"The gap between what we know and what we don’t know is much less than the gap between what we know and what we do”
Don Berwick

“Six Week Baby Check in General Practice” Project

A conjoint approach to quality assurance of child health screening, surveillance and health promotion in Irish general practice, supported by the Health Service Executive West (Donegal, Sligo, Leitrim & West Cavan), the Irish College of General Practitioners (ICGP) and Best Health for Children (BHFC) / Programme of Action for Children (PAC)

March 2006
“Six Week Baby Check in General Practice” Project

Health Service Executive West (Donegal, Sligo, Leitrim & West Cavan)

Best Health for Children / Programme of Action for Children and

Irish College of General Practitioners

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March 2006
Foreword

The check that babies are offered at 6 weeks of age is a key part of an evidence based child health surveillance and screening service, and is a routine part of the work of most General Practitioners. However, up until now there has been little opportunity to look at the quality of this service.

This project represents a very important and innovative approach to improving the quality of services provided to parents and children.

It demonstrates how primary care plays a central part in child health surveillance and shows how evidence may be translated into practice and result in greater satisfaction for parents and better outcomes for children.

It also shows how improvements can be made in services that, although ‘low tech’ and routine, have real potential in terms of not only detecting problems at an early stage but also providing opportunities for promoting health.

This project was only possible because of the close working between the Irish College of General Practitioners and the Health Service Executive through the Programme of Action for Children. It demonstrates the potential of such collaborations for improving the service professionals are able to give, by both involving them directly and supporting them through training.

On behalf of the project steering group, we would like to thank all those involved in the project, and in particular the parents and babies, the General Practitioners and their teams who made it such a success.

The challenge now will be to ensure that all babies and their parents can receive a service of this quality. This project will certainly have played a key point in achieving this.

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This report should be quoted as: McBride L, McMaster C. Six Week Baby Check in General Practice Project. Health Service Executive West; Ireland: 2006.
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Executive Summary

Introduction

All children in Ireland have the right to access a national programme of core health services, which aims to identify health problems early, offer effective interventions and provide support to families in helping their children to achieve the best possible level of health and well being.

An evidence based framework for the equitable delivery of integrated and child centred health services is contained in the strategic report Best Health for Children – Developing a Partnership with Families, 1999 and its recent review Best Health for Children Revisited, 2005. Both emphasise the importance of universally accessible services for all children and families, provided by primary and community care based practitioners, who work in multi-disciplinary teams against a background of professional training and local knowledge.

The primary care strategy Primary Care – A New Direction, 2001 provides a blueprint to develop primary care teams as a cornerstone of modern health service delivery. There is potential for an extended role of primary care in child health screening, surveillance, health promotion and family support, which is supported by evidence for the effectiveness of such services being provided in primary care.

In this context, the Health Service Executive West (Donegal, Sligo, Leitrim and West Cavan) in co-operation with the Irish College of General Practitioners (ICGP) and the Programme of Action for Children (PAC) presents in this report the findings of a project to develop a new model for the 6 week baby check under the statutory Maternity and Infant Care scheme (MIS) as part of the national core child health programme.

Aims and objectives

Regardless of universal entitlement to this service, uptake rates throughout the country vary widely, and there are currently no effective mechanisms to monitor service delivery, performance and outcomes. This project provides an explicit standard in line with currently available evidence and best practice regarding:

- Clinical content,
- Health promotion and family support,
- Staff training,
- Data collection, analysis, integration and sharing and
- Service monitoring.

It is based on an assessment of existing practice in consultation with service users and providers.

Project methodology

Fifteen GPs and nine Practice Nurses from nine primary care practices in HSE West (Donegal, Sligo, Leitrim and West Cavan) participated in the project.

Following a skills update training module, they assessed 284 babies in accordance with the new model between November 2004 and August 2005. Data were collected electronically with software developed for the project and analysed both by HSE West (Donegal, Sligo, Leitrim and West Cavan) and the Independent National Data Centre at the ICGP.

The project was funded by Regional Children’s Services and developed in co-operation with Management Services in HSE West (Donegal, Sligo, Leitrim and West Cavan) and the Independent National Data Centre at the ICGP.

The project was supported by a GP project officer employed by the ICGP and funded by HSE. A multidisciplinary regional steering group advised on the development, delivery and evaluation of the project, which was overseen by a project board.
Assessment of existing practice

Estimated uptake rates for the MIS and 6 week baby check are very high in HSE West (Donegal, Sligo, Leitrim and West Cavan) at 90 - 100% amongst practices participating in the project. In a predominantly rural area with remote access to secondary care provision, the model of shared antenatal care is strong, leading to higher levels of awareness that postnatal care is also available in primary care.

“The Doctor and the Public Health Nurse reminded you that you had to go for the 6 week check, which I thought was very good, because you could easily forget.”

While not familiar with the actual MIS, most mothers were informed that the check was free.

“I wasn’t told about it, but I heard it that it was free.”

“I had never been told, nobody discussed it to say what should or shouldn’t happen at it. To a certain extent, I would feel even now, I’m not really sure what should have taken place.”

“Basically the way I see it, it’s just a way of getting the baby weighed to see how he’s doing over the first couple of weeks. Any queries that you might have are cleared up, basically an introduction to the GP for the baby.”

Prior to the project, primary care providers appreciated the importance of the 6 week baby check, but expressed concern about inadequate structures and processes underpinning its delivery and evaluation:

- Inadequate standardisation of 6 week baby check content
- Restricted access to secondary referral services for children
- Anachronistic data collection processes (only two of 15 GPs participating in the project used the ‘white card’ for shared care; all expressed dissatisfaction with lack of feedback from HSE)
- Insufficient links between primary and community care based service providers, i.e. Public Health Nurses, GPs and Practice Nurses (despite high regional levels of postnatal Public Health Nurse visiting of mothers and babies)
- Need to renegotiate MIS and GP contract

There was wide variation regarding:

- Length of time for 6 week baby check (10 - 30 minutes)
- Levels of Practice Nurse involvement
- Combining 6 week baby check with baby’s primary immunisations or postnatal check of mother
Recruitment of General Practitioners and Practice Nurses

Participation in the project was offered to all GPs on ICGP and HSE West (Donegal, Sligo, Leitrim and West Cavan) databases. Practices needed to be part of the secure primary care HSE e-mail network and computerised, using one of the two main GP software providers in HSE West (Donegal, Sligo, Leitrim and West Cavan).

Participation in the project was restricted to no more than three GPs from any group practice and attracted a fee of €400 per GP. In addition to the existing MIS fee of €29.74, GPs received €40 for each baby assessed in accordance with the new model for the 6 week baby check.

These arrangements were agreed by the participants for the purpose of this project only and without prejudice to the future position of any of the parties in MIS fee negotiations.

Training module

All GPs and Practice Nurses participating in the project undertook a multidisciplinary skills update course designed and delivered as part of the project. This was approved both by the ICGP and An Bord Altranais. It consisted of training in relevant aspects of child health examination, health promotion and data management.

Data collection

A set of data to be collected by primary care providers at the 6 week baby check was agreed between steering group, HSE, ICGP and software vendors. Analysis of non-anonymised data was undertaken by HSE and INDC received anonymised data for service monitoring purposes.

A service user information leaflet was designed to fulfil informed consent requirements and received approval from the Office of the Data Protection Commissioner.

One out of 14 GPs providing feedback experienced problems with use of the programme, three expressed concern about content, four felt that the data set was lengthy and all experienced problems with the secure HSE e-mail connection for data transfer.

Results

- 35% of mothers held a medical card
- 31% of mothers’ marital status was ‘single’
- 3% of births were to mothers aged 19 years or younger
- 95% of mother recalled having received a visit from their Public Health Nurse
- 15% of babies seen for the 6 week baby check were breastfed (GMS 5%, non GMS 21%)
- 20% of mothers said they had smoked during pregnancy (GMS 37%, non GMS 12%)
- 24% of babies were exposed to Environmental Tobacco Smoke (ETS) when attending for 6 week baby check, according to their mothers (GMS 38%, non GMS 17%)
- 80% of babies were living in households with two parents
Feedback from parents and professionals

57 mothers were sent an evaluation questionnaire, and 27 (47.3%) replied.

- Only four mothers recalled having received the information leaflet.
- 26 mothers agreed or strongly agreed that:
  - they were satisfied with the examination of the baby,
  - they felt comfortable asking questions of health professionals during the 6 week check and
  - enough time had been given to the check.

“They were satisfied with the examination of the baby, they felt comfortable asking questions of health professionals during the 6 week check and enough time had been given to the check.”

Suggestions from parents:

- Invitation for 6 week baby check via appointment card
- Provision of more information, including leaflets, about 6 week baby check
- Attention to mothers’ wellbeing

Thirteen out of 15 GPs returned a completed evaluation questionnaire.

- Time taken to complete check had increased to 20-30 minutes
- Eleven of 13 GPs were involving their Practice Nurse, compared to eight of 14 prior to the project.

“Very thorough and not rushed. Time was taken and everything was covered.”

Suggestions from professionals:

- Five GPs combined the 6 week baby check with giving primary immunisations, experienced as particularly stressful by mothers.
- Ten GPs reported a change in their approach to health promotion.

“More time spent discussing safety, accident prevention, feeding and recognising illness”

- Six GPs changed the content of their clinical examination of babies as a result of the project.

“Parents seemed to feel that they had more opportunity to ask questions and were impressed by the detail of the examination”

- Eleven GPs favoured continuation and national dissemination of the project.

“Caused us to focus and involve other staff”

- Contrary to recommendations for good clinical practice, only two of 13 GPs carried out baby checks at 6 weeks of age at the end of the project, compared to seven of 14 prior to the project.
Recommendations

- To include new model for 6 week baby check in national GP contract renegotiations
- To encourage access of all children and families to the 6 week baby check in primary care

"we felt it was better to have a 6 week check with our own GP rather than waste time at the hospital with a stranger"

"introduce our baby to our family doctor"

- To facilitate feedback on health behaviours of practice populations to primary care providers
- To provide multidisciplinary training of primary care providers in child health
- To assess the performance and impact of child health service provision through research, monitoring, evaluation and feedback
- To disseminate information for parents on the 6 week baby check through national introduction of the parent held Personal Health Record (PHR)
- To further integration and sharing of child health data between different disciplines and agencies providing services for children
- To introduce comprehensive patient registration
1. Introduction
1.1 Background

In 1996, a national review of child health services for the 0 - 12 year age group in the Republic of Ireland (ROI) was commissioned. The findings and recommendations resulting from this comprehensive process were published in 1999 in a strategic report called Best Health for Children-Developing a Partnership with Families, 1999 (BHFC). A national project team was established in 2000 to drive the implementation of the report's recommendations. BHFC became a national programme under the umbrella of the Health Board Executive (HeBE) and was given an extended role in the development of a national service framework for integrated children's services, the Programme of Action for Children (PAC).

The BHFC report, endorsed in the National Health Strategy Quality and Fairness – A Health System for You in 2001, is based on an assessment of existing child health service provision. Its recommendations for best practice in a national statutory core child health programme are drawn from international research based evidence and consultation with service users and providers in ROI, underpinned by the principles of quality assurance through standardisation of service provision, training of staff, information management, improved communication and accountability. There is an emphasis on partnership with parents, equity and the importance of moving to a child centred model of service provision. In line with the developmental nature of evidence based practice, the national core child health programme as outlined in BHFC was reviewed recently (Best Health for Children Revisited, 2005), and its recommendations are reflected in the new model for the 6 week baby check reported here.

The Primary Care Strategy Primary Care – A New Direction, published in conjunction with the National Health Strategy, underlines the importance of primary care as a cornerstone of modern health services, not just in the areas of diagnosis and treatment, but also in relation to prevention and health promotion. There is the potential for an extended role in child health surveillance, supported by a framework for quality assurance. Better links between primary and secondary care, as well as improved team working at primary care level through joint training and education of professionals, need to be developed. The existing unique position of Irish general practice to provide locally accessible services in the context of long term relationships and continuity of care is acknowledged.

1.2 Current practice

The Maternity and Infant Care Scheme (MIS) provides for free antenatal, intrapartum and postnatal care for mothers and their children up to 6 weeks after birth. It is available to all women on application to health boards and is delivered in the form of eight general practice assessments, mostly through a model of shared care with hospital maternity units.

The agreement between the Department of Health and Children (DoHC) and the Irish Medical Organisation (IMO) in respect of the MIS, Appendix 1, November 1999, describes the 6 week postnatal visit as an opportunity to review the general health of the baby, to conduct a developmental examination, to review feeding practice and overall management of the baby and to finalise immunisation plans. GPs are requested to forward health information concerning the baby (e.g. centile measurements, developmental status and information on any abnormalities) to the Senior Area Medical Officer (SAMO) of the health board, but recorded on the combined care card are only the weight of the baby at the time of the 6 week visit, the birth weight, outcome of delivery and type of feeding.

BHFC recommends the examination of all infants at the age of 6 to 8 weeks and the development of a standard set of data to be recorded on each child at the time of that examination. The report notes the currently low uptake rate of the MIS throughout the country at 54% and the lack of standardisation of the 6 to 8 week infant examination, which is presently provided in four alternative ways:
GPs contracted under the MIS,
GPs contracted privately,
Paediatricians contracted privately and
Maternity hospitals.

A community based prospective study of 463 mothers in the North Eastern Health Board (NEHB) area during 2002 found high overall uptake rates for the 6 week postnatal examination of 89% for mothers and 97% for their children, respectively.

77% of women had attended shared antenatal care involving GPs, but only 26% of women and 55% of infants attended a GP for the 6 week postnatal examination. The study underlined the potential of the 6 week postnatal examination in general practice for establishing a relationship with mother and baby, as well as providing support and health promotion advice. It called for adequate remuneration of such service provision in general practice to support a shift from secondary to primary care. 7

The counties Donegal, Sligo, Leitrim and a small section of West Cavan in the HSE West area have a population of 221,336 according to the 2002 census. The North West has high levels of deprivation and the highest dependency ratio of all health boards in the country. Approximately 45% of the population are medical cardholders, compared to an average of 30% in the remainder of ROI. In 2002, there were 118 GPs holding a GMS contract, working in 76 GMS practices, and a number of private GPs. The number of births to mothers resident in the region is approximately 2,800 annually. In 2002, 3,281 contracts under the MIS were signed, indicating a very high uptake of antenatal and postnatal care offered in general practice.

With existing data information systems, it is currently not possible to ascertain uptake figures for the 6 to 8 week postnatal examination in general practice, other than at the level of individual practices. Valuable information on health status of infants remains unutilised, and there is no process to measure outcomes. In the absence of a quality assurance system, it is difficult to assess the level of service provision, its standard, resources required, service user satisfaction and outcomes.

These information gaps also currently exist in many parts of ROI in relation to the remainder of statutory child health screening, surveillance and health promotion services. With DoHC funding, HSE West (Clare, Tipperary & Limerick) have in consultation with parents and service providers developed and implemented a parent held Personal Child Health Record (PHR), in which all assessments of children recommended by the national core child health programme are recorded. Data are electronically collected and analysed, giving a picture of the health history of individual children, while also describing uptake of and outcomes from the universal child health programme, as well as generating performance indicator and service activity data. A unique opportunity exists to integrate data collection from the 6 week baby check in general practice with the data processed by the PHR IT support system. 8

This project provides the tools to realise this potential, pending national dissemination of the PHR, which requires resources and a mandate both at regional and national levels.

1.3 Evidence for the 6 to 8 week examination of infants

There is evidence for the positive effect of good universal primary health care provision on child and population health outcomes. Content and timing of child health screening and surveillance programmes have been increasingly subjected to scrutiny, and evidence from international research supports a shift in focus from clinical examination at regular intervals to health education, health promotion and support for parents. An examination of infants at the age of approximately two months is considered useful, with a smaller yield than the neonatal examination, but one that is still significant. GPs have been found effective in detecting key physical abnormalities in preschool children in the context of child health surveillance and screening programmes. 13

While the usefulness of the 6 week postnatal check in its current form has been questioned in relation to women, the examination of all babies by the age of 8 weeks is supported by evidence
from research as outlined below. There is little evidence for or against physical examinations for screening purposes beyond this age.13

Developmental assessment. The first edition of Health for All Children emphasised the value of parental observation in identifying areas of concern regarding the developmental progress of children.14 This is acknowledged in the broader concept of developmental surveillance, described as a flexible and continuous process, which considers the developmental history, monitors progress and attends to parental observations within the context of children’s overall wellbeing.1

When examining infants at 6 to 8 weeks of age, there are no definitive tests to be carried out, other than an assessment of tone and observation of spontaneous movements.

Vision. The baby should show a range of behaviours, including smiling and visual following. The red reflex needs to be elicited to confirm the absence of cataracts and to examine for retinoblastoma.

Congenital heart disease. Early detection is desirable to avoid children presenting with acute heart failure or with irreversible haemodynamic changes secondary to undiagnosed congenital cardiac malformations. These might predispose to endocarditis if antibiotic prophylaxis is not prescribed during invasive procedures.15 Most cases present shortly after birth, but some conditions like small ventriculoatrial defect (VSD), atrioventricular defect (ASD) or coarctation of the aorta may not present until later and might be more easily detected at 6 to 8 weeks of age. Routine cardiovascular examination as part of a screening programme for all infants is therefore indicated, including history, observation and palpation of femoral pulses.

Testicular descent. Incomplete or abnormal testicular descent is a common problem in infant boys - approximately 6% are affected at birth. In the majority of these children, testicular descent is complete by 3 months of age. Children born prematurely (<37 gestation) might experience spontaneous testicular descent until the age of 6 months. Thereafter, spontaneous resolution of the problem is very unlikely. It is therefore necessary to screen all boys at birth and at 6 to 8 weeks of age.16 Children with abnormal findings are referred to a surgeon with appropriate skills before the child reaches one year of age to undergo surgery during their second year to avoid damage to the undescended testes and fertility problems.13

Developmental dysplasia of the hip (DDH). This term is now preferred to “congenital dislocation of the hip”, as it covers a broader range of conditions affecting the stability of the hip joint. The aim of a screening programme is early identification of children at risk of hip dislocation in order to commence treatment. Both ultrasound imaging and clinical examination as primary screening procedures produce a significant number of false negative results and have not been shown conclusively to reduce the number of children requiring surgery. There are also high numbers of false positive results, leading to unnecessary referral, investigation and conservative treatment with abduction splinting.17 The main means of finding late or missed cases is detection of limited abduction and asymmetric skin creases after the neonatal period;16 but these findings are unspecific. Occasionally, children present more after they learn to walk with a waddling gait.

Although the evidence supporting clinical examination of infants at 6 to 8 weeks of age as part of a screening programme for DDH is insufficient, this might be the only opportunity for detection of presymptomatic cases and should therefore be included in the 6 to 8 week check.13

Growth monitoring. The potential benefits of growth monitoring are identification of chronic disorders, reassurance to parents, and generation of epidemiological data for public health purposes and research.18 Growth during infancy is measurable in weight, length and head circumference. It is recommended that children should be weighed at birth, at immunisations and during child health surveillance checks.18 Accurate technique is required to obtain reliable results, identifying those children who require further monitoring and intervention. There is a need to provide adequate training in measurement technique, use of growth charts and criteria for referral to those involved in growth monitoring of children.
Parental concerns. These always need to be taken into consideration, as parental observation has been shown to be as effective as assessment by health professionals in detecting problems in many areas of child health and development.1,11

Table 1  Recommended content of 6 to 8 week examination of infants

<table>
<thead>
<tr>
<th>Item</th>
<th>Examination (including history and parental concern)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development</td>
<td>Tone and movements, smiling</td>
</tr>
<tr>
<td>Vision</td>
<td>Visual behaviour, history, red reflex</td>
</tr>
<tr>
<td>Hearing</td>
<td>“Can your baby hear you?”</td>
</tr>
<tr>
<td>Cardiovascular system</td>
<td>Colour, respirations, heart sounds, femoral pulses</td>
</tr>
<tr>
<td>DDH</td>
<td>Skinfold symmetry, range of movement, Ortolani &amp; Barlow test, Galeazzi sign, leg length</td>
</tr>
<tr>
<td>Testicular descent</td>
<td>Clinical examination</td>
</tr>
<tr>
<td>Growth monitoring</td>
<td>Weight (record on centile chart); head circumference and length only if clinically indicated</td>
</tr>
<tr>
<td>Health promotion</td>
<td>Immunisation, nutrition, parental smoking, sudden unexpected death in infants (SUDI), unintentional injury prevention, recognition of illness</td>
</tr>
</tbody>
</table>

1.4 Project rationale

Although there are limitations to clinical examination of infants as a screening tool in the context of the 6 to 8 week postnatal examination, it may be the only opportunity to detect conditions listed above for early and effective intervention.15 The quality of a screening programme as described here depends on the context of an adequate early detection programme or system to support it.13 This should include:

- Clear examination protocols
- Appropriate staff training
- Clear referral criteria and pathways
- Standardised follow-up procedures
- Good communication between service users and professionals in primary and secondary care settings
- Clear documentation of clinical findings and outcome measures
- Strategies to reach children from marginalised groups
The Irish setting differs from the situation in other countries with universal free access to primary care, making the provision of a standardised and quality assured child health surveillance and screening programme a higher priority. GPs in ROI work in close proximity to the communities they serve. This gives them unique insight into the social, economic and political context of child health issues at a local level and offers equal access opportunities, which are currently restricted by the two tier system in Irish health services.

The provision of antenatal and postnatal care in conjunction with child health services offers an opportunity to develop a relationship between a family and their GP, on which to base the practice of family medicine. Prevention and health promotion are to become an increasingly important part of primary care provision, and it is therefore necessary and appropriate to augment GPs’ role in the delivery of child health programmes.

Quality assurance through evidence based practice, staff training, improved communication, service monitoring, outcome measurement and accountability underpin the vision for child health outlined in BHFC. There is a need for more integration of child health services to develop child and family centred models of service provision. This will lead to improved outcomes and better use of resources. HSE West (Donegal, Sligo, Leitrim & West Cavan), the ICGP and BHFC/ PAC recognise the importance of Irish general practice in this regard. Interagency partnerships developed through this project can support increased co-operation of service providers to achieve better child health outcomes.
2. Aims and Objectives
2.1 Project aim

- To standardise and improve existing service provision under the MIS for examination of babies aged 6 to 8 weeks in general practice in line with BHFC recommendations and evidence for best practice.

2.2 Project objectives

- To provide an assessment of existing practice.
- To develop, test and implement a standard for best practice in consultation with service providers and service users.
- To develop, test and implement processes for improved communication between service providers and service users.
- To develop, test and implement data collection and analysis mechanisms for monitoring, review and audit purposes.
- To inform developments at national level in the area of child health and child care information technology.
- To facilitate the development of data sharing protocols.
- To develop and test a training programme for primary care practitioners delivering child health services at the 6 to 8 week examination of infants.
- To provide a written evaluation of the project.
- To commence the development of structures and processes for conjoint working between HSE, primary care providers, the ICGP and PAC in the area of child health.
- To disseminate and implement recommendations from the project through educational and service development frameworks.
- To support renegotiation of the GP contract at national level.
3. Project Methodology
3.1 Project plan

Phases 1 and 2 of the project (November 2003-November 2005) addressed the development and testing of an improved model for best practice in the general practice setting of HSE West (Donegal, Sligo, Leitrim & West Cavan), supported by a project officer working under the direction of a multidisciplinary regional steering group.

Phases 3 and 4 deal with the development and utilisation of regional and national frameworks to disseminate the outputs of the project. This process is overseen by a project management team, initially with representation from HSE and the ICGP, but also requiring involvement of stakeholders from the area of industrial relations in the context of national renegotiation of the GP and MIS contracts.

See Appendix A for full project plan.

3.2 Roles and responsibilities

Role of management team
- To monitor implementation of project plan in accordance with proposed time and financial allocation
- To oversee work of steering group and project officer
- To maintain responsibility for decisions on how to deal with risks and opportunities that arise
- To maintain responsibility for any changes that may need to be made to project plan

Steering group membership
- Dr. Michael Boland, ICGP, Dublin
- Dr. Brenda Corcoran, PAC, Dublin (replaced Dr. Ailis Quinlan in June 2004)
- Ms. Josephine Heward, Practice Nurse, Health Centre, Lifford, Co. Donegal (replaced Ms. Ursula Molloy in February 2005)
- Dr. Declan Laffan, General Practitioner, Drumshambo, Co. Leitrim (replaced Dr. Siobhan Tobin in May 2005)
- Ms. Catherine McBride, Assistant Director of Public Health Nursing, HSE West (Donegal, Sligo, Leitrim & West Cavan)
- Dr. Lynne McBride, Project Officer, ICGP, Co. Donegal
- Ms. Maeve McDermott, Cardiovascular Strategy Facilitator, Primary Care Development Unit, HSE West (Donegal, Sligo, Leitrim & West Cavan)
- Dr. Seamus McGuire, Consultant Paediatrician, HSE West (Donegal, Sligo, Leitrim & West Cavan), Letterkenny General Hospital, Co. Donegal
- Dr. Christine McMaster, Regional Child & Adolescent Health Development Officer, HSE West (Donegal, Sligo, Leitrim & West Cavan), Letterkenny, Co. Donegal
- Dr. Philip Murphy, General Practitioner, Bundoran, Co. Donegal (replaced Dr. Majella Grealish in May 2005)
Role of steering group
- To advise on development of approaches to achieving aims and objectives of project
- To explore and make recommendations on ethical and operational issues
- To work with project officer on aspects of project appropriate to individual role and expertise
- To contribute to evaluation of project
- To represent views of and communicate with professional colleagues
- To attend quarterly meetings

Participating GPs
- Dr. Paul Armstrong, Health Centre, Lifford, Co. Donegal
- Dr. John Mark Dick, Health Centre, Skreen, Co. Sligo
- Dr. Majella Grealish, Bayview Practice, Ballyshannon, Co. Donegal
- Dr. Karena Hanley, Health Centre, Rathmullan, Co. Donegal
- Dr. Ciaran Kelly, Health Centre, Lifford, Co. Donegal
- Dr. Raymond Kerr, Bayview Practice, Bundoran, Co. Donegal
- Dr. Declan Loftus, Health Centre, Drumshambo, Co. Leitrim
- Dr. Denis McAuley, Millbrae Surgery, Stranorlar, Co. Donegal
- Dr. Colette McGrory, Health Centre, Lifford, Co. Donegal
- Dr. Diarmuid Mee, Health Centre, Carrigart, Co. Donegal
- Dr. Padraic Mitchell, Millbrae Surgery, Stranorlar, Co. Donegal
- Dr. Philip Murphy, Bayview Practice, Bundoran, Co. Donegal
- Dr. Tommy Nunn, Health Centre, Rathmullan, Co. Donegal
- Dr. John Sheeran, Health Centre, Cloghan, Co. Donegal
- Dr. David Swann, Medical Practice, Riverstown, Co. Sligo

Participating Practice Nurses
- Ms. Tina Bouvard, Practice Nurse, Health Centre, Lifford, Co. Donegal
- Ms. Grace Duffy, Practice Nurse, Health Centre, Carrigart, Co. Donegal
- Ms. Fiona Gibbons, Practice Nurse, Millbrae Surgery, Stranorlar, Co. Donegal
- Ms. Josephine Heward, Practice Nurse, Health Centre, Lifford, Co. Donegal
- Ms. Niamh Kilcullen, Practice Nurse, Health Centre, Skreen, Co. Sligo
- Ms. Eileen McDevitt, Practice Nurse, Health Centre, Rathmullan, Co. Donegal
- Ms. Valerie Quinn, Practice Nurse, Medical Practice, Riverstown, Co. Sligo
- Ms. Elsie Stewart, Practice Nurse, Millbrae Surgery, Stranorlar, Co. Donegal
- Ms. Cathy Taffe, Practice Nurse, Health Centre, Cloghan, Co. Donegal
Role of GPs and Practice Nurses

- To attend skills update day
- To complete 6 week baby check in accordance with new standard model
- To complete IT proforma for 6 week baby check as developed for project and return data to HSE West (Donegal, Sligo, Leitrim & West Cavan) and Independent National Data Centre (INDC) at ICGP on a monthly basis for data analysis and generation of payment
- To communicate to project officer any difficulties arising during participation in project
- To contribute to the evaluation of project

Project officer

Dr. Lynne McBride was employed by the ICGP for the duration of the project for two sessions per week.

Role of project officer

- To work towards achieving objectives of the project by undertaking necessary actions in co-operation with other project participants
- To work under direction of steering group and report to members of project management team

3.3 Project structure
3.4 Project implementation summary

Evidence based clinical standard

Steering group members met in November 2003 for a workshop to discuss the evidence base for the value and content of the 6 week baby check in general practice. This resulted in recommendations for clinical and health promotion content of the new model, on which the development of the training curriculum and data set for collection and analysis were based.

Assessment of existing practice

Consultation with GPs and Practice Nurses took place during January and February 2004 through local ICGP faculty meetings in Donegal and Sligo, as well as a Practice Nurse Association meeting in Donegal. Based on a presentation of the evidence base and steering group recommendations for the clinical standard, variations in existing practice were identified (see Sections 4.2 and 4.3 of this report for details).

Following recruitment of practitioners participating in the project, a more detailed and systematic assessment of existing practice was carried out in form of a questionnaire (see Appendix B), which also served to identify training needs (see Sections 4.1 and 6).

An assessment of service users’ views took place in March 2004 in form of in-depth interviews with 10 mothers from three different practices in Donegal who had recently attended the 6 week baby check with their child. Qualitative analysis showed a high level of service user satisfaction with existing service provision, but a low level of awareness of the purpose and content of the 6 week baby check (see Section 4.4).

Testing of clinical standard

The feasibility of implementing the newly developed clinical standard in the environment of a busy GP surgery was initially tested by the project officer. It emerged that time required for delivery of a comprehensive 6 week baby check required approximately 30 minutes practitioner time.

Recruitment of project practitioners (GPs and Practice Nurses)

This process took place in early summer 2004. All GPs known to be practising in HSE West (Donegal, Sligo, Leitrim & West Cavan) according to ICGP and HSE West (Donegal, Sligo, Leitrim & West Cavan) primary care development unit databases were invited to apply to participate in the project. The format of the application process was based on selection criteria similar to those used in the ICGP ‘HeartWatch’ project and allowed for a transparent and equitable selection process overseen by the steering group (see Appendix C).

Care was taken to recruit a range of practices representative of those in existence in HSE West (Donegal, Sligo, Leitrim & West Cavan), including group and single handed practices in a variety of geographical locations. It was essential that practices used one of two main IT support systems and were electronically linked to HSE West (Donegal, Sligo, Leitrim & West Cavan) via a designated secure e-mail network (see Section 5).

Training needs assessment and curriculum development

In view of training needs identified as part of the assessment of existing practice, a training module was developed and approved by the steering group, based on a manual for good practice compiled by the project officer. With support from clinicians practising in HSE West (Donegal, Sligo, Leitrim & West Cavan) hospitals, a comprehensive skills update session was delivered in early autumn 2004 (see Appendix D). This was approved for professional development credits by the ICGP and An Bord Altranais and supported financially by Pfizer (see Section 6).

Data collection and analysis

In co-operation with the two main software providers Health One Partners Ireland and Medicon, electronic data collection tools based on the agreed data set were developed for installation in practices participating in the project.
(see Section 7). It had been agreed between HSE West (Donegal, Sligo, Leitrim & West Cavan) and the ICGP to provide for the transmission and analysis of data generated at the 6 week baby check from GP surgeries to both HSE West (Donegal, Sligo, Leitrim & West Cavan) (non-anonymised data) and the ICGP managed Independent National Data Centre (INDC) (anonymised data) (see Appendix E for details).

**Figure 1** Outline of data flow

A client information and consent leaflet outlining the purpose of the 6 week baby check and details concerning the project was designed and received approval by the Office of the Data Protection Commissioner (see Appendix F).

**Evaluation**

After data cleaning, analysis was carried out (see Section 8) in September 2005. The results are reported in Section 9. These were presented at a stakeholder meeting in October 2005, at which feedback was sought from project participants. Formal evaluation took place through questionnaires sent to parents of children examined as part of the project during June and July 2005 (see Appendix G) and project GPs in September 2005 (see Appendix H).