Tees

child death overview panel

Hosted by Redcar & Cleveland Safeguarding Children Board in statutory partnership with Hartlepool, Middlesbrough and Stockton-on-Tees Local Safeguarding Children Boards.

TEES

CHILD DEATH OVERVIEW PANEL

ANNUAL REPORT

2013 - 2014

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Foreword to CDOP annual report 2013-14

As 2013/14 has been my last year as Independent Chair of the Tees Child Death Review Panel, it seems timely to thank my colleagues who constitute the panel, to take stock of our achievements, and to look to the future.

First, the thanks. In my foreword last year I paid tribute to Alex Giles, formerly the Designated Nurse for Child Protection, on the occasion of her retirement, but as she was so pivotal to the development of child death review on Teesside it seems only right to thank her once again for bringing to the CDOP her great combination of strategic vision and operational support. In addition, without the work of our coordinator, Marcia Ingram, and our various administrators over the years, the system would not have functioned; and I would like to record my personal thanks to Marcia for her unstinting contribution.

It is also true that all the professionals from every agency who have served on the panel have made a powerful contribution to its work, and I would particularly like to highlight the contribution of our lay members in this regard. The level of scrutiny and challenge has been outstanding and I have been both proud of, and humbled by, the quality of the panel I have been privileged to lead. So to all the panel members, past and present, my heartfelt thanks.

So to our achievements. Wherever child deaths occur, and under whatever circumstances, scrutiny of the cases yields insights that can drive up the quality of care as well as the safety of children. It has been a central tenet of our work that we try to ensure that the teams looking after children have the opportunity to discuss and reflect on the death, learn any lessons, and implement any helpful changes to practice or to systems of care. The role of our CDOP has been partly to ensure that this process is effective, and partly to identify relevant strategic issues and ensure that these translate into action within or between agencies.

In our Annual Reports it has been the second of these on which we have focused. But the real gains from the process lie in the first, local, tier of case review; and these achievements remain largely invisible, as they sit in the minds of the local professionals, and are reflected by the changes they make to their own practices and the work of those around them. Whenever people participate in the locally organised case discussions, they immediately understand their value and can see how improvements to quality and safety follow from the discussions. Those who have not participated have to rely on the testimony of those that have. It has therefore been very difficult for the CDOP to demonstrate the locally added value of the child death review process. There is simply no way to do this in an Annual Report. Consequently, in all our Annual Reports we have described the achievements of the panel rather than those of the people who first discussed the cases, and we have to remember that many things that are important cannot be measured, while much that we can measure is not important.

Finally, to the future. The value of child death review, and the necessity for its coordination and scrutiny by a Child Death Review Panel, has been understood nationally and remains a core component of the latest version of Working Together. So the process is secure even though it has been challenging for the four Children's Services across Tees to find ways to support and fund it.

At last, there is a government commitment to aggregate individual information on each death so that the national picture can be analysed and published. At the time of writing I am uncertain as to which organisation will be commissioned to undertake this work, but everyone agrees that this is long overdue.

After six years as Independent Chair I believe I leave a vibrant and enthusiastic CDOP, to which I give my very best wishes for an effective and creative future.

Dr Martin Ward Platt

Independent Chair, Tees Child Death Overview Panel

1. Introduction

The Tees Child Death Review Project (CDRP) was set up to support the work of the Tees Child Death Overview Panel (CDOP) in reviewing the deaths of children from the Hartlepool, Middlesbrough, Stockton-on-Tees and Redcar & Cleveland Local Safeguarding Children Board (LSCB) areas. The CDOP is a sub group of the 4 Tees LSCBs.

Tees CDOP met 6 times in 2013/14 and discussed 53 cases which is in line with the national average from previous years. In addition the CDOP members took part in a Development Session to improve the functioning of the child death review process. The business of these meetings and the collation of national statistics form the basis of this Annual Report

A comprehensive Independent Review was carried out during this year and substantial changes have been made to staffing and chairing arrangements from April 2014. Staffing support has been reduced and incorporated into the existing Redcar & Cleveland LSCB staff team. The other pertinent recommendations are that the Chairing role is taken on by the Directors of Public Health and that the neonatal deaths are discussed in a forum outside of the CDOP. Work is still ongoing to put these changes in place.

The membership of CDOP and panel meeting dates can be found at Appendix 1. During 2013-2014 the Tees CDOP was chaired by an Independent Chair, Dr Martin Ward Platt, who will leave after the May 2015 meeting when it is hoped that the new chairing arrangements are in place. Community and voluntary sector involvement was demonstrated through the appointment of a second Lay Member and attendance by Teesside Hospice staff.

Financial information from this year can be found at Appendix 3.

2. Reviewing cases

During 2013-14 Tees CDOP reviewed 53 child deaths making a total of 231 reviewed over the 6 years of operation. Reference is made in this report to national statistics on child death review, the latest of which are from 2012/13. The Tees Panel met 6 times during the year and reviewed an average of 9 cases per meeting. This is very similar to the national picture where CDOPs met 6 times a year and reviewed an average of 7 cases per meeting.

During this time 13 cases took more than a year to review and most of these were oncology cases or cases where the child had died in one of the Newcastle Hospitals. Two cases were delayed as CDOP requested more information from local hospitals or waited for the inquest verdict before reviewing the case. Fortunately a staff member at the RVI has temporarily taken on the responsibility of ensuring that form Cs are completed and returned for CDOP to review. This means that deaths particularly those from cancer, should now be reviewed by CDOP much quicker than in previous years.

All cases are classified via the national classification system to reflect one of the following :

- Modifiable factors identified – factors identified in the case which by means of local or nationally achievable interventions could be modified to reduce the risk of future child deaths.
- No modifiable factors identified – the panel have not identified any potentially modifiable factors in relation to the death
- Inadequate information to make a judgement

The CDOP classified 14 of the deaths reviewed as having modifiable factors and 1 other as having insufficient information to make a decision. This equates to 26% of the total deaths reviewed which is slightly higher than the national figure of 21% and also slightly higher than the previous years' national average of 20%.

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Three of the cases with modifiable factors involved small babies co sleeping either in parent's bed or on a sofa. In these cases there was exposure to passive smoking in the home as well as alcohol consumption by the parents. These factors are recognised nationally as increasing the vulnerability of babies and are known risk factors in infant deaths. One of the babies was also born prematurely which is recognised as another factor which increases vulnerability. In one of the cases the Ambulance personnel did not follow Tees Unexpected death procedures and so further training has taken place with staff.

Tees CDOP has launched an E learning course on Safe Sleeping for babies, encouraging all staff going into family homes to give the same messages on how to keep babies safe. CDOP were also considering a publicity campaign targeting these issues but Hartlepool LSCB have now developed a leaflet which has been made available for other areas to use.

Six other deaths were associated with extremely premature birth and although not directly connected to the babies' deaths issues have been resolved around keeping babies warmer when they are born under 26 weeks gestation. Transwarmers are now being used at James Cook University Hospital in the delivery room, during resuscitation and when being transported within the hospital. There has also been increased infection control in the Neonatal Unit at this hospital.

One of these deaths was of a baby with complex health issues and where there was a life threatening condition existing within the family. This family declined genetic counselling prior to conception but in cases like this pre implementation embryo selection is now offered. The RVI team also recognised that due to advances in technology since this baby's birth they would now be able to perform an operation on an experimental basis to alleviate some of the problems associated with the baby's condition.

Other issues that were considered from review of these deaths include lack of ITU space for very premature babies and issues around babies born at the lower end of viability, that is around 23 weeks.

An internal review has been conducted to find ways of improving communication around transferring babies between units in Tees and Newcastle. Hospital protocols have also been updated to ensure that if discharge is delayed then an extra pre discharge meeting should be held.

Two older children who died had complex health needs and some of the modifiable factors identified were around internal hospital procedures, such as communication, which probably would not have affected the outcome for these children. Another issue concerned not having an End of Life Care Pathway in place for a child with a life limiting condition as the parents would not engage with it despite several attempts by staff to encourage them to put one in place. This is now being embedded much more fully with other children and enables parents to make decisions, such as where they would like their child to die, before they are faced with a traumatic situation. There has also been work carried out in the hospitals on ensuring better communication in complex cases such as Consultant to Consultant handover, especially on the evening handover.

One teenager died from malignancy due to late presentation and a particularly chaotic lifestyle including drug use. Issues around capacity to consent were raised due to his withdrawal from drug use and this has been raised with relevant Consultants. Late presentation to health care, particularly with malignancy, is an issue that CDOP have been concerned with and are currently carrying out a pilot around this to see if there is anyway to improve the outcomes for children and young people.

There was one modifiable death from a road traffic accident where the young person had been drinking alcohol. Issues that arose from this included a request for better information sharing between CAMHS and schools as well as an investigation by Police and the Local Authority into road safety at the site where the accident happened. Enforcement Officers have also been asked to confirm that shops are aware of the need to check young people's ID more closely to prevent under age purchase of alcohol.

The sudden death of another child was initially attributed to asthma but they also had significant allergies and so this may have been Anaphylaxis, but this was not routinely tested in the Post Mortem examination. The Tees Unexpected Death protocol is currently being updated in conjunction with Pathologists to ensure this test is done in cases of sudden death and a history of allergies.

Finally a young person died suddenly having had a history of epilepsy and because they were 17 they were in the process of having their care transitioned to adult care. The child had apparently been fit free when they were handed over to their GP who then made a referral to an adult physician. The young person was due to be seen the month after their death but the issue of transition to adult services is currently being raised with the Hospital trusts as for those young people with complex healthcare needs this can be a particularly vulnerable time. The CDOP were unable to say whether this death had modifiable factors as there was some uncertainty around whether there was compliance with medication and so this will be revisited after the inquest takes place.

3. Impact of Tees CDOP:

The Tees CDOP Procedures for Unexpected Death give agencies a comprehensive understanding of their role in the child death review process and how this fits in with the review as a whole. Following the procedures means that investigations into any child death should be comprehensive and identify any lessons which can prevent future deaths. As already highlighted the Procedures are being updated to ensure the inclusion of specific tests during post mortem examinations where children die suddenly and have a history of allergies.

Any lessons learned in Tees which may be of benefit to other areas are circulated through the CDOP national network and other areas also share important messages this way. It is important that families should be offered appropriate support around the death of their child and CDOP regularly updates the list of resources available locally and publishes this on its' website: http://www.tees-cdrp.org.uk**.** Deaths in schoolchildren are relatively rare but CDOP has also identified organisations which can help staff support other children in their school through the bereavement process.

A lot of work has been carried out regionally around the importance of developing an end of life plan for those children who are receiving palliative care or who have life limiting conditions. Tees CDOP has supported the development of the pathway which

has been adopted by James Cook University Hospital and adapted for use in University Hospital of North Tees and Hartlepool. There has recently been a case presented to CDOP which illustrated the value of the Emergency Health Care Plan (EHCP). This concerned a young person with complex health needs where an advanced care plan drawn up by Dr Liang in consultation with the parents stated that the child was to be managed with gentle supportive care and not invasive ventilation. The child's condition deteriorated and after further discussion with his mother he was kept comfortable with pain relief medication until he died. His parents and family were provided with appropriate support and his mother stated that she had valued the visit made by the Consultants and Specialist Nurses after the death. The Consultant also felt that it was a fitting closure to this long standing patient/parent professional relationship. It was extremely important that the patient had the EHCP with them and that family presented this to JCUH staff as this made the care pathway very smooth and effective.

Other issues which have been highlighted in the national data collection from CDOPs which are relevant to Tees CDOP cases include safe sleeping, smoking and road safety. Health promotion issues that have been highlighted during Tees CDOP reviews include road safety, substance misuse and late presentation with malignancies.

Tees CDOP has established a good working relationship with the local Coronial service so that relevant information can be shared to the benefit of both processes.

4. Tees Child Death Statistics 1st April 2013 to 31st March 2014

The numbers of deaths reviewed will differ to the number of children who died in this year due to the time delay in reviewing cases whilst relevant information is being gathered.

4.1 Table 1 shows the number of child deaths in each local authority and the cumulative total across Tees. (It should be noted that the number of child deaths in any one year is likely to vary and sometimes notifications to the project are made after the year end.)

Table 1	H	S	M	R & C	**Tees**
Total Number of Child Deaths in each local authority	*	17 (7)**	9 ()*	*	**36**
Total Number of Males		9 (53%)	6 (67%)	*	**61%**
Total Number of Females	*	8 (47%)	*	*	**39%**

** Numbers in brackets show unexpected deaths

* Numbers referring to 5 or less have been suppressed

4.2 Table 2 shows comparative numbers of **total child deaths** per area for the 6 complete years of the Tees CDOP.

Table 2	**2008-09**	**2009-10**	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**Total**
Hartlepool	*()*	9 ()*	9 ()*	*()*	* (0)*	*()*	**34**
Stockton	15 ()*	10 ()*	18 (8)*	25 (8)*	14 (5)*	17 (7)*	**99**
Middlesbrough	20 (9)*	18 (8)*	12 (6)*	11 ()*	12 ()*	9 ()*	**82**
Redcar & Cleveland	12 (8)*	8 ()*	13 ()*	6 ()*	8 ()*	* ()*	**52**
TOTAL	**52**	**45**	**52**	**45**	**37**	**36**	**267**

**Numbers in brackets denote unexpected deaths

* Numbers referring to 5 or less have been suppressed

5. Child Deaths considered by CDOP April 2013 to March 2014

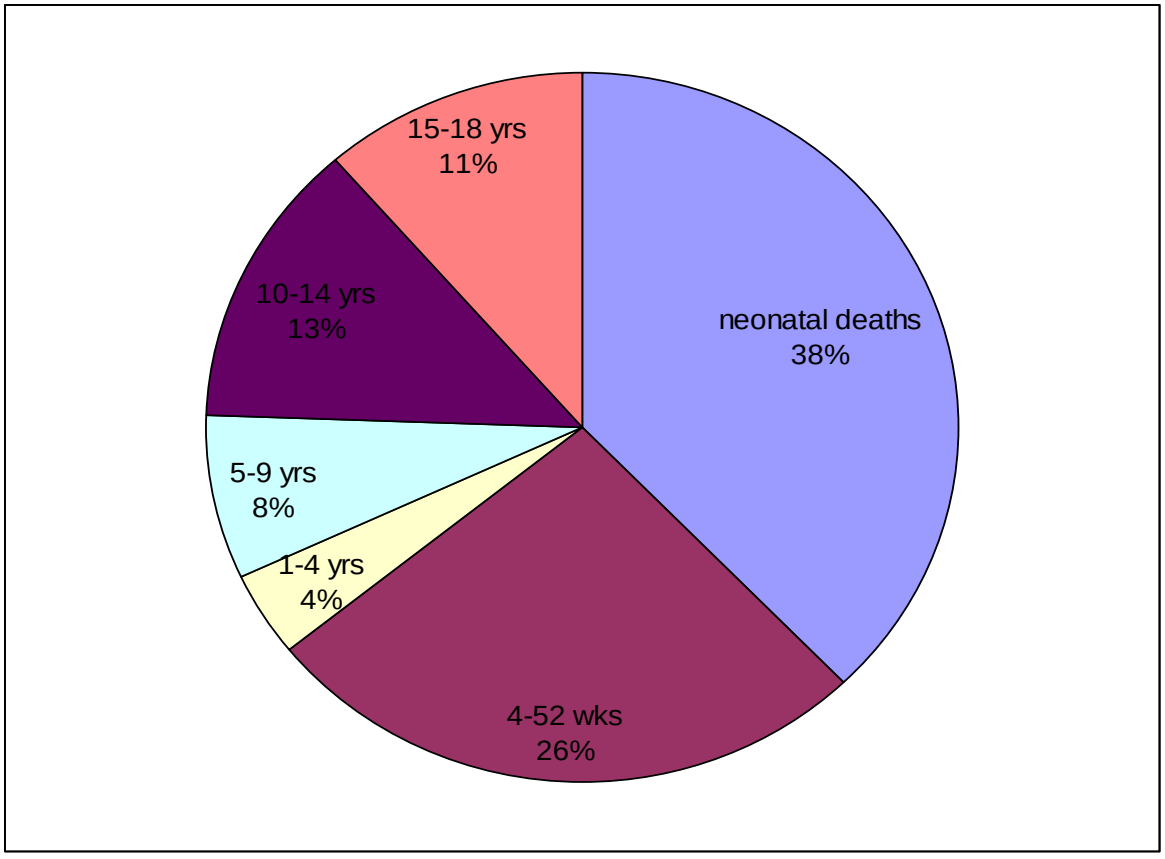
5.1 Table 3 shows the respective ages of the children when they died. In total 53 deaths were reviewed during this year.

Table 3: Numbers in age range

	Neonatal Deaths <4weeks	4-52 weeks	1-4 years	5-9 years	10-14 years	15 up to 18 years	**TOTAL**
Hartlepool LSCB	*	*		*			**8**
Stockton LSCB	7	*	*	*	*	*	**23**
Middlesbrough LSCB	6	*	*		*		**14**
Redcar & Cleveland LSCB	*	*				*	**8**
Tees	**20**	**14**	**2**	**4**	**7**	**6**	**53**

* Numbers referring to 5 or less have been suppressed

5.2 **Percentage of deaths reviewed by age group**



The latest national figures available are for 2012/13 which showed that 66% of child death reviews were on those aged under 1 year old which is comparable with the figures in Tees (64%).

Nationally the largest percentage of modifiable factors were seen in the under 1 years and the 15-17 year age group. In Tees 71 % of all cases with modifiable factors were seen in those aged under 1 year whilst 21% were seen in the 15-17 year old group.

5.3 Table 4 shows the children's ethnicity which unsurprisingly given the ethnic mix across Tees is overwhelmingly White British

Table 4: Ethnicity as recorded on returned CDOP forms						
		H	**S**	**M**	**R & C**	**Tees**
White	British	8	20	12	8	**48**
Asian or Asian British	Chinese		*			*****
	Pakistani		*	*		*****

* Numbers referring to 5 or less have been suppressed

5.4 Table 5 looks at the place of death. It should be noted that when a child dies in hospital after an incident that occurred elsewhere, such as a river or a highway, the place of the incident that led to the child's death is recorded.

Table 5: Location of death or fatal event					
	H	S	M	R&C	**Tees**
Number at home of normal residence or other family home	*	*	*	*	**9**
Number in hospital or medical facility	6	22	10	6	**44**
Number in educational establishment					
Number in public place (including roads, railways, parks, restaurant, beaches etc)waterway (i.e. river, canal, sea,)					**0**

* Numbers referring to 5 or less have been suppressed

5.5 Table 6 sets out the recorded reason for the child's death. This data reflects the original categorisation from the Local Case Discussion (LCD) and Form C information.

Numbers of deaths in the categories * ***as taken from the DfE website**						
Table 6		H	S	M	R&C	**Tees**
1. Deliberately inflicted injury, abuse or neglect						
2. Suicide or deliberate self inflicted harm			*			
3. Trauma or other external cause			*			
4. Malignancy		*	*	*	*	
5. Acute medical or surgical condition			*			
6. Chronic medical condition						
7. Chromosomal, genetic or congenital anomalies			*	*	*	
8. Perinatal/neonatal event		*	7	*	*	
9. Infection		*	*	*		
10. Sudden unexplained, unexpected death (Of these any classed as SUDI)		*		*	*	

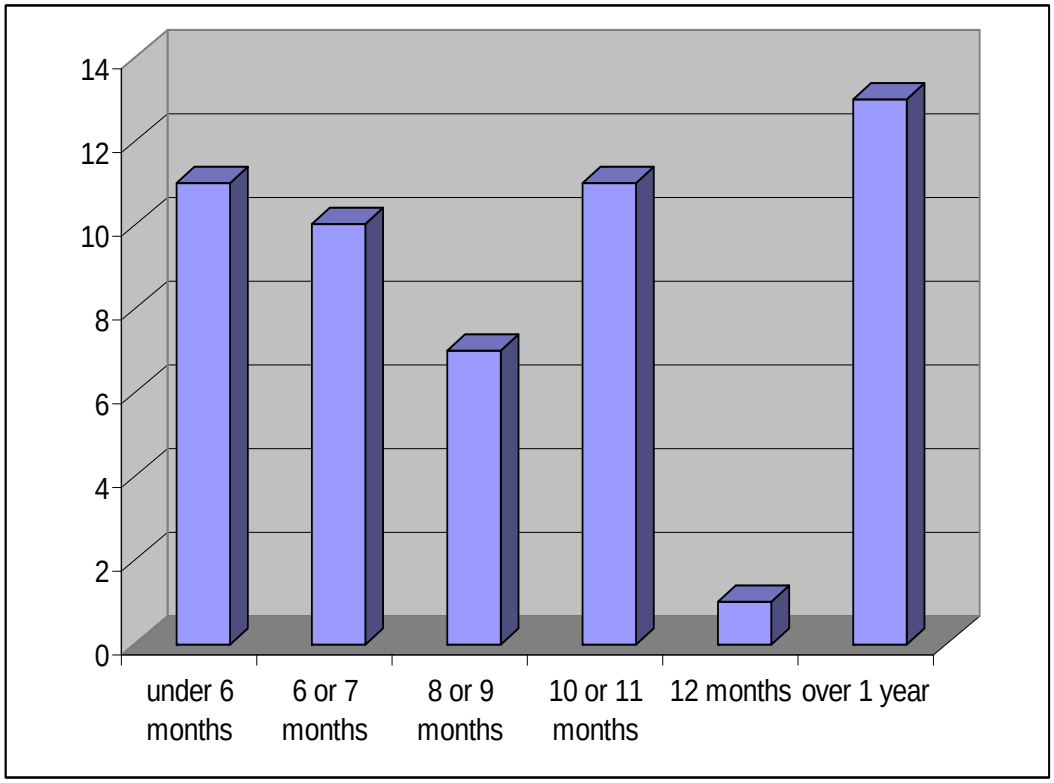
* Numbers referring to 5 or less have been suppressed

5.6 Table 7 provides additional information in respect of the Child Death Review (CDR) process and outcomes from the Child Death Overview Panel CDOP.

Table 7 : additional information	H	S	M	R&C	**Tees**
Number of deaths that were unexpected	*	7	*	*	**15**
Number of deaths that CDOP deemed to have modifiable factors.	*	*	*	*	**14**
Number of cases were CDOP had insufficient information to make a decision on modifiable factors	*	0	0	0	*****
Serious Case Reviews /Learning Review considered or CDOP flagged this up as a possibility	0	0	0	0	**0**

* Numbers referring to 5 or less have been suppressed

5.7 Length of time taken from date of death to case being reviewed by CDOP



In Tees 40% of the cases were reviewed within 7 months of the child's death but 24% of them took over a year. This is in line with the national average where 25 % of cases took over a year to review, a figure which has increased slightly over each of the last 3 years. In Tees this is primarily down to issues around gaining relevant information from staff when children have died expected deaths at home from conditions such as cancer. Tees CDOP has been working to resolve this problem and it is anticipated this will improve in coming years.

6.Tees CDOP and the Child Death Review Process

CDOP recognises, and greatly appreciates, the work done by partners across all services to ensure the smooth implementation of the Child Death Review processes and hopes to enjoy their ongoing support and commitment to ensure that all those who are required to, play their full and proper part in the process.

Neonatal Deaths:
These are discussed and reviewed by the medical and nursing staff of the two neonatal units on Teesside as well as receiving input from the neonatal unit in Newcastle if a child was transferred for care to the Royal Victoria Infirmary (RVI) in Newcastle. Two neonatologists (one from each unit on Teesside) have been co-opted to CDOP so that they could present local deaths to the Panel for scrutiny and discussion, whilst the Panel Chair, Dr Ward Platt is often able to give additional information on deaths which occur in Newcastle hospitals. A recent Independent Review carried out on the functioning of the Tees CDOP recommended that to save resources neonatal deaths should be reviewed outside of the main CDOP meeting. Although the 4 LSCBs have agreed this in principle at the time of writing no decisions have been made on the optimum way forward .

7. The future:

An Independent Review was carried out late in 2013. The purpose was to consider the current arrangement of the Tees Child Death Review Service, and in the light of available resources and the requirement of all services to review their position and maximise savings, explore alternative models which meet statutory requirements and provide an effective service. The following recommendations were made and agreed by the 4 Tees LSCBs.

1: The arrangement of a single Tees CDOP accountable as a sub-committee to each of the four LSCBs should continue. Currently a Lead Council hosts and supports the CDOP. This works well and should continue.

2: The Independent Chairing of the Tees CDOP ends and is replaced by a rotational arrangement between the four Directors of Public Health in the four boroughs, who will take on this work as part of their substantive role, funded by their employing authorities. This will require careful negotiation and planning. A new Chair will require sufficient time to take on the role effectively so it is recommended that this is an annual commitment, each DPH holding the responsibility for one year.

2 Support arrangements are reduced and incorporated into the Lead Council's LSCB Business Unit. Further work to be undertaken to estimate the costs of this arrangement, which will then need to be agreed by each of the four LSCBs.

3 A sub-committee is established to consider neonatal deaths. The membership of this sub-committee would have a clinical focus and be accountable to the multi-agency CDOP. It should refer to CDOP any particular case which it considers requires a multi-agency discussion. CDOP should continue to meet every two months to discuss all expected deaths of children over the age of 28 days and all unexpected deaths. The learning from CDOP and the Neonatal Sub-committee should be reported to the four LSCBs.

The new arrangements are being implemented during the early months of the financial year 2014/15 and current support staff and the Independent Chair will leave their posts at the end of June 2014.

APPENDIX 1

CHILD DEATH OVERVIEW PANEL

MEMBERSHIP 2013 – 2014

Core Members:

Dr Martin Ward Platt	Consultant Paediatrician (Independent Chair)
Rob Donaghy	Temp Detective Superintendent
Dr Kailash Agrawal	Designated Doctor
Dr Anne Phellas	GP representative
Dr Toks Sangowawa	Clinical Director of Public Health, Tees
Karen Hedgley	Designated Nurse Safeguarding Children/Looked After Children
Lesley Thirlwell	Named Professional for Safeguarding, NEAS NHS Trust
Janet Alderton	Supervisor of Midwives, UHNTH NHS FT
Jacqui Tucker	Lay Member
Joanne Atkinson	Lay Member
Jane Wiles	Children's Service Manager, JCUH
Hilary Minter	Head of Counselling, Teesside Hospice
Dean Jackson	Assistant Director, Education, Hartlepool BC
Shaun McLurg	Head of Children and Young People's Services, SBC
Dr Shalabh Garg	Consultant Neonatologist
Dr Bernd Reichert	Consultant Neonatologist
Dr Yifan Liang	Consultant Paediatrician

Deputies and Ad Hoc Members

Barry Waller	Head of Fire Engineering

Officers in Attendance

Marcia Ingram	Tees Child Death Review Manager
Sue Thubron	Tees Child Death Review Administrator

CDOP Meeting Dates and Development Sessions for 2013/2014

There were CDOP meetings in May, July, September, November 2013 and January and March 2014. A development session was held for CDOP in March 2014.

APPENDIX 2: Attendance at Tees CDOP meetings 2013-14

AGENCY	MAY 2013	JULY 2013	SEP 2013	NOV 2013	JANUARY 2014	MARCH 2014	NUMBER OF MEETINGS ATTENDED	PERCENTAGE OF MEETINGS ATTENDED
Public health	✓	✓	APOLS	✓	APOLS	APOLS	3 out of 6	50%
Designated Nurse safeguarding	✓	✓	✓	✓	APOLS	✓	5 out of 6	83%
Designated Paediatrician	✓	✓	✓	✓	✓	✓	6	100%
Neonatologists	✓	✓	APOLS	✓	✓	APOLS	4 out of 6	67%
Police	✓	✓	✓	✓	✓	✓	6	100%
Lay Members	✓	APOLS	✓	APOLS	✓	APOLS	3 out of 6	50%
Education	✓	✓	✓	APOLS	✓	APOLS	4 out of 6	67%
Children's Social care	APOLS	✓	✓	APOLS	APOLS	APOLS	2 out of 6	33%
GP	✓	APOLS	✓	✓	✓	✓	5 out of 6	83%
Paediatric Consultant	APOLS	✓	✓	✓	✓	✓	5 out of 6	83%
NEAS	✓	APOLS	✓	APOLS	✓	APOLS	3 out of 6	50%
Childrens Services Manager , JCUH	✓	✓	✓	✓	✓	✓	6	100%
Supervisor of Midwives, UHNT	✓	✓	✓	APOLS	APOLS	✓	4 out of 6	67%
Teesside Hospice	✓	APOLS	APOLS	✓	✓	APOLS	3 out of 6	50%

APPENDIX 3

Child Death Review Income & Expenditure 2013/14

INCOME	£	Total 13/14
Redcar & Cleveland Borough Council		1200
Middlesbrough Borough Council		1200
Hartlepool Borough Council		1200
Carry forward from 2012/13*		99,331
Total Income		**102,931**

EXPENDITURE	£	Total 13/14
Staffing: Manager/ administrator and on costs		31176
Professional Fees**		9970
Supplies and services		301
Total Expenditure		**41,447**
Carry forward 2014/2015		**61484**
Total		**102,931**

Notes:

* Carry forward income includes payments made in advance from SLSCB and R&C PCT for 2013/14

**Professional fees include costs for the Independent Chair including attendance at pre agenda meetings, training and other professional meetings. Other costs within this heading include Lay Members expenses, Hospice staff attendance at meetings, hosting of the website and the RMSO contract for notifications.

An Independent Review was carried out to determine how to continue with the Child Death Review process the current funding regime from April 2014 and decisions are being made on how to carry forward the underspend.

APPENDIX 4

TEES CDOP
WORK PLAN 2011-2014

PRIORITY	ACTIVITY	LEAD	TIMESCALES/ PROGRESS
1: Review of all child deaths by Panel.	• Panel meetings to be arranged a year in advance • Membership of Panel to be representative of all major agencies • Panel meetings to be organised and minuted by CDOP support team. • Panel members to attend annual Development Session to improve aspects of review. • LCDs to be held on all unexpected child deaths.	Marcia Ingram Martin Ward Platt Marcia Ingram Martin Ward Platt Kailash Agrawal	Completed Completed Ongoing Completed Ongoing
2. Monitoring of actions from each Case Discussion.	• All actions from each case discussion to be recorded and updated as information becomes available. • Monitoring data to be standing item on CDOP agenda • Any outstanding actions to be followed up by the appropriate member of CDOP or CDRP Manager. • Facilitation of appropriate actions that may be required following review eg ensuring families are aware of the need for genetic counselling.	Sue Thubron Marcia Ingram Marcia Ingram Kailash Agrawal	Ongoing Ongoing Ongoing Ongoing
3. Learning lessons to prevent Child Deaths	• Ensuring lessons are learned where appropriate from each review. • Facilitating discussion on preventative work eg para suicide • Dissemination of lessons learned to prevent future deaths occurring.	Martin Ward Platt Martin Ward Platt Martin Ward Platt	Ongoing Ongoing Ongoing
4. Produce and disseminate Annual Report	• Annual report to be available by September/October each year • Annual report to be circulated to Independent Chairs and Business Managers of Tees LSCBs for comment prior to publication. • Annual reports to be made accessible on Tees CDOP website.	Martin Ward Platt Marcia Ingram Marcia Ingram	Ongoing Ongoing Completed
5. Support for	• Monitoring of support services available for families	Martin Ward Platt	Completed

families	• Informing LSCBs when gaps in services are identified.	Martin Ward Platt	Ongoing
6. Collation of annual stats to inform national reporting	• Data to be compiled onto appropriate spreadsheets as per national guidance • National annual statistical pro formas to be completed and returned to DfE as required.	Sue Thubron Marcia Ingram	Ongoing Completed
7. Develop closer links with Tees LSCBs	• Panel minutes and overview of case discussions to be sent to each of the 4 Tees LSCBs after ratification. • Circulating Annual Reports and other updates as requested to Tees LSCBs.	Marcia Ingram Marcia Ingram	Ongoing Ongoing
8. Develop collaborative relationships with other North Eastern CDOPs	• Maintain and develop links with other CDOPs in North East and North Yorkshire through attendance at regional meetings and contribution to conferences. • Taking part in themed projects around specific areas of child deaths	Martin Ward Platt Marcia Ingram	Completed Ongoing
9. Ensure an annual review is carried out	• Ensure annual review of finances and staffing is carried out and a report submitted for information to each LSCB	Manager RCSCB	Ongoing

APPENDIX 5:

Gestation specific mortality for extremely preterm babies: how do the Tees units compare?

Shalabh Garg and Martin Ward Platt

Background

Over half of all child deaths occur under 1 year of age, and the two biggest contributions to these deaths are complications of prematurity and congenital malformations, in a ratio of 2:1. And since many babies who die as a result of their preterm birth do so after the age of a month, it is important when analysing deaths of preterm babies to consider mortality up to a year of age. Because of advances in neonatal care over the last 20 years, mortality from prematurity has fallen dramatically, and nowadays most of the mortality from prematurity is confined to the most premature babies, those under 28 weeks' gestation at birth. We therefore undertook this audit to assess the relative performance of the four neonatal intensive care services for the north of England, focusing on the most preterm babies and their mortality outcome to one year. We wished to ascertain whether there was any significant difference in overall or gestation specific mortality amongst the four neonatal intensive care units in non-malformed babies <28 weeks.

How we did the work

We took the cohort of babies born at less than 28 weeks from January 2006 to December 2011and used the perinatal mortality survey database held at the Regional Maternity Survey Office to identify all deaths up to a year of age. As the Badger database that is now used to capture all neonatal unit admissions did not extend back to 2006 we searched the admissions books of the four neonatal intensive care units to identify all relevant admissions in the years before Badger came on stream. We did not include babies who died before reaching intensive care (either because they died in another hospital or on the delivery suite). We attributed each baby uniquely to one intensive care unit based on the baby's location at 24 hours of age, irrespective of where the baby subsequently may have moved to, or may have died; a method agreed by the Northern Neonatal Network Board. We treated each live born baby of a multiple pregnancy as an individual.

Key results

Figure 1 shows overall mortality for babies under 28 weeks with 95% confidence intervals for each of the four neonatal intensive care units. The two Tees services had significantly higher mortality than Sunderland and Newcastle.

Figure 2 shows the gestation specific mortality. The unit differences here are more nuanced: there were very few deaths among 26 and 27 week babies so the apparent differences between units do not have significance. At 25 weeks Newcastle had a much lower mortality than all the other services. The main source of the difference between the Tees units and the rest can be seen to be the mortality from 23 to 25 weeks.

Further analyses by unit of maternal booking, birth weight, and in-utero versus ex-utero transfer, showed no plausible explanation for the differences in outcome between units.

Interpretation

Teesside has a high level of deprivation, and deprivation is known to be a factor in determining overall mortality, but work from other parts of the country has shown that although deprivation is a major cause of preterm birth, it does not adversely affect gestation specific mortality once a baby is in intensive care. However Teesside has much higher levels of maternal smoking and recreational drug use than the rest of the north east, and it is

possible that this and other unmeasured factors may be contributors to the higher Tees mortality.

The recently published EPIcure2 study has shown unequivocally that 'size matters': in other words, mortality outcomes are improved in babies under 28 weeks when they are delivered, and given their neonatal intensive care, in large perinatal centres. Together with the local audit data presented here, the message for Teesside is that if mortality among the most preterm babies is to be reduced, these babies should be cared for in fewer, larger centres. This would potentially be the quickest and most effective way to reduce overall infant mortality too.

These data support the case for initially centralising the care of babies under 26 weeks into one of the Tees services, and ultimately amalgamating both the neonatal intensive care services onto a single site.

Figure 1
Overall mortality (%) by neonatal intensive care unit
JCUH: James Cook University Hospital. UHNT: University Hospital of North Tees. RVI: Royal Victoria Infirmary, Newcastle upon Tyne. SRH: Sunderland Royal Hospital.

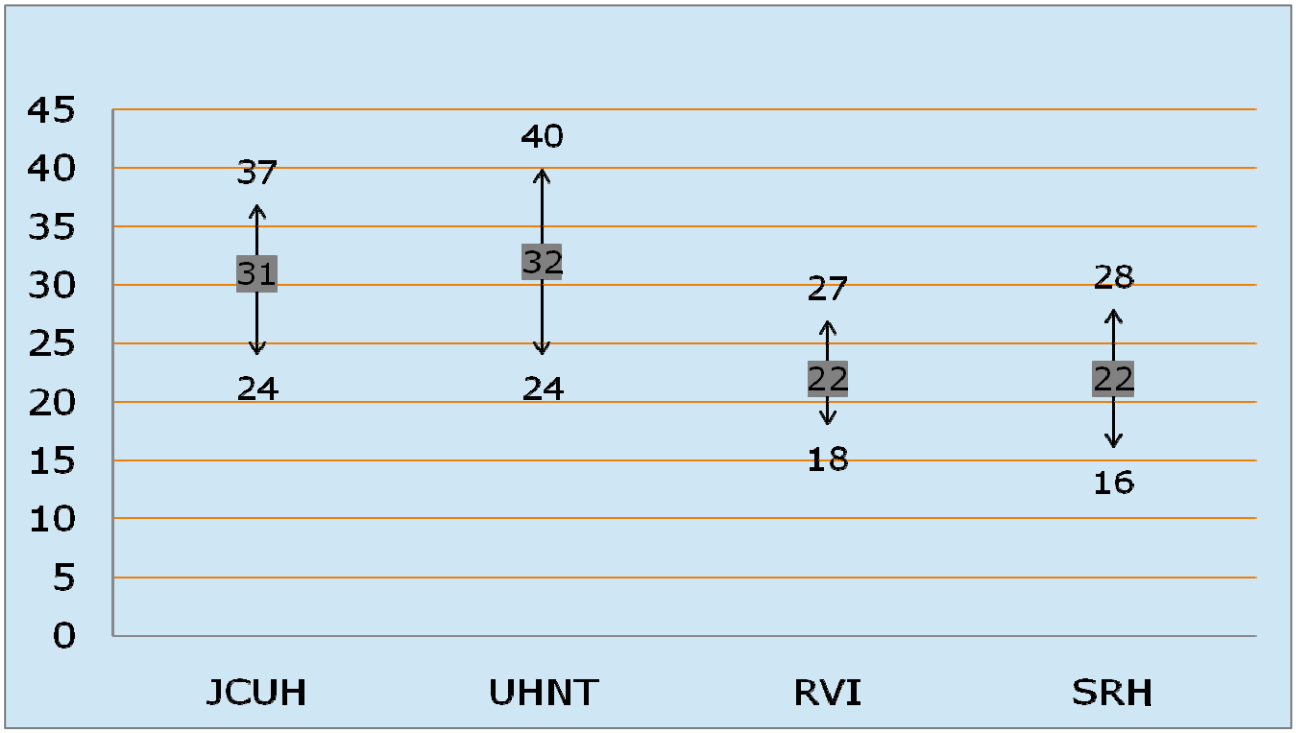


Figure 2
Gestation specific mortality (%) by neonatal intensive care unit.