



**“Putting Children First”- School Readiness and School Transition
Children with Mild to Moderate Developmental Delay**

Discussion Paper

Lisa Knightbridge

In consultation with

Best Start Service Access and Co-ordination Sub-committee.

(With representation from: Connections Preschool Field Officer, Noah’s Ark
CSRDO, Monash University, Chisholm Institute, Frankston Community Health,
Anglicare, DE&T, Best Start Facilitator, FCC.)

INDEX

Executive Summary.....	3
Introduction.....	6
Current environment.....	7
Definition.....	9
Prevalence	12
Current models.....	14
Local Situation.....	17
Best practice model: FCHS best practice model.....	19
Recommendations.....	21
References.....	23

EXECUTIVE SUMMARY

Aim

The aim in writing this paper is to highlight the unique issues surrounding children with mild to moderate developmental delay and to inform current planning for Victorian children.

Background

This paper has been written on behalf of The Frankston Best Start Service Access and Coordination Committee (BSSACC) to be considered in conjunction with it's "Putting Children First – School Readiness and Transition discussion paper. This paper focuses specifically on children with mild to moderate development delay as it is believed that children with MMDD are currently being failed by both the universal and the secondary service sectors and early indicators are that current reforms and initiatives may not change this situation.

Methodology

Information will be presented from a number of sources:

- literature review local and international,
- current policy papers
- local evaluation
- experiences of BSSACC members

The paper has been written by Lisa Knightbridge with advice from Dr Ted Brown and John McCartin

Current environment

Presented is a summary of recent research findings around how children develop, and how this is beginning to manifest in government policy.

Defining children with mild to moderate developmental delay

Using a review of the literature, MMDD children are defined under these key points:

- MMDD is difficult to define or diagnose formally.
- MMDD does not include that group of children with moderate to profound intellectual and physical disorders who often have related medical conditions or conditions identifiable at birth such as chromosomal abnormality or pre maturity.
- The real picture is one of complicated combinations or overlays of delays and difficulties
- MMDD is caused by a complex interplay between biological and environmental factors.
- There is abundant evidence that without intervention, these mild to moderate developmental delays manifest in the longer term as significant health, well being and learning disorders.

Prevalence

Prevalence figures sourced from the literature as well as local evaluations are presented and compared. A profile of children referred to the FCHS school readiness program is given and close similarities between this and the definitions described in the literature are highlighted.

Early intervention for children with MMDD.

Through a literature search effective and best practice models of early intervention for this group are described. Key points discussed are:

- These disorders are identifiable in early childhood and the cost to the individual, their family and society when early intervention does not occur are enormous.
- Vast research supports the effectiveness of early treatment intervention.
- A range of universal and targeted preventions are required across all systems levels
- Most effective programs incorporate a family centred and family friendly approach.
- The most effective services are flexible and holistic

Local situation in Frankston

An overview of the local situation in Frankston is described to give a picture of how this looks on the ground. Presented are:

- Findings from The Best Start Service Access and Coordination Committee conducted Frankston Parent Survey (2004).
- Systemic barriers to service access
- Observations of early years and school teachers.
- Current service collaboration initiatives targeting this issue.

Best practice model

A best practice model; the Frankston Community Health Services School readiness program is described highlighting program aims, the model used, and evaluation outcomes.

Recommendations

Recommendations made are drawn directly from the key learnings from the literature review, local evaluations and experiences of service providers and are in addition to those outlined in the accompanying “Putting Children First-School readiness and School transition” discussion paper. It is hoped these recommendations will inform current planning for Victorian Children. The following key points are discussed as recommendations;

- Ensure there is a new intersectoral coming together in planning to meet the needs of children with MMDD.
- In policy planning, avoid searching for and using diagnostic labels for convenience then prioritising the more severe end of the spectrum.

- Fund separate, evidence based and targeted intervention models for children with MMDD.
- These models need to be provided at a cost the community can afford.
- Required are developmentally informed universal, tertiary and targeted preventive interventions across all system levels delivered by specialist therapists. . services need to be more flexible and holistic.
- They should be child and family centered rather than discipline or disorder focused.
- Services to this group need to be delivered in a timely manner, implemented at a preschool age before patterns of personality and interactions become entrenched
- Put in place the necessary secondary specialist services for identified children to be referred to.
- Current service ineligibility at school entry needs to be revised as it is a significant barrier to these children receiving the intervention they require
- Ensure services are able to provide a family friendly and family centered practice
- Instigate a comprehensive needs assessment focusing on children with MMDD to continue to inform key directions in meeting the needs of this group.

INTRODUCTION

According to the findings from the most recent and comprehensive profile of Australian children, the Australian Early Development Index (AEDI), twenty five percent of children are starting school without having obtained required school readiness development. These children are the focus of this paper. Using a review of the literature, these children, termed mildly to moderately developmentally delayed (MMDD), will be defined and described according to causes, prevalence and outcomes. The long term financial cost to the community when children at risk of developmental delay are not provided adequate early intervention and prevention services in their preschool years will be highlighted. Best practice models sourced from the literature are summarised and a more detailed case study, which includes input from parents, early childhood workers and specialist service providers around what is happening in Frankston is provided. Key learnings concerning what is required and what is still lacking for children with MMDD are highlighted.

It has been found that the needs of this group are currently not being met by either the universal services or secondary specialist services. The current political environment surrounding early childhood will be referred to and the lack of inclusion of this at risk group as well as the possible reduction in service to this group through planned initiatives is argued. Recommendations for this at risk group drawn from the information and arguments presented will be detailed.

CURRENT ENVIRONMENT

A relatively recent explosion of research around neurobiological, behavioral and social sciences has influenced profound changes in how child development and childrearing is understood and how it is currently being shaped. Central to the research findings is an understanding of the dynamic and continuous interplay between biology and experience, most recently the emphasis being on which experiences and when are most crucial for positive developmental outcomes for children. Findings from this explosion in research are reflected in common themes underpinning recent National and International early childhood initiatives such as 'From neurons to neighborhoods', 'Sure start' and locally in Victoria 'Best start'

Coupled with this recent research, the current shortcomings in the early years service system is also driving current reforms and policy reviews. Shortcomings identified in this system include fragmented service delivery; lack of timely intervention, inequalities in access, lack of family and community centered capacity building and limited resources and funding for secondary and specialist services. The latter evidenced by long wait times for these services.

These findings are currently influencing Federal, State and Local government policy around the health, development and well being of children. At the Federal level the National Agenda for Childhood has resulted in a range of initiatives including FACS Communities for Children and The Commonwealth Government Preschool Policy directions. Primary to this is the importance of the early years for child development and prevention and early intervention for improving developmental outcomes, particularly where there are children who are at risk. Locally, it is evident in the early years municipal health plans currently being released across Victoria. The Victorian State government, through key learnings from the Premiers advisory committee and it's report "Joining the Dots," is redirecting how it meets the needs of children and is implementing this through the newly formed Office for Children.

These initiatives incorporate a range of upstream and downstream interventions. Best start complies with a social model of health in that it aims to improve the health, development, learning and well-being of all children across Victoria from pregnancy through transition to school by aiming to support communities, parents, families and service providers to improve universal local early years service systems. However, consistent with overseas initiatives, Best start also acknowledges that certain groups of children experience poorer outcomes due to their unique situation, namely those children from vulnerable and indigenous families. As evidenced in the document 'Establishing priorities for gain', the Office for Children initiatives as well as key directions for community health are underpinned by a treatment, early intervention and prevention continuum. Priority issues, which in many instances are diagnosable disorders, are identified for focus across the Department of Human Services (DHS) as well as other departments, such as the 'Key directions for Community Health' Document.

Overall, these initiatives are very welcome, hold much promise and have been a long time coming. The priorities targeted by the outcomes branch are well founded, and groups chronically under-funded such as children with severe developmental delay should benefit from the changes planned, however children with mild to moderate developmental delay have arguably again fallen through the cracks. The State Governments Community

Health Services-Creating a Healthier Victoria' Policy holds some promise for this group. It is acknowledged that there are some children who require episodic intervention from allied health professionals and that this group can contribute to stressors that impact on key services including early intervention. This acknowledges that there are children who require some allied health intervention but not at the level and intensity provided by Early Intervention (EI) services that are set up and funded to cater for the 3% of severely to profoundly disabled children. However recent policy in this area, driven by the Health and Well Being' project again narrowly defines this group as having high developmental needs or behavioral problems. Money invested in the 2005 to 2006 budget around the Victorian Governments 'Putting Children First' policy also narrowly targets children with severe to profound developmental delays.

Children with MMDD are currently being failed by both the universal and the secondary service sectors and early indicators are that current reforms and initiatives will not change this situation; in some instance it may become harder for this group to access services. This appears to contradict the current and ubiquitous service delivery principles concerning early identification, equity of access and prevention. With recent figures released by the AEDI (Centre for Community Child Health 2005), revealing in that in Australia, almost 25% of children beginning school can be defined as having a MMDD, it is crucial that the unique needs of this group of children are considered and it is no longer assumed they will be met through other early childhood initiatives.

DEFINITION

MMDD is difficult to define or diagnose formally.

MMDDs are not diseases that one does or does not have but are behaviorally defined dimensional traits along a continuum with a wide range of severity. The diagnostic dilemma is summarised by Rapin 2002; he describes them as the fuzzy margins at the edges of normality. The individual strengths and emerging abilities vary significantly, and there are few measures across the population in the years before school (Elliot et al 2002). Therefore, there is no crisp partition between normalcy and disorder. It can reflect a delay or lag in certain aspects of a child's development that may or may not include intellectual delay. Many children can rate average or above on tests of intelligence (Schuck 2005) but learning, behavioural and performance problems exist. There are subtypes of disorders including autism, dyslexia, dyspraxia and attention deficit disorder that are defined by arbitrary cuts in a bell-shaped spectrum of disability, however these are acknowledged not to be mutually exclusive conditions and rarely occur without co-morbidity (Rapin 2002).

MMDD does not include that group of children with moderate to profound intellectual and physical disorders who often have related medical conditions or conditions identifiable at birth such as chromosomal abnormality or pre maturity.

As distinct from children with MMDD, children with moderate to profound intellectual and physical disorders are the most eligible for, are the highest users of and are the most likely to present at specialist and support services within their preschool years (Wright and Oberklaid 2003). The group of children the focus of this paper are those described by Mc Dowell M and Klepper K (2000) as having low severity, high prevalence disabilities such as ADHD (Attention Deficit Hyperactivity Disorder), language and learning disabilities and ASD (Autism Spectrum Disorder) presenting as disturbances of behavior, emotional well-being or developmental skill acquisition. They are generally identified within the preschool years as the functional consequences of the underlying disorder begin to become apparent within the challenges of the child's developmental stage and by extension, their environment and their clinical problems change over time depending on the challenges of the child's developmental stage.

The real picture is one of complicated combinations or overlays of delays and difficulties.

MMDDs tend to present in combinations across the language, attentional, behavioral, perceptual and emotional domains rather than as separate entities. Kooistra et al 2005, found that early learning disorders of attention, language and motor control frequently overlap. Prior et al (1995) found an overlap of 50% between behavioural problems and early learning difficulties. A study by Fowler G and Beurtearx (2003) provides evidence that children with language disorders and delays are at significant risk of co-morbid motor impairment. They found that 92% of the children referred with language delay were also experiencing sensory, motor (fine and gross), perceptual or attentional difficulties and that these had a significant impact on the child's performance. Wilson 2005 indicates that motor clumsiness or DCD (Developmental Coordination Disorder), occurring in 5 to 15% of children has associated social and emotional problems, low self-esteem and social isolation. ADHD occurring in 5 to 10% of children is related to motor control, as well as high order executive processes such as self control (Kaiff A et al 2003). DCD related to overall planning and organisation weakness is linked to general learning difficulties. Motor impairment is a fundamental part of ADHD and that the severity of ADHD resides in the amount of co-occurring disorders (Kooistra et al 2005).

This complex co morbidity persists into school when disabilities in learning such as reading are identified. "Reading problem are one manifestation of a complex disorder with multiple co-occurring dimensions, invoking a broader range of perceptual, attentional, motoric, and other cognitive processes to explain the heterogeneity of children with reading disability" (Morris, R. D et al 1998).

This complex and overlapping pattern often is often diagnosed later in life as it manifests as a more significant impairment. For example Dadds (2002) using an evidence base, identifies the developmental risks through prenatal, infancy and adolescence for externalizing and internalizing behaviors and their links to later depression, mental illness and substance abuse. The risks include the developmental and environmental factors associated with mild to moderate developmental delay including language and learning difficulties, impulsivity, temperamental difficulties, poor social skills, behavioral difficulties and sensory seeking behaviors often associated with mild developmental delay.

Developmental delay is caused by a complex interplay between biological and environmental factors.

MMDDs are rarely the consequence of single gene defects or definable insults; they have many causes that vary among individuals. Like many complex human traits, they are the expression of extremely complex multigenic influences on brain development (Rapin 2002). The principal model for the cause of developmental delay is a transactional one in which development is viewed as a transaction between the child and the environment, in which each can have profound effects on the other (Wright and Oberklaid 2003). This model is supported by the evidence indicating the increased risks for developmental delay associated with children from more vulnerable social and family settings (Guttman et al 2004) (Blor et al 1997) (To et al 2001) (Cunningham and Boyle 2002).

There is abundant evidence that without intervention, these mild to moderate developmental delays manifest in the longer term as significant health, well being and learning disorders.

There is abundant evidence that without intervention, these mild to moderate developmental delays manifest in the immediate short term as amongst other things, literacy and numeric delays and behavioral and social skill problems in early primary school (Mc Dowell M and Klepper K 2000). In the intermediate term they manifest as more significant educational, conduct disorders and mental health issues and long term as a wide range of social, economic and health issues (Dadds 2002).

Untreated, a child with a MMDD does not grow out of it. Early learning social/emotional and motor control and behavioral difficulties persist throughout schooling. Up to 50% of children with motor clumsiness and associated social and emotional problems such as low self esteem and social isolation, show persistent motor and associated difficulties even into early adulthood (Wilson 2005). Problems such as premature school dropout, unemployment, mental health disorders and antisocial behaviors are more likely long term in the children presenting with low prevalence disorders whether the developmental problem be learning disorders, developmental coordination disorder or ADHD. Reflecting the transactional nature of development, these issues arise as a process separate to the direct functional consequences of the underlying disorder (Mc Dowell M and Klepper K 2000)

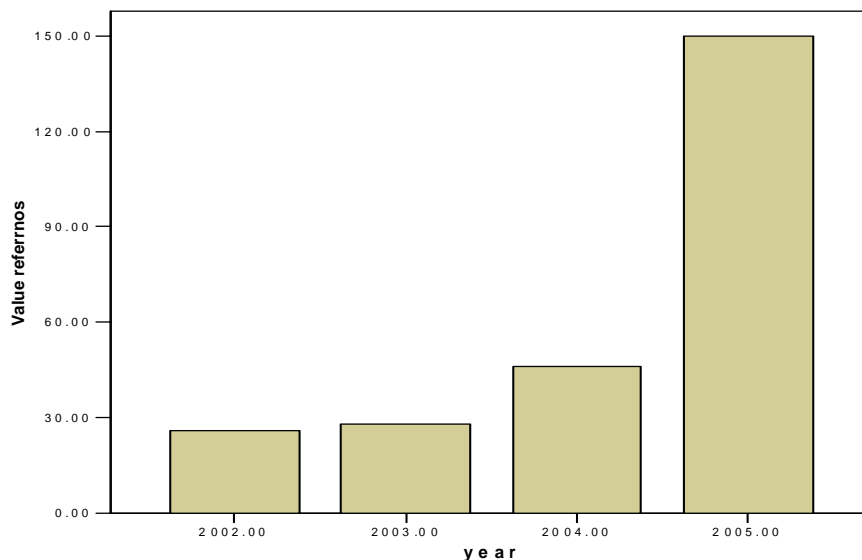
Early social and behavioral difficulties also persist and often worsen without intervention. Sawyer et al 2000 found that 14% children experience significant behavioral and emotional difficulties which can manifest later at school as a range of behavioral issues with ADHD, ODD (Oppositional Defiant Disorder) and conduct disorder the most demanding on educational, and counseling services. The origins of most antisocial behaviors are in early childhood and that 50% of children with these behaviors show a persistent pattern of oppositional behavior, concentration and attentional difficulties that are seen in poor self regulation skills (Prior et al 1989)

More concrete figures are available from the US where the Bureau of census has calculated that the absence of early intervention contributes to the fact that 1 in 3 child has either disabilities or substantial school difficulties and that 28% drop out of high school. (Glascoe 1999)

PREVELENCE

Based on the figures from national and international studies, children with MMDD make up a surprisingly large percentage of the pop. The figure is estimated to be somewhere between 15% (Wright and Oberklaid 2003) to 33% (Glascoe 1999) of the population. Not included in this group are the smaller groups of severely to profoundly delayed children who make up around 4% of the population. Early figures being released by the AEDI (Centre for Community Child health 2005) indicate that 22.6% of Australian children surveyed were 'developmentally vulnerable' on one or more domains. Extrapolating from population figures and excluding the 5% of children that fit the moderate to severe category, this equates to around 22,000 children under the age of eight who arguably are not receiving a targeted intervention service.

Referral figures from the Preschool Field Officer (PSFO) service in Frankston and the Frankston Community Health Service (FCHS) are consistent with these findings. The occupational therapy school readiness program introduced in 2003 as an early intervention program targeting children at risk of learning difficulties has been experiencing rapid increase in referral numbers since 2003 as the program becomes known in the community. In 2003 the referral numbers were 26 children however for the first five months of 2005 they had already reached 105 which could extrapolate to almost 150 for the year. This sharp increase in referrals is demonstrated in Table 1 below.



The profile of children referred to the school readiness program reflects and confirms the definition of MMDD sourced from the literature and described previously. It is estimated that less than 10% of children referred to the school readiness program have a diagnosed condition or disorder. Where there is, it is most commonly autism spectrum disorders

aspergers syndrome, borderline intellectual disability or epilepsy. A small group of children referred to the program have MMDD secondary to a medical condition such as asthma or anaphylactic shock syndrome, the delay due to missed developmental opportunities. The typical picture however, is a child identified for the first time in their preschool years when, as Mc Dowell and Klepper (2000) explain, “the functional consequences of the underlying disorder begin to become apparent within the challenges of the child’s developmental stage and by extension, their environment”. It is the functional consequence initially identifying them. These are commonly social skill difficulties, delay in or avoidance of hand skills or gross motor skills, poor confidence and attentional / activity level problems. Each child is assessed using a standardized developmental assessment including information gathered from the parents and the early year’s educator. The real picture that emerges is indeed one of complicated combinations or overlays of delays and difficulties reflecting the child’s emerging strengths and weaknesses, their individual temperament and inherent resilience as well as the protective and negative contributions of their home and community environments.

CURRENT MODELS

These disorders are identifiable in early childhood and the cost to the individual; their family and society when early intervention does not occur are enormous.

Programs aiming to improve child adjustment also need to attend to preparing children for positive experiences at school in the early years to diminish the risk for problems in both the behavioral and learning domains. Once entrenched, behavioral and learning problems are difficult to treat and therapeutic outcomes are disappointing (Elliot 2002). It is less effective to intervene once a developmental issue becomes an entrenched learning or behavioral problem. This is reflected in a statement by Dr Oberklaid quoted recently in the Age newspaper, “literacy levels have not improved over two consecutive generations despite substantial investment in school literacy programs by government.”

The costs associated with the absence of EI for children with developmental delay needs to be considered in terms of the cost to the individual and their family, the cost to the community in terms of demand on services as well as economic costs. As an example, conductive disorders, a persistent and pervasive patterns of antisocial behaviours, has an estimated prevalence of 3% in Australia and use of public services is estimated as ten times more for this group compared to children without conduct disorder (Hourihan F and Hoban D 2004). There is no evidence to indicate that these disorders can be eradicated, however even a relatively small reduction in the prevalence and persistence of these behavioral problems would represent major cost savings to the community in both the short and long term (Elliot et al 2002). Dadds (2003) reminds us of the need to take a risk reduction early intervention and prevention approach for emotional, behavioral and substance abuse problems due to the substantial, health, economic and personal costs involved and the generally unsuccessful psycho educational approaches targeting youth.

The US bureau of statistics calculates that society saves \$30,000 to \$100,000 when at risk or disabled children have two years of early intervention prior to school entrance. With EI there is an increased likelihood of graduating from high school, living independently, employment and decreased criminality and teen. Society saves tens of thousands of dollars when a child receives two years of EI. The absence of EI contributes to the fact that 1 in 3 children has either disabilities or substantial school difficulties and that 28% drop out of high school. (US Bureau of Census 1990 in Glascoe 1999)

Considering that 22.6% of children are developmentally vulnerable, the enormous numbers of children affected add up to a significant cost not only to the individuals and their families but society as a whole. In a recent article in the Age newspaper quotes Dr Rob Simons from Smith Family Research as saying ‘research is overwhelming, investment in the early years is repaid **seven times** in terms of cost for remediation later on.

Vast research supports the effectiveness of early treatment intervention.

Numerous studies reviewed indicate that early intervention for children with developmental delay minimizes the developmental disorder as well as the potential secondary complications of the initial developmental delay such as learning disorders, social skill issues and emotional problems and family stress (Gauntlett et al 2000), (Feldman 2002). Dadds (2003) looked at the effectiveness of early intervention for major internalizing disorders (anxiety and depression), the major externalizing (behavioral) disorders for young

people and the effect on the incidence of substance abuse disorders. He concludes that strong evidence exists, that the incidence of both internalising and externalizing problems can be reduced via developmentally informed tertiary and preventive interventions.

The National Health and Medical Research Council report on screening and Surveillance in children concluded that the early identification of developmental delay or disability and subsequent early intervention can improve developmental and social outcomes. Treatment for children with conduct disorders has been most successful when implemented at a preschool age before patterns of personality and interactions become entrenched (Hourihan F and Hoban D 2004).

A range of universal and targeted prevention is required across all systems levels

It is apparent from the review of the literature that a combined approach that links community-based programs with individual prevention and ameliorative programs targeted at at-risk children provides superior outcomes (Gauntlett et al 2000). The risks for later mental health and substance abuse disorders are a complex interplay between contextual, societal, individual and interpersonal factors so a range of universal and targeted prevention is required across all systems levels (Dadds 2003)

Health service systems must begin to recognize this high risk group of children with developmental disabilities who often fall through the cracks' and lack interdisciplinary services that meet their unique and persistent needs throughout childhood. Mc Dowell M and Klepper K (2000) propose a long term chronic and complex model be used reflecting the ongoing effects of these disorders arguing also that services should not stop when preschool ends

Although like all children, children with MMDD will benefit from universal prevention strategies based on a social model of health (for example Best start), strategies aimed at increasing skills in the entire population are not always effective in meeting the needs of children at risk of learning difficulties, they also require early identification and assessment, preventative and specialist interventions delivered by skilled health professionals. As an example, a highly valued and effective approach to targeting early literacy is to encourage shared reading between young children and parents. However a study by Laakso (in Prior 1995) revealed that only the control group, i.e. children without risk of reading difficulties, benefited from shared reading interactions in their later language and letter knowledge, compared to a group of children identified at risk and neither group differed in the interest they showed towards shared reading. In a local study, a twelve week low intensity program delivered by preschool teachers made no difference to a group of children at risk of later learning difficulties (Elliot et al 2002).

A family centred and family friendly approach is required.

Consistently across a range of research areas, studies demonstrate that intervention programs incorporating family centred practice are most effective. Effective programs incorporate parent observation to support evaluation of child, intervention to address family and parent strengths and weaknesses, parent education, relationship building, reducing family stress and increasing parent self efficacy (Vig S and Kaminer R 2003), (Glascoe F 1999)

Programs simultaneously addressing children, parents and community have been shown to result in better mental health outcomes than focusing on parents alone. Hourihan (2004) found an increase in positive parenting skills, a reduction in child problem behaviors at completion of a group program incorporating a parenting, child skill and school transition

component. Family intervention incorporating behavior, management practice and environment is critical (Dadds 2003).

However it must also be realised that parents are the gatekeepers of their child's access to early intervention and that family friendly approaches are crucial. Services should be more integrated and holistic so parents do not need to shop around and prioritise presenting issues when deciding between inadequate services within a service delivery system that does not allow 'double dipping'. Elliot et al (2002), found that a non stigmatizing, non selective program is more likely to attract and maintain parent interest and confidence and that it should focus on issues other than parenting such as school readiness. In their study, parents were more willing to focus on the child's needs, rather than a parenting issue and that the numbers of parents electing to join the parent-training program were small

Services should be flexible and holistic

It is not only difficult but also unnecessary and counterproductive to separate the developmental issue out into specialist disciplines and services. The most effective approach is a multidisciplinary team approach with the child and family at the center incorporating interventions across the systemic levels. This multidisciplinary approach has been found to support better outcomes across a range of areas diagnosed at earlier age (De V Peters R. 2000).

LOCAL SITUATION

Frankston Prep Parent Survey.

The Best Start Service Access and Co-ordination Committee conducted the Frankston Parent Survey in 2004. It was given to parents in every prep class in the city of Frankston and achieved almost a 50% return rate increasing confidence that the results represent a cross section of the current attitudes and opinions of families in the city of Frankston. The focus of the survey was access to universal service however many comments as sampled below, concerned services for children with developmental concerns

Offer more parenting courses to help us before small problems become huge and shorten integrated health waiting list such as dental, counseling and speech therapy.

It took her new kinder one year to work out she has a learning disability. The most important services in supporting my child things to help my child at Frankston Hospital (speech therapy and school readiness group), they were great.

More help needed once children were found to have problems at kinder.

I would have appreciated more help understanding and dealing with issues once kinder field officer had assessed my kids and found problems.

It would have been good to know about the Frankston Community Health services Occupational school readiness when my older children started preschool.

There needs to more help and information for us parents who have a child with ADHD and other learning problems. I have had all sorts of tests done, get the answers and then there is nothing else to do with all the results. "Thanks for coming but that's all we can do.

These comments reflect issues raised through the literature review i.e.; delays in initial identification, lack of services or long waiting lists when a child is identified, the importance of parent involvement, the effectiveness of early intervention programs and the need to intervene before small problems become huge.

School readiness and specialist services

Children with mild to moderate delay and their families are most affected by the service policy and provision gaps as presented in detail in the accompanying "Putting Children First"-School Readiness and School Transition discussion paper. For example, they are most likely to be the children for whom a second year of preschool is recommended and so delayed school entry is required and they are most likely to be disadvantaged by the inflexible preschool and early years service delivery models. In addition to general policy and service gaps around school readiness and school transition, the 'on the ground services' that are meant to be targeting children with developmental delay are not accessible to this group due to waiting times, eligibility criteria and demand management strategies.

The Specialist Children's Service in Frankston, as a consequence of inadequate funding and difficulties in attracting staff, has a long waiting time for service that is currently up to 18 months for some disciplines. Children with MMDD identified in the year before beginning school, even if they are determined to be eligible for the service according to their severity and multiplicity of delays, are unlikely to receive a service before they become ineligible as the service ceases once a child begins school. The CAHMS service, which has experienced

high demand and inadequate resources, prioritises older children in crisis for direct intervention. Intervention for preschool children is delivered by offering secondary and tertiary consultation to other overstretched service providers. Centre based early intervention programs such as Biala and Frankston SDS early intervention group take children with severe to profound delay that are generally identified and enrolled before they begin their preschool year.

Pre-prep or school transitions programs are considered an appropriate form of intervention for these children and have been shown to result in improved outcomes for children with MMDD. They are usually based at and funded by a local school however there is currently no program available in the city of Frankston. Within the school in Frankston, there is a perceived increase in the numbers of children beginning school who are not prepared for learning. In 2005, 50% of children entering prep at a school in Frankston North were identified as having significant speech and language delays.

Current initiatives

The Frankston Best Start program has had a positive effect on the way services work together to meet the needs of children and families within the City of Frankston. A number of initiatives arising from these new ways of working are targeting this group both directly and indirectly. The BSSACS has instigated a number of initiatives to improve the universal school readiness and school transition processes. These are outlined in the accompanying discussion paper "Putting Children First"- School Readiness and School Transition. The Frankston North Early Childhood Support Project is currently exploring ways to increase access to early childhood intervention services for children with additional needs accessing universal services in Frankston North. This model developed takes an intersectorial, family centered, systemic and capacity building approach involving parent and teacher consultation, outreach models and family friendly practice.

The current environment and service system inadequacies has also lead to the development and implementation of the FCHS school readiness program. This will be detailed as an example of a best practice model for addressing the unique needs of this group of children

FCHS SCHOOL READINESS PROGRAM: A BEST PRACTICE MODEL

Aims

To provide an effective and efficient evidence based paediatric therapy program to address mild to moderate developmental, environmental and social concerns in 4 to 5 year old preschool children which places them at risk of learning, behavioural and social difficulties at school as well as being risk factors for longer term poorer educational, health or social outcomes

- To identify developmental concerns and intervene in a timely, equitable and accessible manner
- To provide a holistic developmental assessment and program targeting presenting problems and identified risk factors
- To empower parents through skill and knowledge building, increasing self efficacy, and providing choice and support
- To provide cost effective, evidence based, practical and scientifically sound interventions
- To provide treatment within a social model of health framework, addressing relevant social and community domains.

Model

The school readiness program was developed initially by two occupational therapists as a strategy to identify and target preschool children with mild to moderate developmental delays at risk of future learning difficulties at school. This was to address a steadily increasing demand for services for school aged children experiencing learning difficulties, poor self esteem and anxiety. It has developed over three years into an efficient and effective evidence based program addressing both presenting issues as well as risk factors within a child and family centred approach. Innovations include a holistic assessment, multidisciplinary intervention delivered through home based and group programs planned according to anticipated referrals across the year, inter-service collaboration and service sector reorientation initiatives. A key factor is that unlike other early years services, eligibility does not stop when the child begins school. Transition to school is part of the program goals and these children are followed through to the early years of school and developmental issues addressed in a timely manner.

Cost effectiveness

Consistent with the need for interventions that are cost effective, the intake, assessment and service delivery model has enabled the achievement of waiting times are no more than four to six weeks from case history form return. The service delivery model allows short wait times while delivering an individualised, family centred, high quality and comprehensive intervention. Average direct service time received is approximately 750 minutes, an increase on 200 minutes for the previous 3 years.

Outcomes

Referrals to the OT school readiness program for 2005 were 121, an increase of 100% on the previous year and an almost 400% increase since 2002. Of those 121, 92 children were

assessed and provided with a program. Of the others 13 no longer required service and 16 recent referrals are either still on the waiting list or waiting for case history form to be returned. Eight school readiness groups were conducted across the fortnight and one social skills group was conducted weekly.

Parents were asked to complete an evaluation form during the last school readiness groups for the year and thirty-one forms were completed. There was a statistically significant reduction in parental concern across all developmental areas, with the most reduction in concern for attention and fine motor skills.

Parents also indicated a significant difference between their child's development at the beginning of the year and at the completion of the program, beyond what one would expect with normal development alone. On a scale of one to five, with five being very much, the average score given was four when parents were asked what effect the school readiness program had on this change.

RECOMMENDATIONS

These recommendations are in addition to those outlined in the accompanying “Putting Children First-School readiness and School transition” discussion paper as it is acknowledged that addressing general policy and service delivery gaps around school readiness, will go a long way to meeting the needs of this group of children and their families. However in meeting the unique needs of this group which are as a combined result of their underlying development disorder, the secondary issues occurring as a result of the transactional process between the child and their environment and compounded by a lack of access to required services, specific recommendations of relevance to this group will also be put forward. These recommendations have been drawn directly from the literature review findings, outcomes of local evaluations, anecdotal experiences provided by service providers and from examples of best practice interventions. It is hoped these recommendations will inform current planning for Victoria’s Children.

- Within the newly embedded partnership culture and by using the new Office for Children Structures, specifically the Statewide Outcomes for Children’s Branch and the Children’s Services Co-ordination Board, ***ensure there is a new intersectoral coming together in planning to meet the needs of children with MMDD.*** Government departments need to recognize this group, up to now, have tended to be ‘buck passed’ between the Health, Education and Community Services sectors.
- In policy planning, ***avoid searching for and using diagnostic labels for convenience then prioritising the more severe end of the spectrum.*** This approach increases the likelihood that this high prevalence (around 25% of the population), low severity group who often do not have a diagnosable disorder, will be continue to be excluded from the services and supports they require
- Include provision in the next State Budget to ***fund separate, evidence based and targeted intervention models for children with MMDD.*** Considering the demonstrated high prevalence of MMDD, ***these models need to be provided at a cost the community can afford.*** Interventions for children with more severe developmental delay such as Specialist children’s Services or Biala would be ‘over servicing’ for this group. More appropriate would be low level, episodic allied health interventions combined with flexible service delivery models such as pre prep programs, community capacity building and school readiness group outreach models. Allocate money specifically for this group rather than throwing all children with a developmental delay together under the same umbrella then determining who does not get access to service by ruling a line on a bell shaped graph of severity.
- ***Required are developmentally informed universal, tertiary and targeted preventive interventions across all system levels delivered by specialist therapists.*** . Considering the variability in level and multiplicity of needs across this group, early intervention ***services need to be more flexible and holistic. They should be child and family centered rather than discipline or disorder focused.*** Parents should not have to choose between or prioritise their child’s problems and therefore the services required. Services should be effective and efficient and delivered within an integrated multidisciplinary setting with a single point of contact.

- ***Services to this group need to be delivered in a timely manner***, implemented at the preschool age before patterns of personality and interactions become entrenched
- Continue to improving the capacity of the universal system to identify these children at risk early however alongside strategies such as increasing the 3.5 year old MCH checks, ***put in place the necessary secondary specialist services for identified children to be referred to.***
- Considering that these children are often not identified until their preschool year, ***current service ineligibility at school entry needs to be revised as it is a significant barrier to these children receiving the intervention they require.*** What is needed is a long term chronic and complex model that does not stop when preschool ends and is integrated across the educational and early years sectors.
- ***Ensure services are able to provide a family friendly and family centered practice*** as they have been demonstrated to be more effective and more likely to attract and maintain parent interest involvement.
- ***Instigate a comprehensive needs assessment focusing on children with MMDD to continue to inform key directions in meeting the needs of this group.***

References

Centre for Community Child Health and Telethon Institute for Child Health research (2005) *Australian Early Developmental Index, Community Results 2004 to 2005* Commonwealth of Australia.

(Blor W, Najman J, Anderson M, O'Callaghan M, Williams G, Beeriness B. (1997).The relationship between low family income and psychological disturbance in young children: An Australian longitudinal study. *Aust NZ J Psychiatry* 31: 664-75

Cunningham C and Boyle M (2002) Preschoolers at risk for attention-deficit hyperactivity disorder and oppositional defiant disorder: Family, parenting and behavioral correlates. *Journal of abnormal child psychology* Vol 30, No 6 555-569

Dadds M and Atkinson E (2003) *Comorbid mental disorders and substance use disorders: epidemiological prevention and treatment.* Commonwealth of Australia

De V Peters R. (2000). *Developing Capacity and competence in the better beginnings, better futures communities: Short term findings report* Community and Social services Ontario

Dummaret A.C. (2003) Early intervention and psycho-educational support: a review of the English language literature *Archives de pediatrie* 10 448-461

Elliot, J., Prior, M., Merrigan C. and Ballinger K. (2002) Evaluation of a community intervention program for preschool behavior problems. *Journal of paediatric child health* 38 41-50

Erin Gauntlett, Richard Hugman, Peter Kenyon and Pauline Logan

Feldman E, Champagne F, Korner S, Bitensky N and Meshefjian G (2002). Waiting time for rehabilitation services for children with physical disabilities. *Child Care Health and Development* 28 No 5

Fowler G and Beurtearx (2003). The connection between language disorders and motor competence in children. Paper presentation at OT Australia, 2nd paediatric conference.

Gauntlett E, Hugman R , Kenyon P and Logan P (2000) A meta analysis of the impact of community based prevention and early intervention action. *Department of community service policy research paper No 11*

Glascoe FP (2000). Evidence-based approach to developmental and behavioral surveillance using parents concerns. *Child care health and development* 26 No 2

Glascoe F (1999) Using parent concerns to detect and address developmental and behavioral problems. *Journal of the society of paediatric nurses.* Jan v4 i1

Guttman A, Dick P, Rosenfield J, Parkin P, Cao H, Vydykhan T, Tassoudji M and Harris J (2004). What factors are associated with poor developmental attainment in young Canadian children. *Canadian Journal of Public Health* Jul/Aug 2004 95 4

- Gwynne K. and Black B (2004) Motor performance checklist for 5 year olds: A tool for identifying children at risk of developmental co-ordination disorder *Journal of paediatric child health* 40, 369-373
- Hanna K. and Rodger S. (2002) Towards family-centered practice in pediatric occupational therapy; A review of the literature on parent-therapist collaboration. *Australian Occupational therapy Journal* 49 14-24
- Hourihan F and Hoban D (2004) Learning, enjoying, growing, support model: an innovative collaborative approach to the prevention of conduct disorder in preschoolers in hard to reach rural families *Aust Journal of rural health* 12 269-276
- Kaiff A et al (2003) Low and high-level controlled processing in executive motor control tasks in 5 – 6 year old children at risk of ADHD *Journal of child psychology and psychiatry* 44:7 1049-1057
- Kendall S and Bloomfield L (2004) Developing and validating a tool to measure parenting self efficacy *Journal of advanced nursing* 51(2), 174-181
- Kooistra L, Crawford S, Dewey D, Cantell M and Kaplan B (2005) Motor Correlates of ADHD: contribution of reading disability and oppositional defiant disorder. *Journal of Learning Disabilities* May-June v 38.
- Mc Dowell M and Klepper K (2000) A ‘chronic disorder’ health care model for children with complex developmental disorders. *Journal of paediatrics and child health* Vol 36 6
- NSW Centre for parenting (2003) *School readiness Discussion paper 1*. NSW Dep Community Services
- Oberklaid F (2005) *Age Newspaper*, August 27
- Orima research (2003) *A report on the qualitative research into parents, children and early childhood services* Aust Gov Dept Family and community services
- Elliot J, Prior M, Merrigan C and Ballinger K (2002) Evaluation of a community intervention programme for preschool behavior problems *Journal paediatric Child Health* 38 41-50
- Fowler G and Beurtearx (2003). The connection between language disorders and motor competence in children. Paper presentation at OT Australia, 2nd paediatric conference.
- Prior M, Sanson A, Smart D, Oberklaid F Reading disability in an Australian community sample *Aust Journal of psychology* 47: 32-7
- Prior M, Sanson A, Oberklaid F. (1989) The Australian Temperament Study In; GA Kohanstamm, JE Bates, MK Rothbert eds *Temperament in Childhood* UK Wiley, Chinchester, 1989, 537-54
- Rapin I, (2002) Diagnostic dilemmas in developmental disabilities: Fuzzy margins at the Edges of Normality *Journal of Autism and Developmental Disorder* Feb v 32
- Schuck S and Crinella F (2005) Why Children with ADHD do not have low IQs. *Journal of Learning Disabilities* May-June 2005 v 38
- To T, Cadarette and Liu Y (2001) Biological, social and environmental correlates of preschool development *Child Care Health and Development* v27 No 2

Vig S and Kaminer R (2003) Comprehensive Interdisciplinary Evaluation as Intervention for Young Children *Infants and Young Children* v16 4

Wilson P (2005) Practitioner Review: Approaches to assessment and treatment of children with DCD: an evaluative review. *Journal of Child Psychiatry and Psychology*

Woolfson, L.H. (1999) Using a model of transactional developmental regulation to evaluate the effectiveness of an early intervention program for preschool children with motor impairments *Child care health and development*. Vol 21 No 1

Wright M and Oberklaid F (2003) Child Development- Issues in early detection *Community paediatric Review* V 12 No 1.