



Child Health Information Development



**Developing child health information for
Tyne and Wear Service Providers**

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Severe Injury

Northumbria Healthcare NHS Trust Wansbeck General Hospital

We have discussed this document with clinicians and managers alike. The general view was that this was extremely helpful in terms of informing various aspects of service delivery, both preventative programmes and inpatient care.

The executive summary could provide an action plan:

- ◆ Improving data collection
- ◆ Reducing rate of severe fracture injuries
- ◆ Planning discharge and follow up facilities, eg community children's nursing services
- ◆ The "reducing length of stay" statistic could help plan paediatric services, in particular models of ambulatory care
- ◆ Targeting of preventative programmes and traffic calming schemes in conjunction with local councils, primary care and education
- ◆ Targeting health promotion focusing on age and gender issues
- ◆ Improvement of history taking within acute settings to provide improved data collection and improved care

Les Morgan

Deputy Chief Executive

Gateshead Council

Thank you for the report, which I found extremely interesting.

I think because of the nature of this activity which is informal it is unlikely that people will travel to a supervised session which makes it unlikely that the results could directly inform the planning service activity. I think it is important that parental guidelines and the raising of awareness of the potential dangers is something which the report could publicise through their findings.

From our point of view, in order to improve the findings more detailed descriptions of the nature of the accident would be required, similarly one of the problems that we have experienced with our fixed play data is the incompatibility with hospital computer systems and to this end improvements to software to hospital systems would be useful, in addition I would suggest that some added criteria could be included such as:

Example – playground activities

- ◆ time of accident ie in school hours/out of school hours
- ◆ type of activity eg games/sport
- ◆ type of sport
- ◆ supervised/unsupervised activity

Other accidents

- ◆ where did it occur eg public building, open space
- ◆ type of activity which resulted in activity
- ◆ supervised/informal etc

Finally if there is a point where you have a draft specification it would be helpful if this could be circulated for comments prior to implementation

Mike Newton
Director of Leisure

Gateshead Council

Thank you for the information report.

I found the information very useful and it will be very useful for supporting future initiatives and local accident prevention strategies. I am unsure how effective it will be at informing the "planning of services", if you mean mainline services of the Council, Trust etc, as many of those services are statutorily required. The presentation of the information is excellent with narrative sections accompanying the statistics and graphical information. I do question the language used in the report its a bit clinical and hardly Plain English.

I appreciate the need for accuracy in reporting and the need for displaying statistics in a proper manner, however, the average lay person or local accident prevention co-ordinator will find the information difficult to comprehend and disseminate in a user friendly way. The narrative sections explaining trends are very practical and although based on proper statistical information give the average person a much better understanding of the issues.

Could I ask why long bone fractures are given a higher severity rating than fractures of skull, spine and pelvis, when you might assume the latter potentially could result in greater harm, ie death or paralysis? Is this based on the demands placed on A+E by numbers of admissions? Or that the numbers of long bone fractures are far greater and provide a better statistical picture of trends.

Overall the report will be valuable for practioners to use. I am unclear about the frequency of such a report and the long term sustainability of it, but this will probably come from the next phase.

I hope these comments are useful.

Thanks

Gary Carr
Senior Environmental Health Officer

Newcastle NHS Primary Care Trust Health Promotion Department

Our department works with others to plan interventions aimed at the reduction of childhood accidents in Newcastle and North Tyneside. These figures are valuable indicators for us in eg linking fractures to falls.

Information in causes will be particularly useful and some economic data will enable us to prioritise our work around age, social status and risk factors.

A broad indication of the setting in which the accident occurred would be even more valuable in planning preventative activities eg home, school, playground etc as we can then target specific groups in specific settings and link this educational work to other interventions with parents, organisations and agencies responsible for 'safe' environments and/or harm minimisation approaches.

Wendy Patton

Head of Health Promotion (Newcastle & North Tyneside)

I have had a chance to look at the Child Health Information booklet. I think this type of information and figures are useful indicators. They will definitely help us plan appropriate interventions in order to reduce accidents and make a difference in North Tyneside. This is important to us in North Tyneside, as we do not have reliable sources of data. The layout also helps to make some comparison with other areas and will help to share information on good practice especially where they are similar trends of injuries. The following information will be useful.

- ◆ Causes of injuries in terms of type and frequency
- ◆ Setting in terms of where and how the accident took place
- ◆ Socio-economic data in terms of age and sex
- ◆ What are the patterns of accidents by age and gender and the relationship between behaviour and injury?

Generally the data will help us prioritise our work around age, social gradient and other factors and also to target specific groups in specific settings. This will also help us to plan appropriate interventions alongside appropriate multi-agency professionals.

Grace Wali

Child Accident Prevention Co-ordinator (N Tyneside)

Low Birthweight

The Newcastle Upon Tyne Hospitals NHS Trust Newcastle General Hospital

Many thanks for sending me this report which I was most interested to read. In principle such information ought surely to help plan services and also serve as a measure of the effectiveness – or otherwise – of intervention.

Taken overall, if the birth rate is falling slightly and the percentage of low birth weight babies is increasing slightly, do the two effects cancel each other out?

Andrew J Cant

Clinical Director – Children's Services

& Consultant in Paediatric Immunology & Infectious Diseases

Department of Epidemiology & Public Health School of Health Sciences University of Newcastle upon Tyne

I have discussed this with colleagues in the Department as well and sought their views. We think this is a fascinating piece of work which is of considerable potential benefit for informing service planning, as well as generating interesting research questions. The analysis based on local growth standards is particularly interesting in raising questions about changes over time in low birth weight and prematurity. You already identify and highlight the limitations of the datasets that are available, such as the absence of gestational age from the ONS birth tapes and the use of current post code of the child rather than post code of birth in some of the data you've used. Furthermore, other factors that influence the risk of having a baby with low birth weight may be contributing to some of the trends that are seen, such as maternal age and maternal smoking status, and it may be worth commenting on this in the absence of appropriate data to allow for them, or finding mechanism of incorporating such data if at all possible.

I also have some comments about the mode of presentation of some of the data. I assume that this data is intended to be accessible to a wide range of people in the service involved in planning and evaluating services. I think some of the data presentations may be quite difficult for those with a non-technical or epidemiological background to understand. I have the following specific comments.

The figures that present foetal growth at birth using the standard deviation score are really quite complex and I suspect many will find them difficult to understand. Furthermore, figure 17 is perhaps too complicated with too much data on it to make its interpretation at all easy.

I wonder if there should be more statistical analysis in terms of supporting statements regarding differences between districts and trends over time. Whilst there appear to be trends over time, are these statistically significant?

The geographical mapping of wards in the enumeration districts is helpful, but I wonder whether it needs more information or more clarity on which wards are which. Whilst many people may have a picture within their mind that enables them to

identify wards on a picture of this type, I wonder whether the inclusion of more information on the maps, to allow people to orientate themselves would perhaps be helpful. I'm not sure about the value of the maps by enumeration district. The scale and shading does not make for easy interpretation.

In summary, I think these presentations are helpful and raise some interesting issues for debate and discussion, both in terms of service planning and delivery and in terms of possible research agendas. I suspect that when these are developed for wider dissemination, they will also generate questions about the significance of any demonstrated differences between districts and areas. Furthermore, such presentation will increasingly need to be undertaken at a PCT level and in some areas within the Region PCTs are going to be relatively small geographical areas with the problems that will then arise from smaller numbers available. Nonetheless, I am sure that these are fascinating and valuable analyses and with further refinement will be even more valuable.

I think the inclusion of commentaries and interpretation is especially helpful and could potentially be extended.

Richard Thomson
Professor of Epidemiology & Public Health

Cerebral Palsy

Newcastle City Council Social Services Directorate

Thank you for the report on Cerebral Palsy. I thought it was an interesting and useful piece of work.

I have now asked Andy Roberts (Manager, Children with Disabilities) to respond in more detail to you and to share the report with The Children's Services Planning needs group for children with disabilities.

Margaret Asquith
Head of Commissioning

Thank you very much for the copies of the Child Health Information booklet on Cerebral Palsy which you sent to various members of this Directorate. I have been asked to co-ordinate a response to the questions you asked.

The booklet gives a clear picture of the impact of disability on a child's lifestyle and where the most pressure is felt eg for Newcastle physical independence, mobility, social integration and clinical burden are high pressure areas. This is an indicator for service development. The report also identifies that an increasing number of children are diagnosed with Cerebral Palsy which has implications for the expected demand for services in the future. While the general information is useful the more specific information regarding the needs of children can be used to predict future demand and therefore direct service planning.

We would be very interested if you were to apply the LAQ to other forms of disability which would give us a much fuller picture of the need.

Andy Roberts
Manager, Children with Disabilities

Gateshead and South Tyneside Health Authority

I was pleased to receive this document and look forward to others in the series. I have a number of comments and questions and would be happy to discuss these with you further.

- ◆ Since the whole analysis largely rests on the validity of the Lifestyle Questionnaire, it is essential that this is explained in the text and a published reference quoted. Your conclusion in paragraph 2 "it is practicable and produces meaningful results" would then be evidenced. As part of this, the use of weightings needs to be discussed in more detail and their validation.
- ◆ There has been much discussion in the published literature around questionnaire-based profiles and whether individual domain scores can be added together. For although it is extremely tempting and may facilitate representation of complex data, some statisticians would strongly argue against this. Equally, the aggregation of

scores of all individuals needs justifying. At the very least, I would suggest that the diagrammatic representation of a linked line across domains is primarily misleading and should be replaced by individual bars.

- ◆ Although the LAQ is explained, the LAS mentioned in Box 2 and in the text is not explained but this clearly relates to incidence. This needs explaining. Also it is unclear if 90-100% or 0-9% LAS is greater severity.
- ◆ Page 2 mentions an increased cerebral palsy rate especially in “moderate or more score cerebral palsy”. This needs to be defined in relation to Box 2 percentage figures
- ◆ Page 3 rates of cerebral palsy (per 1000 births) are quoted and because of the reference to “small numbers”, it would be helpful for the numbers to be quoted alongside the rates.
- ◆ Box 3 gives the “dimensions” or domains of the LAQ but to confirm links to next boxes, each dimension should have the letter “P” “M” etc alongside.
- ◆ It is important for planners to understand the use of the LAQ with parents and professionals (this also relates to the weightings), to be sure that the system is not open too bias particularly in relation to supply of benefits. A real example is of families with a child with soiling and encopresis not reporting improvement for fear of losing benefits.
- ◆ All boxes would benefit from titles/legends.
- ◆ Overall, the data analysis would benefit from further simplification with greater explanation given about the range of scores for a particular dimension (apart from appendices of actual data) and what this means in practice. Is a score 0 = normal child at 4 or 5 years or is there no relation to this? Is the range of scores 0-10 arithmetic as chart indicates? Planners need to understand your use of “poor”, “better” if this is to be used.
- ◆ Is this information to be shared with parents and users and does it also need testing with them?

Dr Gill Sanders
Executive Director

Gateshead Council

I was recently passed the Cerebral Palsy exemplar and read it with interest. I do not think there is any doubt that we need information of this sort or that it would assist planning of services. As things stand we tend to struggle, when planning new or restructured services, to build up a clear picture of current and likely future need. Our recent experience in planning provision for children with autism was a case in point with decisions ultimately being based on figures of rather doubtful reliability.

Our needs as an education authority, however, tend to extend beyond single issue statistics (the prevalence of autism being an exception to this). Indeed, the major, and much emphasized, concern of our special schools is what they see as the increasing complexity of the special needs they are required to address. (This is often attributed to the improved survival of very premature babies and it was interesting to see evidence of this effect, in your exemplar.) The kind of information we would find most valuable would, therefore include the prevalence of associated, particularly cognitive, communication and, sensory difficulties. Of course, I appreciate how difficult it would be to compile such information but suspect that without it the statistics would only partially relieve the need to rely on an informed guess.

As for the presentation of the information itself, I liked its brevity and general clarity. I would have preferred a different way of representing the information in ‘box 2’ so that trends and actual numbers of cases at each severity level could be

distinguished more easily and would have liked some indication, in practical terms, of what particular LAQ dimension scores meant.

Overall, I felt that information of the sort covered in the exemplar presented in the manner of the exemplar could, potentially, be very useful.

R A Champion

Principal Educational Psychologist/Learning Support Co-ordinator

Smoking Prevalence

Newcastle NHS Primary Care Trust Health Promotion Department

Thank you for the copies of the reports. Wendy Patton has asked me to comment on her behalf.

The report is well written and provides a useful outline of the currently available data on smoking and young people throughout Tyne & Wear. I feel that Monique L'hussier, has managed this task well, despite the data coming from such a wide number of sources. This in itself does however highlight the fact that data on smoking and young people is not consistently collected across the HAZ, for a variety of reasons.

In the longer term it would be useful to have agreed consistent data collection and monitoring procedures on smoking and young people throughout Tyne & Wear and Northumberland (Strategic Health Authority area). However, currently Health Authorities and PCT's have different plans for such data collection. Some have committed funding to regular Health Related Behaviour Questionnaires, whilst others such as Newcastle and North Tyneside PCT's have purchased the Huddersfield model of school health profiling. This will involve the collection and analysis of health related data on a school, its locality and its population. It does include some basic smoking prevalence data. Such local information, it is hoped will provide a baseline for schools and those that work with them, that will inform interventions.

Additionally other major initiatives are required to collect data on smoking, such as Sure Start. Whilst districts do try to have a 'joined up' approach this can be somewhat challenging! Any joint smoking prevalence data collection and analysis would need to be carefully negotiated and planned. I do feel it is possible to use the same basic framework and methods. This would have cost implications both in staff time and data analysis and I'm not sure how this could be secured. Perhaps the production of a model framework, with arguments could be produced and presented to PCT's for their consideration.

I hope these comments help.

Judith MacMorran
Health Promotion Officer
Acting Team Leader (Young People)

Gateshead Health NHS Trust Children's Services Directorate

This is a very useful document as it brings together local data and puts it into context with national data.

I feel this would be an extremely useful document for the School Health Advisors (School Nurses) to have, as this would assist us in the identification of health needs in individual schools and targeting areas for service development.

We have already organised training for the School Health Advisors on smoking cessation for young people and this information gives us evidence in planning and targeting services. On a more local level it would be useful to have the results on individual schools to enable more targeted work.

Susan Hay
Team Leader School Health Advisors

Sunderland Health Authority

Thank you for your report, which is welcomed and I have sought the views of Christine Jordan, our Tobacco Control Co-ordinator before responding. Her view is that she is currently concerned that each district collects data in different ways. This makes for difficulty in comparison between small areas and aggregation with regards to a figure for the whole area.

Certainly in Sunderland we have made widespread use of the John Balding questionnaire, and the advantage of continuing with this is that we can make relatively meaningful use of a trend data with consistent cohorts over time.

If we are to look at rates across Tyne & Wear the only way round this would be to have a regular prevalence and consistent survey done in each area. This will probably require funding and dedicated staff. Whilst this would have local consistency, the difficulty is then that it would be out of sync with the national data, and personally I think that smoking amongst young people is most likely to be influenced by national initiatives and awareness at a governmental level. A decision to undertake local prevalence studies then will put us out of sync with the ONS survey, but Christine's view is that the ONS survey is misleading in that it shows that smoking prevalence is reducing when she is of the view that it is increasing in this area.

My conclusion is that actually there needs to be a decision with regard to monitoring smoking prevalence at a national level, and if further local area data is to be required the data should be collected in the same way to ensure its comparability.

Dr J Thomas
Director of Public Health

Northumberland Health Authority

Here are a few comments about the smoking prevalence paper.

- ◆ So true that it is hard to find good comparative data. Vital that all Public health depts in the area work together to collect good data. I find the ONS data the most useful and have some reservations about Balding.
- ◆ There is cause for serious alarm in the North East as it looks as if this next generation of adults will have worse health than their parents (in terms of smoking and alcohol related disease)
- ◆ Why have smoking rates fallen in South Tyneside?? Have they really? 4. Please can you show more data including the breakdown of smoking rates by AGE and SEX as this then shows the alarmingly high rates of smoking among teenage girls. Giving average figures for all ages and for boys and girls of same age obscures the data.

- ◆ Fig 11. girls 2"seem to be" decreasing faster than boys- let's hope this may be true, but surely too early to say. Need a breakdown by age AND sex. Is this the mobile phone effect? Should all girls (and boys) be given a mobile phone with regular health related text messages?!
- ◆ Page 18, bottom of page, reference to my publication as ref 5., in fact ref 8. The data that stands out in that small survey of 2 schools is the stark contrast in smoking rates between them. One school had a heavy smoking head and no effective anti- smoking policy, the other had a strict anti-smoking policy. There is evidence from work by Anne Charlton and others about school policies. This needs further research, and application. Healthy schools is an excellent opportunity to really put this to the test, but we need good data.
- ◆ Can you give the complete reference for ref 8.!

Dr Mark Baggot
Paediatrician

Teenage Pregnancy

Royal Victoria Infirmary

Hello, I was asked to comment on this recent report. I found it very useful and although I have only had it for the past week, I've used it on several occasions and have shown it to colleagues. We all agree that it is great to have all the latest statistics in one report. The format is easy to read and will be very helpful for anyone who is putting a talk together around teenage pregnancy in the north east. It's also good to be able to compare local statistics. I work closely with the teenage pregnancy co-ordinators and they feel it is a positive and useful document for the provision of services for this client group. Hope this feedback has been constructive. Do contact me if you need any further help or more specific comments.

Sara Hayward

Lead Project Midwife for Teenage Pregnancy

8 March 2002

Newcastle Primary Care Trust

I was asked by Nigel Davison, Assistant Director of Nursing for the Primary Care Trust, to read and make comments on the above document as I work in the Contraception and Sexual Health Service in Newcastle.

I found it to be an excellent piece of work, clearly demonstrating the huge need to improve sex education in schools, service delivery and advertising, as well as many other issues. For future planning, it may have been helpful in figures 2,6,7, showing the wards of Newcastle, if those with the highest conception rates, ie. dark blue, were named. It necessitates referring to another map to locate which ward it is.

The children indicated (figures 8,9,10,11) that the main and ideal source of sex education after parents was at school. They also indicated (page 10), that it was inadequate, too little, too late, provided by a teacher with too little training and/or time to teach it. For any future surveys, can the children be asked: "How they would like sex education in schools developed and by whom?" Would Health Workers be more appropriate for example?

Another area that also needs addressing is how can education and health services work together more closely. For future planning this would be very useful.

I hope these comments will be helpful in the next phase in developing improved information concerning teenage pregnancy.

Stella Rutherford

Clinical Nurse Leader

Graingerville Contraception & Sexual Health Clinic

Gateshead Health NHS Trust

I recently received a copy of the above document and my comments are that I have found this an extremely useful document to my current role.

One of the main priorities for our service is sexual health, including the reduction in teenage pregnancies and this document provides useful local and comparative data, which can be used for profiling and producing action plans for service development.

I have sent a copy to Ms Linda Hubbucks who is the Team Leader for the School Health Advisors at Grassbanks Health Centre for their use.

Ms Susan Hay

Team Leader School Health Advisors

General Comments

Overview

The variation between the reports is puzzling: is it primarily due to different researchers' involvement? The other possible reasons include variations in data 'demand' (ie. the report aims to meet the distinctive needs of the users of information on that particular topic), or differences in data 'supply' (ie. the report has been shaped by the data available on that topic). No doubt a mix of these reasons applies. As a researcher, I would like to know the decisions which led to each report's content. This explanation could be embedded in an introductory section (following the Executive Summary) which all the reports probably should have, and which would help both researchers and other readers to appreciate what they are reading (and why). The following is a possible structure for this introductory section.

- ◆ The project [common to all reports]
- ◆ This topic
- ◆ The main users of this topic's information
- ◆ This report [its purpose/status eg. "for consultation"]
- ◆ Data availability [what is currently/potentially/surprisingly (un)available]
- ◆ Analysis options [what can (would be) done with (un)available data]

At the end of each report, an evaluation could be attempted. At the consultation stage, this might involve a series of questions for readers (eg. "what here was useful/surprising?" or "what more is needed?") with the aim of identifying the *value added* from collating/linking/analysing/disseminating data.

Analyses

The more national/regional benchmarking that is possible, the more the information helps to identify problems in the HAZ area. To a lesser extent, trends can be seen as more indicative than static measures.

One simple guide-line on the choice of particular indicators would be to adopt any indicators used in Best Value or other government target systems. That said, one of the strong points of the Severe Inquiry report is its demonstration that official measures sometimes produce potentially misleading information.

For analyses focussed on people living in deprived areas, consider analysing *only* people living in the most deprived areas in the country, but *then* providing a breakdown by, for example, local/health authority, or by age.

Presentation

The following points may seem to be unimportant, but they can make all the difference to the readability – and hence the impact – of the reports.

Stick to the same order of areas, or categories, throughout a series of charts so that it is easier to recognise the different patterns of results in related analyses;

Avoid using tints of the same colour – unless it is essential to cut reproduction costs – as many people find them hard to discriminate.

Choose the areas for mapping so that the output isn't dominated by boundaries – which in fact may be better left off altogether – and also isn't so fragmented a pattern that there is wild variation over very short distances (eg. as with Enumeration Districts).

There probably should be 'technical' annexes which could specify precisely, for example, the denominators used in the analyses (eg. Census or Annual Estimate populations?), and also give other background formation (eg. defining what "SSDA 903" is).

Specifics

Some other issues about the individual reports:

- ◆ Smoking - some titles of the tables are particularly odd

- ◆ Injury - can there be links made to earlier road accident research

- ◆ In care - the health analysis needs to be much more to the fore, and there should be contrasts with the total population of children in the same areas.