Agenda item

Health and Wellbeing Board – 15 April 2013

Reducing Infant Mortality in Walsall

1. Summary

This is a report on infant mortality in Walsall, which describes

- The current situation in Walsall with respect to infant mortality
- Key actions to address infant mortality
- Which agencies need to contribute
- How success will be measured

Appendix 1 describes the current infant mortality action plan in Walsall.

2. Recommendations

2.1 That the contents of this report be approved.

2.2 That the Health and Well Being Board adopt the reduction of infant mortality as a key priority for the Health and Wellbeing Board.

3. Report detail

3.1 At its meeting in January 2013 the Health and Wellbeing Board requested a more detailed consideration of the issue of Infant Mortality in Walsall. This report presents that detail.

Infant mortality is a sensitive indicator of the overall health of a population, providing a measure of the well-being of infants, children and pregnant women. Walsall's infant mortality rate is consistently higher than regional and national rates, reflecting its high level of deprivation.

3.2 Both infant and perinatal mortality are strongly associated with deprivation. Reducing health inequalities in infant mortality requires a combination of health interventions and actions on the wider social determinants of health

3.3 Actions to reduce infant mortality will require coordinated efforts by a wide range of agencies across health, education and social care. Walsall has had an Infant

Mortality Action Plan since 2009, but there is further work to be done in addressing the wider determinants of infant mortality (See Appendix 1).

3.4 Infant mortality has been identified as a concern in the Joint Strategic Needs Assessment and is one of the key priorities in the Joint Health and Well Being Strategy. The reduction of Intrauterine Growth Retardation has been identified as a key priority of the Walsall Clinical Commissioning Group. It has also been identified as a priority for the Children and Young People's Plan.

4. Council priorities

This report relates to the Marmot objective "Giving every child the best start in life"

5. Equality implications

Infant mortality is one of the significant contributors to health inequalities in Walsall; the proposals contained in this report should contribute to the reduction of health inequalities in the Borough.

Background papers

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Infant Mortality in Walsall

What is the current situation in Walsall?

In Walsall both infant mortality and perinatal mortality have remained consistently higher than the regional and national levels (see Figures 1 and 2 below).

Both infant and perinatal mortality are strongly associated with deprivation with infant mortality rates of 0 per 1000 live births in the least deprived areas compared with rates of 32 per 1000 in the most deprived areas of Walsall.

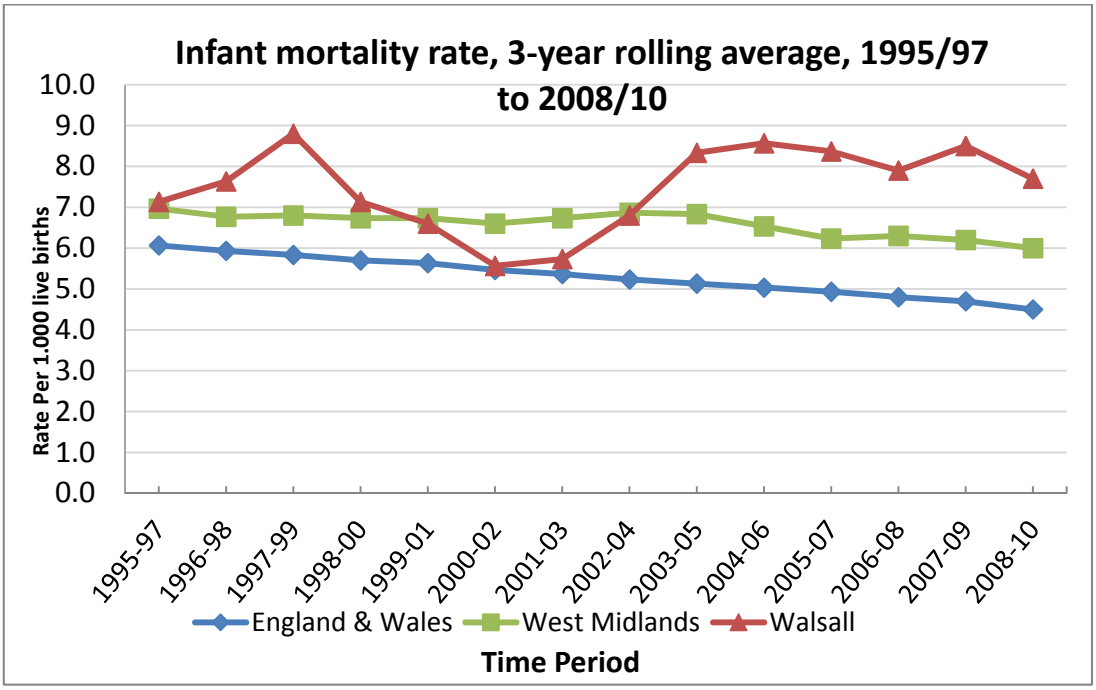


Figure1: Infant Mortality rates 1995-2010

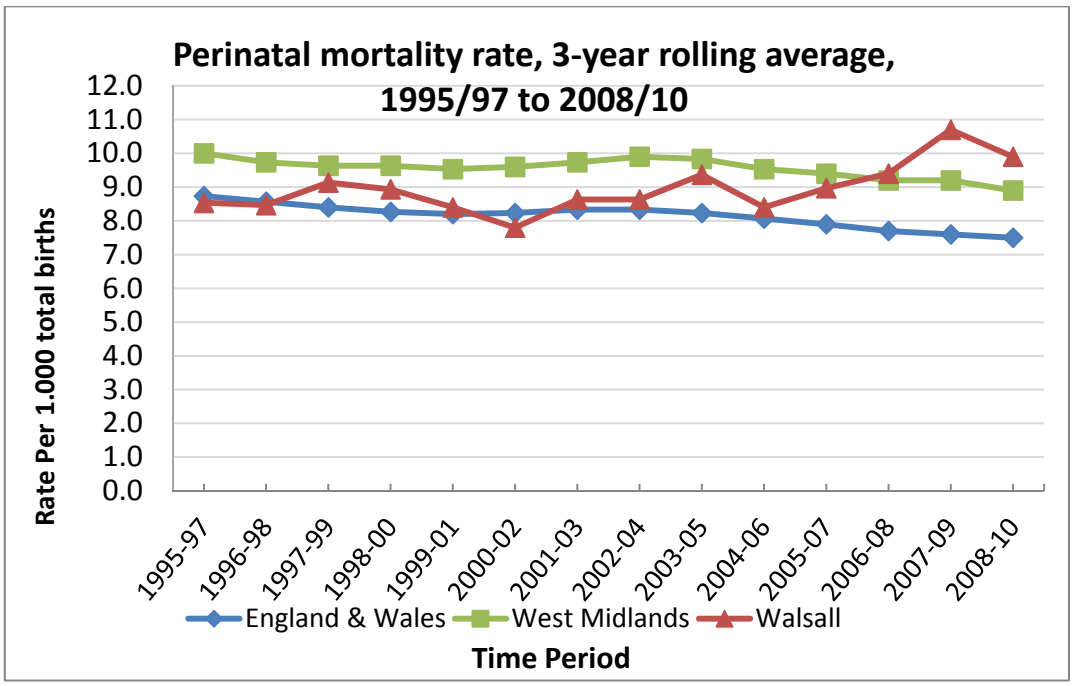


Figure 2: Perinatal Mortality rates 1995-2010

Even though numbers are small and subject to greater volatility a funnel plot analysis of local authority infant mortality rates (See Figure 3) shows that Walsall's level is still high (Walsall shown in red).

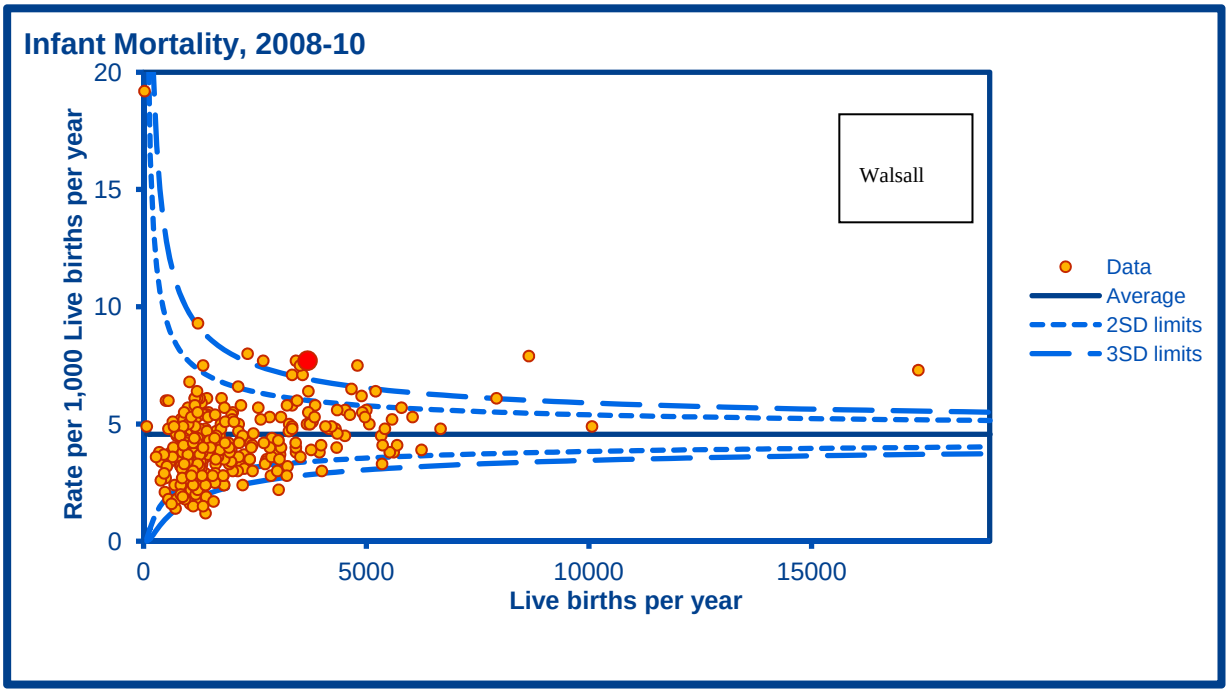


Figure 1 Funnel plot analysis of Infant mortality rates per 1000 live births per year 2008-10, by local authority

What are the key actions which will reduce infant mortality?

An audit into infant and perinatal deaths in Walsall completed in 2008 identified four key contributing factors to infant and perinatal deaths in Walsall, namely smoking in pregnancy, consanguinity, maternal obesity and deprivation, which are in turn linked to prematurity and congenital abnormalities.

Some of the key actions to address infant mortality include:

- Improving antenatal care through encouraging early booking for antenatal care, , identification and management of social risk factors in pregnancy, continuity of carer through pregnancy and improved detection of intrauterine growth restriction (IUGR).

- Reducing levels of maternal obesity and smoking in pregnancy through projects such as Maternal and Early Years, Smoke Free Homes, improving smoking cessation in pregnancy and working with ethnic communities to reduce the use of ethnic tobacco products

- Maintaining an effective antenatal and newborn screening programme

- Reducing sudden unexpected death in infancy (SUDI) and improving breastfeeding initiation and continuation rates

- Target vulnerable groups through specialised programmes such as the Enhanced Community Genetics service and the Family Nurse Partnership

- Addressing social determinants such as reducing child poverty, improving housing and reducing overcrowding and reducing teenage conceptions, including repeat conceptions are also critical to reducing infant mortality

Walsall has had an infant mortality reduction plan in place since 2009. The details of the Walsall Infant Mortality Action Plan are included in Appendix 1.

Although the infant mortality strategy addresses all the key actions mentioned above, the Infant Mortality Local Implementation Group has further work to do in addressing the wider determinants of infant mortality.

Which group of children or young people will benefit if infant mortality is adopted as a priority?

The targeted group are babies 0-1 years of age who are at risk of ill health, poor nutrition and insufficient nurturing that can result in death in the first year of life. Failure to address poor health and mortality in the first year of life can lead to delayed cognitive development, poor social skills and, over time, to difficulties in accessing learning and reaching potential.

Which agencies would need to contribute?

Tackling this combination of disadvantage and its impact on the life chances of children will require many professionals to work together. This will include:

- Maternal and infant health professionals including midwifery, health visiting, Family Nurse Partnership, etc
- Public Health professionals
- Children's centres, nurseries and schools
- Housing
- LA services (including, social workers, Family Support workers, Troubled Family professionals, teenage pregnancy services etc)
- Adult Colleges

How would the HWB Board measure success?

- Reduction in infant and perinatal mortality. The following supplementary measures can also be used to measure progress in addressing infant mortality.
    - Increase in breastfeeding levels
    - Reduction in smoking in pregnancy
    - Reduction in the proportion of babies who are of a low birth weight
    - Improved access to antenatal screening programmes
    - Reduced admissions of full term babies to neonatal care

Conclusions

- Infant mortality is a sensitive indicator of the overall health of a population, providing a measure of the well-being of infants, children and pregnant women. Walsall's infant mortality rate is consistently higher than regional and national rates, reflecting its high level of deprivation.

- Both infant and perinatal mortality are strongly associated with deprivation. Reducing health inequalities in infant mortality requires a combination of health interventions and actions on the wider social determinants of health
- Actions to reduce infant mortality will require coordinated efforts by a wide range of agencies across health, education and social care .
- Infant mortality has been identified as a concern in the Joint Strategic Needs Assessment and is one of the key priority in the Joint Health and Well Being Strategy. The reduction of Intrauterine Growth Retardation has been identified as a key priority of the Walsall Clinical Commissioning Group. It has also been identified as a priority for the Children and Young People's Plan.

Recommendations

That the Health and Well Being Board approve the contents of this report.

Appendix 1

Walsall Action plan for reducing infant and perinatal mortality

An action plan aimed at reducing infant and perinatal mortality was launched in July 2009. There are 8 key work streams within this action plan which are robustly performance managed:

1. Improving programme delivery
2. Monitoring targets and using health intelligence
3. Prevention and investigation of sudden unexplained deaths in children
4. Developing maternity services
5. Reducing risk through screening and immunisation
6. Reducing risk through lifestyle changes
7. Targeting vulnerable groups
8. Addressing wider determinants –child poverty and housing.

1. Improving programme delivery

- Stakeholder events have taken place to highlight the key priorities and to identify gaps. Partners from both the acute sector, communities, sure starts and voluntary sector worked collectively in workshops prior to the National Support team visit. A Maternity Matters stakeholder event was held to work collaboratively in taking the Maternity Matters agenda forward.
- Presentations have been made at regional meetings and conferences on community genetics work which is unique to Walsall in the fact that it is based on family network approach as advocated by the World Health organization (WHO). Colleagues from other areas have visited Walsall to observe areas of good practice.
- Infant mortality has been prioritized in key Walsall strategies such as the Child Poverty Strategy, Children and Young Peoples Plan, Joint Strategic Needs Assessment.

2. Monitoring targets and using health intelligence

The Infant Mortality action plan was highlighted as good practice by the NST reviewers. The plan is underpinned by an agreed set of KPIs which are monitored and reported through both NHS and Local Authority mechanisms.

Infant mortality has been included as a key theme in the Joint Strategic Needs Assessment. Mosaic[1] monitoring tool which was recommended by the regional analysis group is now available in public health to give a more accurate local level data and improve social marketing strategies in targeting the right population with the right information.

Key service providers and commissioners as well as service users have been working together to improve data collection systems, particularly in relation to breastfeeding, smoking cessation and maternity.

Some key audits have taken place to monitor the effectiveness of the following services:

- Breastfeeding audit which prompted the team to focus on key elements to improve the breastfeeding rates.
- An audit of services offered by the Maternity Triage unit audit prompted action by the acute trust to improve coding of inpatients and outpatients, and identified for commissioners cost savings.
- An audit of Hepatitis b vaccination led to the identification of key vulnerable children that had incomplete vaccination programme and the service is undergoing further development to ensure failsafe are in place and the pathways are reflective of all involved within the pathway from birth to preschool
- An audit of BCG immunization uptake among high risk infants in Walsall, following delays in uptake of BCG vaccination in at risk infants. This audit identified deficiencies in risk assessment of infants for BCG and delays in uptake of the BCG vaccine.
- An audit of the Healthy Start programme in Walsall revealed low levels of uptake of vitamin supplements in pregnant women and children.
- Child Death Overview panel data have been used more proactively to reduce the Infant mortality rates. Review of infant deaths between 2009 and 2011 showed that alcohol and substance misuse, smoking, overheating and co-sleeping were identified as key risk factors contributing to these deaths

3. Prevention and investigation of sudden unexplained death in children

[1] A segmentation tool by which we can gain a deeper insight and understanding of the characteristics and behaviors of our consumers (patients/service users), particularly as to how they utilize and interact with services and respond to different information and media messages.

- Pathways and protocols for training of Health professionals have been established. CONI programme co coordinators within the health visiting team established and Link midwives within acute setting.
- There is a GP champion in post who is responsible for safeguarding awareness training to GP's.
- The Child Death Overview Panel meets on a quarterly basis and data on child deaths is available from the panel. Child deaths are reviewed systematically and findings are used to inform services improvement.
- There is a "*Sleep Safe*" campaign in progress to address sudden infant deaths in Walsall and Wolverhampton, based on findings from Child Death Overview Data. The deaths occurred in recognized socio economic deprived areas within the two authorities.

4. Developing maternity services

- There is an electronic Maternity Information System which has been recently introduced; it is anticipated that this system will make it easier to identify high risk women and monitor the care made available to them.
- Family Nurse Partnership- Intensive support programme for young vulnerable families to guide/support them through adopting healthy lifestyles as well as increasing their knowledge on parenting skills.
- Increased investment in midwifery staff and maternity support workers has resulted in improved booking rates and an improvement in continuity of care.
- Care pathways to increase and target the most vulnerable and high risk women are being developed. A midwife led birthing unit was set up in May 2012 to promote normal delivery.
- Walsall CCG's Service Transformation and Redesign group for Obstetrics has oversight of the developments in maternity services. There is a programme of work underway to review of maternity services care pathways.

Key performance indicators for Maternity

Key performance Targets	2008/2009	2011/2012	2012/2013
Continuity of carer with two named midwifes (Target 75%)	34.1	81.8%	79.9%
Health and social risk assessment completed before 12 weeks and 6 days (Target 90%)	70.1	91.3%	91.5%
Antenatal Detection of growth restriction (some units not able to collect this data) Local target to increase by 10% each year	34.1	43.9%	47.6%

5. Reducing risk through screening and immunisation

- There is robust immunisation and vaccination strategy group in place.
- A comprehensive immunization programme is in place and achieves high levels of immunization uptake in all areas.
- The BCG immunization of neonates has improved dramatically from previous years. There has been an evaluation of the BCG immunization programme which has identified key areas for improvement. The evaluation was used to inform the redesign of the pathway for risk assessment and immunisation of neonates with BCG.
- Walsall has now implemented the first trimester scan for Downs's syndrome/congenital anomalies in line with the national guidelines.
- Key performance indicators have been set nationally and will be monitored at regional level however key pieces of work will need to be implemented at a local level to achieve these e.g. looking at failsafe, flow of data from one department to another, key responsibility to chase up results, identify concerns and relay to appropriate services
- An audit has been carried out into the uptake of Hepatitis B immunization for children born to Hepatitis B positive mothers. The findings of this audit have been used to to inform the redesign of the pathway for risk assessment and immunisation of babies born to Hepatitis B positive mothers.

6. Reducing risk through lifestyle changes

Breastfeeding

The Manor Hospital has a Breastfeeding Co-ordinator now in post and a breastfeeding strategy in place they have a breastfeeding support group within the hospital called "Café au lait". The breastfeeding specialist group which is now part of the new integrated provider has developed a new workforce of paid peer support workers' who have received extensive training to assist the midwives and health visitors with this extra support and currently work is in progress to have a fully developed 'bank 'of breastfeeding peer supporters to assist and build confidence to enable them to become paid supporters. They also work in the community and link in with the wider children centres network. Walsall also has a full time health visitor specialist in breastfeeding to assist in the training and delivery in the community.
The Walsall Manor Hospital is now 'baby friendly' accredited; however there are concerns as to whether this accreditation will be sustained for the Walsall Healthcare Trust due to concerns that community venues and health centres will not be able to achieve accreditation. Breastfeeding data coverage is 98.3%, which is above the target and our breastfeeding prevalence is currently at 32.8%.

- An audit of the Breastfeeding Peer support programme audit has helped to improve service development
- A breastfeeding equity audit completed in 2011 has enabled the team to focus on key strategies to improve the breastfeeding rates by focusing on areas and population groups with a low uptake of breastfeeding

Smoking

- A dedicated smoking cessation team for pregnant women has been set up.
- All midwives use carbon monoxide monitors and refer all positive results to the smoking cessation team
- There are plans to link into the Sudden Infant Death campaign to promote the dangers of smoking.

Key performance Indicator	2008/2009	2011/2012
Perinatal institute KPI: % of women smoking at booking	*23.9%	*24.8%
Perinatal institute KPI: % of women smoking at end of pregnancy	*14..9%	*18.7%

**Data obtained from Perinatal Institute*

Obesity

Following the successful completion of the pilot maternal and early years service (MAEYS) through *Investing for Health* project 2c, Walsall now has a maternal and early year's service in place. There are pathways in place for referral of obese pregnant women from midwifery into the MAEYs service.
Work is currently in progress to increase the capacity of the MAEYs service.

Indicators	2008/09(new service	2011/2012
Number of referrals	100	294
Maternal weight gain e.g. not more than 7 – 10 Kg	60%	85%
Maternal weight loss post-pregnancy (5-10%)	60	75%

7. Targeting vulnerable groups

- Pathways within maternity services to support vulnerable pregnant women have started to be developed. However there is further work to be completed in this area.

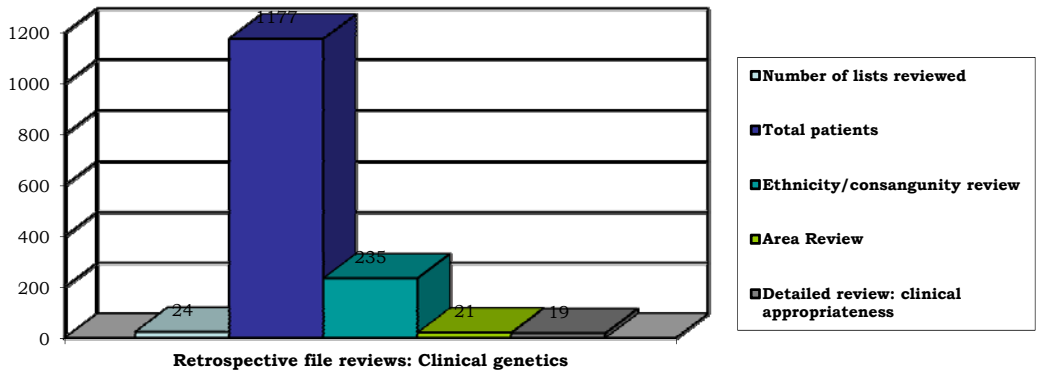
- There is a now a specialist midwife for domestic violence in post.

- There is now a designated health visitor for vulnerable groups such as migrants, travelling families, in post. This health visitor is leading on the development of pathways within health visiting team for supporting such vulnerable clients.

- **Community Genetics Service**

    - The Community Genetics service was launched in 2010 and genetics counsellor with appropriate language skills has been in post since then to work with families at risk of experiencing a recessive disorder in the family. Congenital anomalies contribute about one third of the extra infant deaths experienced by the routine and manual socio-economic groups compared with the population as a whole.

    - A total of 1177 files were reviewed some dating back to over 10 years. 235 clients from that group were identified as eligible for the service (see graph below)



Retrospective file reviews: Clinical genetics

- Key Health professionals and community members have been trained in recessive disorders to enable them to detect and refer clients into the service.

- **Family Nurse Partnership**

The **Family Nurse Partnership** is an intensive support programme for young vulnerable teenage mothers to guide/support them through adopting healthy lifestyles as well as increasing their knowledge of parenting skills. Health outcomes for babies born to teenage mothers are worse than for babies born to older mothers. In particular, infant mortality rates are 60% higher for teenage mothers than mothers aged 20–39 and there is a 25% greater likelihood of prematurity/low birth weight among teenage mothers compared with older mothers. The main goals are to improve the outcomes of pregnancy:

- by helping women to improve their prenatal health
- to improve the child's health and development by helping parents to provide more sensitive and competent care of the child
- To improve parental life course by helping parents to plan future pregnancies, complete their education and find work.

8. Addressing wider determinants of infant mortality

Housing

- The Overcrowding and under occupancy strategy (2010- 2011) supports housing providers develop a range of housing options and advice services to assist those households worst affected by overcrowding.

Child Poverty

- Extensive work carried out by local authority in partnership with key stakeholders from infant mortality local implementation group to complete a child poverty needs assessment and develop a Child Poverty strategy in 2011.

Reducing illnesses that are made worse by damp/ cold through the *Health through Warmth* Programme

- Referral pathways have been developed for this service
- Promotional material has been developed by public health in collaboration with local maternity services and children centres.
- Funding has been made available through the health and warmth programme for pregnant women.