Good beginnings for young children and families: a feasibility study
May 2004
City of Wodonga

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During 2000, the City of Wodonga engaged in community consultation which demonstrated that childcare, preschools and primary schools together with maternal and child health and primary school nurses provided a platform for the early identification of developmental and behavioural problems in children. The same consultations also defined a lack of a suitable tool for these services to use in identifying problems, as well as a knowledge deficit of the appropriate service providers to address these issues. There appeared to be both a need to consider how to best communicate with parents around their child’s development and behavioural concerns as well as an opportunity to pilot a methodology to demonstrate how a number of services might be able to better coordinate and communicate around issues of child development and parent concern. In June 2002, the City of Wodonga received funding from the Primary Care Partnerships, to undertake “A Good Beginning for Young Children and Families Project” to test the feasibility of establishing a questionnaire that could act both as a communication tool between providers and between providers and parents, as well as having psychometric properties that would enable it to be used as a developmental screening tool in the context of services that were already providing a system of care.

In 1998 Professor Frances Page Glascoe from Vanderbilt University published a simple to use, reliable and validated methodology to systematically elicit and respond to parent concerns regarding their children’s health, development and behaviour for this purpose. A 10-item parent completed questionnaire, the Parent Evaluation of Developmental Status (PEDS), has been shown to be as accurate as any of the previously developed screening tests. However, it has the distinct advantage of taking less time, needing no specialised equipment and has a strong emphasis on parental involvement. Research has demonstrated that using the PEDS in a systematic way to elicit parent concerns, and then by responding to these concerns in an appropriate way (by providing parent education and information or else referral for further comprehensive assessment) has the potential for significantly improving child outcomes. The PEDS tool was chosen for the project.

A project officer was employed in 2001 to undertake the project, and a partnership was developed with the Centre for Community Child Health, Royal Children’s Hospital, Melbourne, to provide education to professional staff, ethics approval and evaluation of the project. The original project submission, to the Primary Care Partnerships, was utilised to identify the aims and objectives of the project. Invitations were extended to early childhood services in the City of Wodonga to participate in the project.

The aims of the Good Beginning for Young Children and Families project were to:

- Trial the use of the PEDS as a developmental screen by maternal and child health nurses
- Trial the use of the PEDS as a parent communication tool by childcare workers and teachers
- Obtain feedback from these provider groups as well as parents on the utility and uptake of the PEDS in these services.
- Determine if service mapping in addition to the PEDS can facilitate more appropriate and timely discussions and referrals of children with developmental and behavioural concerns.
- Utilise information gained from this project to develop a sustainable model of intersectoral communication and early detection around child development.
To achieve these aims the project:

- Provided service mapping through a local resource guide known as “A Guide for Young Children and Families” and the Primary Care Partnerships State-wide Health Service Directory, and made these readily available to providers.
- Piloted the P EDS, either for a 4-week period or at predetermined parent interviews, as a communication and early detection tool to assist staff in the early identification, appropriate referral and management of developmental and behavioural problems in young children 8 months to 8 years.
- Undertook a process evaluation that measured the uptake, accuracy, effectiveness and costs of the pilot process.

Further details about the evaluation methodology and background to the planning, development and implementation of the project is provided in the main report.

There were 246 children whose parents completed the P EDS questionnaire, with 70% of these children from child care centres or maternal and child health centres. The most frequent concerns were related to behaviour and expressive language, with these concerns significantly more frequent. Behaviour concerns were significantly higher in the children more than 4.5 years of age, whilst expressive language concerns were higher in children from the age of three years. There was a significant difference in the concerns reported by parents between boys and girls in the areas of expressive language and social/emotional.

Through the use of the P EDS those children who were considered ‘high risk’ of disability, 89.3% required referral or had been previously referred to outside services. Of those children who were considered ‘medium risk’ of disability, 59.3% required referral or had been previously referred to outside services. In contrast, of those children who were considered ‘low risk’ of disability or their parents had no concerns, 10.3% and 0.8% respectively were referred to outside services. The P EDS provided a process whereby those children most a risk were identified and appropriate anticipatory guidance and referrals could be implemented by providers. There is a need to develop coordinated service systems that cross the traditional health and education boundaries in order to establish systems of early detection, prevention and promotion within a family centred model of coordinated care for young children. The P EDS offers the opportunity for disparate services to all focus on development, using a common tool. The services can then address parental concerns within their own professional boundaries and provide transition information, to the next service system, using the same common tool.

The P EDS was thought to be an easily used tool by all providers from schools, childcare and maternal and child health, with over 80% of providers feeling confident using the P EDS, agreeing that it was a positive addition to their practice and interested in using the P EDS in the future. The concept of a service directory that provided up to date information to parents and providers on support services for young children and families was considered important and assisted people in accessing these services.

In summary, the P EDS is an acceptable tool across provider groups for both screening and for parent discussion and promotes family centred practice. Concerns raised through P EDS can be addressed by primary care providers and prevent further problems through early intervention and anticipatory guidance. P EDS has the ability to form an integral part of a service coordination framework that facilitates a focus on development, early detection and prevention including transition information between services.
2. Introduction

2.1 Upper Hume Primary Care Partnerships (UHPCP)

The Upper Hume Primary Care Partnership (UHPCP) is a voluntary alliance between 27 primary care agencies and community organisations in the municipalities of Wodonga, Indigo and Towong and the Kiewa Valley of the municipality of Alpine. The Primary Care Partnership strategy is a framework for improving the planning and delivery of Victorian primary care services and for ensuring that they work effectively together from the perspective of the consumer. Details of the UHPCP can be found in the Upper Hume Healthy Communities Plan 2002-2005. Copies of this plan are available from the UHPCP Project Officer (02) 6022 9284, the Department of Human Services (DHS) website; www.dhs.vic.gov.au and the web sites of the City of Wodonga; www.wodonga.vic.gov.au and the Shire of Indigo; www.indigo.vic.gov.au.

2.2 City of Wodonga demographics

Wodonga is one of Victoria’s fastest growing regional cities strategically located on the Hume Highway between Melbourne and Sydney. Wodonga has a population of 32,091 and covers an area of 430 square kilometres. Boundaries include the Shires of Indigo, Towong and the NSW State Border (City of Albury and Hume Shire Council). Wodonga has approximately 500 births per year and 4500 children in the 0-8 year age group. This age group is serviced by various health and educational facilities. These include five maternal and child health centres, one occasional child care centre, nine long day care centres, eight preschools, seven primary schools (four government, and three denominational) and one special developmental school, together with primary health and wellbeing services provided by many of the primary health care agencies which represent the Upper Hume Primary Care Partnership.

2.3 Project rationale

International evidence highlighting the importance of the early years of life is now having a significant influence on both the State and Federal Government as they consider the best approach to improving outcomes for children. In addition a recent report by the National Health and Medical Research Council (NHMRC), summarising the evidence for a number of child health screening and surveillance programs, has highlighted the importance of systems of early detection, rather than stand alone activities. The report supports an integrated and coordinated approach to the early identification of problems with subsequent provision of appropriate intervention, leading to improved outcomes for children and their families. Approximately 20% of children have significant problems in one or more areas of their development (gross motor, fine motor, language, self-help, social, cognitive and behavioural).

In June 2002, the City of Wodonga received funding from the Primary Care Partnerships, to undertake “A Good Beginning for Young Children and Families Project” to test the feasibility of establishing a questionnaire that could act both as a communication tool between providers, and between providers and parents, as well as have psychometric properties that would enable it to be used as a developmental screening tool in the context of services that were already providing a system of care.
In 1998 Professor Frances Page Glascoe from Vanderbilt University published a simple to use, reliable and validated methodology to systematically elicit and respond to parent concerns regarding their children’s health, development and behaviour for this purpose. A 10-item parent completed questionnaire, the Parent Evaluation of Developmental Status (PEDS), has been shown to be as accurate as any of the previously developed screening tests. However, it has the distinct advantage of taking less time, needing no specialised equipment and has a strong emphasis on parental involvement.\textsuperscript{7,8}

Furthermore, research has demonstrated that using the PEDS in a systematic way to elicit parent concerns, and then responding to these concerns in an appropriate way (by providing parent education and information or else referral for further comprehensive assessment), has the potential for significantly improving child outcomes.\textsuperscript{9} An Australian version of PEDS has been developed to ensure cultural appropriateness. The authorised Australian version of the PEDS Response Form, PEDS Score Form, PEDS Interpretation Form and an Introduction to: Parents’ Evaluation of Developmental Status PEDS can be found in Appendix 1.

In any community young children will spend numerous hours in childcare, preschool and primary school. Together with parents and carers, staff at these sites spend many hours with children and know their abilities very well. Community consultation with parents of young children and service providers, held in Wodonga during 2000, has demonstrated that childcare, preschools and primary schools provide a platform for early identification of developmental and behavioural problems in children.

The same consultations also defined the lack of a suitable tool for maternal and child health nurses (MCHN), childcare, preschool and primary school staff to use in identifying problems as well as a knowledge deficit of the appropriate service providers to address the issues.

Therefore there appeared to be both a need to consider how to best communicate with parents around their child’s developmental and behavioural concerns, as well as an opportunity to pilot a methodology to demonstrate how a number of services, many funded by the City of Wodonga, might be able to better coordinate and communicate around issues of child development and parent concern.

2.4 Project aim & objectives

The overall aim of the Good Beginning for Young Children and Families project was to establish:

- The Parent Evaluation of Developmental Status (PEDS) questionnaire is an acceptable and feasible communication and screening tool to use with parents and staff of Maternal and Child Health Centres, Childcare Centres, Preschools and Primary Schools to identify developmental and behavioural problems in children aged 0-8 years.

- The combination of providing service mapping of referral services and the use of the PEDS leads to more timely and appropriate referrals
Before implementing any sort of tool that might be an additional burden on service providers, it should be demonstrated that the tool is useful for both parents and providers, is acceptable and is an effective addition to professional practice. The objectives of the “Good Beginning for Young Children and Families Project were:

- To trial the use of PEDS as a developmental screen by maternal and child health nurses
- To trial the use of the PEDS as a parent communication tool by childcare workers and teachers
- To obtain feedback from these provider groups as well as parents on the utility and uptake of PEDS in these service.
- To determine if service mapping in addition to the PEDS can facilitate more appropriate and timely discussions and referrals of children with developmental or behavioural concerns

In order to achieve these objectives the “Good Beginning for Young Children and Families Project” would:

1. Provide service mapping of primary health care referral services, applicable to the City of Wodonga, and make these readily available to staff and parents.

2. Pilot the Parents’ Evaluation of Developmental Status (PEDS) tool, for a four-week period, as a communication and early detection tool to assist staff in the early identification, appropriate referral and management of developmental and behavioural problems in children aged 8 months to 8 years. During this pilot, those children who were considered as having a ‘high’ or ‘moderate’ risk of disability were referred to either the maternal and child health nurse (under school age) or the primary school nurse (school age) for a secondary screen. The secondary screen used was the BRIGANCE Screen. This added secondary screening, for those at ‘high’ and ‘moderate’ risk, increased the specificity of the PEDS from 70%-80% to over 82%.10

3. Undertake a process evaluation that will measure the uptake, accuracy, effectiveness and costs of the pilot process.

It was anticipated that the project would provide an opportunity to identify a systematic system, using parental input, of addressing behavioural and developmental issues with young children. The information, from this trial, could then be utilised to develop a sustainable model of intersectoral communication and early detection around child development.

2.5 Relevant use of the PEDS and its use in Australian settings

The PEDS has been validated and used widely in the USA9. It has been trialled in Melbourne in five long day care centres in the suburbs of Broadmeadows, Carlton and Hawthorn in 1999. The Melbourne study found the PEDS to be acceptable and easy to use by parents, with parents also reporting it to be beneficial to professionals when assessing development in children. This study showed that the incidence of children who were identified as having a ‘high’ and ‘medium’ risk of developmental problems were similar to those found in the original USA study.11
3. Parents’ Evaluation of Developmental Status (PEDS) and BRIGANCE screen

3.1 Parents’ Evaluation of Developmental Status (PEDS)

The Introduction to: Parents’ Evaluation of Developmental Status (PEDS), PEDS Response Form, PEDS Scoring Form, and PEDS Interpretation Form can be found in Appendix 1. Further information on the PEDS is available at www.rch.org.au/ccch. The following is a brief explanation of the PEDS.

The PEDS is designed for use with parents of children from birth to 8 years of age. It is written at grade six reading level and the PEDS Response Form comprises 10 questions, eight of which elicit parental concern about specific domains of learning, development and behaviour; the remaining two questions are about more general concerns. Parents can respond ‘yes’, ‘a little’ or ‘no’ to the questions. ‘Yes’ and ‘a little’ responses are considered to be a concern. Certain groupings of concerns have found to be significant predictors of the presence or absence of developmental disability for certain age categories.

The PEDS also has a PEDS Score Form and on the reverse side of this is a PEDS Interpretation Form. These forms are for professional use. The PEDS is scored by adding the total number of significant and non-significant concerns as indicated by the parent on the PEDS Response Form. The PEDS Interpretation Form directs the professional to a choice of one of five paths.

Children with two or more significant concerns on the PEDS Interpretation Form are Path A and are considered at ‘high risk’ of disability. Their risk of disability is 20 times that of children whose parents have no concerns, and 70% have substantial delay. Further testing is needed and the PEDS Interpretation Form suggests the kinds of referrals that should be most helpful.

Those children with one significant concern are Path B and are considered at ‘moderate risk’ of disability. They are 8 times more likely to have difficulties than those children whose parents have no concerns and 30% have disabilities. Further testing is needed to determine which children need referral and which do not.

Those children with one or more non-significant concerns are Path C and are considered ‘low risk’ of disability and are only 1.3 more times likely to have difficulties than those children whose parents have no concern. Only 7% have developmental disability and the best response is to counsel parents with their concerns and monitor the child’s progress closely.

If there are no concerns reported by the parents but the parents have difficulty communicating either due to language barriers, parental mental health problems or the carer is unfamiliar with the child, the child is on Path D. 3% of these children have a moderate risk of disability, which is 4 times that of parents who have no concerns and no communication difficulty. These children require an additional screen to ascertain if there are any developmental problems. Usually this screening will involve interpreters or support services for the parents so that quality information can be elicited.

If there are no concerns the children are on Path E and are considered to be ‘low risk’ of delay or disability as only 5% will have difficulties or delay.
The PEDS Interpretation Form provides a space to list specific decisions, referrals, additional screening test results, counselling topics, plans for further review etc. The form can be used across multiple interviews with parents to follow children over time. This is where the PEDS has the ability to be a model for inter-sectorial communication around child development and behaviour. The PEDS questions can be asked from parental contact in maternal and child health centres, childcare centres, preschool and primary schools. With parental consent, a copy of the PEDS Interpretation Form can be passed on as transition information to the continuing service. The new service is then provided with a chronological history of parental concern and decisions regarding children’s development and behaviour. This can only facilitate the early identification and referral of difficulties around children’s development and behaviour.

The PEDS has been shown to have a high sensitivity and identifies 74% to 80% of children with disabilities, similar to the accuracy of other screening tests which take much longer to administer. The PEDS also has a high specificity in that 70%-80% of children without disability are identified as developing normally. For those children who are identified as ‘high risk’ of disability (Path A) and ‘medium risk” of disability (Path B) by providing a secondary screening test such as the BRIGANCE increases the PEDS specificity to over 82%.10

The PEDS Response Form and PEDS Score and Interpretation Form are available for purchase though the Centre for Community Child Health, Royal Children’s Hospital Melbourne, Telephone: 03 9345 6150. The forms are under copyright and are not able to be photocopied. The combined cost of the two forms is $1.10c. Hence, the cost of providing the PEDS on the first occasion is $1.10, and on subsequent interviews within a service it would be $0.55c, as the PEDS Response Form is the only new form required. The PEDS Brief Administration and Scoring Guide is also available at a cost of $8.00.

3.2 BRIGANCE screen

Children who were considered at ‘high risk’ (Path A) or ‘medium risk’ (Path B) of developmental disability following the use of the PEDS were given a secondary BRIGANCE screen. This was to determine which children needed referral. The use of the secondary BRIGANCE screen increases the specificity of the PEDS to over 82%.10 Children, under school age, were referred to the maternal and child health nurse for the secondary BRIGANCE screen, and school age children to the primary school nurse.

The BRIGANCE screen is designed to be used by early childhood professionals as an assessment for identifying developmental delay and academic talent in children form birth to eight years of age.12 The screen consists of a series of measures with one form per year of age from birth to 8 years. The BRIGANCE screens are divided into 4 books relating to age groups.

- Infant and Toddler Screen
  - Infant Assessment (birth -11months)
  - Toddler Assessment (12-23 months)

- Early Preschool Screen
  - 2 Year Assessments (1 year 9months - 2 years 2 months)
  - 2½ Year Assessments (2 years 3 months – 2 years 9months)
Preschool Screen
- 3 Year Assessments (2 years 9 months – 3 years 8 months)
- 4 Year Assessments (3 years 9 months – 4 years 8 months)

P, K & 1 Screen
- Kindergarten Assessments (4 years 9 months – 5 years 8 months)
- First Grade Assessments (5 Years 9 months or older)

The screening books provide professionals with instructions on each screen which most children will complete in 15-20 minutes. The basic assessments provide a sampling of the child’s learning, development and skills in a broad range of areas, such as fine motor skills, body awareness, general knowledge, language development and gross motor skills. There are data sheets, one for each age level, to allow data to be recorded. A point value is assigned to each skill in the basic screening assessments to provide a means of calculating a score for each child. The BRIGANCE screen has been standardized and validated to produce cutoff scores for detecting children likely to have developmental disabilities or academic delays and also cutoff scores for detecting children who may be gifted or academically talented. Children who score below the established cutoff score should be further evaluated in more detail and considered for more comprehensive assessment unless other available information indicates the referral is not necessary or appropriate.

The BRIGANCE screen offers the professional the added information required to decide whether further assessment and referral is warranted. Through administering the BRIGANCE screen to those children who have been identified through the PEDS as being at ‘high risk’ (Path A) or ‘moderate risk’ (Path B) of developmental disability, the professional can then decide who to refer and who not to refer. The BRIGANCE screen has the distinct advantage of assisting professionals in referring only those children who really require referral, thus decreasing the number of children who may be on waiting lists for intervention services.

An example of a completed Two Year Old Data Sheet for the BRIGANCE Early Preschool Screen can be found in Appendix 2.

The set of four books which comprise the BRIGANCE screen are available for purchase from Hawker Brownlow in Melbourne, Telephone: 03 9555 1344. The cost of the set of four books is $155.00. Software to assist in the interpretation of the results of the screen is available at a cost of $25.00. The summary forms can be photocopied so once the four books are purchased there are no ongoing purchase costs for the screen. There are no special developmental toys required for the screenings. Toys used can be those already in use in services or they can be purchased from any educational toy distributor. The cost of providing these toys for each set of BRIGANCE screens for the project was $30.00. Therefore, the total cost of purchasing the BRIGANCE screen for a service is $210.00.
4. Project description

4.1 Project working group

A project officer was appointed to undertake the Good Beginnings for Young Children and Families Project. The project officer, Marcia Armstrong, was appointed in October 2002. Ms Patience Harrington (Director Community Development, City of Wodonga) and Ms Debra Mudra (Manager Service Planning, City of Wodonga) provided supervision to the project officer.

4.2 Key activities & timelines

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<th>Proposed Key Activities</th>
<th>Roles &amp; Responsibilities</th>
<th>Timelines</th>
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<tbody>
<tr>
<td><strong>1. Getting Started</strong></td>
<td>Appointment of Project Officer</td>
<td>Undertake project October 2002</td>
</tr>
<tr>
<td><strong>2. Gathering Information</strong></td>
<td>Identify aims and objective of project from original submission</td>
<td>Project Officer and agencies involved in the project October – December 2002</td>
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</tbody>
</table>

1. Consultation with Community Development, Director Community Development and Manager Service Planning (City of Wodonga)
2. Invite representation from maternal and child health, preschool, childcare and primary schools for participation in the project
3. Invite partnership with the Centre for Community Child Health (CCCH), Royal Children’s Hospital, Melbourne for participation in the project. CCCH role is in education of professional staff, ethics approval and project evaluation
4. Development of a service directory

**3. Develop a framework for the implementation of the project**

1. Develop outline of project
2. Education of professionals
3. Development of evaluation framework
4. Application to ethics committee

Project Officer, and agencies involved in the project January – May 2003

**4. Implementing project**

1. Project implementation in 2 primary schools
2. Project implementation in 2 preschools
3. Project implementation in 2 childcare settings
4. Project implementation in Maternal and Child Health Centres (City of Wodonga).

Project Officer and agencies involved in the project February – September 2003
<table>
<thead>
<tr>
<th>Proposed Key Activities</th>
<th>Roles &amp; Responsibilities</th>
<th>Timelines</th>
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<tbody>
<tr>
<td>5. Feedback from parents and provider groups on the utility and uptake of PEDS in the services piloted</td>
<td>Project Officer, providers and parents</td>
<td>June 2003 – February 2004</td>
</tr>
<tr>
<td>1. Provide questionnaires to parents and providers on the utility and uptake of the PEDS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Undertake focus groups with parents and providers on the utility and uptake of the PEDS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Provide telephone consultation, after 3 months of completing the PEDS, to those parents whose children were referred to outside services during the project</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Evaluation</td>
<td>Project Officer, CCCH</td>
<td>February – March 2004</td>
</tr>
<tr>
<td>1. Measure process impacts and outcomes. The process outcomes are related to evaluating the successes of the aims and objectives of the project.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Measure economic outcomes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Dissemination of information gained from the project</td>
<td>Project Officer, CCCH</td>
<td>March 2004</td>
</tr>
<tr>
<td>1. Provide information and education regarding the PEDS to interested service providers in Wodonga who did not participate in the project</td>
<td></td>
<td>April 2004</td>
</tr>
<tr>
<td>2. Disseminate information gained in the project in a report and make this available to key stakeholders</td>
<td></td>
<td>July 2004</td>
</tr>
<tr>
<td>3. Publish findings of project in an appropriate journal</td>
<td>Project Officer, CCCH</td>
<td>October 2004</td>
</tr>
<tr>
<td>4. Present findings of the project to the 2004 World Organisation for Early Childhood Education (OMEP) Congress ‘One World: Many Childhoods’ to be held in Melbourne in 21st -24th July 2004.</td>
<td>Project Officer, CCCH</td>
<td></td>
</tr>
<tr>
<td>5. Present findings of the project as a paper at the Queen Elizabeth Centre’s conference “The Critical Early Childhood Years” to be held in Melbourne from 1-2 October 2004.</td>
<td>Project Officer, CCCH</td>
<td></td>
</tr>
</tbody>
</table>
4.3 Resource allocation

The Primary Care Partnerships allocated a total of $42,000 to this project; funding was received in July 2002. The City of Wodonga employed a project worker for 1 day a week from October 2002 until May 2004. Resources were made available to cover reimbursement for professional’s time during the project, which included professional education. Resources were also allocated to the Centre for Community Child Health for ethics approval, project evaluation and facilitation of the education of professionals. Further funds were spent on the PEDS and BRIGANCE product, evaluation software and office administration.

Budget (March 2004)

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Officer, including On-Costs</td>
<td>15,000.00</td>
</tr>
<tr>
<td>Consultation with Centre for Community Child Health/ethics and evaluation</td>
<td>3,640.00</td>
</tr>
<tr>
<td>Office Administration, including printing, photocopying, postage, computer usage, program for evaluation and filing.</td>
<td>4,300.00</td>
</tr>
<tr>
<td>Education of professionals for the project and deployment of information and education to service providers at the end of project</td>
<td>4,140.00</td>
</tr>
<tr>
<td>Reimbursement of professionals for time in project and education</td>
<td>7,500.00</td>
</tr>
<tr>
<td>Catering</td>
<td>1,100.00</td>
</tr>
<tr>
<td>PEDS and BRIGANCE Product</td>
<td>6,250.00</td>
</tr>
<tr>
<td>OMEP Conference</td>
<td>800.00</td>
</tr>
</tbody>
</table>

Total Budget (excluding GST) 42,730.00
5. Project development, resourcing and professional training

5.1 Getting started

A project officer was appointed to undertake the Good Beginnings for Young Children and Families Project. The project officer, Marcia Armstrong, was appointed in October 2002. Ms Patience Harrington (Director Community Development, City of Wodonga) and Ms Debra Mudra (Manager Service Planning, City of Wodonga) provided supervision to the project officer.

5.2 Gathering information

5.2.1 Original submission

The original project submission, attended by Ms Patience Harrington (City of Wodonga), was utilised to identify the aims and objectives of the project. Invitations were extended to early childhood services in the City of Wodonga to participate in the project. These included, two preschools, two primary schools, two childcare centres, maternal and child centres and primary school nurses. All maternal and child health and primary school nurses were involved in the project as they were required to undertake secondary screenings on children who participated in the project. The two preschools in the project were Belgrade Ave and Stanley St. The primary schools were Melrose Primary and St Monica’s Primary and the childcare centres were the Wodonga Occasional Care Childcare Centre and the Willow Park Long Day Care Centre. The preschools, childcare centres, and maternal and child health centres are all managed by the City of Wodonga. Melrose Primary School is a government primary school and St Monica’s is a catholic primary school. The primary school nurses are employed by the Department of Human Services (DHS).

5.2.2 Partnership with the Centre for Community Child Health (CCCH)

The Centre for Community Child Health, Royal Children’s Hospital, Melbourne was invited as a partner to provide education to professional staff, ethics approval and evaluation of the project. Dr Sharon Goldfeld was contracted as the chief researcher. Marcia Armstrong, Project Officer from the City of Wodonga, undertook the role of associate researcher.

Dr Sharon Goldfeld is a consultant community paediatrician, specialising in developmental and behavioural paediatrics, and senior research fellow at the Centre for Community Child Health. She was appointed Child Health Policy Advisor in the Public Health Division of the Victorian Department of Human Services in 2000 after returning from completing a year in the United States as a recipient of the prestigious international Harkness Fellowship in Health Care Policy. Her project there focused on early childhood early intervention programs and health service use and complemented her own PhD research which focused on psychosocial factors contributing to health care utilisation in the first 12 months of life. She has presented her research extensively both nationally and internationally. Dr Goldfeld is a member of several national and state committees that focus on children’s issues and is currently Chair of the Chapter of Community Child Health in the Royal Australasian College of Physicians. In both her policy and academic roles she has spoken about the various facets of early childhood to many varied audiences in an effort to promote the importance of early childhood.
5.2.3 Service directory

One of the overall aims of the project was to determine whether the use of the PEDS with the combination of a service directory of referral services would lead to more timely and appropriate referrals. One of the concerns that were expressed in the community consultations, held in 2000, was the need for an up to date list of referral services. Inherent to the project was the use of a service directory outlining referral options for providers and parents.

5.2.3.1 Local service directory

The City of Wodonga, within the project, established a service directory in May 2003 with a listing of available resources for children 0-8 years and their families. This was known as “A Guide for Young Children and their Families in Wodonga”, and its formulation took 45 hours of project time. “A Guide for Young Children and Families in Wodonga” was made available in hard copy, to providers participating in the project, and is also available on the City of Wodonga’s web site www.wodonga.vic.gov.au.

5.2.3.2 Primary Care Partnership (PCP) Statewide directory

The Primary Care Partnership (PCP) Statewide Health Services Directory was also utilised in the project. There had been no documented evaluation of this directory to date, and as the Primary Care Partnerships supplied funding for the project, there was an opportunity to provide evaluation on its effectiveness. The PCP Statewide Health Services Directory (www.pcpdirectory.health.vic.gov.au/) is Victoria's most extensive health and community support services directory. The PCP Statewide Health Services Directory (www.pcpdirectory.health.vic.gov.au) provides access to a current, accurate database of health and associated community support services in Victoria. It contains information on over 30,000 health and community services across Victoria. Nominated personnel at Primary Care Partnerships and their member agencies are able to make "live" updates to the Agency Facilities table. All other data is maintained by the Statewide Content Manager - Infoxchange Australia (www.infoxchange.net.au/). Requests to amend all details can be submitted 365 days a year, 24 hours per day by using the online form provided at the bottom of each database record. It complements the consumer-focused local services directory available through Better Health Channel (www.betterhealth.vic.gov.au) by providing a service information resource that aims to meet the needs of practitioners.
5.3 Developing a framework for the implementation of the project

5.3.1 Project proposal and evaluation framework
In partnership with the Centre for Community Child Health a detailed project proposal (Appendix 3) and evaluation framework was developed. An outline of the evaluation framework can be found on page 20-21 of this report.

A parent invitation sheet for the project was developed together with a consent form. A written questionnaire for parents was also developed which included questions on the satisfaction, utility, appropriateness, readability and ease of completion and time taken for the PEDS. Demographic data was also included on the parent questionnaire. Further questions for parents were also developed for parental feedback at focus groups. The parent information sheet, consent form, questionnaire and questions developed for the focus groups can be found in Appendix 4.

As professional providers were invited to assist in the recruitment of participants and give feedback on the PEDS tool and BRIGANCE screens a professional information sheet, consent form, written questionnaire and focus group questions were also developed. The professional information sheet, consent form, written questionnaire and focus group questions can be found in Appendix 5.

Approval was obtained from the management of each participating provider in the project, and ethics approval was obtained from the Royal Children’s Hospital Ethics in Human Research Committee, see Appendix 6.

5.3.2 Sample selection
Participants for the study were recruited from parents attending maternal and child health centres for their child’s key stage visit from 8 months of age, parents attending parent-teacher interview or childcare worker interviews during the four-week period of the pilot.

The maternal and child health centres, childcare centres, preschools and primary schools were chosen to represent a cross section of the City of Wodonga. As the maternal and child health nurses were involved in secondary screens for preschool children, all centres were represented. One long day and one occasional-care childcare centre were chosen. Two preschools were chosen in geographically different locations to the childcare centres. One government and one catholic primary school were chosen. Primary school nurses, who attended the schools included in the study, were also involved in the secondary BRIGANCE screening and referral, but did not actively recruit participants into the project.

The service providers recruited parents with support from the project worker. Each provider was briefed by the project worker and the method of recruitment, including the importance of the information sheet and consent form, explained. In order to ensure that each provider understood their role, and because each provider was also be required to give feedback, an additional information sheet and consent form was developed for the providers as participants.
### Evaluation Framework for the “Good Beginning for Young Children and Families” Feasibility Project

<table>
<thead>
<tr>
<th>Objectives (outcomes)</th>
<th>Process</th>
<th>Impact measure</th>
<th>Methodology</th>
<th>Economic Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trial the use of the PEDS as a developmental screen by maternal and child health nurses</td>
<td>Train MCHN in PEDS and BRIGANCE</td>
<td>All participating MCHN attend training day</td>
<td>Training day for PEDS organised-names taken Evaluation form completed</td>
<td>Cost of training day (including catering and room hire) Cost of nurse time</td>
</tr>
<tr>
<td></td>
<td>MCHN to use PEDS during 4 week period for all key ages and stages visits</td>
<td>Number of completed PEDS forms returned to project officer</td>
<td>Project officer to visit all providers and obtain consents and ensure will act as recruiters for the project</td>
<td>Cost of project officer time</td>
</tr>
<tr>
<td>Trial the use of PEDS as a parent communication tool by childcare workers and teachers</td>
<td>Train CC workers and teachers in PEDS</td>
<td>All participating CCC and teachers to attend training evening</td>
<td>Training evening for PEDS organised-names taken Evaluation form completed</td>
<td>Cost of training day (including catering and room hire) Cost of professional’s time</td>
</tr>
<tr>
<td></td>
<td>CC workers and teachers to use PEDS during a period that coincides with their usual parent interview practice</td>
<td>Number of completed PEDS forms returned to project officer</td>
<td>Project officer to visit all providers and obtain consents and ensure will act as recruiters for the project</td>
<td>Cost of project officer time Cost of professional’s time</td>
</tr>
<tr>
<td></td>
<td>CC workers and teachers refer all children with significant concerns and a proportion of those with non significant concerns to either MCHN (CC) or PSN (teacher)</td>
<td>Number and type of concern referred to MCHN Documentation of types of concerns addressed without referral</td>
<td>Referral forms used will be those already in use within services. CC use a triplicate form which provides for feedback to referrer</td>
<td>Project officer time</td>
</tr>
<tr>
<td>Obtain feedback from provider groups as well as parents on the utility and uptake of PEDS in these services</td>
<td>Evaluate each provider group’s use of PEDS</td>
<td>Satisfaction, confidence, future use, referrals</td>
<td>Questionnaire after 4 week trial (slightly different design for each provider group) and focus group</td>
<td>Estimate time taken to score PEDS by MCHN, childcare worker and teacher (estimate as additional time compared to usual practice)</td>
</tr>
<tr>
<td>Objectives (outcomes)</td>
<td>Process</td>
<td>Impact measure</td>
<td>Methodology</td>
<td>Economic Evaluation</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>Evaluate parent use of PEDS and consequent actions</td>
<td>Satisfaction, utility, appropriateness, readability, ease of completion, time taken</td>
<td>Questionnaire to be completed on day of PEDS completion plus a limited focus group</td>
<td>Cost of project officer time</td>
<td></td>
</tr>
<tr>
<td>Determine if service mapping, in addition to the PEDS can facilitate more appropriate and timely discussions and referrals of children with developmental and behavioural concerns</td>
<td>Complete community directory</td>
<td>Community Directory completed and distributed to providers</td>
<td>Project officer to undertake development and focus testing of community directory</td>
<td>Cost of project officer time Printing or distribution costs</td>
</tr>
<tr>
<td>Evaluate referral processes and client pathways</td>
<td>Number of referrals from MCHN or PSN as a result of completing the PEDS</td>
<td>Utilise returned PEDS score forms to estimate number of referrals. Project officer to contact parents who were referred, by telephone after 3 months, to discuss the process of referral, time taken and whether the referred agency had been seen (Including reasons why this may not have occurred)</td>
<td>Cost of project officer time</td>
<td></td>
</tr>
<tr>
<td>Utilise information from this trial to develop sustainable model of intersectoral communication and early detection around child development</td>
<td>Completion of final report and proposed programme model and costs</td>
<td>Project officer to summarise results in final report and to utilise the methodology included in this project as the basis for an ongoing programme</td>
<td>Cost of project officer time</td>
<td></td>
</tr>
</tbody>
</table>
5.3.3 Analysis
A unique identification number identified parent and provider questionnaires. Data were analysed using SPSS Version 12.0. Simple descriptive statistics were used to report prevalence, using the standard PEDS age categories. The descriptive data were analysed using cross tabulations, particularly to examine demographic differences or difference across provider groups. The Chi Square Test for Independence was used for appropriate categorical comparisons. Results of the focus groups were analysed using a thematic approach and was examined in conjunction with the parent and provider questionnaires.

5.3.4 Provider training
A training day in the use of the PEDS and the secondary BRIGANCE screen for maternal and child health nurses (MCHN) and primary school nurses (PSN) was undertaken prior to the pilot implementation period. The local paediatric group was also invited to this training day. In addition a shorter training period for the childcare workers and school teachers outlining the PEDS was also undertaken. There was either position backfill or evening training offered for these services. All PEDS forms and BRIGANCE kits were provided by the City of Wodonga. Training days also outlined the project in further detail together with the recruitment process. Providers completed their consent forms at these meetings or were followed up by the project worker if they are unable to attend.

The training day was also offered to all MCHN and PSN in the municipalities of Towong, Indigo, and Alpine even though they were not directly involved in the project. BRIGANCE kits were also provided to these nurses as well as the local paediatric group. This provided those municipalities, which are members of the Upper Hume Primary Care Partnership, to have the benefit of the resources available through the project funds. Through this professional education and provision of resources they would be able to implement the same process in their own municipalities. The provision of education to the paediatric group, together with resources, provided the paediatricians with knowledge of the primary health care intervention strategies occurring in their area. If children were referred for paediatric assessment they were well informed of the process which had occurred in the community.

5.3.5 Content of the training day
Separate training sessions were planned for the MCHN, PSN and paediatricians, and childcare workers and teachers. The training for the nurses and paediatricians was designed to take place over five hours as it included training in the secondary BRIGANCE screen. The training for childcare workers and teachers was designed to take place over 3 hours and did not include the BRIGANCE secondary screen. The following components were included in the training sessions.

- Developmental screening and surveillance – what are the issues?
- The development and use of the PEDS – the importance of family centred practice
- Scoring and interpreting the PEDS
- BRIGANCE Screen (MCHN, PSN and Paediatricians only)

Table 1, on page 23, shows the number of professionals attending the training sessions
Table 1 Attendance of professionals at PEDS training sessions

<table>
<thead>
<tr>
<th>Five Hour Training Session</th>
<th>Number Attending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal and Child Health Nurses (City of Wodonga)</td>
<td>8</td>
</tr>
<tr>
<td>Maternal and Child Health Nurses (Towong Shire)</td>
<td>3</td>
</tr>
<tr>
<td>Maternal and Child Health Nurses (Indigo Shire)</td>
<td>2</td>
</tr>
<tr>
<td>Primary School Nurses – Hume Region</td>
<td>5</td>
</tr>
<tr>
<td>Paediatrician†</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Three Hour Training Session</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Preschool Teachers</td>
<td>3</td>
</tr>
<tr>
<td>Primary School Teachers</td>
<td>4</td>
</tr>
<tr>
<td>Childcare Workers</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

**Total**                                               **36**

†Paediatrician unable to attend training session on the day due to clinical commitments. Paediatrician briefed on BRIGANCE screen at a later date by the project officer.

5.4 Implementing the project

Integral to the project was to implement the PEDS during a normally scheduled interview with parents. Each of the services partaking in the project had different times in which they formally communicated with parents. Even though it was planned the pilot would be implemented over a four week period, it was not appropriate to implement this at the same time across all services.

5.4.1 Primary schools

The primary schools were very keen to utilise the PEDS in their services once they were informed of the project.

St Monica’s Primary School interviewed prospective prep students and parents in the 4th term of the previous school year. The ethics approval had not been processed through the ethics committee at that time and a letter of consent for the project worker to contact the parents at a later date was developed. The teachers utilised the PEDS questionnaire during that interview. When the ethics approval was obtained, the parents were contacted by the project worker and invited to participate in the project. The parent information letter, consent form and written questionnaire were provided to the parents at the school and the consent form and written questionnaire were then returned to the project worker by reply paid envelope. The teachers at St Monica’s Primary School stated that the PEDS was useful in that interview as they were informed of prospective children who required referral and subsequent extra support in their first year of primary school. In the catholic education system, if schools require extra funding for services such as occupational therapy or speech therapy, they need to have full documentation in by the second week in February of the school year. They commented that if they found out about children’s special needs at the commencement of first term, it was not possible to have this documentation complete in 2 weeks, especially if it meant that the child required referral to other services for assessment and evaluation to substantiate the submission for extra funding.
Unlike St Monica’s Primary School, Melrose Primary School attended their interviews with parents at the commencement of first term. They chose to utilise the PEDS during this interview. Once again the ethics approval was not processed at that time and parents were given a letter of consent for the project worker to contact them at a later date. When the ethics approval was obtained, the parents were contacted by the project worker and invited to participate in the project. The parent information letter, consent form and written questionnaire were provided to the parents at the school and the consent form and written questionnaire were then returned to the project worker by reply paid envelope. Melrose Primary School teachers commented that at the parent interview they were informed of any concerns the parents had with their children. The teachers were able to offer the parents guidance and support and appropriate referral if indicated. The teachers believed that if the parents had not informed them of their concerns, it may have taken them several weeks to get to know the child well and form the same conclusions as the parents.

Primary school students who were identified through the PEDS as having a ‘high’ risk or ‘medium’ risk of disability (Path A or Path B) were referred to the primary school nurse (PSN) for the secondary BRIGANCE screen. The primary school teachers contacted the PSN and informed them of the number of children who required screening. The PSN, through the project worker, was aware these referrals would take place. Following the secondary screen, children who required referral were referred by the PSN to other services. The referral information was passed on to referral agencies and feedback to the teachers was made through the existing documented processes of the primary school nurse program.

The primary school nurse screens all children in the first year of primary school in Victoria. However, the process of screening is attended on a universal basis and children are only requested to be seen by the primary school nurse at an earlier date if the teacher identifies the need. In some schools this may mean that unless the teacher has identified the need for earlier assessment, the child may not be screened until 4th term. The teachers at both primary schools commented by using the PEDS with parents at initial interview, concerns with children were identified earlier and they had the ability to refer children for assessment and appropriate intervention. The PEDS provided the teachers with a tool for early identification of developmental disability. The PSN could then be informed of those children who were at risk of disability and therefore required their assessment earlier in the year. The PEDS was found to be a tool, which had the ability to assist in the prioritisation of PSN screenings.

**Recommendation:** The PEDS can be used to identify those children most at risk of disability, and therefore has the ability to prioritise the prep assessment attended by the primary school nurses (PSN). The PEDS should be implemented in all initial interviews with parents of prep grade children.
5.4.2 Preschools
The preschools that participated in the project were Belgrade Ave and Stanley St Preschools. They were chosen to participate in the project as they represented two different geographical locations in Wodonga. The preschools have an organised interview with the parents during the second term of the year. Parents, during this interview, were approached by the Preschool teachers for recruitment onto the project. The parent information sheet and consent form were completed at this interview and the written questionnaire for the parents was returned to the project worker by reply paid post. Children who were identified at ‘high risk’ (Path A) or ‘moderate risk’ (Path B) of disability were referred to the maternal and child health nurse of the parent’s choice for the secondary BRIGANCE screen. The referral form used by the Preschool teachers was the triplicate referral form already in place within the service (Appendix 7). The maternal and child health nurse then contacted the parents to make an appointment time for the secondary BRIGANCE screen. Children who required referral for further assessment or intervention following the BRIGANCE screen were referred to the maternal and child health nurses. The triplicate referral form provided a copy of the outcome of the secondary BRIGANCE Screen back to the Preschool teacher. Some children, who were identified at risk of disability through the use of the PEDS, were directly referred by the Preschool teacher to appropriate services.

5.4.3 Childcare
The childcare centres that participated in the project were childcare centres managed by the City of Wodonga. The Wodonga Occasional Care Childcare Centre is a 30 place occasional care centre, providing occasional care for children aged 4 months – 6 years of age, Monday –Friday from 8.30am-4.00pm. The Willow Park Long Day Care Centre is a long day care centre providing childcare for children 4 months to 6 years of age, Monday – Friday from 7am – 6 pm.

5.4.3.1 Long day care
The Willow Park Long Day Care Centre provides parents with an invitation to attend an interview with their childcare worker in the second term of the year. The PEDS Response Form was sent to parents with this invitation. The parents who accepted the invitation for an interview with their childcare worker were approached during this interview to participate in the project. The parents had completed the PEDS Response Form prior to the interview. The parent information sheet and consent form were completed at this interview and the written questionnaire for the parents was returned to the project worker by reply paid post. The parent consent form was returned to the project worker. Children who were identified at ‘high or moderate’ risk of disability (Path A or B) were referred to the maternal and child health nurse of the parent’s choice for the secondary BRIGANCE screen. Parents who had non-significant concerns were also referred to the maternal and child health nurse, if the childcare worker did not feel confident to provide advice for that area of concern. The referral form utilised for referral to the maternal and child health nurse was the form already in use in the service (Appendix 7). The referral form is a triplicate form and provides for the maternal and child health nurse to feed back to the childcare worker the information on the outcome of the secondary BRIGANCE screen and any referrals they may have made for further assessment or intervention.
5.4.3.1 Occasional care

The Wodonga Occasional Care Childcare Centre, as an occasional childcare centre, did not routinely provide an organised interview for parents. In light of this, for participation in the project the Wodonga Occasional Childcare Centre organised parents to attend an interview with childcare staff to complete the PEDS Response Form and recruit to the project. The project was advertised to the parents on a noticeboard in the foyer of the centre 2 weeks prior to its commencement. The project funds provided money to employ additional staff to undertake the recruitment of participants and to attend parent interviews. The week the project was scheduled, the childcare staff approached all families who attended the childcare centre that week to participate in the project. The parent information sheet and consent form were completed at this interview and the written questionnaire for the parents was returned to the staff of the childcare centre the morning of the interview. Some parents, who did not have the time to complete the white questionnaire that morning, returned the questionnaire to the project worker by reply paid post. This system of requesting parents to attend the questionnaire at the same time as completing the PEDS Response Form and being interviewed by staff, provided the best return rate of questionnaires. Wodonga Occasional Childcare Centre had a return rate for the white parent questionnaire of 97.5%.

As with Willow Park Long Day Care Centre, children who were identified at ‘high risk’ (Path A) or ‘moderate risk’ (Path B) of disability were referred to the maternal and child health nurse of the parent’s choice for the secondary BRIGANCE screen. Parents who had non-significant concerns were also referred to the maternal and child health nurse if the childcare worker did not feel confident to provide advice for that area of concern. The referral form used by the childcare workers was the triplicate referral form already in place within the service (Appendix 7). The maternal and child health nurse then contacted the parents to make an appointment time for the secondary BRIGANCE screen. Children who required referral for further assessment or intervention following the BRIGANCE screen were referred by the maternal and child health nurses. The referral form, being a triplicate form, provides feedback to the childcare worker on the outcome of the secondary BRIGANCE screen and any referrals they may have made for further assessment or intervention.

5.4.4 Maternal and child health

The project was implemented in the Maternal and Child Health Service over a four week period. The parents approached for recruitment to the project were those parents attending the Key Age and Stage Developmental visits from 8 months of age. These included visits at 8 months, 12 months, 18 months, 24 months and 3.5 years of age. The project funds provided an extra 15 minutes for the nurses to recruit onto the project. The parent information sheet and consent form were completed at the Key Age and Stage Visit together with the PEDS Response Form. The PEDS Score Form was completed by the maternal and child health nurse during the visit and any child that scored a ‘high’ or ‘moderate’ risk of disability (Path A or Path B) was provided with a secondary BRIGANCE screen. Appropriate referrals for further assessment or intervention were attended. The maternal and child health nurses, through the project funds, were provided with an extra 30 minutes of time for any secondary BRIGANCE screen attended. This included those screens referred to the maternal and child health nurses from either childcare or preschool.
5.4.5 Project officer

The parent consent form, completed Peds Response Form, Peds Score Form, white parent questionnaire, BRIGANCE Screen and referral information were collected by the project officer. The white questionnaire which parents attended at home, were posted to the project officer by reply paid post. The project officer photocopied all completed Peds Response Forms, Peds Score Forms, BRIGANCE Screens and referral information. The project officer then collated these forms and applied a research identification number to them. The original Peds Response Forms, Peds Score Forms, BRIGANCE Screens and referral information were returned to the service provider for filing on client files.

The forms collated by the project worker together with the parent and professional consents were stored in a locked filing cabinet in the City of Wodonga. Access to this file is available only to the associate researcher and direct supervisors. Once the project has been completed for 5 years, shredding will destroy this research documentation. This process is in accordance with the ethics approval granted by the Royal Children’s Hospital Ethics in Human Research Committee. The project worker collated the data and the data were analysed using SPSS Version 12.0.

5.4.6 Model of inter-sectoral communication around child development

The Peds provides a model of inter-sectoral communication, which is integrated and coordinated around child development and behaviour. The Peds can be used at parent interview across early childhood services such as maternal and child health, childcare, preschool and primary school. Through eliciting parental concern, children at risk of disability can be identified and further screening, assessment and referral can be attended. Peds provides the professional with identified areas of parental concern in which they can respond to the parent with appropriate information. Peds, with parental consent, can move from one service provider to another. This provides transition information between services around child development and behaviour. This can only lead to the earlier identification of developmental and behavioural problems. Professionals can then respond with appropriate information, intervention and referral. Diagram 1, on page 28, shows the Peds as a model of inter-sectoral communication around child development and behaviour.

**Recommendation:** The Peds tool has the ability to provide an integrated and coordinated approach across early childhood services addressing child development and behaviour. The process of the movement of Peds information, with parental consent, from one service provider to the next (from maternal and child health to preschool and from preschool to school), needs to be addressed.
Diagram 1. PEDS as a model of inter-sectoral communication around child development and behaviour.

5.4.7 Focus group and telephone feedback from parents and service providers

Focus groups were organised with parents and service providers. The purpose of these focus groups was to build on information gained from the parent questionnaire on the satisfaction, utility, and appropriateness of the PEDS. Data were evaluated using a thematic approach. Telephone contact, 3 months after the PEDS, was made with parents whose children were referred to outside services. The purpose of the telephone interview was to ascertain parent’s satisfaction with the referral process, the number of children seen by the referral agency and the average length of time it took between referral and being seen at the referral agency.

Focus groups were also organised with each of the service providers. The purpose of these focus groups was to build on the information received in the professional questionnaire around the satisfaction, confidence, future use of the PEDS and BRIGANCE screen and the referral process. These groups also provided further information on the two service directories used in the project. Data from these interviews were analysed using a thematic approach.
6. Results

6.1 Response rates

A total of 380 parents were approached for recruitment to the project. A total of 246 parents completed the PEDS questionnaire in regard to their child and consented to be part of the project. Of these 246 parents, 162 (65.8%) returned a completed questionnaire on the ease of use/acceptability of the PEDS and demographic data. Table 2, below shows the percentage of recruitment and uptake of the parent questionnaire across the services.

Table 2. Percentage of recruitment and uptake of the parent questionnaire across services

<table>
<thead>
<tr>
<th>Service</th>
<th>Number recruited</th>
<th>Number approached for recruitment</th>
<th>Recruitment Percentage</th>
<th>Number and percentage completing parent questionnaire n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary School</td>
<td>50</td>
<td>58</td>
<td>86.2%</td>
<td>27 (54.0%)</td>
</tr>
<tr>
<td>Childcare</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occasional Care</td>
<td>80</td>
<td>82</td>
<td>97.5%</td>
<td>76 (97.5)</td>
</tr>
<tr>
<td>Long Day Care</td>
<td>5</td>
<td>50</td>
<td>10.0%</td>
<td>3 (60.0)</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>132</td>
<td>64.3%</td>
<td>81 (95.1%)</td>
</tr>
<tr>
<td>Preschool</td>
<td>26</td>
<td>72</td>
<td>36.1%</td>
<td>17 (65.4%)</td>
</tr>
<tr>
<td>Maternal and Child Health</td>
<td>85</td>
<td>118</td>
<td>72.0%</td>
<td>37 (43.5%)</td>
</tr>
<tr>
<td>Total</td>
<td>246</td>
<td>380</td>
<td>64.7%</td>
<td>162 (65.8%)</td>
</tr>
</tbody>
</table>

The highest recruitment and completion of the parent questionnaire occurred at the occasional childcare centre. The recruitment rate of 97.5% and return rate of the parent questionnaire of 97.5% can be attributed to the motivation and organisation of staff. The staff at the centre promoted the project with an information board in the foyer of the centre and an explanation of the project in the weekly newsletter, two weeks prior to the implementation of the project. Occasional care staff then targeted all parents in one week and requested they complete the parent questionnaire before leaving the centre. The return rate of the questionnaire was much higher than returning by reply paid post. Staff also reported that parents were excited about being part of the project and actively sought to participate in the project the week it was piloted in their centre.

Changes in the provision of services at the long day care centre had decreased staff morale and this was evident in the recruitment of parents to the project. The recruitment rate of 10% was 54% lower than the mean recruitment rate of 64%.
6.2 Sample characteristics

Of the 246 children who participated in the project 106 (43.1%) were female and 140 (56.9%) male. Equal numbers 49 (19.9%) were represented in both the < 18 months and 18 months - < 3 years age groups. 67 (27.3%) were aged 3 years - < 4.5 years and 81 (32.9%) were aged over 4.5 years. The mean birth weight of children was 3444 grams with a standard deviation of 654 grams. Equal numbers of children 85 (34.5%) attended maternal and child health and childcare, with 26 (10.7%) attending preschool and 50 (23.3%) attending primary school.

One hundred and sixty-two parents responded to the written parent questionnaire. 152 (93.8%) were mothers and 10 (6.2%) were fathers. The average age of the parent was 33.13 years with a standard deviation of 5.64 years. The majority of parents, 153 (94.4%), were born in Australia and 160 (98.8%) spoke English at home. The majority of parents were either married (79.6%) or living in a de-facto relationship (8.6%). 7.4% reported either to be single or never married, and 4.3% separated, divorced or widowed. Families reported having an average of 2.31 children in their family.

The majority of responding parents were mothers (93.8%). Of these responding parents 43.2% were not in paid employment or attended home duties and 82.2% of the spouses of responding parents were reported to be in full time employment. 32.1% of responding parents reported to be in part time employment and only 6.8% of responding parents and 1.3% of spouses of responding parents reported being a pensioner.

50.1% of parents had a high school education (16.3% < Year 10 and 33.8% Year 11 or Year 12) and 49.4% of parents had post secondary qualifications (19.4% trade or diploma and 30.0% tertiary degree). 0.5% of parents did not respond.

Table 3, on page 31, presents sample characteristics for the children, the parents and providers involved in the project.

6.3 Ease of use/acceptability of PEDS

Mothers completed 93.8% of the PEDS questionnaires. The mean reported time (±SD) to complete the questionnaire was 5.8 ± 6.3 min (median 5.0 min, range 50 secs – 50 min). There was only one parent who reported taking 50 minutes to complete the PEDS questionnaire and two parents reported taking 30 minutes. 92.2% of parents reported taking 10 minutes or less to complete the questionnaire. The majority of parents (99.4%) found the questionnaire easy or very easy to complete; the one parent reporting that it was difficult also reported an education level of Year 10 or lower. Most parents (96.0%) felt that the PEDS would be helpful or very helpful to health and educational professionals. This varied with parental educational levels; 62.5% of parents with a tertiary level education rated the PEDS questionnaire as very helpful compared with 74% of those with an educational level of year 11-12 and 83% of those with an educational level of Year 10 or lower.
Table 3. Sample characteristics of the respondents to the Parent’s’ Evaluation of Developmental Status (PEDS) questionnaire

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n(%)†</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Responding parent (n=162)</strong></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>152(93.8)</td>
</tr>
<tr>
<td>Male</td>
<td>10(6.2)</td>
</tr>
<tr>
<td>Age of parent (years; mean ± SD)</td>
<td>33.13 ± 5.64</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>≤ Year 10</td>
<td>26(16.3)</td>
</tr>
<tr>
<td>Year 11-12</td>
<td>54(33.8)</td>
</tr>
<tr>
<td>Trade/Diploma</td>
<td>31(19.4)</td>
</tr>
<tr>
<td>Tertiary</td>
<td>33(20.0)</td>
</tr>
<tr>
<td>Australian born</td>
<td>153 (94.4)</td>
</tr>
<tr>
<td>Speak English at home</td>
<td>160 (98.8)</td>
</tr>
<tr>
<td>No. of children (mean ± SD)</td>
<td>2.31 ± 0.09</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
</tr>
<tr>
<td>Single/never married</td>
<td>12 (7.4)</td>
</tr>
<tr>
<td>Married</td>
<td>129 (79.6)</td>
</tr>
<tr>
<td>De facto</td>
<td>14 (8.6)</td>
</tr>
<tr>
<td>Separated/divorced/widowed</td>
<td>7 (4.3)</td>
</tr>
<tr>
<td>Employment of responding parent</td>
<td></td>
</tr>
<tr>
<td>Employed/self employed full time</td>
<td>26 (16.0)</td>
</tr>
<tr>
<td>Employed/self employed part time</td>
<td>52 (32.1)</td>
</tr>
<tr>
<td>Not in paid employment/home duties</td>
<td>70 (43.2)</td>
</tr>
<tr>
<td>Pensioner</td>
<td>11 (6.8)</td>
</tr>
<tr>
<td>Other</td>
<td>3 (1.9)</td>
</tr>
<tr>
<td>Employment of spouse of responding parent</td>
<td></td>
</tr>
<tr>
<td>Employed/self employed full time</td>
<td>131 (82.2)</td>
</tr>
<tr>
<td>Employed/self employed part time</td>
<td>7 (4.4)</td>
</tr>
<tr>
<td>Not in paid employment/home duties</td>
<td>4 (2.5)</td>
</tr>
<tr>
<td>Pensioner</td>
<td>2 (1.3)</td>
</tr>
<tr>
<td>Other</td>
<td>2 (1.3)</td>
</tr>
<tr>
<td>Doesn’t apply</td>
<td>13 (8.2)</td>
</tr>
<tr>
<td><strong>Child (n=246)</strong></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>106 (43.1)</td>
</tr>
<tr>
<td>Male</td>
<td>140 (56.9)</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>&lt; 18 months</td>
<td>49 (19.9)</td>
</tr>
<tr>
<td>18 months - &lt; 3 years</td>
<td>49 (19.9)</td>
</tr>
<tr>
<td>3 years - &lt; 4.5 years</td>
<td>67 (27.3)</td>
</tr>
<tr>
<td>≥ 4.5 years</td>
<td>81 (32.9)</td>
</tr>
<tr>
<td>Birth weight (kg; mean ± SD)</td>
<td>3443.56 ± 654.83</td>
</tr>
<tr>
<td>Provider</td>
<td></td>
</tr>
<tr>
<td>Maternal and Child Health</td>
<td>85(34.5)</td>
</tr>
<tr>
<td>Childcare</td>
<td>85(34.5)</td>
</tr>
<tr>
<td>Preschool</td>
<td>26(10.7)</td>
</tr>
<tr>
<td>Primary School</td>
<td>50(20.3)</td>
</tr>
</tbody>
</table>

† Percentages might not add up to 100 because of missing data
6.4 Parent reported concerns

Twenty-eight children (11.4%) were classified as being at high risk of disabilities because of two or more significant concerns on the parent completed PEDS (Table 4). Fifty-four (22.0%) were classified as being at medium risk of disabilities because of one significant concern and parents of thirty nine children (15.9%) reported non-significant concerns only; mostly on behavioural and social emotional domains. No developmental concerns were reported by one hundred and twenty five (50.8%) parents. More boys than girls were classified as being at high-risk and medium-risk of disabilities; 13.6% of boys vs 8.5% of girls with two or more significant concerns, and 29.3% of boys vs 12.3% of girls with one significant concern.

Table 4. Prevalence of parent-reported significant and non-significant concerns

<table>
<thead>
<tr>
<th>PEDS risk category</th>
<th>n (%)†</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 2 significant concerns</td>
<td>Moderate: 1 significant concern</td>
</tr>
<tr>
<td>Sample group</td>
<td>Overall (n=246)</td>
</tr>
<tr>
<td>Sex</td>
<td>Male(n=140)</td>
</tr>
<tr>
<td></td>
<td>Female (n=106)</td>
</tr>
<tr>
<td>Age</td>
<td>&lt; 18 months (n=49)</td>
</tr>
<tr>
<td></td>
<td>18 months - &lt; 3 years (n=49)</td>
</tr>
<tr>
<td></td>
<td>3 years - &lt; 4.5 years (n=67)</td>
</tr>
<tr>
<td></td>
<td>≥ 4.5 years (n=81)</td>
</tr>
<tr>
<td>Provider</td>
<td>Maternal and Child Health (n=85)</td>
</tr>
<tr>
<td></td>
<td>Childcare n=(85)</td>
</tr>
<tr>
<td></td>
<td>Preschool n=26</td>
</tr>
<tr>
<td></td>
<td>Primary School n=(50)</td>
</tr>
</tbody>
</table>

†Percentages might not add up to 100 because of missing data

The prevalence of concerns, across the PEDS domains, was found to be similar to those in the Melbourne study by Coghlan et al 2003. The Melbourne study reported slightly more concerns in the fine motor and behavioural domains, than in Wodonga. The comparison of the two studies can be found in Table 5.

Table 5. Percentage of respondents reporting concerns ('yes' or 'a little') for each domain, Melbourne study† and current project

<table>
<thead>
<tr>
<th>Domain</th>
<th>Melbourne study † (n=262)</th>
<th>Parent report Wodonga study (n=246)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global/cognitive</td>
<td>3.4</td>
<td>3.7</td>
</tr>
<tr>
<td>Expressive language</td>
<td>20.6</td>
<td>22.8</td>
</tr>
<tr>
<td>Receptive language</td>
<td>6.5</td>
<td>6.9</td>
</tr>
<tr>
<td>Fine motor</td>
<td>5.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Gross motor</td>
<td>4.6</td>
<td>4.9</td>
</tr>
<tr>
<td>Behaviour</td>
<td>34.1</td>
<td>25.6</td>
</tr>
<tr>
<td>Social-emotional</td>
<td>20.7</td>
<td>17.9</td>
</tr>
<tr>
<td>Self-help</td>
<td>10.7</td>
<td>8.5</td>
</tr>
<tr>
<td>School</td>
<td>8.8</td>
<td>6.5</td>
</tr>
<tr>
<td>Other concerns</td>
<td>3.0</td>
<td>4.9</td>
</tr>
</tbody>
</table>

†Coghlan et al 2003
6.4.1 Most frequently reported concerns

The most frequent concerns were related to behaviour and expressive language (see Diagram 2), and these concerns were significantly more frequent.

Concern regarding expressive language and behaviour increased with the age of the child. Expressive language concern increased with age and peaked at 18 months - < 3 years, with 32.7% of parents reporting concern. The concern then decreased slowly with the increase in age of the child with 23.2% of parents reporting concerns with children ≥ 4.5 years of age. Chi Square Test for Independence showed there was a significant difference in parent reported concerns for expressive language between age groups (p= 0.003). Behavioural concerns also increased with the age of the child and peaked with 34.1% of parents reporting concern with children ≥ 4.5 years of age. There was a significant difference in parent reported concerns for behaviour between age groups (p=0.023). Details of parent concern for the PEDS domain and age group is shown in Table 6.

Table 6. Parent concerns by Parents’ Evaluation of Developmental Status (PEDS) domain for age groups.

<table>
<thead>
<tr>
<th>PEDS Domain</th>
<th>&lt; 18 months</th>
<th>18 months - &gt; 3 years</th>
<th>3 years - &lt; 4.5 years</th>
<th>≥ 4.5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global/cognitive</td>
<td>1(2.0)</td>
<td>1(2.0)</td>
<td>5(7.6)</td>
<td>2(2.4)</td>
</tr>
<tr>
<td>Expressive language</td>
<td>2(4.1)</td>
<td>16(32.7)</td>
<td>19(28.8)</td>
<td>19(23.2)</td>
</tr>
<tr>
<td>Receptive language</td>
<td>2(4.1)</td>
<td>4(8.2)</td>
<td>5(7.6)</td>
<td>6(7.3)</td>
</tr>
<tr>
<td>Fine motor</td>
<td>1(2.0)</td>
<td>1(2.0)</td>
<td>1(1.5)</td>
<td>2(3.7)</td>
</tr>
<tr>
<td>Gross motor</td>
<td>4(8.2)</td>
<td>2(4.1)</td>
<td>2(3.0)</td>
<td>4(4.9)</td>
</tr>
<tr>
<td>Behaviour</td>
<td>5(10.2)</td>
<td>10(20.4)</td>
<td>20(30.3)</td>
<td>28(34.1)</td>
</tr>
<tr>
<td>Social-emotional</td>
<td>4(8.2)</td>
<td>6(12.2)</td>
<td>16(24.2)</td>
<td>18(22.0)</td>
</tr>
<tr>
<td>Self-help</td>
<td>5(10.2)</td>
<td>2(4.1)</td>
<td>9(13.6)</td>
<td>5(6.1)</td>
</tr>
<tr>
<td>School</td>
<td>1(2.0)</td>
<td>2(4.1)</td>
<td>5(7.6)</td>
<td>8(9.8)</td>
</tr>
<tr>
<td>Other concerns</td>
<td>1(2.0)</td>
<td>3(6.1)</td>
<td>2(3.0)</td>
<td>6(7.3)</td>
</tr>
</tbody>
</table>
6.4.2 Concerns across provider

Parent reported concerns across the PEDS domain for provider is detailed in Table 7. There was no significant difference between providers and parent reported concerns. The level of parental concern did not change with provider but rather with the age of the child.

Table 7. Parent concerns by Parents’ Evaluation of Developmental Status (PEDS) domain for provider.

<table>
<thead>
<tr>
<th>PEDS Domain</th>
<th>Primary School</th>
<th>Preschool</th>
<th>Childcare</th>
<th>MCHN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=50</td>
<td>n=26</td>
<td>n=85</td>
<td>n=85</td>
</tr>
<tr>
<td>Global/cognitive</td>
<td>1(2.0)</td>
<td>2(7.7)</td>
<td>5(5.9)</td>
<td>1(1.2)</td>
</tr>
<tr>
<td>Expressive language</td>
<td>11(22.0)</td>
<td>5(19.2)</td>
<td>27(31.8)</td>
<td>13(15.3)</td>
</tr>
<tr>
<td>Receptive language</td>
<td>5(10.0)</td>
<td>1(3.8)</td>
<td>6(7.0)</td>
<td>5(5.9)</td>
</tr>
<tr>
<td>Fine motor</td>
<td>2(4.0)</td>
<td>0(0)</td>
<td>3(3.5)</td>
<td>1(1.2)</td>
</tr>
<tr>
<td>Gross motor</td>
<td>3(6.0)</td>
<td>1(3.9)</td>
<td>3(3.5)</td>
<td>5(5.9)</td>
</tr>
<tr>
<td>Behaviour</td>
<td>13(26.0)</td>
<td>11(42.3)</td>
<td>20(23.5)</td>
<td>19(22.3)</td>
</tr>
<tr>
<td>Social-emotional</td>
<td>10(20.0)</td>
<td>7(26.9)</td>
<td>17(20.0)</td>
<td>10(11.8)</td>
</tr>
<tr>
<td>Self-help</td>
<td>3(6.0)</td>
<td>3(11.5)</td>
<td>8(9.4)</td>
<td>7(8.2)</td>
</tr>
<tr>
<td>School</td>
<td>4(8.0)</td>
<td>2(7.7)</td>
<td>6(7.0)</td>
<td>4(4.7)</td>
</tr>
<tr>
<td>Other concerns</td>
<td>2(4.0)</td>
<td>3(11.5)</td>
<td>3(3.5)</td>
<td>3(4.7)</td>
</tr>
</tbody>
</table>

† Percentages might not add up to 100 because of missing data

**Recommendation:** Service providers are made aware the most frequent concerns for parents are related to behaviour and expressive language. Providers can plan for appropriate intervention services to be available around these aspects of parental concern.

**Recommendation:** Concern regarding expressive language increases with age and peaks at 18 months - < 3years. Professionals can identify expressive language as a significant concern to parents and provide anticipatory guidance before the peak age of parental concern.

**Recommendation:** Concern regarding behaviour increases with the age of the child. Professionals can identify behaviour as an important concern for parents and provide appropriate anticipatory guidance and continue this guidance as the child increases in age.
6.4.3 Concerns for boys and girls

More concerns were expressed by parents for boys than girls across the PEDS domains apart from self help and other concerns (Table 8). Using the Chi Square Test for Independence it is shown that there is not a significant difference between boys and girls for global/cognitive, receptive language, fine motor, gross motor, behaviour, self help, school and other concerns. However, there is a significant difference in the expressive language (p=0.029) and social emotional (p=0.019) domains between boys and girls.

Table 8. Parent concerns by Parents’ Evaluation of Developmental Status (PEDS) domain for boys and girls.

<table>
<thead>
<tr>
<th>PEDS Domain</th>
<th>Parent reporting concern n(%)†</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
</tr>
<tr>
<td>Global/cognitive</td>
<td>7 (5.0)</td>
</tr>
<tr>
<td>Expressive language</td>
<td>39 (27.9)</td>
</tr>
<tr>
<td>Receptive language</td>
<td>12 (8.6)</td>
</tr>
<tr>
<td>Fine motor</td>
<td>4 (2.9)</td>
</tr>
<tr>
<td>Gross motor</td>
<td>8 (5.7)</td>
</tr>
<tr>
<td>Behaviour</td>
<td>40 (28.6)</td>
</tr>
<tr>
<td>Social-emotional</td>
<td>32 (22.9)</td>
</tr>
<tr>
<td>Self-help</td>
<td>11 (7.9)</td>
</tr>
<tr>
<td>School</td>
<td>12 (8.6)</td>
</tr>
<tr>
<td>Other concerns</td>
<td>6 (4.3)</td>
</tr>
</tbody>
</table>

† Percentages might not add up to 100 because of missing data

**Recommendation:** More parents have concerns with boys than girls in the expressive language and social-emotional domains. Anticipatory guidance to parents by professionals should acknowledge these differences between boys and girls.
6.4.4 Concerns related to demographics

Of the 246 participants recruited to the project, 162 (66%) returned a completed questionnaire on the ease and useability of the Peds and socio-demographic information. 82 (34%) parents did not complete this questionnaire. The following data, in Table 9, relates to the 162 (66%) parents who completed the parent questionnaire.

Table 9. Prevalence of parent-reported significant and non-significant concerns of those who completed the parent questionnaire on demographics, and the ease and useability of the Peds.

<table>
<thead>
<tr>
<th>PEDS risk category n (%)†</th>
<th>Sample group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High: ≥ 2 significant concerns</td>
</tr>
<tr>
<td>Overall (n=162)</td>
<td>22(13.6)</td>
</tr>
<tr>
<td>Parent</td>
<td></td>
</tr>
<tr>
<td>Mother (n=152)</td>
<td>20(13.1)</td>
</tr>
<tr>
<td>Father (n=10)</td>
<td>2(20.0)</td>
</tr>
<tr>
<td>Parent Education</td>
<td></td>
</tr>
<tr>
<td>≤ Year 10 (n=26)</td>
<td>4(15.4)</td>
</tr>
<tr>
<td>Year 11-12 (n=54)</td>
<td>6(11.1)</td>
</tr>
<tr>
<td>Trade/Diploma (n=31)</td>
<td>6(19.4)</td>
</tr>
<tr>
<td>Tertiary (n=48)</td>
<td>6(12.5)</td>
</tr>
<tr>
<td>Parity</td>
<td></td>
</tr>
<tr>
<td>1st child (n=63)</td>
<td>9 (14.3)</td>
</tr>
<tr>
<td>2nd child (n=61)</td>
<td>8 (13.1)</td>
</tr>
<tr>
<td>3rd child (n=26)</td>
<td>3 (11.5)</td>
</tr>
<tr>
<td>4th child (n=11)</td>
<td>2 (18.0)</td>
</tr>
<tr>
<td>5th or more child (n=1)</td>
<td>0 (0)</td>
</tr>
</tbody>
</table>

† Percentages might not add up to 100 because of missing data

The level of parent education and the number of children present in a family did not influence the risk of disability of a child. There was no significant difference between the risk of disability in relation to the level of parent education or the number of children in a family. The gender of the parent reporting the concern also did not influence the risk of disability of a child. There was no significant difference between the risk of disability reported by mothers and fathers.
6.5 Referrals

6.5.1 Risk of developmental disability (PEDS Path) and referral

Overall, forty-seven (19.1%) children were referred to outside services as a result of their parents completing the PEDS. Table 10, provides detail on the risk of disability (PEDS Path) and referral outcomes.

<table>
<thead>
<tr>
<th>PEDS Path n (%)</th>
<th>Yes</th>
<th>No</th>
<th>Previously Referred</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>28(11.4)</td>
<td>17(60.7)</td>
<td>3(10.7)</td>
</tr>
<tr>
<td>B</td>
<td>54(22.0)</td>
<td>26(48.1)</td>
<td>22(40.7)</td>
</tr>
<tr>
<td>C</td>
<td>39(15.9)</td>
<td>3(7.7)</td>
<td>35(89.7)</td>
</tr>
<tr>
<td>D</td>
<td>0(0)</td>
<td>0(0)</td>
<td>0(0)</td>
</tr>
<tr>
<td>E</td>
<td>125(49.2)</td>
<td>1(0.8)</td>
<td>124(99.2)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>246(100.0%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Twenty-eight children (11.4%) were considered at ‘high risk’ (Path A) of disability following the PEDS questionnaire. 60.7% of those at ‘high risk’ were referred to outside services and 28.6% had been previously referred. Three (10.7%) were not referred to outside services.

The first child who was not referred was a boy aged 5 years and 8 months, whose parents were concerned regarding his fine motor and school skills. The child was referred to the primary school nurse and underwent the secondary BRIGANCE screen. The child passed this screen with a score of 94.5/100. The parents were reassured regarding the child’s ability and follow up with the teacher was organised for 3 months. The second child not referred was a 4 year and 7 month old boy whose parents were concerned about his expressive language and school skills. The parents were counselled by the preschool teacher regarding normal speech and preschool development. The preschool teacher felt that the parents had unrealistic expectations of the child and used the opportunity of addressing parental concern with the parents. The preschool teacher had no indication to refer the child as the child’s development was appropriate for their age. The third child, who was not referred, was an 8-month old baby girl whose parents were first time parents. They were concerned regarding her gross motor and expressive language skills. The maternal and child health nurse counselled the parents on normal developmental progress, and had no professional concerns regarding the child. The parents were reassured their child was developing normally and they commented to the nurse that they appreciated the ability to express their first time parental concern.

Fifty-four (22.0%) children were considered at ‘medium risk’ (Path B) of disability following the PEDS questionnaire. Twenty-six (48.1%) were referred to outside services and six (11.2%) had been previously referred. Twenty-two (40.7%) children were not referred to outside services.

Of the twenty-two children who were not referred to outside services, 21 (95.5%) did not require referral following consultation with the professional. One child (4.5%) had relocated 2 weeks after the PEDS questionnaire, and the parent was to access maternal and child health services in the new location regarding their concern. Of the remaining 21 who did not require referral, 17 were related to parental concern regarding speech. The parents of these children were counselled by the professional regarding normal speech development and referral to outside services was not considered necessary. Three children whose parents expressed concern regarding their social development were aged between 8 and 12 months. These parents were counselled and given
anticipatory guidance regarding normal development by the maternal and child health nurse and referral to outside services was not necessary. The maternal and child health nurses would review these children at the next key age and stage visit. Two parents reported concern regarding preschool and school skills. The preschool teacher had no indication to refer these children, as their development was appropriate for their age. The parents were counselled and given anticipatory guidance regarding normal development.

Thirty-nine (15.9%) children were considered at ‘low risk’ (Path C) of disability following the PEDS questionnaire. Three (7.7%) were referred to outside services and one (2.6%) had been previously referred. Thirty-five (89.7%) were not referred to outside services. Two of the referrals to outside services were to Positive Parenting courses, addressing parental concern around behaviour. The other referral from Path C was an 8 month old infant who had a congenital abnormality. The referral was made to early intervention services to access physiotherapy and occupational therapy.

One hundred and twenty-five (50.8%) of children were at ‘low risk’ (Path E) of disability following the PEDS questionnaire, with their parents reporting no concerns. Only one (0.8%) child was referred to an outside service. This child’s parents reported no concern regarding development and behaviour (Path E), however the preschool teacher was concerned regarding speech development. The preschool teacher found the PEDS “opened the door” for discussion around speech development. After discussion with the parent, the preschool teacher referred the child to speech therapy for further assessment.

The ‘risk of disability’ or PEDS path and need for referral is evident. Those children with ‘high risk’ (Path A) of disability required more referrals than those with ‘medium risk’ (Path B). Children with non significant concerns (Path C) required minimal referral and those with ‘no risk factors’ (Path E) only one (0.8%) was referred to an outside service. The PEDS provides a process whereby those most at risk are identified and can then be referred for further assessment and intervention. The relationship between the PEDS path and referral is shown in Diagram 3.

**Diagram 3. PEDS Path and Referral**

Recommen**dation:** The PEDS provides a systematic process whereby those most at risk of developmental and behavioural disability are identified and can be provided with anticipatory guidance by primary care providers and referred if necessary to appropriate services.
6.5.2 Referrals by provider type

Table 11, provides detail on the referrals made by provider type. There is no significant difference between the referrals made from each provider group.

Table 11. Referrals by provider type

<table>
<thead>
<tr>
<th>Provider</th>
<th>Yes</th>
<th>No</th>
<th>Previously Referred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal and Child Health (n=85)</td>
<td>12(14.1)</td>
<td>70(82.4)</td>
<td>3(3.5)</td>
</tr>
<tr>
<td>Childcare (85)</td>
<td>16(18.8)</td>
<td>61(71.8)</td>
<td>8(9.4)</td>
</tr>
<tr>
<td>Preschool (n=26)</td>
<td>7(26.9)</td>
<td>17(65.4)</td>
<td>8(27.7)</td>
</tr>
<tr>
<td>Primary School (n=50)</td>
<td>12(24.0)</td>
<td>36(72.0)</td>
<td>2(4.0)</td>
</tr>
</tbody>
</table>

6.5.3 Referrals by age of child and significant and non significant concern

Overall the rate of significant concern (more predictive of disability) was in children greater than 4.5 years of age (p=0.05) whilst non significant concerns were highest in the 3 years - 4.5 years age group (p=0.02). The referral rate corresponded to the rate of significant concern. This is shown in Table 12.

Table 12. Referrals by age of child and significant and non significant concerns

<table>
<thead>
<tr>
<th>Age</th>
<th>Non significant concerns</th>
<th>Significant concerns</th>
<th>Referral</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 18 months (n=49)</td>
<td>8.1%</td>
<td>10.0%</td>
<td>8.5%</td>
</tr>
<tr>
<td>18 months - &lt; 3 years (n=49)</td>
<td>18.6%</td>
<td>20.0%</td>
<td>21.3%</td>
</tr>
<tr>
<td>3 years - &lt; 4.5 years (n=67)</td>
<td>37.2%</td>
<td>32.5%</td>
<td>31.9%</td>
</tr>
<tr>
<td>≥ 4.5 years (n=81)</td>
<td>36.0%</td>
<td>38.5%</td>
<td>38.3%</td>
</tr>
</tbody>
</table>

6.5.4 Referral type

Of the forty-seven (19.1%) children referred to outside services, the majority of referrals were made to speech therapy, followed by multiple referrals and others. Other referrals included such programs as Families and Schools Together (FAST), and consultation with the school teacher regarding school progress. These referral types are shown in Table 13 and Diagram 4, on page 40.

Table 13. Referral type as percentage of total referrals.

<table>
<thead>
<tr>
<th>Referral type</th>
<th>Percentage of total referrals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearing</td>
<td>6.4</td>
</tr>
<tr>
<td>Speech</td>
<td>31.9</td>
</tr>
<tr>
<td>Hearing and Speech</td>
<td>8.5</td>
</tr>
<tr>
<td>Physiotherapy</td>
<td>2.1</td>
</tr>
<tr>
<td>Occupational Therapy</td>
<td>0</td>
</tr>
<tr>
<td>Positive Parenting</td>
<td>6.4</td>
</tr>
<tr>
<td>General Practitioner</td>
<td>2.1</td>
</tr>
<tr>
<td>Multiple</td>
<td>25.5</td>
</tr>
<tr>
<td>Other</td>
<td>17.0</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
</tr>
</tbody>
</table>
6.5.5 Referral type by PEDS path

Of those children at ‘high risk’ of disability (Path A), who were referred to outside services, 42.9% received multiple referrals, compared to 7.4% of ‘medium risk’ (Path B) and 2.6% of ‘low risk’ (Path C) and 0% for those with no concerns (Path E). Children with ‘moderate risk’ (Path B) and ‘low risk’ (Path C) were more likely to receive a referral to a single service provider. Referral type by PEDS path is shown in Table 14.

Table 14. Referral type by PEDS path

<table>
<thead>
<tr>
<th>Referral type</th>
<th>High: ≥ 2 significant concerns PEDS Path A</th>
<th>Moderate: 1 significant concern PEDS Path B</th>
<th>Low: ≥ 1 non-significant concerns PEDS Path C</th>
<th>Low: No concerns PEDS Path E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearing</td>
<td>0</td>
<td>5.6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Speech</td>
<td>17.9</td>
<td>27.8</td>
<td>0</td>
<td>0.8</td>
</tr>
<tr>
<td>Hearing and Speech</td>
<td>7.1</td>
<td>3.7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Physiotherapy</td>
<td>0</td>
<td>1.9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Occupational Therapy</td>
<td>3.6</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Positive Parenting</td>
<td>7.1</td>
<td>0</td>
<td>5.1</td>
<td>0</td>
</tr>
<tr>
<td>General Practitioner</td>
<td>0</td>
<td>3.7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Multiple</td>
<td>42.9</td>
<td>7.4</td>
<td>2.6</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>10.7</td>
<td>9.3</td>
<td>2.6</td>
<td>0</td>
</tr>
<tr>
<td>No referral</td>
<td>10.7</td>
<td>40.4</td>
<td>89.7</td>
<td>99.2</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
6.5.6 Referral follow-up

Of the forty-seven children who were referred to outside services, six (12.8%) families were unable to be contacted due to relocation. Of the forty-one children remaining, thirty-eight (92.7%) children who were referred to services were seen by the referral agency within three months of the referral and did require referral. The average length of time for children to be seen by referral agencies was four weeks or less. The three children (7.3%) who were not seen by the referral agency within three months were in the process of accessing different services.

One child, who was school age, had been referred for speech therapy. It took longer than three months for the child to receive speech therapy. The mother was dissatisfied with this access to speech therapy and commented that the services that were provided to her child prior to school age had been superior. This child had received speech therapy during their preschool year.

The second child had been referred to audiology, positive parenting and psychology (at early intervention services). The audiology appointment was not attended, as the referring agency did not have the services of an audiologist. The agency did not advise the mother of an alternative service. The mother was advised, three months after the referral, of an alternative service by the researcher, and subsequently attended the appointment six weeks later. The mother was dissatisfied with the availability of hearing testing. On referral to early intervention services for psychology the mother was advised that there was no psychologist available as they were unable to fill a staff vacancy. Early intervention services suggested to the mother that she obtain a referral to a paediatrician as an alternative. The mother was able to access the paediatrician within four weeks and was satisfied with the outcome. The family was also referred to a positive parenting course, which they were able to access within four weeks. They were very satisfied with this service.

The third child was referred for speech therapy. However, the mother did not organise the speech assessment as she thought the child would improve without intervention. At three months from the referral date, the mother reported the child’s speech not to have improved. The mother was now keen for the assessment to occur and would organise an appointment with the speech therapist.

Overall, parents were generally very satisfied with the referral process, waiting times and outcomes. Access to referral agencies for three families was noted above. However, there were two parents who expressed dissatisfaction between initial assessment and follow-up intervention. One parent was dissatisfied with the length of time between speech assessment and the availability of an ongoing program. Currently the child has been waiting two months since the initial assessment for ongoing sessions. Another parent expressed concern regarding ongoing sessions with the speech therapist. Their child had the initial assessment attended with in four weeks of the referral and was commenced on a home program with one follow up appointment with the speech therapist. The mother expressed satisfaction with the referral and program, but would be more satisfied if her child was offered further individual sessions with the speech therapist.
6.6 Parent feedback on the use of the PEDS

6.6.1 Findings from the parent survey
Mothers completed 93.8% of the PEDS questionnaires. The mean reported time (±SD) to complete the questionnaire was 5.8 ± 6.3 min (median 5.0 min, range 50 secs – 50 min). There was only one parent who reported taking 50 minutes to complete the PEDS questionnaire and two parents reported taking 30 minutes. 92.2% of parents reported taking 10 minutes or less to complete the questionnaire. The majority of parents (99.4%) found the questionnaire easy or very easy to complete; the one parent reporting that it was difficult also reported an education level of Year 10 or lower. Most parents (96.0%) felt that the PEDS would be helpful or very helpful to health and educational professionals. This varied with parental educational levels; 62.5% of parents with a tertiary level education rated the PEDS questionnaire as very helpful compared with 74% of those with an educational level of year 11-12 and 83% of those with an educational level of Year 10 or lower.

98.2% of parents reported that a local resource listing community and health services would be useful. The majority of parents (69.1%) reported that this information would be best made available both on line and in a booklet; 29.6% reported booklet only, and 1.2% reported on line only. 67.9% of parents reported having access to the internet, and of these 64.5% had access at home, 6.4% at work, 3.6% at the library and 25.5% in more than one location. 32.1% of parents reported having no access to the internet at all. There was no significant difference between access to the internet and the educational level of parents. Parents reported that it would be important that a local resource be updated yearly.

Parents reported a variety of resources as being helpful in gaining information about local services. Maternal and child health nurses (22.4%), friends (21.1%) and a combination of more than one resource (22.2%) were those identified overall as being most helpful. However, there were differences between provider type, with primary school parents reporting the ‘general practitioner’ as most helpful (18.5%), preschool parents ‘more than one resource’ (37.5%), childcare parents ‘friends’ (24.5%) and maternal and child health, the ‘maternal and child health nurse’ (40.5%). Details of resources considered most helpful in gaining information about local services across provider type are provided in Table 15.

Table 15. Resources most helpful in gaining information about local services

<table>
<thead>
<tr>
<th>Resources most helpful</th>
<th>Primary School</th>
<th>Preschool</th>
<th>Childcare</th>
<th>MCH</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friends</td>
<td>14.8</td>
<td>12.5</td>
<td>24.7</td>
<td>21.6</td>
<td>21.1</td>
</tr>
<tr>
<td>Family</td>
<td>0.0</td>
<td>6.3</td>
<td>3.7</td>
<td>2.7</td>
<td>3.1</td>
</tr>
<tr>
<td>Local paper</td>
<td>11.1</td>
<td>12.5</td>
<td>3.7</td>
<td>0.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Yellow pages</td>
<td>11.1</td>
<td>6.3</td>
<td>8.6</td>
<td>2.7</td>
<td>7.5</td>
</tr>
<tr>
<td>Local paper</td>
<td>3.8</td>
<td>6.3</td>
<td>3.7</td>
<td>0</td>
<td>3.1</td>
</tr>
<tr>
<td>General Practitioner</td>
<td>18.5</td>
<td>12.5</td>
<td>7.4</td>
<td>8.1</td>
<td>9.9</td>
</tr>
<tr>
<td>MCHN</td>
<td>11.1</td>
<td>6.3</td>
<td>21.0</td>
<td>40.5</td>
<td>22.4</td>
</tr>
<tr>
<td>More than one</td>
<td>14.8</td>
<td>37.3</td>
<td>21.0</td>
<td>24.4</td>
<td>22.4</td>
</tr>
<tr>
<td>Other</td>
<td>14.8</td>
<td>0.0</td>
<td>6.2</td>
<td>0</td>
<td>5.5</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
6.6.2 Findings from the focus group with parents
A focus group was held to identify parent’s experiences, feelings and views on the use of the PEDS, and to discuss the concept of a local service directory. Parents were invited from the different service providers so there was a representation across all age groups of children. Eight parents attended the focus group. Parents reported the PEDS as being easy to use and would be very willing to use it in the future. When asked when the best time to use the PEDS, parents agreed that the Key Stage Visits were appropriate at maternal and child health centres and suggested on enrolment at other services such as childcare, preschool and school. Parents also reported that it would be beneficial to use the PEDS at parent interviews during the year at childcare, preschool and primary school.

Parents were of the belief that transition information regarding their child’s development was passed on from the preschool to primary school. They were surprised that this did not occur. Parents suggested following consent, transition information of the PEDS between services would be best organised with service providers rather than depending on the parents to provide it. In acknowledging the movement of some families it was further suggested by parents that transition information be passed on by both parents and service providers.

Comments from parents in regard to the transition of information included:

“Personally I thought the parents, but then I agree with what .......... is saying, because I’m guilty of doing that sometimes, getting a form, chucking it out, I’ll do that later. I’d like to think parents would be responsible enough to do it, but then at preschool they get their developmental records and everything anyway and pass them on too, so this could just get slipped in with that and sent onto school. I think it should go with the rest of the documentation from the preschool going to school”.

“Probably if you rely on parents a lot of it is not going to be passed on”

“It would be good if the information could be in the Child Health Record”

Parents were also asked about their thoughts on a local service directory and whether this should be available as a hard copy or on line. Parents agreed that having the service directory available as both a hard copy and on line would be most beneficial. This was consistent with the outcome from the parent questionnaire. However, some parents did make comment on the differences between a hard copy and on line. Parents commented that even though they may have access to the internet and use it on occasions, a hard copy would be more practical, especially with children. They also suggested the resource should be available in doctor’s surgeries, schools, childcare centres, maternal and child health centres, community centres and other providers of services. Comments from parents included:

“I have access to the internet at work but to be quite honest I don’t use it. If I was looking for a service my first point of call would be the health nurse, the doctor, or I would go to someone else first before I’d look it up for myself”

“I find the M&CH nurse is our little fountain of knowledge”

“I think the hard copy is instantly visual – just there.
With the internet – you’ve got to find some time without the kids”
Recommendation: The PEDS tool has the ability to provide an integrated and coordinated approach across early childhood services addressing child development and behaviour. The process of the movement of PEDS information, with parental consent, from one service provider to the next, needs to be addressed.

Recommendation: A local service directory listing resources for parents is considered helpful. This resource is required to be available in hard copy, online and updated yearly. The directory should be cross referenced for ease of access of information, and be readily available at all providers of services to young children and families.

Recommendation: The PEDS forms are provided in triplicate, as transition information, in the Child Health Record.

6.7 Provider use of the PEDS and BRIGANCE

6.7.1 Findings from the provider survey

The PEDS was thought to be an easily used tool by all providers from schools, childcare and maternal and child health, with over 80% of providers feeling confident in using the PEDS, agreeing that it was a positive addition to their practice and interested in using the PEDS in the future.

The time to score the PEDS varied amongst service providers. The mean reported time (±SD) to score the PEDS was 2.8 ± 2.2 min (median 0.8 min, range 10 secs – 5.0 min) for maternal and child health nurses, 4.2 ± 3.2 min (median 4.0 min, range 1.0 min – 10 min) for childcare workers, 15 min for preschool teachers and 6.6 ± 2.8 min (median 5.0 min, range 5.0 min – 10 min) for primary school teachers. Providers made the comment that the more experienced they became with scoring the length of time taken decreased.

The time taken in the process of scoring, discussion and referrals also varied with providers. Primary school teachers reported that the process took no longer than usual practice. Maternal and child health nurses and preschool teachers reported the process to be longer and estimated this to be an extra 15 minutes and 20 minutes respectively. Childcare workers estimated the extra time to be 5 minutes.

None of the service providers were aware of the existence of the PCP Statewide Health Services Directory prior to the commencement of the project. During the project, no one accessed it for information. Over 80% of service providers agreed that a service directory should be available both in hard copy and online. 60% of providers had made use of the local service directory “A Guide for Young Children and Families”, and over 80% of these users found the directory to be useful.
6.7.2 Findings from the focus groups with providers

Focus groups were organised with each service provider and requested information regarding preparation and training for the PEDS and BRIGANCE screen, referral processes, positive outcomes of using the PEDS and BRIGANCE, difficulties using the PEDS and BRIGANCE, and feedback on the service directories.

Preparation and training

All providers found the training for the PEDS and BRIGANCE to be very good, thorough and comprehensive; however, some providers commented they would have preferred the training to be held a couple of weeks before they commenced the project rather than several months before.

PEDS

All providers had many positive comments regarding the PEDS. They commented the PEDS provided an avenue to elicit parental concern and then subsequently address these concerns with parents. Many providers commented that issues with children were more quickly identified through using the PEDS. Comments from providers included:

Primary School

“…at the same time as we were scoring the PEDS the school became involved in a program called FAST – Families and Schools Together, and that’s supported by the Uniting Church. It’s an American program and once a week the families all come together, have a meal together, take turns in cooking and do lots of positive parenting. We identified, through the PEDS, a few families who would really benefit from the FAST Program, so we referred them into that and they went happily and are having a lovely time. We’ve noticed it with the students and again with the parents - we can talk to them more and they’re a lot more receptive to what we’re saying because they have identified the problem themselves. It works both ways, we a lot more understanding of their situation”

Occasional Childcare Centre

“It was an excellent tool to use, it was in simple English. Parents could understand exactly what they were being asked. The fact that we sat with them was just fantastic, that the girls and I had the opportunity to have one on one time with the parent and actually just talk about their thoughts on their child – we never do that. Previously, when parents come in to enrol we would discuss our program but did not actually sit and look at a parent and say “tell me what your concerns are?” To offer the PEDS to parents and ask what are your thoughts - I felt was a really powerful thing to do. I just think the ease of the PEDS is reflected in the number of people that did it. We could have done the same thing and if it was an unfriendly tool, the parents wouldn’t have done it. We would have got them in here but the word would have got out that it was a pain or that it was difficult, or it was intrusive. But from the Friday before to the next Friday the parents were particularly keen to be involved in it. I think that the word filtered out that it was an OK tool to use and it wasn’t at all threatening or whatever. That in itself - that it was written really well. We didn’t have any non-English speaking parents, but we did cover a few illiterate parents and having that one on one was great and they understood the questions very well. Just to have time to actually focus on one family was really nice. It identified to us as a service what parents expectations were a little bit, but we got a few surprises about what parents expected their children to do and what their concerns were and we could address some of those issues and have started to do that”
Maternal and Child Health

“….I found in the few places I’ve done PEDS I’ve been surprised at some of the parents coming out with things I hadn’t realised they were concerned about. Maybe it’s due to my lack of expertise in asking the right questions, but they came out with things that blew me away really. On further investigation they weren’t a problem, but the parent thought it was”.

“I think it is a really good way of showing parents that we do offer things for older children and also doing the PEDS in the preschool and then following up in the M&CH centre – really showed that I guess there’s an avenue of referral there. It highlights the importance of M&CH but probably highlighted some things in kids in the preschools that may not have been picked if we hadn’t been doing it. In some of them were very obvious – some kids had definite delays and had problems but there were some other children that were sort of pretty grey and it was just good for the parents to realise that even though it mightn’t be a glaring problem that they could still have it followed up and evaluated and someone making a decision about whether they were referred on or not”.

Preschool

“………but don’t you find the PEDS was a great way of bringing things up? With one child, we were concerned about his speech and his mother much to my surprise had circled ‘no’ for ‘Do you have any concerns about how your child talks and makes speech sounds?’, and I was so surprised! But it opened the door, so I said “So you don’t have concerns about his speech?” and she said “Should I?” At least then the door’s open and I found that was a really positive thing that came out of the PEDS that you saw it from the parent’s perspective, how they felt their child was developing and what concerns they had, and even if they had “no” when you felt there was concerns, at least it was there and gave you a starting point to discuss it. Whereas, it is sometimes very difficult to walk up and approach them. If it’s there and you’re there to discuss, it just flows through and you’re not in their face presenting concerns to them”

Some providers expressed some difficulties with the PEDS. One of these difficulties was around the interpretation of the PEDS Path. If parents expressed concern regarding development or behaviour of the child, and the concern was found not to be significant because the parent was unaware of normal development for that age, the provider was unsure of the Path.

“The only thing that really concerned me about referring was referring those who didn’t really need it. Because of their score they fell into the category of being referred but when you looked at the whole child and spoke with the parent it was, they were kind of concerned but not really as they were not sure of normal development. They were a little bit concerned but they did not need referring, only reassurance”.

One maternal and child health nurse reported that she had excellent communication with her mothers who she saw regularly and commented:

“……….with PEDS most of the mothers said to me, “if I had any concerns ……. I’d ask you, I wouldn’t wait for you to give me the form”. So now I have a habit of no concerns - no concerns because when they’re sitting there filling out the form I’d previously answered their concerns, and they didn’t have any concerns. With a tool like the PEDS it maybe used when you haven’t seen someone for a length of time or if they’re new – that type of thing. I found the ones that I’ve seen regularly – it was just a waste, because they didn’t have any concerns”
Most appropriate time to use the PEDS
Service providers in childcare, preschool and primary school agreed the most appropriate time to use the PEDS was on enrolment and possibly repeated in an interview during the year. Maternal and child health nurses agreed at Key Stage Visits from 8 -12 months onwards. Some nurses commented that 8 months was a little “too young” and 12 months would be more appropriate; others would be happy to use it with every child at each Key Age and Stage Visit from 8 months as it provided parents with the chance to voice their input.

Recommendation: The PEDS questionnaire be utilised in the maternal and child health service at Key Age and Stage Developmental Visits, from 8 months of age.

Recommendation: The PEDS questionnaire be utilised at parent/provider interviews on enrolment at childcare, preschool and primary school and then if indicated at a repeat interview during the year.

BRIGANCE screen
Both the maternal and child health and primary school nurses liked the BRIGANCE screen and found it an easy tool to use.

“I thought the BRIGANCE screen was great – I really like using it”

“I actually liked the BRIGANCE, because I thought it was quite clear cut and it actually ended up being quicker than I thought it was going to be”

“I think now it’s a very good tool and the parents enjoy it, the children enjoy it and I find it easy, but it did take me quite a few goes before I realised how good it was and how quick it was”

“I found it easy to do. The children liked it very much and they liked the activities in it. We only had one child who refused to do one activity. It was easy to do and I enjoyed it”

Recommendation: The BRIGANCE screen is an acceptable tool to use by both maternal and child health and primary school nurses as a secondary screen.

Referral processes
The preschools and childcare centres reported easy referral processes to the maternal and child health nurses and effective feedback. One child care worker commented on the positive aspect of the feedback provided by the maternal and child health nurse.

“... one of the positives which the girls and I found was with one of our children, whose language development is particularly poor, the maternal and child health nurse had sent back a copy of the referral form saying that she’d seen him and together with various other suggestions had also referred the family to the library for story telling. We looked at each other and said - why don’t we do that? - like it was just so sensible, and it’s just something that totally missed us. Join the toy library, go to story telling, they have it every week at the library or whatever. That for us was – oh we can start doing that – we’d forgotten that there were resources that we can encourage families to use. You sort of get a bit tied up with the ones you normally use. So that was a really positive thing that came back on the copy of the referral”
**Recommendation:** Effective feedback to the referral source regarding assessment and interventions is important. Referral forms should have the provision for feedback to the referral source.

The maternal and child health nurses reported that some parents did not want to attend a maternal and child health centre for a secondary screen. They found some families were difficult to contact or did not attend their appointment. One maternal and child health nurse commented:

“I wonder if parents were given the responsibility of contacting the maternal and child health centre for appointments for secondary screens, that they may actually turn up”.

Suggestions by the nurses to address this included offering the parents the flexibility of having the screen attended either at the maternal and child health centre or at the preschool or childcare facility and giving the parents the responsibility of following up the appointment with the maternal and child health nurse.

**Recommendation:** Maternal and child health nurses offer parents the flexibility of providing services either at maternal and child health centres or at the facility of the parents choice.

The primary school teachers reported some difficulty in accessing intervention services for school age children. This was most problematic for speech therapy. One teacher reported that the need for speech therapy exceeded the availability of services. This comment was validated by the feedback from parents on the referral process, where one parent reported extreme dissatisfaction with the availability of speech therapy services for school age children.

The primary school nurses acknowledged that if all schools utilised the PEDS on enrolment, it would identify early those children requiring further assessment and referral. The primary school nurse reported that nursing hours would need to be adjusted to cover a larger workload that would be required at the beginning of the year to provide secondary screenings to those children at high and moderate risk of disability. The nurse also commented, the PEDS had the ability of provide a triage system, whereby those children who are at high risk (Path A) or moderate risk (Path B) of disability, are seen by the primary school nurse as a priority. Children, whose parents have non significant concerns (Path C) or no concerns (Path E) could be reviewed at a later date. This would mean a change in the service provision of the primary school nurse program.

**Recommendation:** The use of the PEDS on enrolment in primary schools may increase the number of referrals to the primary school nurse in the first term of the school year. The primary school nurse program may have to adjust its service provision to meet this demand.
Service directories

All service providers, prior to the project, were not aware of the existence of the Primary Care Partnerships (PCP) State-wide Health Service Directory and during the project no one accessed this service directory for information regarding referral resources. During the focus groups with providers, comments regarding on line access were made.

Childcare workers commented that they did not have on line access when working in rooms with children. If parents asked about services when they delivered their children to the centre, they would have to get back to the parents after they accessed a computer in the office area. This could mean a delay of up to one day. Other providers such as maternal and child health nurses, who have access to the internet, in their rooms, experienced difficulty with remote access and found it too time consuming to access online during parent interviews. Preschool teachers were in a similar situation to the maternal and child health nurses, and some reported not being familiar with technology. Primary school nurses and primary school teachers also commented that on line was more time consuming and not always practical when speaking with parents. However, despite these comments, all providers could see the strength of a state-wide directory and stated that it would be something they would access for further information when they had the available time. Some comments from providers included:

Primary School

“For teachers a hard copy is always better, even though they have the internet in the classroom, a hard copy is a quick and easy reference”.

Maternal and Child Health

“I have a problem with the internet at work – it drops out all the time. I’ll get half way into something and then it drops out and I have to go all the way through again, so I just avoid it!”

Preschool

“If I needed it I would have found out how to use it. Not being familiar with technology – avoided it”.

“We’re not on line all the time. Check emails and get off”.

Service providers did use the local service directory “A Guide for Young Children and Families” during the project and commented about the usefulness of a hard copy reference.

“The hard copy local directory was useful, but it is important that it is kept up to date. Yearly update is important”.

“Maybe a laminated card would be a good addition to the hard copy. Something that you can just flip out and refer for a telephone number and address. If you need further detail, such as hours of operation, eligibility criteria, waiting lists etc, these can be listed in the directory itself”.

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“Some one has to be responsible for the yearly update. Maybe this can be a role of the Primary Care Partnership”

“The hard copy is user friendly for both provider and parent. If a parent is asking something you can’t go online with 25 children running around, whereas if the hard copy is in the room, you can go flick flick and heres an address and find what you’re looking for”.

“There is no point in having a service directory that is not up to date. If you are using it with parents etc, and you’re giving them the wrong information there’s nothing worse if they go off and you have given them the wrong numbers or something – it is not a good start”.

“Cross referencing is important. If I want speech therapy, I want to be able to look up speech therapy and find services that provide it. I also want to be able to find speech therapy under the listing of the service provider, for example, Wodonga Regional Health Service – Speech Therapy”.

“The Guide for Young Children and Families was useful, I loved the format. Easy to use and to find what I needed – accessible”.

<table>
<thead>
<tr>
<th>Recommendation:</th>
<th>A local service directory listing resources for providers and parents is considered helpful. This resource is required to be available in hard copy, online and updated yearly. The directory should be cross referenced for ease of access of information, and be readily available at all providers of services to young children and families. Individual pages can be added to the hard copy as an update, rather than in total to decrease cost.</th>
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| Recommendation: | Remote service providers need improved access to online services. |
7. Dissemination of information

Information regarding the PEDS and BRIGANCE screens and the project has been disseminated to interested stakeholders throughout the running of the project. This dissemination of information has seen the use of the PEDS and BRIGANCE screens in services outside those participating in the project. The outcomes of the project will be presented, at this stage, at two conferences and two academic papers will be written and submitted for publication. A copy of the project report will be made available to interested stakeholders and is available on the City of Wodonga website, www.wodonga.vic.gov.au and on the Centre for Community Child Health, Royal Children's Hospital Melbourne, website, www.rch.org.au/ccch.

7.1 Early intervention services

The project officer disseminated information regarding the PEDS and BRIGANCE screens to the early intervention service in the Hume region. Once aware of the screens, the service was keen to utilise them in their practice. The early intervention service, in November 2003, commenced utilising the PEDS questionnaire with parents on telephone interviews, as a method of triaging waiting lists. Those children at ‘high risk’ (Path A) and ‘moderate risk’ (Path B) of disability are given higher priority. Maternal and child health nurses on referring children to early intervention services are encouraged to complete a BRIGANCE screen to assist the allied health professionals to facilitate appropriate intervention.

7.2 Training in the PEDS and BRIGANCE

Training in the PEDS and BRIGANCE has extended beyond those services participating in the project. The training day was offered to all maternal and child health nurses and primary school nurses in the municipalities of Towong, Indigo and Alpine even though they were not directly involved with the project. BRIGANCE kits were also provided to these nurses as well as the local paediatric group. This provided those municipalities, which are members of the Upper Hume Primary Care Partnership, to have the benefit of the resources available through the project funds. Through this professional education and provision of resources they would be able to implement the same process in their own municipalities. The provision of education to the paediatric group, together with resources, provided the paediatricians with knowledge of the primary health care intervention strategies occurring in their area. If children were referred for paediatric assessment they were well informed of the process which had occurred in the community.

Following completion of the project, many service providers were interested in the PEDS and BRIGANCE and as there were available funds left from the project a second training session was organised for the 13th March 2004. Those participating in the training sessions included early intervention workers, preschool teachers, childcare workers, specialist children services, and general practitioners. Dr Sharon Goldfeld, from the Centre for Community Child Health, facilitated this training. Table 16, provides detail on the type and number of service providers involved.
Information regarding the Peds and BRIGANCE and the project was presented, by the project worker, to the regional primary school principal's conference held on the 24th March 2004.

7.3 Dissemination of information regarding the project and outcomes

Submissions have been accepted to present the project and its findings, as a paper, at the XXIV World Organisation for Early Childhood Education (OMEO) Congress ‘One World: Many Childhoods’ to be held in Melbourne from 21-24 July 2004 and at the Queen Elizabeth Centre’s conference “The Critical Early Childhood Years” to be held in Melbourne from 1-2 October 2004. A poster presentation outlining the project and its outcomes has been presented, by Dr Sharon Goldfeld, at the Royal Australasian College of Physicians (RACP) meeting held in Canberra in May 2004.

Two academic papers will be written by the researchers, reporting the project and its outcomes. These papers will be submitted to appropriate journals for publication. This dissemination of information gained from the project will add to the knowledge base around the early identification, communication, referral and intervention of children with behavioural and developmental concerns.

7.4 Implementation of the model utilised in the project

Early childhood services in the City of Wodonga (preschool, childcare and maternal and child health) have implemented the Peds and BRIGANCE as recommended in the project into routine practice in 2004. The two primary schools, who participated in the project, have implemented the Peds at enrolment interviews in 2003/2004. The Peds product used in these services in 2004 were provided by the project money. This implementation will be evaluated in June 2004.

7.5 Further dissemination and sustainability of the model

A submission was made to the Telstra Foundation's Community Development Fund, addressing ‘early intervention’, in April 2004 to implement the recommendations from the project across all early years services in the municipalities of the City of Wodonga, Towong, and Indigo, and parts of Alpine shire that form the Upper Hume Primary Care Partnerships. This implementation, if successful, would occur over three years and be evaluated by the Centre for Community Child Health. The leading agency in this submission is Upper Murray Family Care, as they provide services to young children and families across the four municipalities. The outcome of this submission will not be known until July 2004.
8. Project evaluation

Evaluation of the project has concentrated on:

- Process and impact evaluation to establish whether the objectives of the project were met.
- Economic evaluation to establish the sustainability of the model

8.1 Process and impact evaluation

The key success indicators relating to process and impact issues established prior to the commencement of the project have been achieved (see pages 20-21, Evaluation Framework).

- Maternal and child health nurse and primary school nurses trained in the PEDS and BRIGANCE screens. Maternal and child health nurses included those nurses in the municipalities of the City of Wodonga, Towong, Indigo and Alpine. Primary school nurses included all nurses in the Hume region.

- Maternal and child health nurses used the PEDS during a 4 week period for all Key Age and Stage Developmental visits from 8 months of age. This included visits at 8 months, 12 months, 18 months, 24 months and 3.5 years of age.

- Childcare workers, primary school and preschool teachers used the PEDS at parent interviews that coincided with their usual parent interview practice. For primary schools this was on enrolment, preschools and long day child care during their mid year interview with parents and occasional child care one week where interviews were organised for parents.

- Childcare workers and teachers referred all those children with significant concerns to either maternal and child health or the primary school nurse for further assessment and intervention. Some children with non significant concerns were referred to maternal and child health or the primary school nurse for those concerns unable to be addressed by the provider.

- Feedback was obtained from provider groups on the utility and uptake of the PEDS as well as the BRIGANCE screen (as appropriate) in services.

- Feedback was obtained from parents on the use of the PEDS and consequent actions.

- A local community resource, “A Guide for Young Children and Families” was developed and distributed to providers.

- Referral processes and client pathways were evaluated, to determine if service mapping in addition to the PEDS can facilitate more appropriate and timely discussions and referrals of children with developmental and behavioural concerns.

- Information gained from this trial has been used to develop a sustainable model of intersectoral communication and early detection around child development.
Other significant outcomes of the project have included:

- Dissemination of information regarding the PEDS and BRIGANCE and the project to other service providers to young children and families.
  - Early intervention services in the Hume region, once aware of the PEDS and BRIGANCE, were keen to utilise the screens in their service. Early intervention services, in November 2003, commenced utilising the PEDS questionnaire with parents on telephone interview, as a method of triaging waiting lists. Those children at ‘high risk’ (Path A) and ‘moderate risk’ (Path B) of disability are given higher priority. Maternal and child health nurses on referring children to early intervention services are encouraged to complete a BRIGANCE screen to assist intervention services to facilitate appropriate referral and intervention.
  - Training in the PEDS and BRIGANCE has extended beyond those services participating in the project.
    - All maternal and child health nurses in the municipalities of the City of Wodonga, Towong, Indigo and Alpine have been trained.
    - All primary school nurses in the Hume region have been trained.
    - Early Intervention, Specialist Children Services, Early Years Development Officers in the Hume region have been trained.
    - General Practitioners (x3) in Albury Wodonga have been trained.
    - Paediatricians (x3) in Albury/Wodonga are aware of the PEDS and BRIGANCE in community settings. They will request copies of the BRIGANCE screen if attended when assessing.
  - Primary School Principals (x40) in the Hume region have been informed of the project and its outcomes.
- Dissemination of information regarding the project.
  - Report of the project will be made available to interested stakeholders
  - Project and outcomes has been accepted for presentation as a paper at the XX1V World Organisation for Early Childhood Education (OMEP) Congress ‘One World: Many Childhoods’ to be held in Melbourne from 21-24 July 2004.
  - Project and outcomes has been accepted for presentation as a paper at the Queen Elizabeth Centre’s conference “The Critical Early Childhood Years” to be held in Melbourne from 1-2 October 2004.
  - A poster presentation outlining the project and its outcomes has been presented, by Dr Sharon Goldfeld, at the Royal Australasian College of Physicians (RACP) meeting held in Canberra in May 2004.
  - Two articles outlining the project and outcomes will be submitted to appropriate academic journals for publication.
  - A showcase of the project will be made to the local community and key stakeholders invited.
- Implementation of the model of intersectoral communication and early detection around child development
  - Early childhood services in the City of Wodonga, (preschool, childcare and maternal and child health), have implemented the PEDS and BRIGANCE as recommended in the project into routine practice in 2004. This implementation will be evaluated in June 2004.
  - The two primary schools, which participated in the project, have implemented the PEDS at enrolment interviews in 2003/2004. This implementation will be evaluated in June 2004.
8.2 Economic evaluation

The economic evaluation of this project is detailed in the Evaluation Framework on page 20-21, and the allocation of resources for the project can be found on page 16. Inherent to the sustainability of the project is the cost of utilising the PEDS and BRIGANCE screens with referral processes across services and the availability of service directories to service providers.

8.2.1 PEDS screen
The PEDS Response Form and PEDS Score and Interpretation Form are available for purchase through the Centre for Community Child Health, Royal Children’s Hospital Melbourne, Telephone: 03 9345 6150. The forms are under copyright and are not able to be photocopied. The combined cost of the two forms is $1.10c. Hence, the cost of providing the PEDS on the first occasion is $1.10, and on subsequent interviews within a service it would be $0.55c, as the PEDS Response Form is the only new form required. The PEDS Brief Administration and Scoring Guide is also available at a cost of $8.00. Providers can use the PEDS in practice with the information gained through reading the PEDS Brief Administration and Scoring Guide. However it is beneficial to be provided with a training day which incorporates the issues around developmental screening and surveillance, the development and use of the PEDS and the importance of family centred practice, scoring and implementing the PEDS and the BRIGANCE screen.

8.2.2 BRIGANCE screen
The set of four books which comprise the BRIGANCE screen are available for purchase from Hawker Brownlow in Melbourne, Telephone: 03 9555 1344. The cost of the set of four books is $155.00. Software to assist in the interpretation of the results of the screen is available at a cost of $25.00. The summary forms are able to be photocopied so once the four books are purchased there are no ongoing purchase costs for the screen. There are no special developmental toys required for the screenings. Toys used can be those already in use in services or they can be purchased from any educational toy distributor. The cost of providing these toys for each set of BRIGANCE screens for the project was $30.00. Therefore, the total cost of purchasing the BRIGANCE screen for a service is $210.00.

All maternal and child health nurses in the municipalities of the City of Wodonga, Towong, Indigo and Alpine, together with all primary school nurses in the Hume region have been provided with the BRIGANCE screen through the project funds. The only additional cost to these services is the photocopying of the summary forms which is calculated at $0.05c per copy.

8.2.3 Referral forms
The referral forms used within the project were those already utilised within services. There is no additional cost for these forms. However, if services provide a copy of the PEDS Score and Interpretation Form with the referral form, this would be an additional cost of $0.05c per referral.
8.2.4 Transition information
If services were to provide both parents and the next service provider with a copy of the PEDS Score and Interpretation Form this would be an additional cost of $0.10c per child. If the recommendation of providing triplicate copies of the PEDS forms in the Child Health Record was accepted by DHS there would be no additional cost for this transition information.

8.2.5 Cost of training day
The cost of the training day in the PEDS and BRIGANCE is calculated at $100.00 per person and $50.00 per person for the 3 hour session. This education is provided by the Centre for Community Child Health, Royal Children’s Hospital, Melbourne. All maternal and child health nurses and primary school nurses in the municipalities of the City of Wodonga, Towong, Indigo and Alpine have attended training through the project funds. In total, 55 service providers were trained during the project. These professionals now have the ability to disseminate the information further.

8.2.6 Cost of time taken to score the PEDS by providers
Additional time by providers to score the PEDS was estimated at an average of 5.8 minutes, with providers reporting the time decreasing as they became more experienced. As hourly rates differ amongst providers it is estimated that this cost was between $1.60 and $2.50 per child during the project. However, considering in practice, using the PEDS is going to elicit parental concern more efficiently than previously, the cost of this scoring in ongoing practice is negligible.

8.2.7 Cost of service directories
The Department of Human Services meets the cost and ongoing maintenance of the PCP Statewide Health Service Directory.

The generation of the local service directory took 45 hours of project time. This is calculated at a cost of $900.00. The printing and distribution of the directory cost $2.00 per copy. Yearly updates of the directory would take less time than its generation and could be estimated to take 16 hours, providing an ongoing cost of $320.00 per year. Printing and distribution of $2.00 per copy would be in addition to those costs.

8.2.8 Cost of sustainability
The true costs of sustaining this model is the purchase cost of the PEDS forms, photocopies of the transition information and the ongoing cost of providing an up to date local service directory. These costs are summarised in Table 17.

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost per child</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEDS forms initial</td>
<td>$1.10</td>
</tr>
<tr>
<td>PEDS forms ongoing</td>
<td>$0.55</td>
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<tr>
<td>Photocopy of PEDS for referral</td>
<td>$0.05</td>
</tr>
<tr>
<td>Photocopy of transition information</td>
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</tr>
<tr>
<td>Total</td>
<td>$1.80</td>
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</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local service directory</td>
<td>$320.00 per year update</td>
</tr>
<tr>
<td></td>
<td>$2.00 per copy distributed</td>
</tr>
<tr>
<td>Total</td>
<td>$320.00 + $2.00 per copy distributed</td>
</tr>
</tbody>
</table>
9. Conclusion & summary of recommendations

Evaluation has shown the PEDS is an acceptable tool across provider groups for both screening and for parent discussion promoting family centred practice. Concerns raised through the PEDS can be addressed by primary care providers and prevent further problems through early intervention and anticipatory guidance addressing issues before they arise. The PEDS has the potential to form an integral part of a service coordination framework that facilitates a focus on development, early detection and prevention including transition to school. This process is shown below.

Recommendations:
Overall
- The PEDS provides a systematic process whereby those most at risk of developmental and behavioural disability are identified and can be provided with anticipatory guidance by primary care providers and referred if necessary to appropriate services for intervention.
- The PEDS tool has the ability to provide an integrated and coordinated approach across early childhood services addressing child development and behaviour. The process of the movement of PEDS information, with parental consent, from one service provider to the next (from maternal and child health to preschool and preschool to school), needs to be addressed.
- The PEDS forms are provided in triplicate, as transition information, in the Child Health Record.
- Concern regarding expressive language increases with age and peaks at 18 months - <3 years. Professionals can identify expressive language as a significant concern to parents and provide anticipatory guidance before the peak age of parental concern.

- Concern regarding behaviour increases with the age of the child. Professionals can identify behaviour as an important concern for parents and provide appropriate anticipatory guidance and continue this guidance as the child increases in age.

- More parents have concerns with boys than girls in the expressive language and social-emotional domains. Anticipatory guidance to parents should acknowledge these differences between boys and girls.

- Service providers are made aware the most frequent concerns for parents are related to behaviour and expressive language. Providers can plan for appropriate intervention services to be available around these aspects of parental concern.

- Effective feedback to the referral source regarding assessment and interventions is important. Referral forms should have the provision for feedback to the referral source.

- A local service directory listing resources for providers and parents is considered helpful. This resource is required to be available in hard copy, online and updated yearly. The directory should be cross-referenced for ease of access of information and be readily available at all providers of services to young children and families. Individual pages can be added to the hard copy as an update, rather than in total to decrease cost.

- Remote service providers need improved access to online services.

**Maternal and Child Health and Primary School Nurses**

- The PEDS questionnaire be utilised in the maternal and child health service at the Key Stage and Age Developmental Visits from 8 months of age.

- The BRIGANCE screen is an acceptable tool to use by both maternal and child health and primary school nurses as a secondary screen.

- Maternal and child health nurses offer parents the flexibility of providing services either at maternal and child health centres or at the facility of the parents choice.

**Childcare, Preschool and Primary School**

- The PEDS questionnaire be utilised at parent/provider interviews on enrolment at childcare, preschool and primary school and if indicated at a repeat interview during the year.

- The PEDS can be used to identify those children most at risk of disability, and therefore has the ability to prioritise the prep assessment attended by the primary school nurses (PSN). The PEDS should be implemented in all initial interviews with parents of prep grade children.

- The use of the PEDS on enrolment in primary schools may increase the number of referrals to the primary school nurse in the first term of the school year. The primary school nurse program may have to adjust its service provision to meet this demand.


<table>
<thead>
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<th>Appendix</th>
<th>Title</th>
<th>Pages</th>
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Introduction to:
Parents' Evaluation of Developmental Status

PEDS
What

is Parents' Evaluation of Developmental Status (PEDS)?

The PEDS is a newly developed methodology for detecting developmental and behavioural problems in children from birth to eight years of age. This methodology involves asking parents to complete a ten-item questionnaire, which takes only a few minutes.

The PEDS can be used in two ways.
1. As a developmental screening test, when the parental responses to the ten-item questionnaire are transferred to the score sheet and interpreted according to the guidelines provided.
2. As an informal means to elicit and respond to parental concerns. The ten-item questionnaire is a non-threatening way to begin a dialogue, and gives parents the opportunity to bring up any concerns they may have about their child.

How

was it developed?

The PEDS was developed in the USA by Frances Page Glassoe PhD, a respected researcher who has published widely in the area of developmental screening and the early detection of developmental and behavioural problems. The ten-items on the questionnaire were chosen on the basis of research data, and the language used in the questions was selected carefully.

The Centre for Community Child Health, Royal Children's Hospital, Melbourne, has used the PEDS with hundreds of children and families across a variety of community-based settings. The language of the PEDS was changed to conform to Australian language usage. Parents and professionals found it useful and had no difficulty with the process.

Why

is a parent questionnaire administered rather than a screening test?

Research suggests that if parents are asked the right questions in the right way, they are very accurate observers of their child's strengths and weaknesses. One of the criticisms of developmental screening tests is that they tend to be performed in isolation without taking into account the socio-cultural context in which a child grows up, and without having systematic input from parents, who know the child best. Apart from the time, costs and special training needed to administer developmental screening tests, there have been concerns that not involving parents actively in the process diminishes their accuracy and makes it less likely that recommendations will be followed.
How do you use PEDS?

The "Brief Administration and Scoring Guide" provides an outline on how to use the three forms that make up the PEDS. There are simple steps to follow.

**Step 1:** Parents complete the "PEDS Response Form".

This is a one page document that can be purchased in pad format.

**Step 2:** Transfer the parents' responses on to the "PEDS Score Form".

This process is outlined in more detail in the "Brief Administration and Scoring Guide".

The "PEDS Score Form" is a one page document printed back to back with the "PEDS Interpretation Form" (see below). These forms can be purchased in a pad format.

**Step 3:** Determine the appropriate path to follow using the "PEDS Interpretation Form".

This process is outlined in more detail in the "Brief Administration and Scoring Guide".
Who can use the PEDS?

The PEDS can be used in virtually any setting - its use is not confined to health professionals such as doctors and nurses. In Australia the PEDS has been used in childcare centres, preschools and kindergartens, maternal and child health centres, general practices, paediatricians' offices, and schools.

When can I use PEDS?

The PEDS can be used in a number of different ways. Some professionals may use the PEDS on a regular basis, e.g. each year on the child's birthday. Others may administer the PEDS when the child is first enrolled in a particular community setting, e.g. preschool and school. Some professionals may use it as a formal developmental screening test, while others may use it informally to elicit and respond to parental concerns. The flexibility of the PEDS means that it can be used in a variety of different ways, and developmental concerns and progress can be monitored over time.

How reliable and valid is the PEDS?

The PEDS has been validated on close to a thousand children and families in North America, and has psychometric properties in keeping with standards for other developmental screening tests (sensitivity and specificity between 70-80%). However, it has the advantage of being brief, simple to use, and actively involves parents.

Ordering and Questions

- All the PEDS materials are available for purchase from the Centre for Community Child Health.
- Professional staff at the Centre for Community Child Health have had experience at using the PEDS and are available for consultation. The contact details are listed below.

Centre for Community Child Health, Royal Children's Hospital
Flemington Road, Parkville, Vic. 3052 Australia Telephone: (03) 9345 6150 Fax: (03) 9345 5900
Email: cccn@cryptic.rch.unimelb.edu.au
1. Please list any concerns about your child's learning, development, and behaviour.

2. Do you have any concerns about how your child talks and makes speech sounds?
   Circle one: No   Yes   A little   COMMENTS:

3. Do you have any concerns about how your child understands what you say?
   Circle one: No   Yes   A little   COMMENTS:

4. Do you have any concerns about how your child uses their hands and fingers to do things?
   Circle one: No   Yes   A little   COMMENTS:

5. Do you have any concerns about how your child uses their arms and legs?
   Circle one: No   Yes   A little   COMMENTS:

6. Do you have any concerns about how your child behaves?
   Circle one: No   Yes   A little   COMMENTS:

7. Do you have any concerns about how your child gets along with others?
   Circle one: No   Yes   A little   COMMENTS:

8. Do you have any concerns about how your child is learning to do things for himself/herself?
   Circle one: No   Yes   A little   COMMENTS:

9. Do you have any concerns about how your child is learning preschool or school skills?
   Circle one: No   Yes   A little   COMMENTS:

10. Please list any other concerns.
GOOD BEGINNINGS FOR YOUNG CHILDREN AND FAMILIES PROJECT

---

**PEDS Score Form – Authorised Australian Version**

Child's Name:  
Date of Birth:  
Date of scoring:  

Find appropriate column for the child's age. Place a tick in the appropriate box to show each concern on the PEDS Response Form. See Brief Scoring Guide for details on categorising concerns. Shaded boxes are significant predictors of difficulties. Non-shaded boxes are non-significant predictors.

<table>
<thead>
<tr>
<th>Child's Age</th>
<th>0-3 mos.</th>
<th>3+ mos.</th>
<th>6-11 mos.</th>
<th>12-17 mos.</th>
<th>18-23 mos.</th>
<th>24-35 mos.</th>
<th>36-41 mos.</th>
<th>42-47 mos.</th>
<th>48-51 mos.</th>
<th>52-57 mos.</th>
<th>58-63 mos.</th>
<th>64-69 mos.</th>
<th>70-75 mos.</th>
<th>76-84 mos.</th>
<th>85-89 mos.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Global Cognitive</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>2. Expressive Language and Articulation</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>3. Receptive Language</td>
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<td></td>
<td></td>
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<tr>
<td>4. Fine Motor</td>
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<td></td>
<td></td>
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<tr>
<td>5. Gross Motor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>6. Behaviour</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>7. Social-emotional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>8. Self-help</td>
<td></td>
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<td></td>
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<tr>
<td>9. School</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>10. Other</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Count the number of ticks in the small shaded boxes and place the total in the large shaded box below:

If the number shown in the shaded box is 2 or more, follow Path A on PEDS Interpretation Form. If the number shown is exactly 1, follow Path B. If the number shown is 0, count the number of small unshaded boxes and place the total in the large unshaded box below:

If the number shown in the large unshaded box is 1 or more, follow Path C. If the number 0 is shown, consider Path D if relevant. Otherwise, follow Path E.

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Appendix 2  Example of two-year old data sheet for the BRIGANCE screen

Two-Year-Old-Child Data Sheet for the BRIGANCE Early Preschool Screen

A. CHILD DATA
Child's Name: Kate Barry
Parent/Guardian: Mark and Joan Barry
Address: 62 Hanson Avenue

B. BASIC SCREENING ASSESSMENTS

<table>
<thead>
<tr>
<th>Page</th>
<th>Assessment Number</th>
<th>Skill (Circle the skills for each correct response. Make notes as appropriate)</th>
<th>Number of Correct Responses</th>
<th>Point Value</th>
<th>Child's Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1A</td>
<td>Builds Tower with Blocks – A: Builds a single-column tower with</td>
<td>4</td>
<td>3 points</td>
<td>12/15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. 2 blocks 2. 3 blocks 3. 4 blocks 4. 5 blocks 5. 6 blocks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3 points) (6 points) (9 points) (12 points) (15 points)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2A</td>
<td>Visual-Motor Skills – A: Strokes or scribbles with crayon are</td>
<td>1</td>
<td>5 points</td>
<td>5/10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Not purposeful or well controlled so frequently lose contact with the paper, (5 points)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. purposeful or well controlled so seldom lose contact with the paper, (10 points)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>3A</td>
<td>Identifies Body Parts – A: Points to or touches</td>
<td>6</td>
<td>2 points</td>
<td>12/12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sample: mouth 1. nose 2. eye 3. head 4. hand 5. arm 6. toe</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>4A</td>
<td>Picture Vocabulary – A: Names picture of</td>
<td>3</td>
<td>4 points</td>
<td>12/12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. car 2. dog 3. key</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>5A</td>
<td>Identifies People in Picture by Paintings: Points to or touches</td>
<td>4</td>
<td>3 points</td>
<td>12/12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. man 2. girl 3. woman 4. boy 5. girl</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>6A</td>
<td>Identifies Objects According to Use: Points to or touches according to</td>
<td>2</td>
<td>4 points</td>
<td>8/12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. ride in 2. sleep in/on 3. brush 4. brush in/on</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>7A</td>
<td>Gross-Motor Skills – A:</td>
<td>4</td>
<td>4 points</td>
<td>12/12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Walks sideways two steps 2. Walks backward two steps</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Walks erect with synchronous arm swing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>8A</td>
<td>Verbal Fluency – A:</td>
<td>2</td>
<td>5 points</td>
<td>10/15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. At least 25% of speech is intelligible 2. At least 50% of speech is</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>intelligible 3. Uses two words that relate in combination</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

D. OBSERVATIONS
1. Handedness: Right __ Left __ Not Determined __
2. Grasps crayon with: Fist __ Fingers __
3. Hearing appeared to be normal: (See page viii.)
   Yes __ No __ Uncertain __
4. Vision appeared to be normal: (See page viii.)
   Yes __ No __ Uncertain __
5. Record other observations below or on another sheet.
   was confident and at ease

E. SUMMARY (Complete only if child is screened with a group.)

- Compared to other children included in this screening:
  1. this child scored ____________ lower ____________ average ____________ higher ____________
  2. this child's age is ____________ younger ____________ average ____________ older ____________
  3. the teacher rates this child ____________ lower ____________ average ____________ higher ____________
  4. the assessor rates this child ____________ lower ____________ average ____________ higher ____________

F. RECOMMENDATIONS

Within normal limits. No further assessment needed.

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Completed Two-Year-Old Child Data Sheet xvii
INTRODUCTION

Background

International evidence highlighting the importance of the early years of life is now having a significant influence on both the State and Federal Government as they consider the best approach to improving outcomes for children. In addition a recent report by the National Health and Medical Research Council (NHMRC), summarising the evidence for a number of child health screening and surveillance programs, has highlighted the importance of systems of early detection, rather than stand alone activities. The Report supports an integrated and coordinated approach to the early identification of problems with subsequent provision of appropriate intervention, leading to improved outcomes for children and their families.

In June 2002, the City of Wodonga received funding from the Primary Care Partnerships, to undertake “A Good Beginning for Young Children and Families Project” to test the feasibility of establishing a questionnaire that could act both as a communication tool between providers, and between providers and parents, as well as have psychometric properties that would enable it to be used as a developmental screening tool in the context of services that were already providing a system of care.

In 1998 Professor Frances Page Glascoe from Vanderbilt University published a simple to use, reliable and validated methodology to systematically elicit and respond to parent concerns regarding their children’s health, development and behaviour for this purpose. A 10-item parent completed questionnaire, the Parent Evaluation of Developmental Status (PEDS), has been shown to be as accurate as any of the previously developed screening tests. However, it has the distinct advantage of taking less time, needing no specialised equipment and has a strong emphasis on parental involvement.

Furthermore, research has demonstrated that using the PEDS in a systematic way to elicit parent concerns, and then responding to these concerns in an appropriate way (by providing parent education and information or else referral for further comprehensive assessment), has the potential for significantly improving child outcomes. An Australian version of PEDS has been developed to ensure cultural appropriateness.

Rationale

In any community young children will spend numerous hours in childcare, preschool and primary school. Together with parents and carers, staff at these sites spend many hours with children and know their abilities very well. Community consultation with parents of young children and service providers, held in Wodonga during 2000, has demonstrated that childcare, preschools and primary schools provide a platform for early identification of developmental and behavioural problems in children.

The same consultations also defined the lack of a suitable tool for maternal and child health nurses (MCHN), childcare, preschool and primary school staff to use in identifying problems as well as a knowledge deficit of the appropriate service providers to address the issues.

Therefore there appeared to be both a need to consider how to best communicate with
parents around their child’s developmental and behavioural concerns, as well as an opportunity to pilot a methodology to demonstrate how a number of services, many funded by the City of Wodonga, might be able to better coordinate and communicate around issues of child development and parent concern.

**Hypotheses**

1. The Parent Evaluation of Developmental Status (PEDS) questionnaire is an acceptable and feasible communication and screening tool to use with parents and staff of Maternal and Child Health Centres, Childcare Centres, Preschools and Primary Schools to identify developmental and behavioural problems in children aged 0-8 years.

2. The combination of providing service mapping of referral services and the use of the PEDS leads to more timely and appropriate referrals

**Aims and Objectives**

Before implementing any sort of tool that might be an additional burden on service providers, it should be demonstrated that the tool is useful for both parents and providers, is acceptable and is an effective addition to professional practice. The aims of the “Good Beginning for Young Children and Families Project” therefore are:

- To trial the use of PEDS as a developmental screen by maternal and child health nurses
- To trial the use of the PEDS as a parent communication tool by childcare workers and teachers
- To obtain feedback from these provider groups as well as parents on the utility and uptake of PEDS in these service.
- To determine if service mapping in addition to the PEDS can facilitate more appropriate and timely discussions and referrals of children with developmental or behavioural concerns

In order to achieve these aims the “Good Beginning for Young Children and Families ” project will:

1. Provide service mapping of primary health care referral services, applicable to the City of Wodonga, and make these readily available to staff and parents.

2. Pilot the Parents’ Evaluation of Developmental Status (PEDs) tool, for a four-week period, as a communication and early detection tool to assist staff in the early identification, appropriate referral and management of developmental and behavioural problems in children aged 8 months to 8 years.

3. Undertake a process evaluation that will measure the uptake, accuracy, effectiveness and costs of the pilot process.
**Project Design**

**Sample selection**

Participants for the study will be recruited from parents attending Maternal and Child Health Centres for their child’s key stage visit, parents attending parent-teacher interview or childcare worker interviews during the four-week period of the pilot.

The Maternal and Child Health Centres, Childcare Centres, Preschools and Primary Schools have been chosen to represent a cross section of the City of Wodonga. As the Maternal and Child Health Nurses will be involved in secondary screens for preschool children, all centres are represented. One long term and one occasional-care childcare centre have been chosen. Two preschools have been chosen in geographically different locations to the childcare centres. One government and one catholic primary school have been chosen. School nurses that attend the schools included in the study will also be involved in secondary screening and referral but will not actively recruit participants into the project.

The service providers will recruit parents with support from the project officer. Each provider will be briefed by the project officer and the method of recruitment, including the importance of the information sheet and consent form, will be explained. In order to ensure that each provider understands their role, and because each provider will also be required to give feedback, an additional information sheet and consent form has been developed for the providers as participants.

**Provider Training**

A training day in the use of the PEDS and the secondary screen (Brigance) for MCHN and school nurses will be undertaken prior to the pilot implementation period. In addition a shorter training period for the childcare workers and school teachers outlining the PEDS will also be undertaken. There will be either position backfill or evening training offered for these services. All PEDS forms and Brigance kits will be provided by the City of Wodonga. Training days will also outline the project in further detail together with the recruitment process. Providers will complete their consent forms at these meetings or will be followed up by the project officer if they are unable to attend.

**Data Collection**

Data collection will commence during the 4 week pilot period and will continue for up to 3 months after the pilot has been completed.

All service providers will be required to copy the PEDS forms and score forms (once consent has been obtained) and send them to the project officer or post them in a secure box that will be provided at each site. An accompanying simple questionnaire including demographic data and feedback about the use of the PEDS to be completed by the parents will also be returned to the project officer either at the time of visit or at a later date through a reply paid envelope.

Parents who have a concern noted on the PEDS will be followed up 3 months after the pilot period by questionnaire. From the PEDS validation study it was demonstrated that approximately 30% of parents had a concern. Of these only 10 % had a significant concern that would require referral. It is anticipated that all parents with a concern will be followed up by questionnaire after 3 months, however only parents with a significant concern requiring referral will be followed up by telephone to determine the outcome of the concern and whether referral was necessary or had occurred.
Focus groups of each service provider group will be undertaken following the 4 week pilot period by the project officer to understand the utility of the Peds and determine the best ongoing model of implementation for the City of Wodonga. In addition service providers will also complete a more detailed feedback questionnaire to ascertain uptake, feasibility and acceptability of the Peds as a screening tool and communication tool with parents and with other providers.

All questionnaires are under development and will be provided to the HREC before commencement of the project. The Centre for Community Child Health has a number of questionnaires utilised in similar studies that will be modified for this study.

Costs will be monitored during the project in order to undertake an economic evaluation of the project.

**Evaluation**

The evaluation of this project will focus on process impacts and outcomes. The process outcomes are related to evaluating the success of the aims and objectives of the project described above.

Additional evaluation of the impact of the use of Peds on parental use and satisfaction with services, as well as provider practice will be included. In order to consider the impact of referrals on local services, referral patterns will be monitored.

An evaluation of the validity of the Peds that tests its properties as a screening tool is considered beyond the scope of this project.

An economic evaluation will be undertaken that will mainly focus on the costs (capital and time) associated with the implementation and ongoing maintenance of this program. This will include the use of the Peds in the practice of these provider groups in the City of Wodonga.

**Data analysis**

Simple univariate and bivariate analyses will be completed. The descriptive data will be analysed using cross tabulations, particularly to examine demographic differences or difference across provider groups. Results of the focus groups will be analysed using a thematic approach and will be examined in conjunction with the provider questionnaires.

**Project Outputs**

The project is funded for a period of 9 months commencing in April 2003. At the end of this time there will be the following outputs:

- The production of a service directory for children and their families in the City of Wodonga
- The formulation of an agreed model that reflects the role that Maternal and Child Health, Childcare, Preschool and Primary School staff plays in the early identification of primary health care issues, together with their potential to be an accessible and sustainable entry point to the primary health care service system.
- The identification of protocols (including the use of the Peds) and relationships between service providers and Maternal and Child Health, Childcare, Preschool and Primary School staff to ensure early identification of issues and timely and appropriate
referrals.

- The development of a potential model that is transferable to other school communities and service systems.

- A final summary report of the project that will be made available to interested stakeholders through the City of Wodonga. The findings will be published in an appropriate journal.

REFERENCES


Dear Parent/Guardian,

**A Good Beginning For Young Children And Families**

We know that parents are often right when they have concerns about their child’s development or behaviour. If these concerns are picked up early enough and if a parent can get help, then this can lead to better outcomes for the family.

We would like to invite you to take part in a research project that is being run by the City of Wodonga and the Centre for Community Health at the Royal Children’s Hospital, Melbourne. There are two researchers involved in this project. Dr Sharon Goldfeld is a paediatrician from the Centre for Community Health at the Royal Children’s Hospital in Melbourne. Ms Marcia Armstrong is a maternal and child health nurse from the City of Wodonga.

The aim of this project is to improve the ways that parents can pick up and manage any concerns they have about their child’s development and behaviour. The project will take place in primary schools, preschools, child care centres and maternal and child health centres in the City of Wodonga. It will include children aged 8 months to 8 years.

The Parent Evaluation of Developmental Status (PEDS) is a short questionnaire that has been shown to be useful in finding out these concerns from parents. The questionnaire takes about 10 minutes to complete. If you have a concern, we may ask your child to do some extra tasks to further understand his or her development. This will be done by your maternal and child health nurse or school nurse and should take about 30 minutes. Children usually find these activities enjoyable.

If you agree to take part, we will ask you to:

- Complete and discuss the PEDS questionnaire at your child’s key stage visit with your maternal and child health nurse or at an interview with your child’s teacher or childcare worker.
- Possibly take part in some extra activities with your child. If you have concerns, this will help you to further understand his or her development. These activities will be done at your maternal and child health centre or through your school nurse.
- Complete a questionnaire and talk to one of the researchers about how useful you found the PEDS.
- If you have concerns, we will ask your permission to contact you again up to 3 months later. We will ask you some questions about what has happened for your child since you completed the PEDS questionnaire.
- Give permission for the maternal and child health nurse, childcare worker or teacher to provide a completed copy of the PEDS questionnaire, and results of any other tests for your child, to Marcia Armstrong.

Any information that you give will be confidential. It may also form part of your child’s health or educational record. The information collected for this project will be only available to the researchers. Any information that is collected in connection with the project and that can identify yourself or your child will remain confidential, except as required by law. The information will be stored securely at the City of Wodonga offices. After 5 years we will shred it.

At the end of this project we will write a report about the results. The results may also be presented at a conference or published in a journal. If we write or talk about the results, you or your child will not be identified. The report will also be made available through the City of Wodonga. We will write to tell you how to get a copy of it.

If you would like any more information, please do not hesitate to contact me on either 02 60 559200 (work) or 0407218294 (mobile).

Yours sincerely

Marcia Armstrong
City of Wodonga
This page has some important general information about taking part in research studies approved by the Royal Children's Hospital. Details about this study are on the Information Sheet.

Your rights as a Participant are:
1. To choose to take part or not to take part
2. To withdraw from the study at any time
3. To have the study fully explained to you

You should feel free to ask the researchers any questions about the study.

Other information you should know about being part of this study

1. Your answers to the questions on this study will be kept private. This is subject to legal requirements.
2. No information from this study will reveal your identity
3. You should have been told what you need to do for this study, and how long it will take.
4. If you do not wish to take part in this study, this will not affect your relationship with the City or Wodonga, your maternal and child health, childcare, preschool, primary school or the Royal Children's Hospital.
5. This research project has been approved by the Royal Children's Hospital Ethics in Human Research Committee.

If you have any concerns about the study, and would like to speak to someone independent of the study, please contact The RCH Consumer Liaison, Clinical Support Services Team at the Executive Office. Telephone 03 9345 5676 (Monday to Friday 9am-5pm).

If you would like more information about the study or if you have any questions about the study, the person to contact is:

Name: Ms Marcia Armstrong

Contact telephone: 02 60 559200 (work) or 0407218294 (mobile)
STANDARD INFORMED CONSENT FOR PARTICIPANT TO:
PARTICIPATE IN A RESEARCH PROJECT

Title of Project
A Good Beginning for Young Children and Families

Principal Investigator(s)  Dr Sharon Goldfeld, Royal Children’s Hospital
Ms Marcia Armstrong, City of Wodonga

I, ____________________________________________________________________________________
voluntarily consent to taking part in this research project, which has been explained to me by
the maternal and child health nurse / child care worker / school teacher (please circle the
correct response and specify name) Name: ____________________________________________________________________________________

- I have received a Participant Information Statement to keep and I believe I understand the
  purpose, extent and possible effects of my involvement
- I understand I have the option to discuss my decision to take part in the project with a
  family member or friend
- I have had an opportunity to ask questions and I am satisfied with the answers I have
  received
- I understand that the researcher has agreed not to reveal results of any information
  involving me, subject to legal requirements
- If information about this project is published or presented in any public form, I understand
  that the researcher will not reveal my identity
- I understand that if I refuse to consent, or if I withdraw from the study at any time without
  explanation, this will not affect my access to the best available treatment options and care
  from Women’s and Children’s Health (The Royal Women's Hospital OR The Royal
  Children's Hospital or any services offered by the City of Wodonga).
- I understand I will receive a copy of this consent form.

SIGNATURE                                              Date
______________________________________________________

SIGNATURE                                                Date
OF WITNESS
______________________________________________________

I have provided study information to the parent/guardian who has signed above, and
believe that they understand the purpose, extent and possible effects of their
involvement in this study.

RESEARCHER/PROVIDER’S SIGNATURE                           Date
______________________________________________________

Note: All parties signing the Consent Form must date their own signature.
Dear Parent

Now that you have completed the PEDS questionnaire, please find attached a questionnaire for you to complete that will help us understand the usefulness of the PEDS from a parent’s viewpoint, how parent’s find out about community services and provide some extra information about children and their families.

Remember any information that you give us will be treated confidentially.

We thank you for your help with this project

Sincerely yours

Marcia Armstrong  
Project Coordinator  
City of Wodonga

Dr Sharon Goldfeld  
Paediatrician  
Centre for Community Child Health
We would like to know what you thought about the PEDS questionnaire (the PEDS questionnaire was the questionnaire with 10 questions regarding your concerns).

How easy was it to understand the PEDS questionnaire?

☐ very easy ☐ easy ☐ difficult ☐ very difficult

How easy was it to complete the PEDS questionnaire?

☐ very easy ☐ easy ☐ difficult ☐ very difficult

If you found the PEDS questionnaire difficult/very difficult to complete please tell us why?

_______________________________________________________________________

_______________________________________________________________________

3. Do you think that the PEDS questionnaire would be helpful to health/developmental/care professionals?

☐ very helpful ☐ moderately helpful ☐ not helpful ☐ other (please comment)

In what ways do you think it might be helpful/not helpful?

_______________________________________________________________________

_______________________________________________________________________

4. How long did it take you to fill out the PEDS questionnaire? _______ minutes

5. Was the provider who scored your PEDS questionnaire helpful in addressing your concerns?

☐ very helpful ☐ moderately helpful ☐ not helpful ☐ no concerns ☐ haven’t seen provider

6. Did you need to be referred to another professional after your PEDS questionnaire was discussed with you?

☐ Yes ☐ No ☐ I had no concerns ☐ haven’t seen provider

If yes, which one(s)?

_______________________________________________________________________

_______________________________________________________________________
This project is also very interested in understanding how you get information about services

1. How do you currently find out about local services that you need? (mark more than one box)
   - Friends
   - Family
   - Local paper
   - Yellow Pages
   - Internet
   - Local council
   - General Practitioner
   - Maternal and Child Health Nurse
   - Other (please specify____________)

2. Of these which do you find the most helpful (mark one box)
   - Friends
   - Family
   - Local paper
   - Yellow Pages
   - Internet
   - Local council
   - General Practitioner
   - Maternal and Child Health Nurse
   - Other (please specify____________)

The City of Wodonga is planning to develop a resource about the local health and community services

3. Would you find this resource:
   - □ very useful  □ moderately useful  □ not useful  □ other (please comment)

4. What do you believe would be the best way for this information to be available?
   - □ Booklet  □ On Line  □ Both

5. Do you currently have access to the internet?
   - □ Yes  □ No
     If yes is this at:
     - □ Home  □ Work  □ Library  □ Internet Cafe
Facts about your child

1. This child is my: (mark one box)
   - 1st  
   - 2nd  
   - 3rd  
   - 4th  
   - 5th or more

2. How many children do you have altogether? (mark one box)
   - 1  
   - 2  
   - 3  
   - 4  
   - 5 or more

3. Was this child born: (mark one box)
   - very early? (32 weeks or less)
   - early? (33 to 36 weeks)
   - on time? (37 to 41 weeks)
   - late? (42 weeks or more)
   - unsure?

4. What is your child's date of birth?
   ______/_______/_______
   Day  Month  Year

5. What is the gender of your child? (mark one box)
   - Male
   - Female

6. How much did your child weigh at birth? (mark one box)
   _____pds_____oz
   OR
   _____.•_____.kg

7. Has your child been diagnosed with any important health or developmental problems?
   - Yes
   - No
   Please describe.

8. Does your child receive a disability allowance? (mark one box)
   - Yes
   - No

9. Does your child receive any special therapy/assistance (e.g., speech therapy, psychology, eye exercises)?
   - Yes
   - No
   Please describe.
Facts about you

1. What is the date today?

_______/_______/_______
Day    Month    Year

2. I am this child's: (mark one box)

☐ Mother  ☐ Father  ☐ other (please specify)

3. What is your own date of birth?

_______/_______/_______
Day    Month    Year

4. Which of the following best describes your current marital status? (mark one box)

☐ single/never married  ☐ married  ☐ defacto  ☐ separated/ divorced  ☐ widowed

5. Where were you born? (mark one box)

☐ Australia  ☐ other (please specify)

6. What is the main language you speak at home? (mark one box)

☐ English  ☐ other (please specify ___________)

7. Which of the following best describes YOUR current employment? (mark one box)

☐ Employed/self employed full time  ☐ Employed/self employed part time  ☐ Not in paid employment/home duties  ☐ Pensioner  ☐ Other

a. Which of the following best describes the current employment of your partner/spouse? (mark one box)

☐ Employed/self employed full time  ☐ Employed/self employed part time  ☐ Not in paid employment/home duties  ☐ Pensioner  ☐ Other  ☐ Doesn’t Apply
9. What is the **highest** level of education YOU have completed? (mark one box)

- [ ] Primary school
- [ ] Technical diploma/certificate
- [ ] Year 7/8
- [ ] Tertiary degree
- [ ] Year 9/10
- [ ] Post graduate degree
- [ ] Year 11/12
- [ ] Other
- [ ] Trade apprenticeship

10. What is your postal code?

---

**Understanding more about your child's development.**

As an **optional** part of this survey we have included an additional questionnaire about your child’s development (yellow pages). This will involve you answering some questions about your child’s development and doing some tasks with your child to answer specific questions. This may take 10-15 minutes to complete. A questionnaire that is appropriate for your child’s age has been attached to this questionnaire and should be returned with the rest of this questionnaire regardless of whether you complete it.

**Thank you for taking part in this project.**

Don't forget:

- Return the signed consent form to the childcare staff, teacher or maternal and child health nurse
- Return the questionnaire to the childcare staff, teacher or maternal and child health nurse

OR

If you do not have time to complete the questionnaire now, post the questionnaire to the City of Wodonga with the supplied Reply Paid envelope.
Focus Group Interview Questions for Parents

The purpose of the focus group is to identify your experiences, feelings and views on:

- The use of the Parents Evaluation of Developmental Status PEDS questionnaire between yourself and your child’s teacher, nurse or carer.
- Resources to identify local health and community services.

1. Discuss any positive outcomes experienced as a result of using the PEDS with your child’s teacher, carer or nurse.

2. Discuss any difficulties you experienced as a result of using the PEDS with your child’s teacher, carer or nurse.

3. Would you be interested in using the PEDS questionnaire in the future?

4. If you were to use the PEDS questionnaire with your child’s teacher, carer or nurse in the future, when do you believe would be the best time to use it?

5. Service Directory
   - How often do you need to find information about local health and community services?
   - What do you believe is the best way to provide information about local health and community services?
Appendix 5 Professional invitation, questionnaire and focus groups

Dear Childcare Worker/Teacher/Maternal and Child Health Nurse/School Nurse

We would like you to take part in a project that is being run by the City of Wodonga and the Centre for Community Health at the Royal Children’s Hospital, Melbourne. The project is known as “A Good Beginning for Young Children and Families”.

The purpose of this project is to improve the early identification, appropriate referral and management of developmental and behavioural concerns in children aged 0-8 years in the City of Wodonga. The project will take place at 11 sites throughout the City of Wodonga, including maternal and child health centres, childcare centres, preschools and primary schools. The project will be piloted for a period of four weeks.

We know that parents who have concerns about their children’s development and behaviour are often right. Early detection and intervention in response to these concerns can lead to better outcomes for children and their families. The Parent Evaluation of Developmental Status (PEDS) is a short questionnaire that has been shown to be useful in finding out these concerns from parents. The questionnaire takes on average about 2 minutes to complete. The “Good Beginning for Young Children and Families” project will find out if the PEDS is useful as a communication tool between professionals such as nurses, child care workers and teachers, and with parents in identifying developmental and behavioural concerns.

If parents have a concern, they may be offered some additional developmental testing for their child by either a maternal and child health nurse or school nurse. This should take about 30 minutes and will involve the child doing a few simple developmental tasks, which will vary depending on the age of the child. These will be fun activities for the child.

The researchers involved in this project are Dr Sharon Goldfeld who is a paediatrician from the Centre for Community Health, Royal Children’s Hospital, specialising in developmental and behavioural paediatrics and Ms Marcia Armstrong, a maternal and child health nurse from the City of Wodonga, who is interested in the best outcomes for young children and families.

You are invited to participate in this research project as a professional associated with the City of Wodonga. This will involve during the four week pilot:

- Recruiting participants for the project by discussing the project and distributing information sheets and consent forms:
  - during key stage visits (12 months and over) at maternal and child health centres
  - during parent teacher interviews
  - during childcare worker interviews
- Issuing the PEDS questionnaire for parents to complete. This form takes only a few minutes to complete.
• Completing and discussing the PEDs Score Form with parents. This may take several minutes, but will enhance and compliment the communication that you are already having with parents at the time.

• Organising additional developmental testing (screening) for children if particular developmental and behavioural concerns are identified. These screenings will be attended by a maternal and child health nurse for children under school age and a school nurse for primary school children. Theses screenings should take approximately 30 minutes to complete.

• In addition to the above, the maternal and child health nurses and the school nurses are requested to perform the additional developmental screening for parents who have concerns regarding their child’s development or behaviour. These screenings will take 30 minutes and the nurses will be reimbursed for their time.

• Providing a copy of the PEDs questionnaire, scoring and interpretation form and results of any additional testing on children participating in the project to Ms Marcia Armstrong at the City of Wodonga. The cost of this will be met by the project.

• Completing a questionnaire and possibly talking to one of the researchers about the usefulness of the PEDs from a professional’s viewpoint.

We hope that by participating in this study, you will have the opportunity to enhance the communication you have with parents in response to their concerns about their child’s development and behaviour and also give you the opportunity to learn more about developmental screening tools. Professionals who have concerns about participating in the study can contact the researchers for further information.

Any information that you give will be treated confidentially. The information collected for this project will be only available to the researchers. Any information that is collected in connection with the project will remain confidential, except as required by law. The information will be destroyed by shredding after 5 years.

The results of this project will be discussed and published as a report and may be presented at conferences or published in a journal. In any publication or discussion, information will be provided in such a way that you cannot be identified. As participants, a copy of the report will be available through the City of Wodonga, and you will be notified its availability.

If you would like any more information Please contact Marcia Armstrong on 02 60 559200 (work) or 0407218294 (mobile).
This page has some important general information about taking part in research studies approved by the Royal Children's Hospital. Details about this study are on the Information Sheet.

Your rights as a Participant are:
1. To choose to take part or not to take part
2. To withdraw from the study at any time
3. To have the study fully explained to you

You should feel free to ask the researchers any questions about the study.

Other information you should know about being part of this study

1. Your answers to the questions on this study will be kept private. This is subject to legal requirements.
2. No information from this study will reveal your identity
3. You should have been told what you need to do for this study, and how long it will take.
4. If you do not wish to take part in this study, this will not affect your relationship with the City or Wodonga or the Royal Children's Hospital.
5. This research project has been approved by the Royal Children's Hospital Ethics in Human Research Committee.

If you have any concerns about the study, and would like to speak to someone independent of the study, please contact The RCH Consumer Liaison, Clinical Support Services Team at the Executive Office. Telephone 03 9345 5676 (Monday to Friday 9am-5pm).

If you would like more information about the study or if you have any questions about the study, the person to contact is:

Name: Ms Marcia Armstrong
Contact telephone: 02 60 559200 (work) or 0407218294 (mobile)
STANDARD INFORMED CONSENT FOR PARTICIPANT TO
PARTICIPATE IN A RESEARCH PROJECT

(Attach to Participant Information Statement)

| Project No | 23032 A |

Title of Project

A Good Beginning for Young Children and Families

Principal Investigator(s)

Dr Sharon Goldfeld, Royal Children’s Hospital
Ms Marcia Armstrong, City of Wodonga

I, ____________________________________________, voluntarily consent to taking part in this research project, which has been explained to me by
Mr / Ms / Dr / Professor ____________________________________________

- I have received a Participant Information Statement to keep and I believe I understand the purpose, extent and possible effects of my involvement
- I understand I have the option to discuss my decision to take part in the project with a family member or friend
- I have had an opportunity to ask questions and I am satisfied with the answers I have received
- I understand that the researcher has agreed not to reveal results of any information involving me, subject to legal requirements
- If information about this project is published or presented in any public form, I understand that the researcher will not reveal my identity
- I understand that if I refuse to consent, or if I withdraw from the study at any time without explanation, this will not affect my access to the best available treatment options and care from Women’s and Children’s Health (The Royal Women's Hospital OR The Royal Children's Hospital).
- I understand I will receive a copy of this consent form.

SIGNATURE ____________________________ Date ____________

I have provided study information to the participant who has signed above, and believe that they understand the purpose, extent and possible effects of their involvement in this study.

RESEARCHER’S SIGNATURE ____________________________ Date ____________

Note: All parties signing the Consent Form must date their own signature.
Dear Preschool teacher/ school teacher/ childcare worker

Please find attached a questionnaire for you to complete after the completion of the four week pilot project.

This questionnaire will help us understand how you found the use of the PEDS in your practice, your referral processes and your thoughts on the Statewide Health Services Directory and the City of Wodonga Services Directory.

Remember any information that you give us will be treated confidentially.

We thank you for your help with this project

Sincerely yours

Marcia Armstrong               Dr Sharon Goldfeld
Project Coordinator          Paediatrician
City of Wodonga               Centre for Community Child health
QUESTIONS ABOUT THE PEDS

1. How many times did you use PEDS over the 4 week project period? ________

Rate your level of confidence:

<table>
<thead>
<tr>
<th></th>
<th>Not confident</th>
<th>Somewhat confident</th>
<th>Confident</th>
<th>Very confident</th>
</tr>
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<tbody>
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<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In evaluating parental concerns using PEDS.</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>3</td>
<td></td>
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<tr>
<td>In “scoring” parental concerns using PEDS.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>4</td>
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<tr>
<td>In identifying appropriate management pathways using PEDS.</td>
<td>☐</td>
<td>☐</td>
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<td>5</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>In discussing the results of the PEDS with parents.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Comments:

6. Outline any positive outcomes experienced as a result of using the PEDS in your service.

7. Was the preparation for using PEDS adequate? ☐ Yes ☐ No

7a. If NO, how you could have been better prepared?

8. How long would you estimate it took you to score each PEDS?__________

9. Did the PEDS process of scoring, discussion and referral take you longer than your usual practice?
   ☐ Yes ☐ No

If YES, please estimate how much longer per child?
10. Where Path B was indicated, did you: (mark one or more boxes)

- Refer all children [ ]
- Refer some children [ ]
- Other (please explain) [ ]

Comments:

11. What percentage of children required a secondary screen? ________ percent

12. How many children did you refer to either the maternal and child health nurse or school nurse? ________

12a. Please comment on this process:

13. Did you use the PEDS for non-English speaking (NESB) parents? [ ] Yes [ ] No

13a. If YES, how satisfied were you with PEDS for NESB parents?

Not at all  A little  Fairly  Very  Extremely

Comments:

13b. If NO, why not?

- No appointments with NESB families [ ]
- Did not consider PEDS appropriate [ ]
- Other (please explain) ______________________ [ ]

Comments:

14. Outline any difficulties you experienced in using the PEDS in your service.

12. Would you be interested in using PEDS in your service in the future?

[ ] Yes  [ ] No

Reasons:
QUESTIONS ABOUT THE SERVICE DIRECTORY

1. Were you aware of the Primary Care Partnership (PCP) statewide directory before the commencement of this project?
   - Yes
   - No

2. Did you use the PCP Statewide Health Services Directory in accessing information for parents?
   - Yes
   - No

3. Was the PCP Statewide Health Services Directory useful (i.e. provide appropriate detail)?
   - very useful
   - moderately useful
   - not useful
   - other (please comment)

4. Did you use the City of Wodonga Service Directory (hard copy) in accessing information for parents about services?
   - Yes
   - No
   - Was City of Wodonga Services Directory useful (i.e. provide appropriate detail)?
     - very useful
     - moderately useful
     - not useful
     - other (please comment)

5. What do you believe would be the best way for service information to be available?
   - Booklet
   - On Line
   - Both

6. Please comment on the information you would require in a service directory.

THANK YOU FOR COMPLETING THE QUESTIONNAIRE.

PLEASE PLACE IT IN THE PROJECT FOLDER FOR MARCIA ARMSTRONG TO COLLECT.
Focus Group Interview Questions for Preschool teacher/school teacher/childcare worker

The purpose of the focus group is to identify your experiences, feelings and views on:
- The use of the PEDS tool in your service, and
- The usefulness of the service directories (PCP state-wide and City of Wodonga) in your practice.

1. Was the preparation and training for using PEDS adequate? If no, how could your preparation and training be improved?

2. How did you find the referral process? Comment on positive and negative aspects.

3. Discuss any positive outcomes experienced as a result of using the PEDS in your service.

4. Discuss any difficulties you experienced as a result of using the PEDS in your service.

5. Would you be interested in using the PEDS in the future?

6. If you were to use the PEDS in the future, when would be the most appropriate time to use it in your service?

7. Service Directory
   a. Did you use the PCP State-wide Health services Directory in accessing information for parents?
   b. Was the PCP State-wide Services Directory useful?
   c. Was the PCP State-wide Services Directory easy to access in your work area when you needed it?
   d. Did you use the City of Wodonga Service Directory (hard copy) in accessing information for parents about services?
   e. Was the City of Wodonga Services Directory useful?
   f. Was the city of Wodonga Services Directory easily accessible in your service?
   g. How often do you believe a hard copy of a local service directory should be updated?
   h. What do you believe would be the best way for service information to be available to you, why?
Dear Maternal and Child Health Nurse

Please find attached a questionnaire for you to complete after the completion of the four week pilot project.

This questionnaire will help us understand how you found the use of the PEDS in your practice, your referral processes and your thoughts on the Statewide Health Services Directory and the City of Wodonga Services Directory.

Remember any information that you give us will be treated confidentially.

We thank you for your help with this project

Sincerely yours

Marcia Armstrong
Project Coordinator
City of Wodonga

Dr Sharon Goldfeld
Paediatrician
Centre for Community Child health

GOOD BEGINNINGS FOR YOUNG CHILDREN AND FAMILIES PROJECT

GOOD BEGINNINGS FOR YOUNG CHILDREN AND FAMILIES PROJECT
QUESTIONS ABOUT THE PEDS

1. How many times did you use PEDS over the 4 week project period? ________

Rate your level of confidence:

2. In evaluating parental concerns using PEDS. Not confident Somewhat confident Confident Very confident

3. In “scoring” parental concerns using PEDS. 

4. In identifying appropriate management pathways using PEDS. 

5. In discussing the results of the PEDS with parents. 

Comments:

6. Outline any positive outcomes experienced as a result of using the PEDS in your practice.

7. Was the preparation for using PEDS adequate? ☐ Yes ☐ No

7a. If NO, how you could have been better prepared?

8. How long would you estimate it took you to score each PEDS?__________

9. Did the PEDS process of scoring, discussion and referral take you longer than your usual practice? 

☐ Yes ☐ No

If YES, please estimate how much longer per child?________________
10. Where Path B was indicated, did you: (mark one or more boxes)

- Refer all children
- Refer some children
- Do a hearing test yourself, if indicated
- Do a full developmental screening (eg Brigance) yourself, if indicated
- Other (please explain)

Comments:

11. What percentage of children required a secondary screen? __________ percent

11a. How long did each of these take you to complete? _______________________

12. How many referrals from child care centres did you receive? ________

12a. Please comment on this process:

13. Did you use the PEDS for non-English speaking (NESB) parents? ☐Yes ☐No

13a. If YES, how satisfied were you with PEDS for NESB parents?

☐ ☐ ☐ ☐ ☐ ☐
Not at all A little Fairly Very Extremely

Comments:

13b. If NO, why not?

☐ No appointments with NESB families
☐ Did not consider PEDS appropriate
☐ Other (please explain) ___________________

Comments:

14. Outline any difficulties you experienced in using the PEDS in your practice.

12. Would you be interested in using PEDS in your practice in the future?

☐ Yes ☐ No

Reasons:
QUESTIONS ABOUT THE SERVICE DIRECTORY

1. Were you aware of the Primary Care Partnership (PCP) statewide directory before the commencement of this project?
   - [ ] Yes
   - [ ] No

2. Did you use the PCP Statewide Health Services Directory in accessing information for parents?
   - [ ] Yes
   - [ ] No

3. Was the PCP Statewide Health Services Directory useful (i.e. provide appropriate detail)?
   - [ ] very useful
   - [ ] moderately useful
   - [ ] not useful
   - [ ] other (please comment)

4. Did you use the City of Wodonga Service Directory (hard copy) in accessing information for parents about services?
   - [ ] Yes
   - [ ] No

5. Was City of Wodonga Services Directory useful (i.e. provide appropriate detail)?
   - [ ] very useful
   - [ ] moderately useful
   - [ ] not useful
   - [ ] other (please comment)

6. What do you believe would be the best way for service information to be available?
   - [ ] Booklet
   - [ ] On Line
   - [ ] Both

7. Please comment on the information you would require in a service directory.

THANK YOU FOR COMPLETING THE QUESTIONNAIRE.

PLEASE PLACE IT IN THE PROJECT FOLDER FOR MARCIA ARMSTRONG TO COLLECT.
Focus Group Interview Questions for Maternal and Child Health Nurses

The purpose of the focus group is to identify your experiences, feelings and views on:

- The use of the PEDS tool and the “BRIGANCE” screen in your service, and
- The usefulness of the service directories (PCP state-wide and City of Wodonga) in your practice.

1. Was the preparation and training for using PEDS and the BRIGANCE screen adequate? If no, how could your preparation and training be improved?

2. How long did it take you to complete the “BRIGANCE” secondary screen? Comment on the “BRIGANCE” screen.

How did you find the referral process? Comment on positive and negative aspects.

Discuss any positive outcomes experienced as a result of using the PEDS and the “BRIGANCE” screen in your service.

Discuss any difficulties you experienced as a result of using the PEDS and the “BRIGANCE” screen in your service.

Would you be interested in using the PEDS and the “BRIGANCE” screen in the future?

If you were to use the PEDS and the BRIGANCE screen in the future, when would be the most appropriate time to use it in your service?

Service Directory

Did you use the PCP State-wide Health services Directory in accessing information for parents?

Was the PCP State-wide Services Directory useful?

Was the PCP State-wide Services Directory easy to access in your work area?

Did you use the City of Wodonga Service Directory (hard copy) in accessing information for parents about services?

Was the City of Wodonga Services Directory useful?

Was the City of Wodonga Services Directory easily accessible in your work area?

- How often do you believe a hard copy of a local service directory should be updated?
- What do you believe would be the best way for service information to be available to you? Why?
- Any other comments regarding service directories
Dear Primary School Nurse

Please find attached a questionnaire for you to complete after the completion of the four week pilot project.

This questionnaire will help us understand how you found the use of the PEDS in your practice, your referral processes and your thoughts on the Statewide Health Services Directory and the City of Wodonga Services Directory.

Remember any information that you give us will be treated confidentially.

We thank you for your help with this project

Sincerely yours

Marcia Armstrong          Dr Sharon Goldfeld
Project Coordinator      Paediatrician
City of Wodonga          Centre for Community Child health
Wodonga Good Beginning for Young Children and Families Project
Primary School Nurse Evaluation

QUESTIONS ABOUT THE PEDS

1. How many times did you use Peds over the 4 week project period? _______

Rate your level of confidence:

- Not confident
- Somewhat confident
- Confident
- Very confident

2. In evaluating parental concerns using Peds.

3. In “scoring” parental concerns using Peds.

4. In identifying appropriate management pathways using Peds.

5. In discussing the results of the Peds with parents.

Comments:

6. Outline any positive outcomes experienced as a result of using the PEDS in your practice.

7. Was the preparation for using Peds adequate? □ Yes □ No

7a. If NO, how you could have been better prepared?
8. Where Path B was indicated, did you: (mark one or more boxes)

- Refer all children ☐
- Refer some children ☐
- Do a hearing test yourself, if indicated ☐
- Do a full developmental screening (eg Brigance) yourself, if indicated ☐
- Other (please explain) ☐

Comments:

9. What percentage of children required a secondary screen? __________percent

9a. How long did each of these take you to complete? _________________________

10. How many referrals from primary teachers did you receive? _______

10a. Please comment on this process:

11. Did you use the PEDS for non-English speaking (NESB) parents? ☐Yes ☐No

11a. If YES, how satisfied were you with PEDS for NESB parents?

☐ ☐ ☐ ☐ ☐ ☐
Not at all A little Fairly Very Extremely

Comments:

11b. If NO, why not?

☐ No appointments with NESB families
☐ Did not consider PEDS appropriate
☐ Other (please explain) ____________________

Comments:

12. Outline any difficulties you experienced in using the PEDS in your practice.

13. Would you be interested in using PEDS in your practice in the future?

☐ Yes ☐ No

Reasons:
QUESTIONS ABOUT THE SERVICE DIRECTORY

1. Were you aware of the Primary Care Partnership (PCP) statewide directory before the commencement of this project?
   - [ ] Yes
   - [ ] No

2. Did you use the PCP Statewide Health Services Directory in accessing information for parents?
   - [ ] Yes
   - [ ] No

3. Was the PCP Statewide Health Services Directory useful (i.e. provide appropriate detail)?
   - [ ] very useful
   - [ ] moderately useful
   - [ ] not useful
   - [ ] other (please comment)

4. Did you use the City of Wodonga Service Directory (hard copy) in accessing information for parents about services?
   - [ ] Yes
   - [ ] No

5. Was City of Wodonga Services Directory useful (i.e. provide appropriate detail)?
   - [ ] very useful
   - [ ] moderately useful
   - [ ] not useful
   - [ ] other (please comment)

6. What do you believe would be the best way for service information to be available?
   - [ ] Booklet
   - [ ] On Line
   - [ ] Both

7. Please comment on the information you would require in a service directory.

THANK YOU FOR COMPLETING THE QUESTIONNAIRE.

PLEASE PLACE IT IN THE PROJECT FOLDER FOR MARCIA ARMSTRONG TO COLLECT.
Focus Group Interview Questions for Primary School Nurses

The purpose of the focus group is to identify your experiences, feelings and views on:

- The use of the PEDS tool and the “BRIGANCE” screen in your service, and
- The usefulness of the service directories (PCP state-wide and City of Wodonga) in your practice.

8. Was the preparation and training for using PEDS and the BRIGANCE screen adequate? If no, how could your preparation and training be improved?

9. How long did it take you to complete the “BRIGANCE” secondary screen? Comment on the “BRIGANCE” screen,

10. Discuss any positive outcomes experienced as a result of using the PEDS and the “BRIGANCE” screen in your service. Was it useful? In what way was it useful?

11. Discuss any difficulties you experienced as a result of using the PEDS and the “BRIGANCE” screen in your service. Why were there difficulties?

12. Would you be interested in using the PEDS and the “BRIGANCE” screen in the future?

13. If you were to use the PEDS in the future, when would be the most appropriate time to use it in your service?

14. Service Directory
   - Did you use the PCP State-wide Health services Directory in accessing information for parents?
   - Was the PCP State-wide Services Directory useful?
   - Was the PCP State-wide Services Directory easy to access in your area of work?
   - Did you use the City of Wodonga Service Directory (hard copy) in accessing information for parents about services?
   - Was the City of Wodonga Services Directory useful?
   - Was the city of Wodonga Services Directory easily accessible in your area of work?
   - How often do you believe a hard copy of a local service directory should be updated?
   - What do you believe would be the best way for service information to be available to you? Why?
   - Any other comments regarding service directories
### ETHICS IN HUMAN RESEARCH COMMITTEE APPROVAL

<table>
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<th>23032 A</th>
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<tr>
<td>PROJECT TITLE:</td>
<td>A good beginning for young children and families - a feasibility study to pilot the effectiveness of a community based child development screening and communication tool</td>
</tr>
<tr>
<td>Date of Parent/Participant Information Statements and Consent Form:</td>
<td>P/GIS and Consent v3 dated 2 Jun 2003, Questionaire dated 2 Jun 2003</td>
</tr>
<tr>
<td>INVESTIGATOR(S):</td>
<td>S Goldfeld, M Armstrong</td>
</tr>
<tr>
<td>DATE OF ORIGINAL APPROVAL:</td>
<td>12 June 2003</td>
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<tr>
<td>DURATION:</td>
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**SIGNED:**

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<tr>
<td>COMMITTEE REPRESENTATIVE</td>
<td>17/6/03</td>
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### APPROVED SUBJECT TO THE FOLLOWING CONDITIONS:

**ALL PROJECTS**

1. Any proposed change in protocol and the reasons for that change, together with an indication of ethical implications (if any), must be submitted to the Ethics in Human Research Committee for approval.

2. The Principal Investigator must notify the Secretary of the Ethics in Human Research Committee of:
   - Actual starting date of project.
   - Any adverse effects of the study on participants and steps taken to deal with them.
   - Any unforeseen events.

3. A progress report must be submitted annually and at the conclusion of the project, with special emphasis on ethical matters.

**DRUG TRIALS**

4. The investigators must maintain all records relating to the study for a period of 23 years.

5. The investigator(s) must report to the Sponsor and the Ethics in Human Research Committee within 24 hours of becoming aware of any serious adverse event experienced by any subject during the trial.

6. The investigators must ensure that all externally sponsored Clinical Drug Studies have insurance coverage that is current for the entirety of the study.
GOOD BEGINNINGS FOR YOUNG CHILDREN AND FAMILIES PROJECT

Appendix 7 Referral form

CHILDREN SERVICES
REFERRAL FORM
A good beginning for young children
and families in Wodonga

No. 0052

FROM:
Name: ___________________________ Date: _______
Shire: ___________________________
Address: _________________________ Postcode: _______
Phone: __________________________

CLIENT:
Parent/Guardian: ___________________________ Birth Date: _______
Address: ___________________________ Postcode: _______
Phone: __________________________
Parent/Guardian signature giving consent for Referral:

TO:
Address: ___________________________ Postcode: _______
Phone: __________________________

REASON FOR REFERRAL:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
I would appreciate a note concerning your findings.
Please return pink copy to address above.
Signed: __________________________

REFERRAL OUTCOME:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Signed: __________________________

Legend: White – Referral Copy
Pink – Referral outcome copy - return to Sender
Yellow – Centre Copy