

| no. | Issue | Detail /Rationale | Action: What are we going to do about this? | Outcome: What change do we want to see? | Accountability: Who is responsible? | How are they reporting back? | Date for "deep dive" | Date to be completed |
|---|---|---|---|--|--|---|----------------------|----------------------|
| 1. Miscellaneous Actions | | | | | | | | |
| 1.1 | Local data and knowledge | Ascertain the main causes of infant death in LLR | Gather information via: <ul style="list-style-type: none"> • CDOP Annual Report • CDOP cumulative report 2009-14 • MBRRACE-UK data & report (due May 2016) • UHL/NHS Perinatal Mortality Review report (due May 2016) • Data can be cross-referenced with the results of the Health & Wellbeing Survey and data from ASH • Use data on ethnicity collected by the Perinatal Mortality Review Group (stillbirths) to identify themes • Use information recorded by CDOP low birth weight and infant deaths to identify key groups • CDOP record smoking in pregnancy as part of the review and this information could be audited • CDOP record known domestic violence, and this could be cross referenced with other factors they collect (such as birth weight) to create a local picture | A better evidenced-based understanding of local causes of infant deaths | Lisa Hydes, Julia Austin, Rob Howard and Lucy Smith | Cross-reference data and report back in Nov 16 | Nov-16 | Review regularly |
| 1.2 | Learning from others | Research actions taken in areas that have reduced infant mortality | Gain insight from peer comparator areas that have significantly reduced infant mortality rates (e.g. Barking and Dagenham) | A better evidenced-based understanding of actions that will reduce infant mortality and stillbirth | Infant Mortality Steering Group (IMSG) – | each member to share information at IMSG meetings | | Ongoing |
| 1.3 | Review of previously identified actions | Review National Strategy Team recommendations (2010) | Undertake a full audit against all the NST recommendations | Report back to Infant Mortality Strategy Group | Clare Mills, Public Health | | Nov-16 | Nov-16 |
| 2. Maternal characteristics & risk factors | | | | | | | | |
| 2.1 | All risk factors | See below | Create a calendar of events to highlight key issues | Raising awareness of what parents can to reduce the risk of infant mortality and stillbirth | Infant Mortality Steering Group | update/planning at each IMSG meeting | | Review Quarterly |
| 2.2 | Maternal age | <p>Mothers under 20 are 1.4 times more likely and mothers over 40 are 1.7 times more likely to have a stillbirth.</p> <p>Mums under 20 are 4 times more likely to have a SIDS compared to the over 20's</p> <p>The teenage conception rate in Leicester has significantly reduced from a baseline in 1998 of 64.6 per 1,000 to in 29.7 in 2013. Reducing under-18 conceptions would decrease the infant mortality gap by 1%</p> | Work with and commission partners and schools to create tailored Relationships & Sex Education (RSE) packages that meet the needs of individual schools and children across LLR | Young people making positive health choices about their own sexual health and relationships | Liz Rodrigo, Clare Mills, Public Health and partners | | Feb-17 | Feb-17 |

| no. | Issue | Detail /Rationale | Action: What are we going to do about this? | Outcome: What change do we want to see? | Accountability: Who is responsible? | How are they reporting back? | Date for "deep dive" | Date to be completed | |
|-----|-------------------------------------|--|--|---|---|------------------------------|--------------------------------------|----------------------|----------------------------|
| | | Looked-after teenage girls are 2.5 times more likely to become pregnant than other teenagers | Have a particular focus on meeting the needs of LAC children | As above | TBC | | Feb-17 | Feb-17 | |
| 2.3 | Maternal ethnicity | Mothers of Black ethnic origin are more than twice as likely and mothers of Asian ethnic origin are 1.5 times more likely to have a Stillbirth | Raise staff awareness across partner organisations and flag as a potential vulnerability. Staff to be made particularly aware of accumulating risk factors | Parents receiving required support to have a healthy pregnancy and birth, and positive experience of child's early life | All partners | by exception | accumulating risk factors 01/02/2018 | on going | |
| | | Mothers from the Asian or Asian British ethnic groups are reported to have | Target support and services appropriately (Staff to be made aware of accumulating risk factors) | | All Partners | by exception | accumulating risk factors 01/02/2018 | on going | |
| | | | Introduction of GROW protocol at UHL to identify small babies by personalised growth charts | | | UHL; training and roll-out | update Nov 16, and then by exception | | Training to begin Sep 2016 |
| 2.4 | Maternal smoking | Smoking in pregnancy doubles the risk of stillbirth and is a significant risk factor for SIDS | Contract mandatory delivery of brief intervention training and referral of smokers into NHS Stop Smoking Services for new HCP | More babies born to non-smoking mothers | Public Health | by exception | May-17 | on going | |
| | | NICE recommends that prospective parents are advised prior to pregnancy and that smokers are identified as early as possible by midwives and referred to specialist stop smoking services. | Record the smoking status of each pregnant woman | Increase in the number of women with Smoking status recorded CO reading being taken | Health Visitors and Midwives. | by exception | May-17 | Ongoing | |
| | | 'Saving Babies' Lives' care bundle identifies that reducing smoking in pregnancy would reduce the incidence of stillbirth and early neonatal death. | Continue to record the Carbon Monoxide (CO) reading for pregnant woman who smoke – with a view to a gold standard of recording readings for <u>all</u> pregnant women | | | UHL. | by exception | May-17 | Ongoing |
| | | The smoking in pregnancy rate is similar to both the national rate and our peer comparator local authorities. However, large variations exist across LLR. | Ensure new mums know about and have the opportunity to be referred to STOP Smoking Service (opt out) at 28-36 week HV visit Create a robust referral system from the point of discharge | Referrals being made to STOP at 28 weeks. | Clare Mills, HCP provider, STOP | by exception | May-17 | Ongoing | |
| | | | | | STOP, Midwifery | by exception | May-17 | Ongoing | |
| 2.5 | Second-hand smoke (passive smoking) | 'Passive Smoking and Children' report concluded that; maternal smoking after birth was associated with a three-fold increased risk of sudden unexpected death in infancy and that having one or more smokers living in the household more than doubled the risk of sudden unexpected death in infancy. | Increase the number of parents being given advice on protecting their baby from second-hand smoke (SHS) | More babies born and living in smoke free homes | a)Maternity Care Assistants and Maternity Support Workers at health visit | by exception | May-17 | Ongoing | |

| no. | Issue | Detail /Rationale | Action: What are we going to do about this? | Outcome: What change do we want to see? | Accountability: Who is responsible? | How are they reporting back? | Date for "deep dive" | Date to be completed |
|-----|--|--|---|---|--|--|----------------------|----------------------|
| | | | Provide training/guidance to all appropriate staff in partner organisations to enable them to advise prospective parents and parents on the risks of SHS to their baby or unborn child. Link to NICE guidance 48. | Training sessions delivered to all relevant staff. Staff feeling confident and competent at discussing second-hand smoke with parents | b) STOP (Karen House and Louise Ross) & Rod Moore UHL | by exception | May-17 | Dec-16 |
| | | | Ensure that all parents are given advice on protecting their baby or unborn child from SHS at each maternity visit, post-natally (in line with requirements of HCP spec) and during episodes of treatment at UHL Children's Hospital (in line with PH48 Recommendation 5) | Second-hand smoke advice given and recorded on paperwork. returns of Step Right Out sign ups (as appropriate) | c)Midwives (and MCAs/MSWs) STOP | by exception | May-17 | Ongoing |
| 2.6 | Maternal obesity | Women with a pregnancy BMI >35 increase the risk of stillbirth Reducing the prevalence of obesity would decrease the infant mortality gap by 2.8% In 2010/11, 25% of pregnant women in Leicester were recorded as overweight and 19% as obese (higher than the national rate of 15.6%) | Provide information and advice about healthy eating in "Bumps to Babies" | Women receive advice on health eating in pregnancy as per PH guidance | a)HCP Provider, LCC staff | by exception via Assurance and Development Group | | Ongoing |
| | | | Look at data and costings to continue and possibly expand Maternal Obesity clinics for women (currently women with 40+BMI are seen at UHL) | Women are supported to have a healthy pregnancy | Undertake a health needs Assessment (Ben Rush, LeicestershireCC) | Update at each meeting | May-17 | May-17 |
| | | | Map what is currently happening via PH funding (and audit against NICE Guidance PH27) | Identification of gaps and planning for future services | Undertake a health needs Assessment (Ben Rush, LeicestershireCC) | Update at each meeting | May-17 | May-17 |
| 2.7 | Maternal immunisation, such as MMR, whooping cough and flu vaccination | NICE recommends that prospective parents are advised prior to pregnancy that influenza in pregnancy is a risk factor for stillbirth | All Health Visitors and Midwives to check immunisations and refer to GP as required | All mothers fully vaccinated as appropriate | GPs Midwifery HCP Provider Dave Giffard to investigate CQUINS | by exception | | Embedded and Ongoing |
| | | | Increase uptake of flu vaccination by frontline staff | | | | | |
| 2.8 | Nutritional status, such as folic acid supplements | Folic acid intake can increase the chances of having a healthy baby. NICE recommends that prospective parents are advised prior to pregnancy and provide guidance for vitamin D and folic acid supplements | All Health Visitors, Midwives and Children Young People and Families (CYPF) Centre staff to promote use of appropriate nutrition, supplements and healthy diet throughout pregnancy at all contacts | All mothers eating well and taking the right supplements during pregnancy | HCP Provider Midwifery | by exception | | Ongoing |
| | | | Revisit Vitamin D and Healthy Start Vitamins | | Clare Mills and Jane Roberts | report at each meeting | | Aug-17 |
| 2.9 | Domestic violence | Domestic violence is associated with increases in rates of miscarriage, low birth weight, premature birth, foetal injury and foetal death | All relevant professionals to be confident to have discussions about domestic abuse and protecting children. [Achieved by core mandatory training and HV care plans] | More mothers and babies living free from domestic abuse | CYPF Centre staff, Midwifery and Health Visiting | by exception | Aug-17 | Ongoing |

| no. | Issue | Detail /Rationale | Action: What are we going to do about this? | Outcome: What change do we want to see? | Accountability: Who is responsible? | How are they reporting back? | Date for "deep dive" | Date to be completed |
|---|---|---|---|--|---|------------------------------|--------------------------------------|-----------------------|
| | | NICE recommends social care support – to identify and support women with complex social factors, including vulnerable parents, children in need and those at heightened risk of domestic violence | b)All professionals able to give relevant advice and to identify accumulating risk factors | | | by exception | Aug-17 | Ongoing |
| 2.10 | Poor mental health | Poor mental health of either, or both parents has been found to be a compounding characteristic in cases of sudden unexplained infant deaths | All relevant professionals to be confident to have discussions about mental health and emotional wellbeing | More parents of babies managing their mental health well | Health Visiting and Midwifery | by exception | Aug-17 | Ongoing |
| | | | All professionals able to give relevant advice and to identify accumulating risk factors | | | by exception | Aug-17 | Ongoing |
| 2.11 | Substance misuse | NICE recommends that prospective parents are advised prior to pregnancy of the risk of substance misuse | All relevant professionals to be confident to have discussions about substance misuse and protecting children | More parents of babies living free from substance misuse | Health Visiting and Midwifery | by exception | Aug-17 | Embedded and Ongoing |
| | | | All professionals able to give relevant advice and to identify accumulating risk factors and act as appropriate Specialist Midwife in post | | | by exception | Aug-17 | Embedded and Ongoing |
| 2.12 | Parents who have difficulty reading or speaking english | NICE Guidance (2010) highlights complex social factors that may adversely impact on pregnancy outcomes and increase the risk of infant/maternal death | Identify accumulating risk factors and put support in place to help parents | | All partners | by exception | accumulating risk factors 01/02/2018 | Ongoing |
| | | | b)CDOP to work with Local Safeguarding Children’s Board on access to emergency services | | Lisa Hydes | by exception | accumulating risk factors 01/02/2018 | Complete by June 2017 |
| | | | Promote use of Lullaby Trust downloadable material in 20 languages | | All partners | by exception | accumulating risk factors 01/02/2018 | Ongoing |
| 2.13 | Preparation for parenthood | NICE Guidance currently highlights the need for antenatal education classes to improve: <ul style="list-style-type: none"> Breastfeeding rate Healthy behaviours Contact with services Support for anxiety and depression Satisfaction with birth | Evaluate the current local offer “Bumps to Babies” programme and implement recommendations to the programme. | Increased parenting confidence and capacity | Children, Young People & Family Centres HCP provider | | | Ongoing |
| | | | Follow-up people who have used Bumps to Babies (journey mapping) | | Liz Mair | | | Jun-18 |
| | | This should be provided in the community, as close as possible to the family home. Pregnant women with health, emotional or social needs should be referred to specialist care. | Increased number of parents attending “Bumps to Babies”, and identify vulnerable mothers who don’t attend, and target them. Working Group to be reconvened; link to Early Help. | | Julia Pilsbury/Clare Mills | Update November 16 | Feb-17 | on going |
| 3. Factors related to the infant | | | | | | | | |

| no. | Issue | Detail /Rationale | Action: What are we going to do about this? | Outcome: What change do we want to see? | Accountability: Who is responsible? | How are they reporting back? | Date for "deep dive" | Date to be completed | |
|-----|--|--|---|---|---|---|--------------------------------------|--|---------|
| 3.1 | Breastfeeding | Increasing the rate of breastfeeding initiation and prevalence in the Routine and Manual group would reduce the infant mortality gap by 4% | Please see Infant Feeding Strategy for actions | Increased number of mothers initiating breastfeeding, and more mothers breastfeeding for longer | Clare Mills on behalf of Infant Feeding Strategy Group and Infant Feeding Network | by exception | | Infant Feeding Strategy consultation to be launched by July 2016 | |
| | | Breastfeeding rates in Leicester are significantly higher with levels consistently above national averages, particularly at 6-8 weeks, although there are areas that are lower than the average – particularly in deprived areas | Health Visitors ensure mothers are fully supported to breastfeed for as long as they chose, and that information about support is made available to mothers. | | HCP provider | by exception | | Ongoing | |
| | | | Bumps to Babies, session 3, covers infant feeding and the value of breastfeeding | | | HCP provider | by exception | | Ongoing |
| | | | NCT's Breastfeeding Peer Support service is able to provide volunteers on UHL wards | | | NCT, midwifery | | | Ongoing |
| 3.2 | Safer sleep | Targeted interventions to prevent Sudden Infant Death Syndrome (SIDS) would decrease the gap by 1.4% | Raise awareness of safer sleep messages and families/babies vulnerable to SIDS and consider how a range of non-NHS colleagues (voluntary sector, CYPF Centre staff and GPs) can help spread the message about the risks of bed sharing and consider developing a concerted campaign around preventing SIDS (National Support Team 2010) | More babies sleeping safely because key Public Health messages are delivered, encouraging early access to provision of formal services and promoting attachment and emotional wellbeing | CONI leads | by exception | | Ongoing | |
| | | | b)Support development of LLR wide Baby Box project, that includes Lullaby Trust safer sleep and Little Lullaby leaflets to ensure safer sleep messages are delivered to younger parents | | b)Voluntary Action Leicestershire Public Health | update from VAL/Untapped me as required | | | |
| | | | Health Visitors to support breastfeeding at night, including an open discussion around safer sleeping practices | | HCP Provider | by exception | | Ongoing | |
| | | | UHL including safer sleep in the mandatory training for all midwives | | UHL | by exception | | Ongoing | |
| 3.3 | "Vulnerable Families" – Identified as having multiple characteristics that might increase risk of stillbirth or infant mortality | (Evidence provided under each characteristic or risk factor heading) | Look at adapt Rotherham card "Child at risk of SIDS" for use by professionals | Professionals being aware, identifying and guarding against the accumulation of risk factors | | by exception | accumulating risk factors 01/02/2018 | | |
| | | | Provide training to Paediatric Liaison Staff to raise awareness of characteristics and risk factors | | UHL CONI coordinator | by exception | accumulating risk factors 01/02/2018 | Ongoing | |
| | | | Adapt current Paediatric Liaison referral form adding a box entitled "vulnerable families" | | UHL CONI coordinator | by exception | accumulating risk factors 01/02/2018 | Ongoing | |
| | | | Identifying and guarding against accumulation of risk factors | | | by exception | accumulating risk factors 01/02/2018 | | |

| no. | Issue | Detail /Rationale | Action: What are we going to do about this? | Outcome: What change do we want to see? | Accountability: Who is responsible? | How are they reporting back? | Date for "deep dive" | Date to be completed |
|--|---|---|---|---|--|------------------------------|--------------------------------------|----------------------|
| 3.4 | Poverty and deprivation | Low socioeconomic status of mother is a risk factor for still birth Improving maternal educational attainment reduces the risk of infant mortality Reducing child poverty would reduce the infant mortality gap by 3% | Create more targeted and tailor interventions | More parents supported to reduce the risk of SIDS in their family environment | Infant Mortality Strategy Group | | accumulating risk factors 01/02/2018 | Ongoing |
| 3.5 | Housing and overcrowding | Improving housing conditions and reducing overcrowding would reduce the infant mortality gap by 1.4% | No action identified at this date | n/a | n/a | | Nov-17 | n/a |
| 4. Other factors relating to preconception care, pregnancy and delivery | | | | | | | | |
| 4.1 | Early booking for antenatal care | In Leicester, the proportion of women booking before 12 weeks is significantly lower than the national average (Quarter2, 2014/15) | No action identified at this date | n/a | n/a | | | n/a |
| 4.2 | Screening for infections and congenital anomalies | NICE Pre-existing familial conditions - genetic counselling, screening and support if needed | Develop a strategic delivery model for screening that ensures services are commissioned, contracted, performance managed and governed for health outcomes. Ensure that sonographers are recruited, trained and supported to implement the first trimester combined screening for Down's screening (National Support Team 2010) | | | | | |
| 5. Important issues which are relevant to the IM Strategy, and are discussed at IMSG, but are core business for partners and reported to other forums (e.g. CCG or CQC) | | | | | | | | |
| 5.1 | Foetal growth restriction | 'Saving Babies' Lives' care bundle identifies that improved death | Identify the local approach to antenatal detection of foetal growth restriction | Reduced number of stillbirth and neonatal deaths of SGA babies | Midwifery | update Feb 27 | | |
| | | risk assessment and surveillance for foetal growth restriction would reduce the incidence of stillbirth and early neonatal | Identify whether UHL calculates and publishes their antenatal detection of Small for Gestational Age (SGA) babies rates | | Midwifery | update feb 17 | | |
| | | | Identify whether UHL audits SGA cases that are not detected antenatal in order to identify the reasons why, learn from them and improve future detection | | Midwifery | update feb 17 | | |
| 5.2 | Reduced foetal movement | 'Saving Babies' Lives' care bundle identifies that raising awareness of reduced foetal movement would reduce the incidence of stillbirth and early neonatal death | Provide information and advice to pregnant women on reduced foetal movement (RFM) and how they should respond by 24 th week of pregnancy, and discussed at every subsequent contact | Reduced number of stillbirths following awareness raising regarding RFM | Midwifery and Health visiting | by exception | accumulating risk factors 01/02/2018 | Ongoing |
| | | | Use the provided checklist to manage the care of pregnant women who report RFM | | Midwifery | by exception | accumulating risk factors 01/02/2018 | Ongoing |
| 5.3 | Issues during labour | 'Saving Babies' Lives' care bundle identifies that effective foetal monitoring during labour would reduce the incidence of stillbirth and early neonatal death | Identify whether UHL provide annual training and competency assessment for all staff who care for women in labour in cardiotocograph (CTG) interpretation and use of auscultation | Reduced number of stillbirth and neonatal deaths | Midwifery | by exception | | Ongoing |

| no. | Issue | Detail /Rationale | Action: What are we going to do about this? | Outcome: What change do we want to see? | Accountability: Who is responsible? | How are they reporting back? | Date for "deep dive" | Date to be completed |
|-----|--|--|---|--|--|------------------------------|--------------------------------------|----------------------|
| 5.4 | Medical conditions during pregnancy, such as diabetes and hypertension | NICE recommends that prospective parents are advised prior to pregnancy and that pregnant women with specific medical conditions such as diabetes, hypertension, epilepsy, renal/cardiac and mental health needs to be identified and offered specific support tailored to their needs | Ensure services screen all pregnant women and offer appropriate support to manage these conditions | More mothers experiencing these conditions during pregnancy managing them well | GPs and Midwifery; report to CCG | by exception | | Ongoing |
| | | | Specialist midwives in post for diabetes and hypertension | | GPs and Midwifery; report to CCG | | | Ongoing |
| 5.5 | Low birth weight | The main risk factors associated with low birth weight include: maternal age, multiple birth, smoking (including passive) in pregnancy, language barriers and delay in accessing the antenatal care pathway, maternal infection, and poor maternal nutrition. | GROW programme to be implemented to support early IDE notification and identification of growth retarded babies | | Midwifery | by exception | accumulating risk factors 01/02/2018 | Ongoing |
| 5.6 | Infections | Childhood immunisations reduce the risk of infections in infancy. Leicester has a good uptake of childhood immunisation of more than the recommended 95% coverage. | HVs to promote vaccinations | Increased take up of childhood immunisations | HCP provider | by exception | | Ongoing |