al*, 2010). It seems likely that the holistic approach will have wide-reaching and long-term benefits in promoting speech and language development in the Early Years, school and direct therapy environment. This is a vital advantage of the CDI SLT Service.

The location of the CDI SLT Service within schools and pre-schools was advantageous because it promoted opportunities for the holistic approach and disruptions to children's routine were minimised. Moreover, although parental attendance at appointments in general was not better in the CDI SLT Service than in other services, the location meant that children were more likely to attend, particularly for an initial assessment, which required no extra effort on the part of parents. Information provided by HSE SLTs indicated that there was a relatively high (in some cases up to 50%) incidence of parents and children missing initial assessment appointments in HSE clinics and health centres. The location of the CDI SLT Service also increased the perception of accessibility of the service among parents and staff. Moreover, the service was provided on a continuous rather than a block basis, meaning that there was continuity of delivery and a clear trajectory for the therapy process, which parents reported was positive both for their child's development and for their own engagement with the service.

Thus, the early age at which children received intervention, the holistic approach of the service and its on-site location were the primary advantages of the CDI SLT Service for children.

5.2 Implementation and outcomes for Early Years practitioners and teachers

CDI SLTs reported feeling a high level of job satisfaction, which they attributed to the working model of the CDI SLT Service, which included shorter waiting lists, continuous therapy versus short blocks, parental and educational staff engagement, and a real opportunity to intervene at an early stage. This was in contrast to information provided by the HSE SLTs, who reported occasionally feeling frustrated by the reality of long waiting-lists, which they felt precluded them from having the opportunity to intervene at an early enough stage with children.

A range of training was provided to teachers and Early Years practitioners, from whose perspective the CDI SLT Service compared favourably to other models of service. They felt that the CDI service had a number of advantages in this regard. The dedicated on-site nature of the service allowed support to be targeted to a greater number of settings. It also ensured that teachers and Early Years practitioners were aware of the support offered and were in a position to avail of it. They felt that they got more relevant information and were more able to contact the CDI SLTs than would have been possible with a different speech and language service. Although other speech and language therapy services provide training and can provide information to practitioners on request, the views from the consultation with teachers and practitioners indicate that they may not have been aware of this. Research indicates that Early Years practitioners and primary school teachers want to know more about speech and language issues. Letts and Hall (2003) found that 70% of Early Years staff had not received any information on speech and language during their training. Similarly, Sadler (2005) found little speech and language training among primary school teachers. The current findings are consistent with this: school principals and teachers pointed out that teacher education courses are lacking in speech and language training and information. Those who had received training in the CDI SLT Service mostly responded positively. This also reflects evidence (such as that found in Mroz's 2006 study) that reported staff would like training to enable them to identify with confidence children with speech and language needs. Identification of children with needs was one of the training topics covered by the CDI SLT Service (*see Appendix 13*). Additional training, particularly in relation to engaging parents of children with speech and language needs, seems necessary for school and pre-school staff, however.

An additional beneficial outcome was that Early Years practitioners and teachers could incorporate activities to promote speech and language development into general practice and develop a better capacity to respond to difficulties as a result of training. The changes to staff practice extended the impact of the CDI SLT Service to include all the children in the setting. Outcomes for staff were increased knowledge and confidence about speech and language issues, and support from an accessible speech and language therapy service. Teachers and practitioners reported that the presence of the service offered reassurance to them that children would receive much-needed help, even though they could not provide it themselves. The increased confidence reported by the staff, together with the reports of the CDI SLTs of the importance of staff in supporting referrals, indicates that, consistent with previous research, training improved staff knowledge and confidence (Ahsam *et al*, 2006). The positive aspects of the service for staff in schools and pre-schools included the provision of information and training on speech and language issues, information on specific children, and support and reassurance. These led to reports of increased confidence in recognising speech and language needs and a greater ability to respond to children with such needs, as well as a deeper understanding of speech and language issues in general.

The working relationships between the CDI SLTs and other staff were overall very positive. This was crucial to the effective implementation of the service. Evidence suggests that collaboration requires more than good interpersonal relationships (McCartney, 1999) and that collaboration is difficult even in situations where SLTs only work in one school (Hartas, 2004) as compared to the multiple schools and pre-schools involved in this study. There are a number of reasons for this, including fundamental differences in the work of schools and speech and language therapy services (*see Chapter 2, 'Literature Review', for details*). The concerns raised by staff regarding the need for more training and input from the SLTs are supported by research evidence and may relate to the nature of the working relationships. Research suggests that the ability and confidence of non-SLT staff to respond to speech and language issues is affected by opportunities for collaboration as well as training (Wren *et al*, 2001) and underlines the importance of refresher training sessions and continuity of the collaborative relationship. Formal opportunities for a reflexive learning relationship to develop between SLTs and staff was not possible as part of the CDI's programme design. Where such learning occurred, however, it was reported that it was on an ad-hoc basis rather than being formally structured. This, together with the turnover of SLTs, limited the sphere of collaboration (two changes of CDI SLTs according to CDI staff) to training sessions and informal interactions in the school and pre-school room, rather than allowing for more structured situations, such as regular meetings, mutual feedback sessions or in-tandem observation/assessment of children whereby SLTs and teachers could

learn from each other. Research indicates that these opportunities, together with good interpersonal working relationships, are crucial to effective pre-school-based models of speech and language therapy. The CDI SLT Service depended on, and promoted, good working relationships. This was fundamental to successful implementation and good outcomes for staff. Greater opportunities for collaboration may have had additional benefits and increased staff confidence further.

5.3 Implementation, uptake and outcomes for parents

The CDI SLT Service provided parents with general support in the form of speech and language events and specific support during direct therapy and through home programmes. The dedicated CDI service was able to provide more training events (between 5 and 20 events per year compared to roughly 12 events per year across all other 10 agencies combined) for more parents than other speech and language therapy services and could target a wider audience (not just parents of children with speech and language needs). The majority of parents felt supported and informed by the CDI SLT Service and the settings. Band *et al* (2002) found that many parents are concerned by an apparent lack of communication between SLTs and school staff. SLTs and staff working together within the CDI context contributed to parents' feelings of support and satisfaction. Increased support was an important outcome for parents. Training parents benefits children during intervention and long after they transition from the service (Adams and Lloyd, 2007; Roberts and Kaiser, 2011). It may be easier for children to generalise new skills learnt in therapy if parents are taught to implement them. Parents' involvement may also support the development of social communication skills (Iacono *et al*, 1998). Lyons *et al* (2010) note that involving parents in speech and language therapy is well established as good practice. The training provided to parents by the CDI SLT Service model was wide-ranging and more extensive than typical parental involvement in the therapy process. Training promoted general speech and language development, as well as focusing on children with difficulties. Improving parents' awareness and promotion of speech and language will benefit children in the long term.

Unlike most other services, parents do not have to attend CDI SLT Service with their children. This must be kept in mind when considering uptake of appointments across services. The overall attendance of children (without parents) in the CDI service is similar to the overall attendance of children with parents in most of the other services surveyed. The attendance of children with parents in the CDI service is less than the attendance of children with parents in other services. This underlines the potential limitations of both pre-school-based and clinic-based services. In services where parents must attend, children may miss out on therapy due to their parents' inability to go with them. Where parental non-attendance is facilitated, parents miss out on vital information to support their children's development. In the CDI model, this was offset by the targeted work with parents. Parental attendance rates at initial assessment in the CDI SLT Service were close to 100%. Other similar services reported much lower attendance at initial assessment (source: CDI and HSE SLTs). This may be related to the longer waiting times, physical location and less integrated approach of these services. This is also a distinct advantage of the CDI SLT Service since children are much more likely to attend their initial assessment and therefore receive appropriate support.

A range of different views on parental attendance emerged. School principals asserted that problems of non-attendance by parents were virtually non-existent in the CDI service. Other staff, however, indicated that although non-attendance was much less of a concern, it was still an issue. In light of these views, the figures suggest that it is not that parental non-attendance is lower in the CDI service, but rather that non-attendance does not have the same consequences as in other services. Non-attendance in other services means that a child cannot attend therapy; ongoing non-attendance may result in children being put back on the waiting list for therapy. This is not the case in the CDI SLT Service. Moreover, more resources exist within the CDI service to ameliorate the problem of non-attendance when it arises, such as the presence of Early Years practitioners or Parent/Carer Facilitators to engage with parents either in the Early Years service or in the home during home visits. Individual attendance was reported to have been improved through reminders and follow-ups, and with the support of Early Years practitioners, school staff and CDI SLTs.

The CDI SLT Service also tackled barriers to parental attendance. There was a consensus among Early Years and school and SLT staff regarding typical barriers to attendance and their lesser impact on the CDI service. These barriers (which include lack of transport, childcare and lack of understanding about speech and language therapy) were consistent with previous research (Morris and Stein, 2005) and were reflected in the reports of parents attending the CDI service. The flexibility and location of the CDI service was noted by parents. Research indicates a number of features that promote attendance, including reminders of appointments, flexible scheduling and convenient locations (*ibid*). These features appear to have had some success within the CDI service, particularly with regard to the outcomes of individual cases. Parent 15, for example, was able to attend her child's therapy every second week; her work commitments were facilitated without her child losing out on therapy.

Across interviews with pre-school and school staff, a lack of parental understanding of speech and language development and therapy was mentioned as a barrier to engagement with services. This was also an issue for a number of parents interviewed, some of whom indicated an initial lack of knowledge and awareness about speech and language needs and therapy. This view is consistent with research into parents' views: Morris and Stein (2005) found that parents generally knew very little about speech and language therapy and how it could help their child. Glogowska and Campbell (2000) argue that some parents know little about speech and language therapy and approach it with anxiety, but that this can be helped by information and support from SLTs. Similarly, Lyons *et al* (2010) argue that it is beneficial for parents and SLTs to develop a shared view of the therapy process. This suggests that educating parents on the need for, and value of, speech and language therapy is vital to promote attendance across services.

Outcomes for parents accessing the CDI SLT Service were very positive and included increased understanding of their children's needs and of speech and language therapy generally. Related to this was the development of better ways to respond to their children's needs. An additional outcome for parents was receiving support from a range of staff members throughout their engagement with the service. Parents' confidence increased and their concerns decreased as a result of the implementation of the CDI SLT Service.

5.4 Challenges and implications

The evaluation was largely retrospective. This created certain issues which should be kept in mind when considering the findings. These issues also have implications for future research in this area.

It had been assumed that statistical analyses of children's scores on their initial and subsequent assessments would be appropriate. However, the number of children for whom comparable scores were available was limited. This was due to a number of factors, including the use of different tests and/or subscales at the two points of testing and practice factors that resulted in some children not being tested using standardised scales a second time. This limited the amount of statistical analysis that could be conducted on scores over time due to the small sample size for each subtest. Given that the data on test scores were not randomly missing, but rather reflected the working practice of the service, it was not appropriate to deal with this using statistical techniques such as imputation. Therefore, statistical analyses were primarily used to summarise and describe the data rather than to statistically test differences over time. This has important implications for further research since it underlines the importance of agreeing on standardised pre- and post-measures at the beginning of a study (which was not possible due to the retrospective nature of the present research). Prospective studies would be able to incorporate additional tests for initial and subsequent assessments, and it may be appropriate for these to be done by an independent evaluation team in the absence of an agreement on the part of SLTs to administer certain instruments pre- and post-intervention. Additional issues for future research are the differences between speech and language therapy agencies and the records that they keep (for example, one agency was unable to provide information on the ages of children) and also the services provided by speech and language therapy agencies may vary considerably (these differences have implications for the overview and comparison of service).

Some changes to the initial methodology were necessitated as a result of the limitations described above, and others. It was intended that focus groups would be the primary means of data collection with parents and schools. However, poor attendance at the initial parent focus groups highlighted practical difficulties. Data collection necessarily (due to the timing of the research being commissioned) occurred in the summer time, when parents tended to have additional childcare needs due to children not being in school or pre-school. As a result, telephone interviews were initiated with the remaining parents. Similarly, telephone or face-to-face interviews were deemed most convenient by many other participants and so the bulk of qualitative data collection was done in this way.

Potential bias in the sample of parents should also be considered since those who had difficulty attending appointments may also have been more difficult to access for focus group or interview participation. Furthermore, the views of parents attending the CDI SLT Service were the only views sought as part of the research design. This should be kept in mind when considering the findings. The need for an examination of parents' views on attendance at other agencies was highlighted by SLTs over the course of the evaluation. This was not, however, within the scope of the current evaluation. A controlled study investigating the benefits of children attending speech and language therapy with their parents (attending alone or not attending) is advised in order to compare different models of delivery. A comparison of those who attend and who do not attend in terms of demographics and their views would be useful in establishing parents' reasons for attendance at different types of service, as well as providing information on how to promote better attendance.

Schweinhart *et al* (2005) indicate that early intervention has long-term effects. The full impact of the CDI SLT Service may thus not be immediately apparent. This is particularly the case for school-readiness. Staff and parents mostly felt that children were more ready for school than they would have been had they not received speech and language therapy. The children who transitioned with normal speech and language were almost certainly more ready for school than they would have been without intervention. The impact of the CDI service on school-readiness cannot be shown conclusively without long-term controlled research.

5.5 Conclusion

The CDI SLT Service was successfully implemented overall and had beneficial outcomes for the children, parents and staff of the settings it served. It offered a service earlier than children might have otherwise received and provided a range of training opportunities to parents and staff to support the development of children's speech and language in the home and in pre-school/school contexts. In addition, all of the parents who were consulted reported that their feelings about their children's difficulties had improved as a result of the speech and language therapy and the support received.

The results suggest that integration of services, such as speech and language therapy, within the community and/or educational system meets the needs of the community in a way that traditional clinic-based services do not. Also, the CDI SLT Service offers a model of delivery that is fulfilling and satisfying for speech and language therapists since therapy is delivered in a more immediate way than is possible in most clinic-based services due to long waiting lists and the policy of delivering therapy in blocks. Finally, given that the service was located in an area where some children are at risk due to multiple factors, the CDI SLT Service can be said to have effectively removed another risk factor from the lives of a proportion (at least 28) of those children. The CDI service ensured that children's speech and language needs were treated early and intensively, which has been shown in international research studies to be a protective factor in children's lives in both the immediate and long term (Adams and Lloyd, 2007; Gray, 2004; Jones *et al*, 2005).

5.6 Key learning and recommendations for policy and practice

- The research underlines the strong potential for Early Years services and schools to identify, and intervene, in the case of children with speech and language needs and to support their families through the therapy process.
- The CDI Speech and Language Therapy model of delivery provided early intervention effectively and efficiently. Embedding an SLT service directly within the children's educational setting (school or early years) resulted in children being seen at a much earlier age and they were likely to be seen without a lengthy wait (on average seen within 2 weeks), which compared favourably to other services in the area. As international research suggests, such early intervention is key, both for the individual and for society (Conti-Ramsden *et al*, 2001; Clegg *et al*, 1999; Gallagher *et al*, 2000; Leitao and Fletcher, 2004; Knox, 2002; Schweinhart *et al*, 2005; Snowling *et al*, 2001). This offers learning for services that wish to engage earlier and more immediately with children with speech and language needs.
- In addition, at least 18% of children transitioned from the service with normal speech and language post-intervention. The findings support the model of delivery with regard to providing early intervention in pre-school and school settings.
- This finding must be considered as particularly positive in the context of Tallaght West, which has an over-representation of families at risk of experiencing multiple disadvantages (CDI, 2004 and 2005). The intervention effectively removed one further risk factor from the lives of a proportion of these children.
- CDI SLTs felt fulfilled by working in an intensive manner with children, which was made possible by short waiting lists and on-site therapy over the course of the school/Early Years service term. In contrast, their HSE counterparts reported frustration at having to deal with long waiting lists and block therapy delivery. This offers clear support for the CDI model, if it is considered that SLTs working within the CDI model are less likely to experience occupational stress or burnout due to their working conditions. HSE SLT services should consider these findings as providing strong support for on-site targeted SLT provision, particularly in terms of therapists' well-being, job satisfaction and productivity.
- The CDI SLT Service was involved in the referral of 39 children to other non-SLT specialist services. This supports the model of delivery with regard to promotion of access to health services, particularly if it is considered that these children came to the attention of allied health services at an earlier than usual age, which increases the likelihood that they will receive intervention before their needs have compounded into life-long problems.
- The CDI SLT Service effectively improved the knowledge and ability of Early Years practitioners and teachers to respond to speech and language issues. This led to changes in practice related to the support of speech and language development within the Early Years services and schools. The findings support the CDI model of delivery with regard to training and offer clear support for the adoption of such training opportunities for all who work in the education of young children, particularly Early Years practitioners and teachers. Such training and information could be incorporated into a module in the training and education courses that Early Years staff and teachers must complete before working with children.
- Findings from the consultation indicate that teachers in schools may not be aware of the support that is provided by non-CDI speech and language services on request. This information may be of use to the HSE and to schools since it suggests that greater awareness and stronger communication would increase schools' ability to avail of such support.

- Parents were scaffolded through the referral and transition process by trained staff members with whom they could easily engage. This underlines the need for a review of the current referral system in the HSE, which may not be sufficiently transparent and accessible for parents to access, particularly those who are at risk due to multiple disadvantage.
- Most parents who used the CDI SLT Service reported that it was easier to access than other services because of its pre-school location, which was non-stigmatising for their child and was convenient for them. This highlights the need for other SLT and specialist services to give consideration to location and accessibility issues.
- The CDI SLT Service effectively improved parents' knowledge and ability to respond to speech and language issues. This led to increased parental confidence and satisfaction, and supports the CDI model of delivery with regard to parent education and engagement.
- It is recommended that a closer examination of parental attendance and engagement in pre-school, clinic and specialist services be undertaken. It is advised that steps be taken by the HSE to maximise attendance at both initial assessments and subsequent appointments. Educating parents on the need for, and value of, speech and language therapy is vital to promote attendance at speech and language services and the onus is on services such as the HSE to ensure that parents are informed and involved in their child's therapy process.
- The views of non-attending and attending parents and their demographic characteristics, in particular, should be sought in order to maximise the opportunities for successful engagement.
- An investigation of the merits of compulsory parent attendance and facilitation of non-attendance is recommended.
- Some qualitative findings indicate that the collaboration of Early Years and school staff with on-site SLTs could be maximised by the development of more formal collaborative structures, such as regular meetings, mutual feedback sessions or in-tandem observation/assessment of children, which could serve to build on the informal collaborative relationships which were shown to have been developed in this study.
- A concern for Early Years service-based speech and language therapy is the transition of children to clinic-based services after pre-school. Specific research on the transition process is recommended so that those factors which support and hinder successful transition can be identified for use in future practice. This learning would also be of benefit to HSE pre-school and school-based services in the development of strategies to ensure smooth transition, such as delivery in dual settings.
- Long-term follow-up of children treated by the CDI SLT Service is recommended to gain clear evidence of the impact of the service on school-readiness and children's development. It is also recommended that future research into the service or similar services incorporate matched controls so that the effects of the programme can be isolated.
- Further prospective research in this area may wish to include additional measures of speech and language to be used in conjunction with SLTs' assessments. This should be done in consultation with SLTs in order to provide an additional objective measure of children's progress without interfering in their work.
- The different client groups, record-keeping procedures and working practices of different speech and language therapy services are key issues to be considered in the design of future research and the potential for alignment of such systems, with a common reporting system, should be reviewed.

- In the development of pilot programmes, such as the CDI SLT Service, it is important to consider the sustainability of the service so that children are not disadvantaged by moving on and off waiting lists. The back-dating of children's referrals once they transitioned from the CDI service back to the HSE list was a reasonable step put in place to ensure that children were not discriminated against as a result of having received some intervention, while still having a need, and offers a useful model for replication.
- A higher profile for speech and language therapy, both at the population level and targeted towards disadvantaged populations, is recommended, not least to educate parents about the benefits of early speech and language intervention and to remove any notion of stigma about children requiring such help. Raising the profile of speech and language therapy in general and improving awareness of how to support speech and language development should be undertaken through a variety of media. These may include a national advertising campaign, seminars provided through localised parenting groups or County Childcare Committees, or the staging of 'health carnivals' (where parents can meet and talk to a wide variety of healthcare professionals) in schools, pre-schools or community centres.

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Appendix 1: Evaluation instruments for CDI Speech and Language Therapy Service

Data Template

A data template was designed with input from the CDI SLTs. It consisted of an SPSS 17¹² file in which information on the programme as a whole (such as referrals, interventions and demographics) could be collated. This template was designed by the evaluation team and installed on the computers of the CDI SLTs. After receiving SPSS training from the evaluation team, the SLTs completed the template electronically and provided the evaluation team with a completed electronic copy of the database.

Child Profile Data Template

A child profile data template was also designed with input from the CDI SLTs and consisted of a Microsoft Office Word document that allowed detailed information on individual children to be captured. This included the tests used at the children's assessments and their scores. This template also allowed for more qualitative textual data where appropriate. These templates were completed by the CDI SLTs using information obtained from their child files and records. Completion of a template was contingent on parental consent being obtained.

SLT Agency Questionnaire

Questionnaires were designed to gather data from speech and language therapy agencies external to CDI, but which were also serving the general area of Tallaght West being served by CDI. This was done after confirming with the relevant agencies that this was their preferred option. The questionnaires were as consistent as possible while avoiding questions that would be irrelevant for given services when their client base, location and organisational structures were taken into account.

Parent Focus Group Schedule

A structured schedule was designed for the parent focus groups. Parents' views on key issues were gathered according to the content of the schedule, but space was allowed for discussion and the emergence of new ideas. In some cases, parents opted to be interviewed individually rather than in a focus group situation. The same schedule was used in interviews as in focus groups. This insured consistency in the data collection process.

Interview Schedules for relevant personnel

Similarly, schedules were designed for use with individuals relevant to the CDI Speech and Language Therapy Service, including the CDI SLTs, teachers, school principals, *Healthy Schools* Coordinators and Parent/Carer Facilitators.

¹² SPSS 17 is a statistics package designed for use in social science research.

Appendix 2: Parent Interview and Focus Group Schedules

1. Experiences of referral and assessment

- 1.1 Could you each tell us about your child's referral to the speech and language therapist?
- 1.2 Does anyone remember how long their child waited to see a speech and language therapist after being referred?
- 1.3 How did you feel about this waiting time?
- 1.4 Did anyone else have a similar experience?
- 1.5 Was anyone's experience different?

2. Supports

- 2.1 How was the SLT run for you and your child?
- 2.2 How did you feel about the SLT?
- 2.3 How much speech and language therapy were you offered? How did you feel about this?
- 2.4 How often did you and your child attend speech and language therapy?
- 2.5 Was there anything that made it difficult for you to attend?
- 2.6 What might have made it easier for you to attend?
- 2.7 How did you feel about the speech and language therapy being based in the pre-schools?
- 2.8 What helped about having the speech and language therapy in the pre-school?
- 2.9 What didn't help about having the speech and language therapy in the pre-school?
- 2.10 Each of the pre-schools had a member of staff to support parents, coffee mornings, family days, home visits. How do you feel about their role? Did anyone ever get advice/information/support from them? Any experience you'd like to talk about?

3. Impressions

- 3.1 Whose children received direct therapy?
- 3.2 What did you find helpful about the direct therapy given to the children?
- 3.3 Does anyone agree/disagree with this?
- 3.4 Is there anything you did not find helpful about this?
- 3.5 Does anyone agree/disagree with this?
- 3.6 Did anyone meet with the SLTs? What did you find helpful about this?
- 3.7 Does anyone agree/disagree with this?
- 3.8 Did anyone have a different experience?
- 3.9 Is there anything you did not find helpful about this?
- 3.10 Does anyone agree/disagree with this?
- 3.11 Did anyone have a different experience?
- 3.12 Did the SLTs or pre-school staff give anyone any ideas about how you could help your child's speech and language at home?
- 3.13 What kinds of things did they suggest?
- 3.14 How did you feel about these ideas? Did you use any of them? Did they work?
- 3.15 What didn't you find helpful about this?
- 3.16 Sometimes the SLTs and the pre-schools held talks and other events for parents. Did anyone attend any of these?
- 3.17 What did you go to? How did you find it?
- 3.18 What was most helpful?
- 3.19 What was least helpful?

3.20 What else did you find helpful/unhelpful about the service?

3.21 Is there anything you would change about the service?

4. Outcomes

4.1 Has anyone noticed any changes in their child since attending speech and language therapy?

4.2 What kind of changes have you noticed?

4.3 How do you feel your child will deal/has dealt with the move to primary school?

4.4 Do you think the speech and language therapy will help/has helped with moving to primary school?

4.5 How?

5. Change over time

5.1 Looking back to before the speech and language therapy, how did you feel about your child's speech and language difficulties then?

5.2 How do you feel about your child's speech and language difficulties now?

6. Conclusions

6.1 Overall, do you feel that the speech and language therapy benefited your child?

6.2 Overall, do you feel that the speech and language therapy benefited you?

6.3 Is there anything you would change about any aspect of the service?

6.4 Is there anything you would like to add about any part of today's discussion?

Appendix 3: CDI SLT Interview Schedule

Referrals

1. Tell me about the referral process (summarise and confirm referral process).
2. How would you describe the referral process? (*straightforward, difficult or lengthy*)
3. Are there any problems with the referral process? (*is it too easy, does it lead to too many inappropriate referrals*)
4. What kind of challenges are there to accessing the service? What helps people to access the service?

Implementation

1. Have you been able to implement staff training and parent training as intended?
2. What has helped/hindered with this?
3. What aspects of the service help you to successfully engage with staff and parents?
4. What do you think are the outcomes of successful engagement with staff and parents?
(*for children, for themselves, for the service, for you as a professional*)

Attendance rates

1. Overall, are you satisfied with the attendance rates? (*at direct therapy sessions, training, etc*)
2. Has non-attendance especially at direct therapy sessions had an impact on the service as a resource?
(*does it prevent you from maximising service provided*)
3. What are the challenges to parental engagement?
4. What supports parental engagement?
5. What supports/prevents staff engagement?

Outcomes

1. Overall, what are the benefits of the service for children, parents, staff and the wider community?

Interagency collaboration

1. Describe your working relationship with other SLT services.
2. What impact does this have on your work as a CDI SLT?
3. What impact do you think the CDI service has on other agencies?

CDI SLT Service

1. What do you think is the best aspect of the CDI SLT Service? (*where do you get the most job satisfaction*)
2. Where is there room for improvement?
3. Have you anything to add?

Appendix 4: Interview Schedule for School Staff

1. What is your impression of the Childhood Development Initiative Speech and Language Therapy Service?
2. How does the service work within your school?
3. Have you been involved in referring children to the SLT? How does the referral process work?
4. What kind of support and training is offered by the SLT? (*to you as a teacher, to children with specific difficulties, to all the children*)
5. What impact has this support had?
6. What do you feel is the role of the *Healthy Schools* Coordinator regarding speech and language support in the school?
7. Is there anything that makes it difficult for you to avail of SLT support and training? What helps?
8. What kind of impact do you think early SLT intervention has in the short term and long term?
9. What benefits have there been to you from having the SLT in the school? (*understanding, response to SLT issues, etc*)
10. Tell me about your working relationship with the Childhood Development Initiative SLT service. How does this impact on the service provided to the children?
11. Have you anything to add?

Appendix 5: Interview Schedule for Parent/Carer Facilitators and Healthy Schools Coordinators

1. Tell me about your role?
2. What kind of involvement do you have with parents and children?
3. How have parents responded to your role?
4. How have children responded to your role?
5. How have other members of staff responded to your role?
6. How involved are you with SLT within the setting?
7. What do you do to encourage uptake of appointments?
8. What do you do to encourage attendance at training and other events?
9. What barriers are there to parents and children availing of SLT?
10. Are these barriers unique to SLT or do they apply to other health and support services?
11. What do you think is good about the SLT programme?
12. What do you think is unhelpful about the SLT programme?
13. Is there anything you would change about the SLT programme?

Appendix 6: Questionnaire for external SLT agencies

SPEECH AND LANGUAGE THERAPY QUESTIONNAIRE

Please answer the following questions about the speech and language therapy provided by your service.

If there are any questions that do not apply to your particular service, please ignore them.

Please only include information regarding children aged less than 6 years who are receiving therapy from your service.

REFERRALS

How many referrals has your agency received since October 2010? _____

Of these, how many referrals were accepted? _____

Estimate the typical waiting time between referral and first assessment for a child in your service (in months). _____

Do you think that the number of referrals is an accurate reflection of the need for speech and language therapy? _____

How do you feel about the waiting time? _____

THERAPY

How many children have received direct therapy (one-to-one or in a group with a speech and language therapist) since October 2010? _____

Approximately how much direct therapy was provided by your service since October 2010 (number of sessions provided)? _____

Estimate how often children and parents attended direct therapy appointments since October 2010. (*Tick the relevant box*)

0-25% of appointments attended

25-50% of appointments attended

50-75% of appointments attended

75-100% of appointments attended

ADDITIONAL SERVICES

Does your agency provide training for schools or pre-schools regarding children's speech and language needs? _____

What types of training are provided? _____

How often is the training held? _____

How many people typically attend? _____

Does your agency provide training for parents of children with speech and language needs? _____

What types of training are provided? _____

How often is the training held? _____

How many people typically attend? _____

Does your agency run any events to encourage awareness of speech and language issues? (*speech carnivals, family days, etc*) _____

What types of event are provided? _____

How often are events held? _____

How many people typically attend? _____

DEMOGRAPHIC DETAILS

What is the average age of children referred to your agency since October 2010? (*include only those aged under 6*) _____

What is the average age of children treated by your agency since October 2010? (*include only those aged under 6*) _____

Estimate the number of boys and girls treated by your agency.

Boys

Girls

Estimate the number of children treated by your agency who speak a language other than English at home.

IMPACT OF LOCAL SLT SERVICES

Tallaght West Childhood Development Initiative has provided speech and language therapy since 2008.

Have you noticed an increase or decrease in your agency's waiting lists for assessment or intervention since this started? _____

Have you noticed any other changes? _____

If yes, please provide details below. _____

Thank you for your participation

Appendix 7: Child Profile Template

1. Child details

Child ID	
Sex	
DOB	
Pre-school/School setting	
Is this child an active or old case?	
Is there a recent/final assessment available?	

2. Referral details

Referred by (<i>if known</i>)	
Date of initial CDI assessment	
How long was child waiting from initial referral to first assessment? 0-2 weeks, 2-4 weeks, 4-6 weeks, 6-8 weeks, 8-11 weeks, 3 months, 4 months, 5 months, 6 months, 7 months, 8 months, other – <i>please specify</i>	
Child accepted for treatment? If No, please state reason:	
Had the child previously been referred to HSE SLT services (<i>if known</i>)?	

3. Therapy details

No. of therapy sessions attended	
No. of sessions offered, but not attended	
No. of therapy sessions attended by parent	
Date of most recent assessment	

4. Initial diagnosis description

- 4.1 Indicate type and severity of the child's speech and or language needs/disorders (*please indicate if non-speech and/or language needs were suspected/diagnosed*).

5. Initial assessment data

- 5.1 What instrument(s) were used to measure the child's language?
- 5.2 Indicate the child's scores on these instruments (*provide reference for the score, e.g. mean, standard deviation, etc*).

Subtest/Scale	Raw score	Standard score	Significance (mild, average, severe)

5.3 What instrument(s) were used to measure the child’s speech.

5.4 Indicate the child’s scores on these instruments (*provide reference for the score, e.g. mean, standard deviation, etc*).

Subtest/Scale	Raw score	Standard score	Significance (mild, average, severe)

5.5 Please add any other comments about the child’s initial assessment.

6. Therapy

6.1 Indicate the type of therapy provided (*e.g. home, school, combination, direct 1:1 therapy*).

6.2 What was the duration of the speech and language therapy provided to the child?

7. Final/most recent diagnosis (if available)

7.1 Indicate the type and severity of the child’s speech and/or language needs/disorders. Indicate whether and to what extent this has changed.

7.2 Can/did the child cease speech and language therapy?

7.3 Will the child be continuing to receive SLT from you (*active cases only*)?

7.4 If the child will be/has been referred elsewhere, please name the service and give the reason for referral.

8. Final/most recent speech and/or language assessment data

8.1 What instrument(s) were used to measure the child’s language?

8.2 Indicate the child’s scores on these instruments (*provide reference for the score, e.g. mean, standard deviation, etc*).

Subtest/Scale	Raw score	Standard score	Significance (mild, average, severe)

8.3 What instrument(s) were used to measure the child’s speech?

8.4 Indicate the child’s scores on these instruments (*provide reference for the score, e.g. mean, standard deviation, etc*).

Subtest/Scale	Raw score	Standard score	Significance (mild, average, severe)

8.5 Add any other comments you may have on the child’s final (or most recent) assessment?

9. Any other comments

9.1 Add any other comments or relevant information you may have.

Appendix 8: SPSS Codebook 1

1. Case ID: Each individual has been given a case ID.

Individuals for whom only a data template is to be completed have 3-digit numerical IDs starting from 301. Individuals for whom consent has also been received for a child profile template have 3-digit numerical IDs starting from 101. *See also case ID document.*

2. Sex: Was the case male or female?

0 = male
1 = female

3. Languages: Are languages other than English spoken at home?

0 = No
1 = Yes

4. Referral date: When was the referral received?

Please indicate the date the referral was received in the format dd.mm.yy.

5. Referral accepted: Was the referral accepted?

0 = No
1 = Yes

6. Referral not accepted: Why was the referral not accepted?

0 = receiving SLT elsewhere
1 = SLT not required
2 = additional non-SLT needs
3 = other

7. New: Is this a new referral?

Indicate whether this is a new referral (i.e. not previously referred to HSE SLT services).

0 = No (this is not a new referral)
1 = Yes (this is a new referral)
2 = Unknown

8. Left service: Did the case leave the service too soon to receive SLT?

Indicate whether SLT would have been provided but was not due to individual's unavailability.

0 = No
1 = Yes

9. Source referral: Where did the referral come from?

Indicate the source of the referral.

- 0 = pre-school
- 1 = school
- 2 = parents
- 3 = PHN
- 4 = other

10. Waiting time: What was the waiting time from referral to first assessment?

Indicate the waiting time from referral to first assessment.

- 0 = 0-2 weeks
- 1 = 2-4 weeks
- 2 = 4-6 weeks
- 3 = 6-8 weeks
- 4 = 3 months
- 5 = 4 months
- 6 = 5 months
- 7 = 6 months
- 8 = 7 months
- 9 = other

11. Non-SLT referral: Was referral made by CDI SLTS to non-SLT services at any time?

- 0 = No
- 1 = Yes

12. Non-SLT services: Which non-SLT services were referred to?

If answer to Q8 above is 1 = Yes, indicate which non-SLT services were referred to. Otherwise skip to Q13.

- 0 = audiology
- 1 = ENT
- 2 = assessment of need
- 3 = NEPS
- 4 = HSE psychology
- 5 = social work
- 6 = Tallaght Hospital
- 7 = other

13. Referral reason: Why did referral to CDI SLT occur?

Indicate the reason given for the referral.

- 0 = understanding
- 1 = talking
- 2 = stammering
- 3 = voice
- 4 = delayed language
- 5 = use of language
- 6 = hearing
- 7 = combination
- 8 = other

14. Therapy reason: Why was therapy provided?

Indicate the reason you provided therapy.

- 0 = core language
- 1 = expressive language
- 2 = receptive language
- 3 = pragmatics
- 4 = phonological
- 5 = articulation
- 6 = fluency
- 7 = voice
- 8 = multiple
- 9 = other

15. Delay disorder: Was the problem one of delay or disorder?

Indicate whether the problem(s) involved delay and/or disorder.

- 0 = delay
- 1 = disorder
- 2 = multiple problems, both delays and disorders

16. Severity: What was the severity of the problem?

- 0 = mild
- 1 = moderate
- 2 = severe

17. Home programme: Was a home programme provided?

- 0 = No
- 1 = Yes

18. Pre-school programme: Was a pre-school programme provided?

- 0 = No
- 1 = Yes

19. Direct therapy: Was direct therapy provided?

- 0 = No
- 1 = Yes

20. Combination therapy: What combination of therapy was used?

Indicate which of the following combinations of therapy were used. If this question is not relevant to the case, skip to Q21.

- 0 = direct
- 1 = indirect
- 2 = both

21. Duration: How much therapy was provided within the CDI SLT Service (in blocks)?

Indicate the amount of therapy provided by typing the number of blocks, up to 2 decimal places if necessary.

22. Attendance: What were the attendance rates at direct therapy?

Indicate attendance rates at direct therapy.

If this question is irrelevant to the case, skip to Q24.

- 0 = 0-25%
- 1 = 25-50%
- 2 = 50-75%
- 3 = 75=100%

23. Attendance parents: How often did the parents attend with the child?

If this question is irrelevant to the case, skip to Q24.

- 0 = 0-25%
- 1 = 25-50%
- 2 = 50-75%
- 3 = 75=100%

24. Ongoing SLT: Was ongoing SLT required after the transition from the CDI SLT Service?

- 0 = No
- 1 = Yes
- 2 = still receiving CDI SLT

25. Onward referral: Which agencies were referred to?

If answer to Q24 is 1 = Yes, indicate which agencies were referred to. Otherwise finish now.

- 0 = HSE Dublin SW SLT
- 1 = Cheeverstown
- 2 = Beechpark
- 3 = other

Appendix 9: Initial and Final/Recent Diagnoses

Table A9-1: Numbers and percentages of initial diagnoses

Initial diagnosis	No.	%
Expressive language delay	1	1.2
Receptive language delay	2	2.4
Expressive and receptive language delay	15	18.1
Phonological delay	17	20.5
Phonological and articulation delay	1	1.2
Phonological disorder	15	18.1
Stammer	1	1.2
Receptive language delay and speech delay	2	2.4
Expressive language delay and speech delay, word finding and stammer	1	1.2
Expressive language delay and speech delay	6	7.2
Word finding	2	2.4
Expressive and receptive language delay and speech delay	4	4.8
Phonological delay, expressive and receptive language, and dysfluency	1	1.2
Speech delay and dysfluency	1	1.2
Receptive and expressive and play interaction	2	2.4
Receptive and expressive and play interaction and phonological	1	1.2
Articulation and phonological disorder	3	3.6
Phonological disorder, receptive and expressive language delay	1	1.2
Within normal limits, but monitor	1	1.2
Expressive and receptive disorder	1	1.2
Voice	1	1.2
Receptive expressive and social communication	2	2.4
Articulation disorder and receptive delay	1	1.2
Fluency	1	1.2
Total	83	100.0

Table A9-2: Numbers and percentages of subsequent diagnoses

Subsequent diagnosis	No.	%
Receptive language delay	1	2.2
Expressive and receptive language delay	5	10.9
Phonological delay	9	19.6
Articulation delay	1	2.2
Phonological and articulation delay	1	2.2
Phonological disorder	8	17.4
Expressive receptive and speech delay	3	6.5
Word finding	1	2.2
Expressive and receptive language delay and word finding	1	2.2
Expressive and receptive language disorder and phonological disorder	2	4.3
Phonological and articulation disorder, expressive language	1	2.2
Within normal limits	6	13.0
Expressive, receptive language disorder and pragmatic deficit and pre-literacy deficit and articulation and phonological delay	1	2.2
Phonological disorder, receptive and expressive delay, and stammer	1	2.2
Phonological and articulation disorder	1	2.2
Expressive delay and phonological disorder	1	2.2
Voice	1	2.2
Expressive receptive language delay and articulation delay	1	2.2
Fluency disorder	1	2.2
Total	46	100.0

Appendix 10: Numbers of children in each setting receiving SLT (from the Child Profile Templates)

Setting	No.	%
Setting 1	10	12.0
Setting 2	6	7.2
Setting 3	10	12.0
Setting 4	9	10.8
Setting 5	8	9.6
Setting 6	6	7.2
Setting 7	3	3.6
Setting 8	1	1.2
Setting 9	3	3.6
Setting 10*	10	12.0
Setting 11*	1	1.2
Setting 12*	12	14.5
Setting 13*	4	4.8
Total	83	100

* *Healthy Schools* Programme setting

Appendix 11: Assessment methods

Table A11-1: Method of initial assessment

Type of assessment	No.	%
Formal speech and language	36	43.4
Informal speech and language	7	8.4
Formal speech, informal language	30	36.1
Informal speech, formal language	7	8.4
Formal speech only	1	1.2
Formal language only	2	2.4
Total	83	100.0

Table A11-2: Method of recent assessment

Type of assessment	No.	%
Formal speech and language	14	33.3
Informal speech and language	1	2.4
Formal speech, informal language	7	16.7
Informal speech, formal language	6	14.3
Formal speech only	10	23.8
Formal language only	4	9.5
Total	42	100.0

Appendix 12: Tests and subtests used in assessments

Table A12-1: Number of times the Clinical Evaluation of Language Fundamentals (CELF-P2uk) was used in initial and subsequent assessments

Subtest of CELF-P2uk	No. in initial assessment	No. in subsequent assessment
Sentence structure	23	13
Expressive vocabulary	22	13
Concepts and following directions	10	13
Recalling sentences	9	9
Basic concepts	9	6
Word Classes – Receptive	2	3
Word Classes – Expressive	1	2
Receptive Language Index	12	10
Expressive Language Index	12	8
Language structure	8	6
Core language	23	13
Total uses of CELF-P2uk	55	28

Table A12-2: Number of times Renfrew Action Picture Test (RAPT) was used in initial and subsequent assessments

Subtest of RAPT	No. in initial assessment	No. in subsequent assessment
Information	24	10
Grammar	24	10
Total uses of RAPT	22	10

Table A12-3: Number of times Pre-School Language Scale (PLS-4) was used in initial and subsequent assessments

Subtest of PLS-4	No. in initial assessment	No. in subsequent assessment
Auditory comprehension	16	2
Expressive comprehension	7	1
Total uses of PLS-4	23	3

Table A12-4: Number of times Diagnostic Evaluation of Articulation and Phonology (DEAP) was used in initial and subsequent assessments

Subtest of DEAP	No. in initial assessment	No. in subsequent assessment
Percentage consonants correct	26	3
Diadochokinetic	3	0
Percentage vowels correct	0	3
Percentage phonemes correct	0	3
Inconsistency	2	0
Total uses of DEAP	31	9

Table A12-5: Number of times Reynell Developmental Language Scales (RDLS) was used in initial and subsequent assessments

Subtest of RDLS	No. in initial assessment	No. in subsequent assessment
Comprehension Scale	4	0
Expression Scale	4	0
Total uses of RDLS	8	0

Table A12-6: Number of times Stuttering Severity Instrument 4 (SSI-4) was used in initial and subsequent assessments

Test	No. in initial assessment	No. in subsequent assessment
SSI-4	1	1
Total uses of SSI-4	1	1

Table A12-7: Number of times South Tyneside Assessment of Phonology (STAP) was used in initial and subsequent assessments

Test	No. in initial assessment	No. in subsequent assessment
STAP	1	1
Total uses of STAP	1	1

Table A12-8: Number of times Test of Word Finding 2 (TWF2) was used in initial and subsequent assessments

Test	No. in initial assessment	No. in subsequent assessment
TWF2	1	1
Total uses of TWF2	1	1

Table A12-9: Number of times Test for Reception of Grammar (TROG) was used in initial and subsequent assessments

Test	No. in initial assessment	No. in subsequent assessment
TROG	1	1
Total uses of TROG	1	1

Table A12-10: Number of times Receptive Expressive Emergent Language Test 3 (REEL-3) was used in initial and subsequent assessments

Test	No. in initial assessment	No. in subsequent assessment
REEL-3	2	0
Total uses of REEL-3	2	0

Table A12-11: Number of times Receptive and Expressive One Word Picture Vocabulary Test (ROWPVT) was used in initial and subsequent assessments

Test	No. in initial assessment	No. in subsequent assessment
ROWPVT	2	0
Total uses of ROWPVT	2	0

Table A12-12: Number of times Arizona Articulation Proficiency Scale 3 (AAPS-3) was used in initial and subsequent assessments

Test	No. in initial assessment	No. in subsequent assessment
AAPS-3	1	2
Total uses of AAPS-3	1	2

Table A12-13: Number of times Renfrew Word Finding Vocabulary Test (RWFVT) was used in initial and subsequent assessments

Test	No. in initial assessment	No. in subsequent assessment
RWFVT	2	1
Total uses of RWFVT	2	1

Table A12-14: Number of times Oral and Written Language Scales (OWLS) was used in initial and subsequent assessments

Test	No. in initial assessment	No. in subsequent assessment
OWLS	0	2
Total uses of OWLS	0	2

Table A12-15: Number of times Hodgson Computerised Analysis of Phonological Patterns (HCAPP) was used in initial and subsequent assessments

Test	No. in initial assessment	No. in subsequent assessment
HCAPP	1	3
Total uses of HCAPP	1	3

Appendix 13: Details of training provided by CDI SLTs

Note: Elklan training and Hanen training provide staff with skills to support children’s speech and language needs. PECS (Picture Exchange Communication System) is an augmentative communication system used particularly to support communication among people with autism.

Training	Target group	Number of events	Attendance
Normal development and identifying needs	Pre-school/school staff	3	28
Vocal hygiene workshop	School staff	2	42
Identifying and supporting children	School staff	2	24
Supporting SL in the classroom	School staff	2	35
Hanen Teacher Talk A	School staff	1	38
Hanen Teacher Talk B	School staff	1	38
Hanen Teacher Talk C	School staff	1	38
PECS training	Pre-school staff	1	All settings
Hanen	Pre-school staff	1	All settings
Elklan	Pre-school staff	1	All settings
Sound of the week	Pre-school staff	2	All settings
Speech carnival training	Pre-school staff	1	12
Speech carnival	Children	1	60
Reading week talks	Parents/carers	5	34
Elklan Modules 1, 2	Pre-school staff	1	15
Elklan Modules 3, 4	Pre-school staff	1	13
Elklan Modules 5, 6	Pre-school staff	1	13
Elklan Modules 7, 8	Pre-school staff	1	11
Elklan Modules 9, 10	Pre-school staff	1	11
Elklan finish-up	Pre-school staff	1	10
Elklan 2-day training	Pre-school staff	1	19
Autism Spectrum Disorders	Pre-school staff	1	29
Top tips for speech and language	All	1	Unknown
Parent information talks/days	Parents/carers	6	20
Coffee mornings	Parents/carers	1	15
Meet the SLT: Summer language support	Parents/carers	3	3
English as an additional language	Parents/carers	4	12
Ditch the Dodie	Parents/carers	1	10
Total		48	

The training carried out each year was as follows:

2009	2010	2011
<ul style="list-style-type: none"> • Parent information session • English as an additional language • Hanen Teacher Talks A and B • PECs training 	<ul style="list-style-type: none"> • Training • Hanen Teacher Talk C • New Parents Day (x2) • Meet the SLT summer language support (x3) • Speech Carnival (training and event) • Supporting speech and language in the classroom (x2) • Ditch the Dodie • Parent meeting • Sound of the week • Speech and language development/Identifying children with speech and language needs (x3) • Top tips for speech and language • Speech, language and communication development in the pre-school child • Coffee morning • Identifying and supporting school-aged children with speech, language and communication difficulties (x2) 	<ul style="list-style-type: none"> • Vocal hygiene workshops • English as an additional language (x2) • Sound of the week • Speech Carnival (training and event) • Reading Week talk – Reading to your child (x6) • Elklan Modules 1-10 • Elklan follow-up • PECS training • Autism Spectrum Disorders (x2) • Elklan 2-day training

Appendix 14: Training provided by other Speech and Language Therapy Agencies

Agencies A-C are specialist services.

SLT Agency A runs the Hanen Parent¹³ Programme once a year for up to 10 people. Lamh Family Courses and Lamh Module 1 courses are held up to twice a year for 10-25 people. Two Lamh Module 1 courses have been run for staff in pre-schools attended by children receiving services from the agency. PECS (Picture Exchange Communication System) and communication aids training courses are held on request. Training on eating, drinking and swallowing needs is also provided. Speech and language awareness events are held infrequently.

SLT Agency B runs a 9-week Hanen training course every 18 months. Training on play skills and promoting 'fun with food' are also held and run for about 6 weeks. Courses are typically attended by 6-8 parents or carers of children. The agency holds 'Introduction to service evenings', based on the number of referrals during each quarter.

SLT Agency C provides individualised training for teachers of children in the service. It also provides training for small groups of parents. It holds public information evenings, which are very well attended.

SLT Agencies D, E and F are HSE primary speech and language therapy services. Agencies D and E are both in Tallaght West. Agencies F and G are outside Tallaght, but cater to families in the area. Agencies H and I are school-based primary speech and language services provided by the HSE.

Agencies D-G run workshops for primary schools each year. They also provide information for teachers on specific needs on request. Parent information drop-in services are also provided while parents are waiting for their children to be assessed. Further information and training for parents is provided through their attendance at direct therapy with their children.

Agencies H and I also run training for teachers and pre-school teachers yearly or when requested.

Agency J is a hospital-based service that provides training on feeding and swallowing needs, and other training to small numbers of parents and carers on request.

¹³ Lamh is a system of signing designed for people with intellectual disabilities in Ireland. Lamh Module 1 is a 6-7 hour introductory course. The Lamh Family Course is an introduction to the signing system over four 2-hour sessions. The 'It takes two to talk' Hanen programme for parents of children with language delays is designed to teach parents to promote their children's language development using everyday activities.

Appendix 15: The Early Years Evaluation

The CDI Early Childhood Care and Education (Early Years) Programme was implemented by CDI as part of a 10-year strategy to improve outcomes for disadvantaged children in Tallaght West. The Early Years Programme aimed to improve children's school readiness by targeting children, parents and their environment through the provision of quality pre-school care, education and access to health services.

The Early Years Programme was evaluated using a cluster randomised trial. This means that social units or clusters (pre-schools in this case) are randomly assigned to intervention or control groups. The intervention group received the Early Years Programme (including the dedicated Speech and Language Therapist). The Early Years Programme was evaluated longitudinally. The evaluation team conducted assessments on children and settings in both the intervention and control groups. These were compared to investigate the impact of the Early Years Programme over time and to investigate its effects compared to settings without the service. Data from the Early Years evaluation were available to the present evaluation of the CDI Speech and Language Therapy Service.

Appendix 16: Speech and Language Therapy Service – Memorandum of Understanding

Description of Service

To provide the administration function for the Tallaght West Childhood Development Initiative (TWCDI) Speech and Language Therapy Service (S<), as detailed in the Memorandum of Understanding between TWCDI, An Cosán, HSE and the Senior Speech & Language Therapist post holder.

Memorandum of Understanding

This Memorandum of Understanding outlines the roles and responsibilities of the following, in relation to the provision of a dedicated Speech and Language Therapy (SLT) service to the CDI-funded Early Childhood Care and Education (ECCE), and *Healthy Schools* Programme:

- An Cosán
- HSE
- Dedicated Senior SLT post holder (ECCE service)
- Dedicated Staff Grade SLT post holder (*Healthy Schools* and ECCE services)
- CDI

An Cosán will:

- Lead in the recruitment process of both SLTs and support the induction process, to include: roles, finance and reporting systems, and child protection policy.
- Provide a payroll mechanism for the post holders and hold the contracts of employment.
- Provide a financial system, including quarterly reports, to equip the SLTs to deliver an appropriate service, e.g. assessment materials, travel and subsistence, IT.
- Process the payment of the SLT expenditure requests which have been approved by the agreed approval mechanisms, i.e. Senior SLT to approve Basic Grade SLT expenses and the HSE Principal SLT to approve Senior SLT expenses.
- Provide financial quarterly reports to CDI and attend quarterly review meetings.
- Make all relevant payments to the Revenue Commissioners.
- Fully participate in the independent evaluation.
- Contact the HSE and/or CDI in the event of any issues/difficulties arising.

The HSE will:

- Support induction and provide ongoing support for both SLTs, which includes continuous professional development, team meetings, etc. as appropriate.
- Provide awareness, acceptance and support to work within the service's manualised approach.
- Monitor time management, attendance, annual leave, etc. of the Senior post holder.
- Provide support/supervision to the *Healthy Schools* SLT in the absence of the Senior SLT.
- Establish a quality assurance mechanism for the SLT service.
- Fully participate in the independent evaluation, as appropriate.
- Work to an agreed supervision contract inclusive of the following:
 - support the Senior SLT in identifying issues and developing a strategy to address them;
 - support the Senior SLT to identify their skills and competencies in their role;
 - support the Senior SLT in clarifying professional issues, responsibilities and boundary issues in respect of their role and that of others;
 - assess how the SLT engages with the role support process.

- Contact An Cosán and/or CDI in the event of any issues/difficulties arising.
- All files and information related to the work of the Senior SLT and Staff Grade SLT will be owned and held securely and confidentially by the HSE. However, the Independent Evaluation team will (if necessary, after having sought consent from parents, and complying with their ethical responsibilities) have access to these files, for the purpose of the evaluation.

CDI will:

- Support the recruitment of the SLTs.
- Support the provision of a comprehensive induction programme, which will include clarity on roles and responsibilities of all relevant personnel involved in the ECCE and *Healthy Schools* programmes, introduction and understanding of a manualised approach to deliver the SLT service within CDI's ECCE and *Healthy Schools* programmes.
- Attend quarterly review meetings with both SLTs and others as required.
- Work towards the mainstreaming of the ECCE and *Healthy Schools* programmes in relation to sustaining the interventions.
- Ensure that the learning from the programmes are shared appropriately in order to inform both policy and practice.
- Support stakeholders in participating in the independent evaluation process.
- Negotiate and 'trouble shoot' where blocks are identified with external organisations and between HSE and An Cosán.
- Provide clarity re. budgets.
- Contact the HSE and/or An Cosán in the event of any issues/difficulties arising.
- Provide other supports as required.

The Senior SLT will:

- Carry out all duties in accordance with the job description.
- Provide quarterly progress reports for review meetings, which will be attended by both SLTs and CDI.
- Work to an agreed HSE supervision contract.
- Work within the service's manualised approach to the delivery of the ECCE programme.
- Support and supervise Staff Grade SLT working in up to three National School sites within Tallaght West as part of CDI's *Healthy Schools* Programme.
- Contact the HSE, An Cosán and/or CDI in the event of any issues/difficulties arising.
- Comply with An Cosán's Staff Handbook, Child Protection, Health and Safety and IT policies and procedures, and be aware of and support each service's/school's policies and procedures.
- Work with CDI, HSE, Service Managers, School Principals, Staff and Staff Grade SLT regarding the strategic development of the service.
- Fully participate in the independent evaluation.

The Staff Grade SLT will:

- Carry out all duties in accordance with the job description.
- Provide quarterly progress reports for review meetings, which will be attended by both SLTs and CDI.
- Work to an agreed supervision contract with the Senior SLT.
- Work within the schools' and service's manualised approach to the delivery of the *Healthy Schools* and ECCE programmes.
- Contact the HSE, An Cosán and/or CDI in the event of any issues/difficulties arising.
- Comply with An Cosán's Staff Handbook, Child Protection, Health and Safety and IT policies and procedures, and be aware of and support each service's/school's policies and procedures.
- Work with CDI, HSE, School Principals, Service Managers, Staff and Senior SLT regarding the strategic development of the service.
- Fully participate in the independent evaluation.

Appendix 17: Service Agreement between CDI/HSE/An Cosán partnership for Speech and Language Therapy Service Provision to Early Childhood Care and Education Sites

1. Allocation of the speech and language therapist

The speech and language therapist is funded by Tallaght West Childhood Development Team and works as part of the Early Years Programme providing a service to designated Early Childhood Care and Education (ECCE) intervention sites. The speech and language therapist is employed by An Cosán. The speech and language therapist also works as part of the Health Service Executive (HSE) Community Speech and Language Therapy Team in Dublin South West and receives role supervision from the Principal speech and language therapist. The speech and language therapist reports to CDI's Early Years Quality Officer and An Cosán.

2. Role of the speech and language therapist

A speech and language therapist has been assigned to work within the ECCE intervention sites. Responsibilities include:

- Carrying out formal and informal assessment of referred children's Speech, Language and Communication development in cooperation with parents/guardians and ECCE staff.
- Providing assessment summaries and reports as necessary.
- Onward referral of a child to other professionals and agencies, e.g. audiology, ENT, psychologist, etc.
- Liaising with other professionals and agencies, including attending case conferences, individual education plan meetings and other progress management meetings as required.
- Implementing therapy as according to identified needs. This may take the form of individual and/or group sessions, home and/or classroom programme, alongside parent and/or staff training.
- Regularly reviewing/monitoring children's progress.
- Providing a health promotion/education/advisory role to support the development of speech, language and communication in all children attending the ECCE site. This will include staff and parent training modules.
- Developing and reviewing the speech and language therapy service provision for ECCE sites in conjunction with ECCE Managers, CDI and the HSE Principal speech and language therapist.

The speech and language therapist also has duties outside of the ECCE Programme, including continued professional development, supervising student speech and language therapists, and participating in the development of the HSE Dublin South West Speech and Language Therapy Department.

3. Collaboration

The successful operation of the speech and language therapy service in ECCE sites depends on good working relationships, good communication, mutual understanding and respect for different training backgrounds, skills and work duties.

It is important that the speech and language therapist is familiar with the classroom environment, daily schedule, high/scope curriculum and any issues which may impact on the child's participation and achievement in the ECCE Programme.

It is vital the speech and language therapist liaise with various people involved with the referred children, e.g. parents, key workers, other professionals. The speech and language therapist should be invited to relevant individual education plan meetings, school transition meetings, etc. If the speech and language therapist cannot attend, reports will be provided.

For targets of speech and language therapy to be achieved, speech and language therapy programmes must be seen as relevant to all aspects of the child's ECCE Programme. Therapy targets should be practised and reinforced throughout the child's daily routines and followed up at home where appropriate. Speech and language therapy programmes will be provided and modelled for staff. Your ECCE site has also been provided with a Speech and Language Therapy Resource folder for access by all staff. ECCE staff are encouraged to observe individual therapy sessions where appropriate to aid their understanding of the speech and language therapy programme. ECCE staff are required to attend offered education modules throughout the year.

The support of the ECCE Manager is required to accommodate times when the relevant staff can meet with the therapist to discuss children's therapy targets and progress, and for staff to be able to attend training modules where possible.

4. Appointments

ECCE sites will be allocated therapy times in advance. The speech and language therapist will endeavour to allocate regular times that are convenient for your site; however, this may not always be possible as the speech and language therapist is providing a service to a number of ECCE sites.

It is the responsibility of the ECCE Manager or Senior Practitioner to inform the speech and language therapist in advance of any closures of the ECCE site, including school holidays, training days, etc. If any unforeseen closures should arise, the speech and language therapist should be notified as soon as possible.

It is the responsibility of the speech and language therapist to schedule appointments with parents/carers. The speech and language therapist will then inform the ECCE Manager or Senior Practitioner of these appointments so they can support the parents in attending by reminding them the day before or the day of the appointment.

5. Attendance

The variety of working relationships for the speech and language therapist means that the therapist who visits your school will be required to attend external meetings, training days, etc. On such occasions, the speech and language therapist will inform you that he/she will not be visiting your site.

As the speech and language therapist works throughout the year, his/her holidays are not confined to school terms.

It is the responsibility of the speech and language therapist to inform the ECCE Manager of any absence on days they had allocated to the ECCE site.

6. Accommodation

In order for the speech and language therapist to provide a service to your ECCE site, appropriate accommodation will need to be made available *before* the speech and language therapist arrives for scheduled sessions. The room should have a table and chairs, all of appropriate size and height, for therapist, parents/carers and child to work at. The room should be free from interruptions as much as possible.

7. Dual service

The speech and language therapist in collaboration with CDI and the HSE have established a dual service policy. This policy guides the therapist on children's eligibility for ECCE speech and language therapy if they may be in receipt of speech and language therapy from other agencies, e.g. HSE, Adelaide and Meath incorporating the National Children's Hospital (ANMNCH), Lucena Clinic, etc. It is generally advised that children attend only one service at a time unless a collaborative approach has been established (e.g. with national services such as national cochlear implant unit at Beaumont Hospital, National Rehabilitation Hospital, Dun Laoghaire, etc. where the children may attend only for a review). The speech and language therapist will discuss each case with the ECCE Manager as needed to support their understanding of service provision.

8. Parental/Guardian involvement

General ECCE Programme:

General consent to the ECCE Programme, of which speech and language therapy health promotion is a part, will have been obtained from all parents prior to commencement in the ECCE Programme. Parent/carers/guardians will be offered opportunities to develop their knowledge in skills in supporting their child's speech and language development. Collaboration between ECCE staff, speech and language therapist and Parent/Carer Facilitators is vital to maximise the attendance at, and benefit from, these opportunities.

Specific intervention:

Written parental/guardian consent is required prior to any specific speech and language therapy intervention. This will be obtained as part of the referral process. Parents/guardians must attend initial speech and language therapy assessment appointment session, unless in exceptional circumstances. Parents/carers are encouraged to attend all following sessions to aid the progress of their child. Parents/guardians will be informed of procedures for contacting the speech and language therapist in order to cancel appointments, arrange reviews, etc. ECCE staff and the speech and language therapist will work in collaboration to encourage parents/carers/guardians to engage with the speech and language therapy process.

9. Confidentiality and Freedom of Information

Parental/guardian consent will be obtained prior to sharing information regarding a child between the speech and language therapist and the ECCE staff.

The speech and language therapist requires access to paediatric development, psychological and other reports that are provided to the ECCE site regarding children on the speech and language therapy caseload, with parent/guardian consent.

Parental/guardian and speech and language therapist consent is required prior to release of speech and language therapy reports to relevant professionals.

Speech and language therapy files will be kept in a locked container on the ECCE site (location to be allocated by ECCE Manager), to be accessed only by the speech and language therapist and the HSE Dublin South West Principal speech and language therapist, as adhering to the ownership of file policy established between CDI and the HSE.

10. Child protection

The speech and language therapist will have received Garda Clearance before commencing direct work with the children.

The speech and language therapist may work with individual children and small groups. The speech and language therapist may also work in the classroom; however, their presence will be in addition to childcare staff and should not be counted as part of the care ratio.

The speech and language therapist has completed a 2-day *Children First* training provided by the HSE and therefore is trained in recognising and reporting child protection issues. With cases of concern, the speech and language therapist informs the designated officer in the ECCE site and the designated officer in An Cosán.

11. Health and Safety

The speech and language therapist will adhere to the Health and Safety policy of the ECCE site. The speech and language therapist will be aware of the designated First Aid Officer.

12. Behaviour Management

The speech and language therapist will adhere to the Promoting Positive Behaviour policy of the ECCE site.

13. Student speech and language therapists

Supervising student speech and language therapists is a component of the speech and language therapist's role. Providing placements for student speech and language therapists is of benefit for the student therapist, the supervising therapist and the development of the profession of speech and language therapy.

The speech and language therapist will request permission from the ECCE Manager for a student speech and language therapist to attend a site and permission from parents of relevant children for the student speech and language therapist to observe and participate in sessions. The student speech and language therapist is, at all times, the responsibility of the supervising therapist and will not be left alone at a site. The ECCE Manager should provide relevant ECCE policies to the student speech and language therapist and it is the responsibility of the supervising therapist to ensure the student therapist has reviewed these policies on commencement of placement.

ECCE–SLT Checklist

Date: _____

ECCE Site: _____

ECCE Manager: _____

Senior Practitioner *(if applicable)*: _____

Speech and Language Therapist (SLT): _____

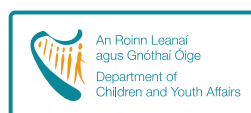
Item	Signed
SLT Service policy provided by SLT	
SLT Service policy reviewed by all staff	1. 2. 3. 4. 5. 6. 7.
Accommodation allocated <i>(please specify)</i>	
Responsibility for accommodation allocated <i>(please specify)</i>	
Health and Safety policy provided by Manager to SLT	
Health and Safety policy reviewed by SLT	
First Aid Officer designated by Manager <i>(please specify)</i>	
Behaviour Management policy provided by Manager to SLT	
Behaviour Management policy reviewed by SLT	
Location for files allocated <i>(please specify)</i>	

**This service agreement will be reviewed at the end of each term
or as requested by ECCE Manager or SLT.**



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The
ATLANTIC
Philanthropies