ScotPHN report

Looked After Children in Glasgow and Scotland:
A Health Needs Assessment

Sonya Scott, Specialty Registrar in Public Health, NHS Greater Glasgow & Clyde
Ray Hattie, Project Manager, NHS Greater Glasgow & Clyde
Carol Tannahill, Director, Glasgow Centre for Population Health

April 2013

FOREWORD

Understanding and meeting the health needs of the population of children and young people looked after by local authorities in Scotland has been identified as a priority by all the Directors of Public Health in Scotland. The looked after child population is defined by its requirement for statutory care and protection and as such is likely to represent some of Scotland's most vulnerable children. As a corporate parent in partnership with other agencies striving to get it right for every child, NHS Scotland has a particular responsibility to ensure it provides these children with the most appropriate and best quality of care possible, accepting that they have not had the best start in life.

The first Scottish Public Health Network (ScotPHN) report on this vital topic looked specifically at the needs of young people looked after in residential settings. This report assesses the needs of those in all settings. The starting point for supporting the children is better information about their health, care and wellbeing, in collaboration with other agencies. Although there is a great deal of tacit knowledge within services and evidence of good multi-agency working at the level of individual case management this has not yet translated into the proper and accurate overview of population health which is essential for planning, evaluating and improving quality of care and support.

In five years' time we want to be able to quantify with confidence the reasons why children become looked after. Then we can direct our prevention efforts, describing the most frequent and severe health issues facing looked after children in all care settings, in order to ensure effective and targeted interventions and be able to show that the quality of provision of care ensures better outcomes for looked after children. The report follows on from that of Dr Maggie Lachlan on children in residential settings. This work adds significantly to that assessment, with a complementary set of recommendations that aim to construct a firm foundation to achieve improved outcomes for this vulnerable group of children.

I would like to acknowledge the work of Sonya Scott and Ray Hattie, with the Glasgow Centre for Population Health, in producing this report; and also extend thanks to ScotPHN, other members of the project steering group and all interviewed stakeholders who provided valuable contributions to this work.

Andrew Fraser
Director of Public Health Science, NHS Health Scotland
Project Chair and Sponsor

ACKNOWLEDGMENTS

Our thanks go to all of the following, without whose help, time and advice this Health Needs Assessment could not have been completed.

Literature Search
Laura Christie, Iain Stewart and Lorna Trainer, of NHS GGC Public Health Directorate Services, helped in design of literature search strategy, accessing literature and screening retrieved abstracts.

Glasgow City Council Data
Susie Kempsell, of Glasgow City Council Social Work Information Services, provided data on children and young people looked after by Glasgow City Council.

Scottish Children's Reporter Administration Data
Gillian Henderson and Donald Lamb, of the Scottish Children's Reporter Administration, provided data and advice on looked after children and young people on Supervision Requirements.

Corporate Respondents
A range of strategic and operational NHS and Local authority staff working with looked after children gave generously of their time and expertise in contribution to this project.

Glasgow Centre for Population Health
A number of individuals gave support and advice relevant to the administration, scope, design and analysis of this work.

Steering Group Members
The members of the steering group (Appendix 1) provided valuable guidance, information and expert advice for this project led by the chair Dr Andrew Fraser, Director of Public Health Science, NHS Health Scotland.

Sonya Scott
StR Public Health

Ray Hattie
Project Manager, NHS GGC

Carol Tannahill
Director, GCPH

April 2013

ABBREVIATIONS AND ACRONYMS USED IN TEXT

CAMHS	Child and Adolescent Mental Health Services
CBCL	Child Behaviour Checklist
CELCIS	Centre for Excellence for Looked after Children in Scotland
CSWS	Children's Social Work Statistics
DfE	Department for Education England
GCC	Glasgow City Council
GGC	Greater Glasgow and Clyde
GIRFEC	Getting It Right For Every Child
GUS	Growing Up in Scotland Study
HNA	Health Needs Assessment
ISD	Information Services Division
LA	Local Authority
LAC	Looked after children
LACYP	Looked after children and young people
NHS	National Health Service
ScotPHN	Scottish Public Health Network
SCN	Scottish Candidate Number
SCRA	Scottish Children's Reporter Administration
SDQ	Strengths and Difficulties Questionnaire
SR	Supervision Requirement

FIGURES AND TABLES

Tables Page

EXECUTIVE SUMMARY

Introduction

Looked after children and young people (LACYP) are a vulnerable sub-group within the general population of children and young people. They are often exposed to previous maltreatment and lack the secure support and oversight of a consistently loving adult. On the basis of available evidence, poorer health outcomes are more likely for LAYCP than other groups of children and young people, particularly with respect to mental health. Case management, driven by GIRFEC (Getting It Right for Every Child), has improved multi-agency information sharing and collaboration in caring for individuals, but there is very little evidence quantifying health outcomes for LAYCP in Scotland as a group. This impedes efforts to assess population needs and evaluate the effectiveness of interventions. This is an important limitation to current policy aiming to prioritise and improve the early years' experience of Scottish children in that this group of children and young people represent failures in early years support and provision and for whom there is a plausible risk of perpetuating a cycle of poor parenting. This report consequently aimed to: establish what health intelligence systems currently exist in Scotland for LACYP[a]; review the limits of what can be said with currently accessible data sources; and elicit the views of key stakeholders in health, social care and education on health intelligence needs.

Methods

There were three main strands of work:

- a systematic search of recent literature to identify high frequency, severe physical, mental and social health problems of LACYP in high income Western countries;
- an exploration of multiple data or information sources (only one of which, Children's Social Work Statistics, is routinely accessible to all health boards) to determine what can currently be said about health outcomes;
- a structured survey of all child health commissioners to determine what health data on LACYP are currently held within individual health boards; and semi-

---

[a] Looked after children are legally defined by the Children (Scotland) Act 1995 (6) (further information in section 4.1 below). In this report we include children looked after in the four main care group settings: at home – parental care at home supervised by the local authority; in kinship care – child removed from their home and placed in the care of a suitable relative or family friend; foster care; and residential care – which includes secure care.

structured interviews with key stakeholders to determine health information and intelligence needs.

What we found

There is a strong consensus that LACYP are a particularly vulnerable group, comprising a sizable proportion of the general population of children and young people in Scotland (1.6%), yet for whom there is no comprehensive health and wellbeing profile. It is likely that children and young people looked after in Scotland will have poor outcomes relative to the general population and, perhaps also, children and young people who have experienced similar levels of material deprivation. There is some evidence of this in educational terms but a lack of documentation to evidence the situation in health and social terms. In the areas studied, multi-agency collaboration and data sharing for individual case management appears to be effective. In addition there is a great deal of tacit knowledge, within services, about the problems experienced by LACYP. There would also appear to be a great deal of health data within individual case records, sometimes duplicated across different agencies, which is not being collated. However, good practice is severely hampered by the lack of systematic information on needs and the limited capability electronically to share information across services, with the use of multiple child identifiers being a particular barrier in this respect.

Children's Social Work Statistics (CSWS), published annually, provide some high level epidemiological information for the national population and by administrative area, including incidence and prevalence of local authority care, with the latter available by care setting sub-group. Both the Scottish Children's Reporter Administration (SCRA) and local authorities hold data on children and young people (the former only for the proportion of LACYP looked after with compulsory measures applied by the Children's Hearing System). From data on a point prevalence sample of all LACYP with Supervision Requirements (provided by SCRA) and data on a point prevalence sample of all children and young people looked after by Glasgow City Council (provided by Glasgow City Council Social Work Services) we were able to add further detail to the information provided by CSWS, including an exploration of reasons for care.

Combining the information from the literature and each of these data sources allows the following conclusions to be drawn:

- 1.6% of 0-17 year olds in Scotland are looked after (July 2011 data);
- the number and proportion of 0-17 year olds in Scotland who are looked after has been increasing over the last ten years;

- children looked after at home (where the parental care of children at home is supervised by the local authority) are the biggest care setting sub-group nationally (representing 33.6% of LACYP in 2011);
- kinship care has seen the largest growth in numbers of any care setting sub-group since 2001;
- most recent data (2011) indicate that “lack of parental care” is likely to be the most frequent reason children and young people become looked after;
- material deprivation is likely to be a major upstream determinant of need for care;
- care setting sub-groups differ in terms of a number of important determinants of health including age, sex, reasons for care, parent’s area deprivation and previous number of placements in care;
- health intelligence is least good for children at home, yet this care setting sub-group may be a particularly vulnerable;
- it is likely that being looked after is associated with an increased risk of mental illness, particularly conduct disorder, although the extent to which this association is related to the causes rather than the consequences of care is not clear; and
- placement instability is likely to be associated with adverse health outcomes, yet may be relatively common for looked after children and young people in Scotland.

The importance of improving local health intelligence is underlined by the methodological weaknesses of studies reported in recent literature, the difficulties of extrapolating findings across different child welfare contexts and the current lack of health outcome data. Unfortunately, neither the SCRA nor Glasgow City Council data sources explored in this study had health outcome data. Four NHS boards reported collating health outcome data for looked after children and young people. The majority of outcomes described were very high level and it was not clear how these were defined or measured.

In addition to measuring absolute health outcome frequencies for LACYP there is a need to determine how much of the observed morbidity and mortality is in excess of that seen in children and young people from similarly deprived backgrounds and neighbourhoods. This comparison is necessary in order to assess the level of investment and intervention that would be proportionate to the needs of this group specifically.

Responses to the stakeholder interviews highlighted that national directives and performance targets are important in determining what data are collated at a local level. There is currently no such directive or target for health outcomes for LACYP, and while the challenges of introducing one are recognised, national leadership of this type is needed to ensure more systematic understanding of the needs of LACYP in Scotland, better targeting of intervention, and routine monitoring of progress.

In the absence of improved health intelligence it is of obvious importance to continue to meet the health needs of children and young people identified through individual health assessments. It is hoped that a planned NHS GGC health and wellbeing survey of 11 to 16 year olds looked after by Glasgow City Council will be helpful in improving our baseline understanding of health needs for this group.

Recommendations

1. A national data set should be created, containing a core set of measures and indicators of the health and wellbeing of LACYP in Scotland. This will require leadership from Scottish Government, and a set of shared requirements and accountabilities on health boards and local authorities (or their integrated health and social care partnerships) to record and report on this health information in a systematic way. Core indicators should by compatible, where possible, with those available for the general population of children and young people, thereby enabling quantification of any excess morbidity associated with being looked after. The multi-informant strengths and difficulties questionnaire (including impact questions) is recommended as a comparable,[b] pragmatic measurement instrument for mental health. A recommended starting point is the incorporation of this core set of measures into the comprehensive physical and mental health assessment for looked after children (see Section 10.3).

2. A series of approaches should be considered to establish the routine recording of looked after status, and to enable linkage across different data sets. These include:
    a. incorporating looked after care setting Read codes/variables into existing child health data sets (e.g. Child Health Surveillance System, Scottish Immunisation Recall System, Special Needs System, relevant local surveys);
    b. including looked after measures in national child health surveys (Growing Up in Scotland, as a prospective cohort, would be particularly useful);
    c. using a single unique identifier across education, social care and health to facilitate record linkage; and
    d. data linkage across agencies supported by the new Data Linkage Service which is in development by Scottish Government. (See: http://www.scotland.gov.uk/Topics/Statistics/datalinkageframework/NDLC)

---

[b] SDQ is currently used for 4-12 year olds Scottish Health Survey and 13 and 15 year olds in the Scottish Adolescent Lifestyle and Substance Use Survey.

3. In addition to a consistent set of health indicators, it is recommended that a more consistent typology of ‘reasons for care’ is developed. Currently, ‘reasons for care’ categories differ between agencies and the distinction between categories is sometimes unclear. A smaller number of categories, or a typology that could merge into broader categories, would enable analysis to be carried out in a way that helps direct preventative action.

4. To ensure progress on the above, Directors of Public Health should assign a national lead for GIRFEC/LACYP health information, working with the Scottish Government and other national bodies to derive a strategy and timescale for delivering:
   a. a standard minimum data set, and a means by which data can be linked across agencies for each child;
   b. shared protocols and facilities for sharing good practice and experience; and
   c. guidelines for regular local and national standard reporting.

5. To ensure implementation on a local basis, Directors of public services should work together to share information on a systematic basis and report jointly on the experience and performance of services supporting looked after children.

SECTION 1: INTRODUCTION

The health needs of the population of children and young people looked after by local authorities in Scotland have been identified as a priority by the Directors of Public Health in Scotland. This is due to the vulnerability of the group, their likely poor health outcomes and the lack of a consistent system to assess need and monitor progress in meeting needs. As a result the Scottish Public Health Network commissioned NHS GGC to carry out a health needs assessment for children looked after in non-residential settings. This health needs assessment follows on from a first health needs assessment of LACYP in residential schools, care homes and secure care (1).

It is highly probable that the causes and consequences of being in care may result in unmet health needs in the population of LACYP. Locally-specific intelligence on health needs is particularly important given potentially significant differences in national child welfare contexts. However the lack of accessible health information on LACYP in Scotland is a barrier to a quantitative assessment of these needs. In particular little is known about the needs of LACYP in non-residential care setting; this is especially true of LACYP looked after by social care services in their own homes.

In order to assess the health needs of any population we would ideally want to be able to use routine data to ascertain the frequency and severity of a range of health outcomes for the sub-group of interest. However, there is currently no routine health data source which identifies the population of LACYP in Scotland. During the scoping stages of this health needs assessment (HNA) a number of potential methods for collecting the health outcome data needed for an epidemiological needs assessment were considered. Record linkage (to look retrospectively at the pattern of NHS utilisation and experience of LACYP) was excluded because of the time required to establish linked data sets and the cost involved. Case note review was also ruled out because only a small sample size would have been achievable within resource limits and children and young people looked after in kinship care and at home may not be sufficiently captured as they are not currently assessed by looked after children teams in all health boards. A population survey was identified as the most viable method for an epidemiological needs assessment but again it was acknowledged this would also have significant time and cost resource implications.

In this HNA we therefore aimed to identify health intelligence needs for LACYP in Scotland by:

- establishing what local health intelligence systems currently exist within the NHS in Scotland;
- reviewing the limits of what can be said with currently accessible data sources; and

- eliciting the views of key stakeholders in health, social care and education on health intelligence needs.

The purpose of this HNA is to make recommendations on the health information and intelligence support systems required to ensure that in the future it is possible to establish the health needs of LACYP and monitor efforts to address identified needs.

SECTION 2: AIMS AND OBJECTIVES

The aims of this report are to:

1. establish what local health intelligence systems for looked after children and young people exist across the 14 territorial health boards in Scotland and within Information Services Division (ISD)[c];

2. understand the limits of what we can currently say about the health of looked after children and young people from recent academic and grey literature, accessible data sources and expert opinion; and

3. make recommendations on what health outcome and contextual indicators it would be useful to measure and how this measurement might be achieved in the future.

It was agreed that these aims would be met through the following objectives:

a. to determine whether LACYP are identified in any local health data sets and where possible describe consequent outcome data available;

b. to undertake a review of recent academic and grey literature on the health of LACYP in high income countries;

c. to describe as far as possible the health and health determinants of LACYP, using both a local and a national dataset; and

d. to elicit the views of key stakeholders in health, social care and education on: i) which contextual and health outcome data would enable improvement of health and prevention of harm in this population; and ii) how these data might be captured in the future.

---

[c] The Information Services Division (ISD) is a division of National Services Scotland, part of NHS Scotland. ISD provides health information, health intelligence, statistical services and advice that support the NHS in progressing quality improvement in health and care and facilitates robust planning and decision making.

SECTION 3: POLICY CONTEXT

In 2007 the Scottish Government published *Looked after Children and Young People: We Can and Must Do Better* (2) which articulated a commitment to improve health and social outcomes for LACYP. One of the required actions was for each health board to assess the physical, mental and emotional needs of all looked after children and young people for whom they have responsibility and put in place appropriate measures which take account of these assessments. This recommendation became a requirement with the publication of NHS Scotland Chief Executive Letter (CEL (2009)16).

The importance of basing service planning on high quality information has been emphasised in a number of recent policies including: *Commission on the Future of Public Services (The Christie Report)* (3) which identifies key reform priorities for the delivery of public services in Scotland and *Delivering a Healthy Future* (4) which sets out a programme of action to improve services for children and young people in Scotland.

Getting It Right For Every Child (5) is Scotland's action plan for supporting children, young people and their families. It is focused in particular on improving outcomes for vulnerable children and young people, advocating the need for early intervention and a co-ordinated and integrated approach. One of the core components involves ensuring capacity to share demographic, assessment and planning information electronically within and across agency boundaries.

SECTION 4: METHODS

4.1. Defining the Looked After Child

Looked after children are legally defined by the Children (Scotland) Act 1995 (6). The majority of looked after children and young people are looked after with a Supervision Requirement applied by the Children's Hearing System under section 52 of the Act (approximately 80% of LACYP in Scotland). The remainder are looked after either under other sections of the act with the use of other compulsory measures applied by the Children's Hearing System (e.g. Child Protection Orders, Place of Safety Warrants, which are often short-term prior to application of a Supervision Requirement), or on a voluntary basis when parents have agreed to the provision of local authority care. Broadly speaking children become looked after because there is either a need for care and protection (the majority), or because they have committed a criminal offence. Children are looked after by local authorities in four main care settings: at home while continuing to live with their parent(s); in kinship care; in foster care; or in a residential care setting.

In the Children (Scotland) Act there are a number of age thresholds for defining the looked after child. For the purposes of children's hearings a looked after child is defined as a person aged less than 18 years; however, local authorities also have a duty to provide assistance for young people formerly looked after until they are 19 and may continue to contribute financially to the care of a young person in full-time education beyond the age of 21 until their course is completed.

In this report we will be using a 0-17 year old age range in both describing the rates of LACYP with supervision requirements in Scotland and those looked after by Glasgow City Council. Although children with supervision requirements are all aged between 0 and 17 years, a small proportion of young people looked after by Glasgow City Council were older than this.

4.2 Categorical Issues

There is a lack of consistency in the terminology used to describe the looked after child population. Looked after children are often categorised according to their care placement type, with the following three overarching typologies used in the literature:

- looked after with or without a condition of residence;
- accommodated and non-accommodated (with the former including LACYP in foster and residential care and the latter including those living in kinship care or being looked after at home); or

- community or residential care (with the former including children living in all other non-residential placement types).

Each of these groupings implicitly prioritises different, potentially important elements of placement type. In the first, whether the child is or is not removed from their home. In the second, whether the child is or is not with adults they know. For the third, whether the child is cared for in a family or non-family setting. In this report we will be using the term “looked after children and young people” (and the acronym LACYP) to refer to all placement categories.

4.3 Stakeholder survey and interviews

An email survey (Appendix 2) was sent out to all Child Health Commissioners (CHCs) in the 14 territorial health boards in Scotland to establish whether LACYP were identified in any local health data sets and, if so, what outcome data were available.

The Scottish Public Health Network (ScotPHN) also sent out an electronic survey to e-Health leads[d] in all boards but the response to this was insufficient for meaningful analysis and inclusion.

In addition to the email survey of Child Health Commissioners, 14 semi-structured telephone interviews were undertaken with key stakeholders from health, social care and education across Scotland to determine existing health intelligence systems for the population of looked after children and young people, information needs and how these might be met in the future (Appendix 3). All participants consented to the audio recording of the telephone interviews. A member of the project team produced summarised transcriptions of these recordings. Thematic analysis was undertaken on the summarised interview transcripts.

The results are described in two sections of this report. First, the survey results and first theme of the telephone interviews are used to describe existing health intelligence for LACYP in Scotland (Section 5.2). Second, the remaining interview data are explored to determine information needs (Section 9.1) and recommendations for capturing appropriate population data in the future (Section 9.2).

---

[d] The e-Health leads have responsibility for implementing local e-Health delivery plans which aim to improve quality of, access to, and integration of, health information for healthcare planning and delivery.

4.4 The Literature Review

A literature search was carried out in June 2012. The aim of the search was to identify, from peer reviewed literature, incidence and prevalence rates for physical, mental and social health problems and health-related behaviours for the population of children and young people legally looked after by governing authorities in high income, western countries. We aimed to determine both absolute health needs, which corporate parents would have responsibility for meeting, and relative need which might indicate issues specifically associated with the causes and/or consequences of care.

Five databases were searched: ASSIA; CINHAL; Cochrane; Medline; PsychINFO. Appendix 4 details the foundation search strategy and how this was amended for individual databases. Reference lists of retrieved articles were used to identify additional relevant studies.

Inclusion criteria included all primary research (qualitative, experimental, observational, descriptive and uncontrolled) from the United Nations Western Europe and Others Regional Group countries[e] and the United States on incidence and prevalence rates of physical, mental and social health problems and health related behaviours and previously identified health needs (where need is defined as the potential to benefit from intervention), which were published in English on humans between 2007 and 2012[f]. Although not specifically searched for, articles found on effective prevention or treatments for identified health issues and reasons children became looked after were also included in the review. Case studies, editorials and commentaries were excluded. Two reviewers performed the initial title screen with one reviewer reading all retrieved full text articles for second stage screening and qualitative review synthesis.

4.5 Profiling the Population of Looked After Children and Young People

Data on the population of LACYP are held in the main by:

- the Scottish Government in the form of the Children's Social Work Statistics (CSWS);
- the Scottish Children's Reporter Administration (SCRA), which administers the Children's Hearing System through which need for compulsory care is decided and
- Local Authority Social Work Departments.

---

[e] Includes: Andorra, Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Liechtenstein, Luxembourg, Malta, Monaco, Netherlands, New Zealand, Norway, Portugal, San Marino, Spain, Sweden, Switzerland, Turkey, United Kingdom.

[f] The 5 year time frame was necessary due to time and resource restrictions.

Children's Social Work Statistics are published annually and are readily accessible online for analysis. Data on children referred to the Children's Reporter Administration having become looked after and data held by local authorities are not routinely available for analysis.

Firstly, information from the Children's Social Work Statistics is described (Section 5.1) in order to indicate what can be said with currently accessible data. Secondly, a summary analysis of data from a cross-sectional sample of all LACYP in Scotland with Supervision Requirements on 30 June 2012 is presented (Section 7). Finally, data are presented on a cross-sectional sample of all children and young people looked after by Glasgow City Council (GCC), the local authority with the largest absolute number and relative proportion of LACYP in Scotland (Section 8). Although each of these analyses, by definition, paints only a partial picture of the Scottish population of LACYP, collectively they offer a rich and contemporary set of insights into the characteristics of this vulnerable group and enable clarification of the substance and limits to what can currently be said about the health and health determinants of the population of LACYP from existing quantitative data sources.

SECTION 5: EXISTING HEALTH INTELLIGENCE

5.1 Children's Social Work Statistics

Summary Points

- 1.6% of all 0-17 year olds in Scotland were looked after on 31st July 2011.
- The largest care setting sub-group is the 'looked after at home' group.
- The number and proportion of 0-17 year olds who are looked after in Scotland has increased over the last ten years, although somewhat more rapidly in the last six years. This increase is driven mainly by increased numbers of children and young people in kinship care and to a lesser extent foster care.
- Analyses of the educational outcomes of LACYP suggest those at home have particularly poor outcomes.

Each year the Scottish Government publishes Children's Social Work Statistics (CSWS) (7) which incorporates statistics on children looked after by local authorities in Scotland. The only health outcome data available concern the number and proportion of young people in secure care (most recently reported as 0.6% of LACYP [31/7/11]) with the following disabilities: medically diagnosed social, emotional and behavioural difficulties; other social, emotional and behavioural difficulties; specific learning difficulties; mental health problems; language and communication disorder; physical or motor impairment; visual impairment; combined sight and hearing loss; and other. Although guidance notes provide definitions for each of these categories, it is not clear for all whether they require a confirmed professional diagnosis or are self-reported by a carer.

CSWS also contain relevant demographic data. From this publication we are able to say that:

- 1.6% of 0-17 year olds in Scotland (16,171) were looked after on 31st July 2011;
- one third of LACYP are looked after at home, the largest care setting sub-group;
- LACYP in residential care comprise the smallest care setting sub-group (9% of all LACYP);
- the number and proportion of 0-17 year olds who are looked after has increased over the last ten years; and
- the number of children and young people looked after in kinship care has increased by 177% in the last 35 years, and the number looked after in foster care has increased by 41%. Over the same time period the number of children looked after in residential care has decreased by 76% and the number looked after at home has remained fairly stable.

There is also information on:

- the age breakdown at national level;
- national distribution by care setting;
- incidence stratified by age then sex at national level;
- care setting numbers for each local authority;
- yearly cumulative incidence for each local authority (Table 1 below shows how these numbers aggregate for NHS partners);
- the national number of young people looked after in secure residential care; and
- the age, sex, disability and length of stay characteristics of young people looked after in secure accommodation.

Table1. Yearly Cumulative incidence of being looked after for 0-17 population by health board.

Health Board	Number starting to be looked after between 1/8/10 and 31/7/11	Percentage all 0-17y*
Ayrshire and Arran	458	0.6
Borders	74	0.3
Dumfries and Galloway	215	0.8
Fife	271	0.4
Forth Valley	345	0.6
Grampian	431	0.4
Greater Glasgow and Clyde	1262	0.5
Highland	254	0.4
Lanarkshire	400	0.3
Lothian	686	0.4
Orkney	2	0.1
Shetland	15	0.3
Tayside	416	0.5
Western Isles	16	0.3
*Using 2011 Midyear population estimates		

In addition to the social work data, statistics on the educational outcomes of looked after children are also published annually by Government. These are achieved by local authority incorporation of the Scottish Candidate Number (SCN) in the social care records of looked after children and then linkage through this unique identifier with a range of other data sources including the pupil census, information on attendance, absence and exclusions, attainment data and the school leaver's destination survey. From this linked information it is possible to establish a current baseline in educational outcomes for looked after children[g], compare this to educational outcomes for all children and then monitor trends over time. From these data it can be said that:

- LACYP attended school on average 87% of the time compared with 93% attendance rate for all school pupils;

---

[g] These rate differences are probably underestimated as LACYP included in the numerator and denominator of the comparator.

- attendance varied across care placement type with children looked after at home having the lowest average rate of attendance (79%);

- school attendance rate decreased as the number of care placements experienced increased;

- looked after children had much higher exclusion rates: 326 exclusions per 1000 children compared with 40 exclusions per 1000 for all pupils;

- exclusion rates were highest for children in residential care and increased with increasing number of care placements experienced;

- looked after children had lower attainment as measured by Universities and Colleges Admission Service award points, with LACYP having 79 points on average compared to a 385 point average for all young people at age 18 years;

- attainment was lowest for children looked after at home (35 UCAS points) and decreased with increased number of placements; and

- the percentage of looked after children in a positive destination (defined as in education, employment, training or voluntary work) 9 months after leaving school was 55% compared to 87% for all pupils[h].

It is not possible from these routine and linked data sources to say anything about: the age, sex, or deprivation profile of the population of LACYP; the reasons children and young people become looked after; what common care trajectories are; or anything about health outcomes. Exploration of national data on children looked after with supervision requirements (Section 7) and local data on a point prevalence sample of all children and young people looked after by Glasgow City Council (Section 8) fill some of the health determinant knowledge gaps but unfortunately do not include health outcome data.

---

[h] The rate difference would be larger if LACYP exclusions were removed from the denominator.

5.2 Stakeholder Responses

Summary Points

Child Health Commissioner email survey:

- Six health boards reported having datasets for LACYP.
- Existing local health service datasets include contextual, process and some outcome data.
- Examples of local data collected by these health boards include: age, sex, pre- and in-care postcodes, care setting, GP registration, completed immunisations, birth weight, and whether the child/young person has neonatal abstinence syndrome, physical or mental health concerns.
- Some care setting sub-groups (e.g. at home and kinship care) are not always captured even in paper-based data collection systems.

Stakeholder semi-structured interviews:

- Good individual level data sharing processes are in operation.
- Respondents feel there is a lot of tacit knowledge on the health of LACYP within services, that they are likely to have poorer health outcomes relative to the general population of children in Scotland, but that there is a lack of a quantitative overview to evidence and profile this.
- There is a general lack of health intelligence systems for LACYP.
- There is no current national imperative for health outcome reporting for LACYP.
- There are a lot of useful health outcome data captured in individual assessments and paper case records but these are not being collated to give an overview of the population.
- Social care and education colleagues reported good IT infrastructure for capturing information on LACYP.
- Health professionals expressed either a lack of supportive IT infrastructure for children’s services or current IT systems not being used to their fullest potential.
- Between health, social care and education there are three parallel systems with three different unique identifiers and these are sometimes capturing the same information on the same population.
- There is greater complexity in establishing a quantitative overview for health boards with multiple local authority partners.

This section describes the findings of an e-mail survey of all Child Health Commissioners to determine whether LACYP are currently identified in local health data sets and, if so, what outcome data are included. Views on existing health intelligence systems for LACYP, gathered through 14 semi-structured telephone interviews with key stakeholders across a range of NHS and local authority services and a national health information agency, are also described.

Child Health Commissioners email survey

An e-mail survey was sent to Child Health Commissioners (CHCs) in all 14 territorial health boards in October 2012 (Appendix 2). Eight CHCs responded to the survey. Two of these indicated that they do not currently identify LACYP in any health data sets. The six remaining respondents included CHCs from both large urban and small rural territorial health boards.

The data held by the six health boards vary in complexity, with some boards collecting only basic demographic variables while others collate more detailed data from health assessments, including some outcome measures and wider contextual variables.

Two boards (A and F) keep a LACYP dataset with limited contextual information drawn from shared social work data which include age, gender, placement type and episode of care start date. These data help inform their own performance reporting systems on those receiving/refusing a health assessments. No health needs or outcomes are collated from the assessments.

Two boards (B and C) include CHI numbers on their LACYP datasets, facilitating linkage with other health outcome records.

The datasets of four boards, (B, C, D, and E) include date of birth, gender and pre-care post codes enabling the production of age, gender and area deprivation profiles for their population of LACYP. Boards D and E also record the postcodes of current care setting.

One board (D) records the reason for care. Unfortunately, no information was provided by the respondent on how this is categorised. Two boards (B and D) note the duration of the current episode of care, Board D also records the age at entry to current episode of care and the number of previous episodes.

All six health boards keep some information on placement type and for four (A, B, D and F) it was clear that they noted all four main care settings thereby providing some data on children looked after at home and in kinship care.

Process measures are collected in four boards (B, C, D and E) including GP and dentist registration and immunisation status. Board C also records data on neo-natal hearing and pre-school vision screening; although it is not clear whether the record records only attendance or include outcome data.

Four boards (B, C, D and E) collate data on health 'concerns' identified during the initial health assessment of the looked after child and this is updated after subsequent review assessments. Information on how these concerns are established was not available from our survey, but it would appear that health assessments are usually undertaken by a registered nurse or paediatrician. These health concerns are collated under broad categories (e.g. unmet physical health need, mental health issues, sexual health concerns) in three of the health boards (B, C and E) using binary systems (i.e. present/not present). In addition board C collates information on prescribed medication, blood borne viruses (present/absent/not known) and whether the infant had low birth weight and/or neonatal abstinence syndrome. Board C also collates data on the young person's ability to express concerns about their own health, whether they display independent living skills and whether they have access to a trusted adult.

All responding health boards with data sets reported having potentially useful health data within individual case records which, unfortunately, were not collated.

Only one board (C) felt that it had a competent community health IT system that supported this work. The others were currently exploring ways of improving their own IT infrastructure(s) to assist data collection and improve service delivery.

Stakeholder semi-structured interviews

Fourteen semi-structured telephone interviews were carried out between 7 November and 4 December 2012 with a range of stakeholders in three NHS territorial health boards and their local partners in education and social work services. In addition a public health consultant working in a relevant special health board was interviewed.

Thematic analysis of the interview data revealed three emergent themes relevant to current knowledge of, and intelligence systems for, the health of looked after children and young people:
- reliance on tacit knowledge;
- lack of population health data; and

- the issue of Information Technology.

A great deal of experience and tacit knowledge on the health needs of looked after children and young people exists within services, but there is an expressed need for a quantitative overview to support strategic plans for improvement. Existing data collated within each of the three main agencies are driven by internal performance reporting or a requirement to provide statistical returns to Scottish Government. Unlike educational outcomes, there is no current requirement to collate health outcome data for looked after children. Without this impetus health information has largely been kept at an individual level. The three local authorities represented at interview did not have their IT systems configured to capture and report on health data for looked after children. Health information would normally be recorded within the case record section of their systems and require manual review and collation. IT support systems vary across the services and this also impacts on the ability to collect and report on health data for looked after children.

These themes are explored further below.

Reliance on tacit knowledge

All of the areas that took part in the survey have robust multi-disciplinary assessment, care planning and review procedures with GIRFEC principles embedded at the core of these processes. The action plans developed from these assessments are shared between the partner agencies ensuring that health outcome data are shared at an individual level, informing a co-ordinated multi-agency approach to intervention for each looked after child and young person. This allows individual practitioners and local managers to have an overview of emerging issues but there was no evidence that this locally held knowledge was aggregated and analysed in any meaningful way to inform service developments and delivery. As one senior nurse manager put it:

> *"We don't keep data on health outcomes across the* [looked after] *settings but we know these outcomes are poorer than the general population. It's kinda staring us in the face a wee bit."*

A Looked After Children's (LAC) nurse also commented:

> *"Experience through intervention helps us identify trends, but we don't collect this in any formal way."*
> (LAC nurse)

Staff interviewed from the various agencies commented on an awareness of some trends or clusters of health problems in the LAC population; but this information is gathered anecdotally rather than through collation and analysis of health data for this group:

> *"We have a lot of information on the individual via the GIRFEC assessments but we aren't so good at aggregating all that information to determine trends and patterns. Sometimes information filters through from individual workers that determine common themes and this can influence service developments."*
> (Head of children and families services social work)

In some areas, local clinicians meet with colleagues from social work and education for informal discussions. Common issues are aired at these meetings and some emerging themes noted, but no evidence was offered that the discussions result in further pieces of work to explore the issues through systematic collection and analysis of data:

> *"Myself, and the lead paediatrician, will meet regularly with colleagues from the local authority to discuss emerging trends and themes but this information isn't collated and only used at a local practitioner level. Our managers are usually involved in discussions at a more strategic level and normally we would only collate and provide data when a specific request came in for this unless it was to do with performance reporting"*
> (LAC nurse)

All of the interviewees highlighted practice that involved the gathering and recording of individual level health data. Multi-agency ownership of the individual care plans ensures this information is shared between partner agencies to improve outcomes for the individual looked after child. Some interviewees also expressed a belief that their involvement in the assessment and care planning process gives them an insight into the comparatively poor health of this sub-group of the general child population; however, no quantitative evidence was available to either support or refute their assumptions.

Lack of population health data

Although detailed health assessment and care planning information is available and shared across services, this exists mainly at the individual level. Similarly, even though there was evidence of good data sharing practice at individual case level, this is not happening for population level data. All localities reported strong inter-agency links and multi-disciplinary working at both strategic and service provision levels and this had improved the flow of data and information between services for individual case management. Multi-disciplinary LAC steering groups exist in all of the localities covered by the respondents. The only aggregated data routinely brought to these groups however, are provided by social work and summarise numbers, basic demographic detail and changes to individual detail in previous reports. As a head of children and families social services noted:

> "*We have a LAC core group that involves partners from social work, education, NHS, third sector and children's advocacy groups. This has strategic responsibility for children that are looked after and the multi-agency response to them. We share aggregated information at this forum but none of the other agencies bring aggregated data to the forum."*
> (Head of children and families services social work)

All of the respondents commented that they do not collate health data for the LACYP population. Where data were collated, performance management appears to be a critical driver and therefore process rather than outcome measures are captured:

> *"We don't have a lot of health information on our looked after children. We don't report on that at present."*
> (Senior social work manager)

> *"Measurement on successful outcomes is done at an individual level by reviewing the care plan and noting when agreed actions have taken place and outcomes achieved. Aggregated information tends to be about service performance like the amount of assessments completed."*
> (LAC Nurse)

In contrast to the Scottish Government's requirement that reports be submitted on the educational outcomes for this group, there is no national requirement for reports on health outcomes for the LACYP population.

In keeping with the finding of the email survey of CHCs, it was clear from the interviews that there was often a wealth of information in individual case records which is not being used to provide an overview at a population level. For example, one health board completes a 'strengths and difficulties questionnaire' (SDQ) for all looked after children but the results are recorded in individual case notes only. As one senior health manager from a different board area stated:

> *"There is a lot of good work and information sharing being done at the frontline but our systems don't facilitate this co-operation well beyond the hard copy."*
> (Senior NHS manager)

The lack of collated population data means that when an audit of needs or outcomes is required, this results in a cumbersome manual trawl of individual case notes, often paper based:

> *"Because we are such a small team it doesn't lend itself to scrutinising the information we collect by way of audit very often, mainly because a manual trawl of written information will take many man hours."*
> (LAC nurse)

> *"We occasionally do audits that require a manual trawl but will result in focused health information being collected and aggregated for example dental health and smoking rates."*
> (LAC nurse)

In addition to the wealth of untapped data in individual health case records, there is a duplication of data collection at individual level: both education and social services are also collecting some health data in individual case notes.

With a few exceptions, respondents were mainly unclear about what health information was already being recorded in each other's systems but it was clear from the responses that each of the systems already contained a good level of individual level health data and this was duplicated across the agencies:

> *"The click and go function on SEMIS allows us to record some health information on children when they enrol and at subsequent points so we do have some health information on our database… learning difficulties and autism, sensory impairments, specific learning difficulties like dyslexia, speech and communication disorders and physical and mental health problems, substance misuse etc. It also records contextual information like young carer, family dysfunction etc. This information is available for every child and can be further broken down into LAC."*
> (Education support officer)

> *" We will have quite a bit of health information on kids that are going through the matching process in fostering and adoption but this will be kept*

> *at a local level within case files and there's not a systematic way of pulling that out."*
> (Social worker)

> *"Our LAC core record will have details on known health problems and any medication that the young person is on. We also record any mental health issues and behavioural problems. This is held in the child's case record. This information is only ever used to support the individual care plan."*
> (Social worker)

One interviewee from education services also confirmed that the IT system used within her department notes LAC status and also information on whether the child or young person has a disability or an autistic spectrum disorder.

It was clear from the interviews that inter-agency communication and data sharing are good at the individual level and that local structures are in place to enhance and facilitate this process. The challenge lies in applying any lessons learned from the successful individual level data sharing processes to the sharing of population data.

The issue of information technology

The complexity of both intra- and inter-agency IT systems was highlighted by all the respondents as a barrier to the smooth flow of data between the agencies. In most cases these operational systems are unique to that service and do not communicate with the systems operated by other agencies or even in some cases the same agency in a different area (e.g. within social services two of the represented local authorities use the *Carefirst* IT system, while the third uses *Swift*; the education department of one local authority uses the *SEMIS* system and its partner NHS board uses *MIDAS*). This complexity is a particular issue for the population of LACYP because health is reliant on its local authority partners for identification of the population denominator. An NHS lead director for children's services commented:

> *"The data that we currently collect doesn't categorise information by LAC sub-group. We would need the data from our Local Authority partners in order to cross reference."*
> (NHS lead director)

NHS boards work with multiple local authority partners and the uniqueness of the individual IT client information systems results in the flow of information mainly being a periodical transfer of hard copy data, with different local authorities having their own agreements with NHS partners around notification schedules that inform of changes in the LACYP population. Sometimes notification is reliant on social workers informing their NHS partners when individual children become looked after:

> *"We don't have a system in place where looked after at home children are notified to NHS...social workers at individual case level are responsible for notifying relevant health colleagues when a child becomes accommodated. At the moment our respective IT systems don't support electronic alerts. We are meeting with senior managers in NHS to look at ways this can be improved".*
> (Head of children and families services social work)

The flow of data on looked after children between the agencies has evolved through local discussion but all of the respondents felt current information exchange systems were not as effective as they should be, and highlighted this as an area for improvement.

In addition to the existence of multiple IT systems across the services, the use of multiple unique identifiers presents a challenge for the linkage of data in an efficient and effective manner. The collection of health data nationally on looked after children, although currently not a requirement would have to negotiate the data linkage issues resulting from the multiple systems with different unique identifiers in use:

> *"We don't routinely report on health outcomes for looked after children...We have data on a range of children's health interventions like hospital admissions etc. and the Local Authorities will know which of these children are LAC but our data won't necessarily show that. Local authorities use their own unique identifier and health services use their own unique identifier, CHI. Education has their own unique identifier as well, 3 parallel systems all recording information on the same child population."*
> (Consultant in public health)

Lack of IT infrastructure was described as another barrier to creating a health intelligence system for LACYP for some health boards. Two NHS boards do not have sophisticated IT patient information systems in their community children's services, relying instead on paper case files (although they see this as a priority area for development and are currently working to improve this):

> *"Because we don't have a proper patient management system for community children's services it's difficult to gather real time data for the LAC population…At the moment the aggregated data I have is basic activity*

> *details on a clumsy spread sheet. The real detail about health need is kept in hundreds of paper records and would require case file audit."*
> (Senior nurse manager children's services)

Where appropriate IT is available, it is often not being used to its fullest potential. Respondents from the health board with a dedicated children's service IT system reported that it is used mainly as an electronic case note but that it has additional functional capacity which is not currently being capitalised on:

> *"I think MIDAS could be used to input data on particular health outcomes that could be aggregated but as clinicians we don't use it in that way."*
> (Health visitor)

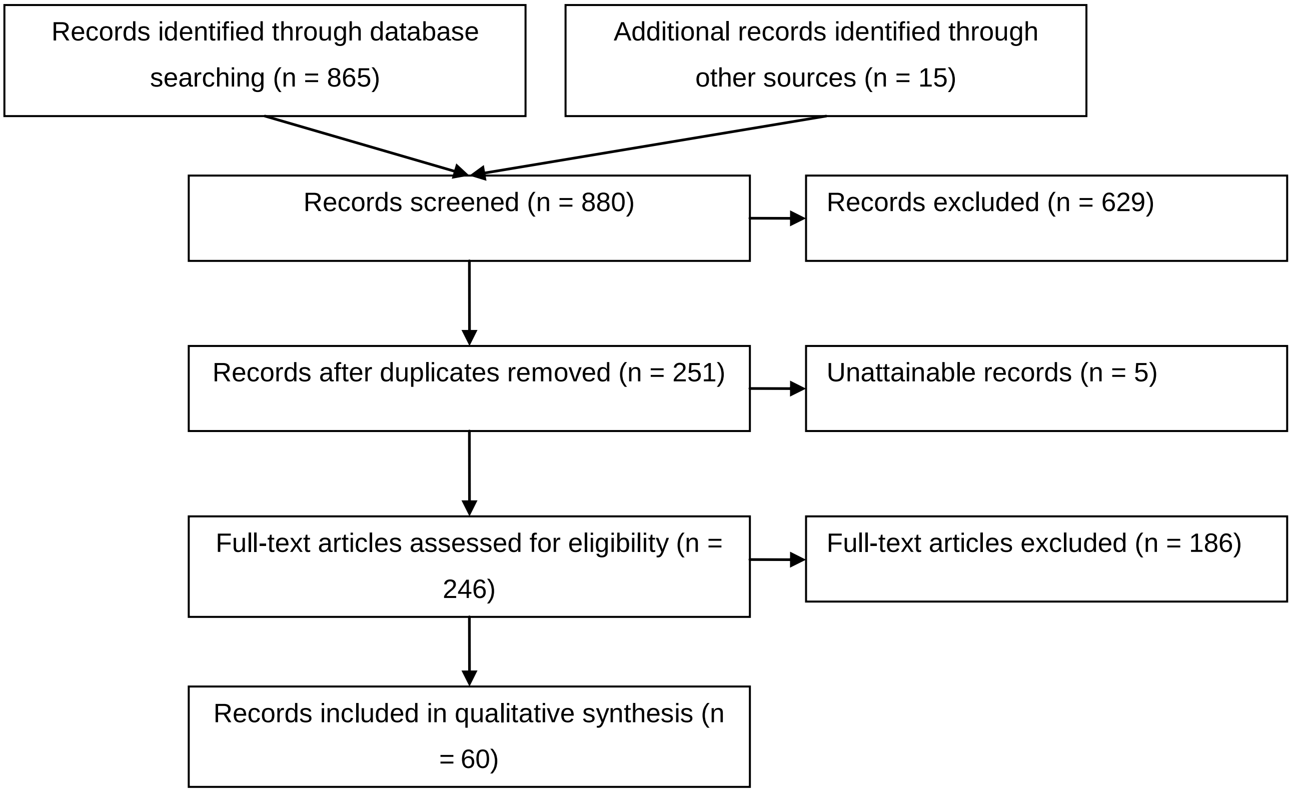
Those respondents based in organisations that operated electronic client information systems felt that their systems were sophisticated enough to report on health outcomes should it be required although in social work and education this would not routinely be seen as core business for the purpose of performance reporting.

SECTION 6: THE LITERATURE REVIEW

6.1 Search Strategy Results

Eight hundred and sixty five results were retrieved from the initial database search and 15 further articles were identified through key contacts or the reference lists of included studies. Based on screening of titles/abstracts, 251 articles were identified as potentially relevant. Five of these were unattainable from either local holdings or the British Library. Two hundred and forty-six full text articles were read with a final set of 60 articles used for the qualitative synthesis (Figure 1).

Figure 1. PRISMA flow diagram



6.2 Reasons children become looked after

Summary Points

- The research literature suggests that neglect is likely to be the most common reason for need of local authority care, although individuals often have multiple reasons.
- Parental substance misuse may be a contributory factor in a significant number of cases.
- Socioeconomic disadvantage is likely to be an important upstream cause.
- There is a need for both clearly defined and consistently used definitions of reasons for care and also a prevention focused typology.

It is necessary to understand why children become looked after in order to direct prevention efforts and consider differential need according to maltreatment experienced/reason for care. However categorical inconsistency, lack of definitional clarity and the complexity of multiple trauma experiences are important barriers to improved understanding in this area.

Most LACYP in Scotland will have a legal reason under section 25 or 52 of The Children (Scotland) Act 1995 (6) for being looked after (Table2)

Table 2. Legal reasons for care

Section 25	
No-one has parental responsibility	
The child is lost or abandoned	
The person caring for the child is prevented from providing suitable accommodation or care.	
Need to safeguard or promote child welfare	
Section 52	
Beyond the control of any relevant person	
Bad associations or moral danger	
Lack of parental care	
Victim of schedule 1 offence* including:	
	Child victim – incest, sexual offences or homosexual offences
	Child victim of begging, burning, performing etc.
	Child victim of bodily injury
	Child victim of lewd, indecent or libidinous practice or behaviour
	Child victim – other
	Child victim (ill treatment , abandonment, neglect and exposure)
Member of same household as a victim of a Schedule 1 offence	
Member of the same household as a Schedule 1 offender	
Member of the same household as an incest victim or perpetrator	
Not attending school	
Allegedly committed an offence	
Misused alcohol or drugs	
Misused solvents	
*Any offences mention in Schedule 1 of the Criminal Procedure (Scotland) Act 1995	

This legal typology is not particularly helpful when thinking about preventing the primary need for care because it was not devised to take account of potentially modifiable causes of the need for care. The lack of both definitional clarity and a sharp distinction between the categories used is also problematic. Although all LACYP in Scotland have a legal reason for their care, published rates for these are not currently available at a national population level. (7)

Table 3 gives the English Department for Education typology of reasons for Local Authority care and the proportion of looked after children and young people recorded in each category in 2012. (8) (9)

Table 3. Reasons for care definitions and proportions in each sub-group for English population of LACYP

Category of Need	Definition	Percentage of LACYP 2011-2012
Abuse or neglect	Children in need as a result of, or at risk of abuse or neglect; also includes children at risk because of domestic violence.	62%
Child's Disability or illness	Children and their families whose main reason for services arises because of the child's disability, illness, or intrinsic condition.	3%
Parental disability or illness	Children whose main need for services arises because the capacity of their parent to care for them is limited due to illness or disability.	4%
Family in acute stress	Children whose needs arise from living in a family that is going through a temporary crisis that diminishes the parental capacity to adequately meet some of the children's needs.	9%
Family Dysfunction	Children whose needs primarily arise from living in a family where the parenting capacity is chronically inadequate.	14%
Socially unacceptable behaviour	Children and families whose need for services primarily arise out of the child's behaviour impacting detrimentally on the community.	2%
Low income	Children, living in families or independently, whose needs primarily arise from being dependent on an income below the standard state entitlements.	0%
Absent parenting	Children whose needs for services arise mainly from having no parents available to provide for them.	5%

As with the Scottish legal typology there is a lack of a clear distinction between some categories (e.g. neglect and family dysfunction). Moreover, some of the categories here are overly broad. Knowing that 62% of children and young people in England are looked after because of abuse and neglect is not that helpful in directing prevention efforts: for example, the underlying causes of sexual abuse may differ from those of neglect secondary to parental substance abuse.

A number of studies giving maltreatment rates were found in the academic literature. Steele et al. (10) looked at the records of all children entering care (placement types not described) in the state of Utah over a four year period between 2001 and 2004. The reason for care was available for 99% of the 6,177 included in the study. Table 4 details their findings.

Table 4. Reasons for care in a US sample

Reason for care **(1 child may have >1 reason)**	**Age in years** **n(%)**				
	All	**0 to 2**	**3 to 5**	**6 to 12**	**13 to 18**
Neglect	2380 (38)	853 (54)	486 (53)	706 (40)	335(17)
Child homeless or without proper care	1322 (21)	286 (18)	174 (19)	377 (21)	485 (25)
Physical Abuse	662 (11)	215 (14)	97 (11)	219(12)	131 (7)
Delinquency	800 (13)	4 (0.4)	1 (0.1)	110 (6)	685 (36)
Sexual Abuse	248 (4)	15 (0.9)	18 (2)	96(5)	119 (6)
Drugs and/or alcohol contributing factor (in parent/and or child)	2830(45)	516 (33)	353 (38)	856(49)	1078 (56)

Although for the overall cohort neglect was the most commonly recorded reason for care, this varied by age with ‘delinquency’ being more common for the 12-18 age group. Drug and/or alcohol problems were contributing factors (for either the adult or child) in 45% of cases. The authors note that children can have more than one reason recorded for care. However, multiple reasons for care are not explored further in this study in terms of common combinations or the proportion of children for whom multiple reasons are recorded. Definitions of the reasons for care are not provided nor is there clarification about how the potential overlap between categories (e.g. “neglect” and “a child without proper care”) is dealt with.

Greeson et al. (11) looked at cross-sectional data on 2,251 zero to twenty-one year olds entering care who were in contact with trauma informed services across 56 sites in the US. They looked at the lifetime prevalence of 20 different traumatic, loss and separation-related events. Case records had been compiled from multiple informants including the child or adolescent, parents/caregivers, family members, and relevant others. Neglect was again the most commonly recorded maltreatment type (68% sample). Caregiver impairment (60%), domestic violence (54%), emotional (51%), physical (48%) and sexual abuse (32%) were all also relatively common. The children and young people in this sample had on average experienced five types of trauma. Oswald et al. (12) in their review of literature on the maltreatment histories of children in care found that highest rates were found for neglect (18-78%), physical abuse (6-48%) and sexual abuse (4-35%).

Three studies suggested that the type of maltreatment experienced may differentially affect outcomes. Taussig et al. (13) explored whether a range of outcomes in 9-11 year olds entering care (and remaining in care at time of interview) in four American counties, differed according to whether the child had or had not experienced emotional maltreatment as defined by the Maltreatment Classification System. The researchers used case notes to establish exposures and outcomes. They had a 93% response rate, with 79% of all eligible 9-11 year olds participating - after exclusions of those with cognitive impairment (11 excluded), insufficient English language skills (4 excluded) and other siblings (14 excluded). Emotional maltreatment was experienced by 160 (66% of the sample) children and there was a statistically significant association between emotional maltreatment and self-reported post-traumatic stress symptoms. Havnen et al. (14) compared mental health outcomes for children placed in care because of parental substance abuse with those placed for other reasons, in a Norwegian sample of 6-12 year olds. The sample (n 109) included 20% of the population of all 6-12 year olds placed in out of home care between September 1998 and December 1999 and was found to be representative of the target population in terms of age, gender, legal basis for placement and mother’s main source of income. The children’s mental health problems and pro-social behaviour were reported by their teachers and parents shortly after care placement, using the Revised Rutter Scale for School-Aged Children, a validated child behaviour assessment questionnaire. In this population being placed in care for reasons other than parental substance abuse was associated with higher emotional and conduct problem scores and an increased total difficulties score. In addition 6-12 year olds placed for other reasons had lower pro-social scores. Unfortunately no confidence intervals were provided for the difference in scores between groups and the point estimates were in general small (0.25 to 0.4). It is therefore difficult to assess the practical significance of this finding. Nonetheless it contributes towards the hypothesis that different maltreatment experiences may differentially affect mental health. Looked after young people in care because of behaviour problems may have poorer outcomes than those for whom this was not a contributing factor. Vinnerljung et al. (15) used Swedish national register data to look at a range of outcomes at age 25 for a cohort of 700 (70% of all) 13-16 year olds placed in care in 1991. They found that both boys and girls placed in care because of behaviour problems were more likely than those placed for other reasons to be dead, have had a psychiatric admission, been a teenage parent, been in prison, to have low educational attainment and been in receipt of social assistance.

The important association between socioeconomic disadvantage and care is highlighted in the work of Franzen et al (16). In this large study (1.5 million participants, including 14,839 looked after children and young people) the authors used data from 15 Swedish birth cohorts (1981-1996) to look at the association between parental socioeconomic status and risk of entry to care. Results showed that: children of single mothers had three to four-fold higher odds of entering care than children from two-parent households. Low maternal education and receipt of social assistance were also strongly associated with higher odds of care entry; and aggregation of socio-economic disadvantage dramatically increased risk of entering care such that children living with a single mother who had basic education, was unemployed and received social assistance had a 1 in 7 chance of being placed in care before age 7 compared with a less than 1 in 2,000 chance for children of two-parent families whose mothers were employed, educated to post-secondary level and not in receipt of social assistance benefits.

6.3 The Physical Health of Looked After Children and Young People

Summary Points

- Methodological weaknesses in the available literature limit the usefulness of observed prevalence rates.
- Obesity, dental caries and vision problems are consistently observed physical health problems in LACYP.
- Rates of dental, visual and hearing problems may be higher than those of the general population.
- It is not clear whether this apparent association is confounded by deprivation, which will be important in deciding where best to focus intervention efforts.
- Sub-group prevalence rates were not available. This is problematic given the heterogeneous nature of the population (e.g. in terms of age, reason for care and care setting).

There were six studies found which described physical health problem prevalence rates for LACYP. Table 5 describes the characteristics of these studies. The studies were heterogeneous in terms of child age, care placements included, child welfare context, and also possibly diagnostic criteria/information source used.

Table 6 gives consistently observed physical health problems and the range of point prevalence rates observed. One study included children and young people looked after in residential care only. As the point prevalence rates in this study were often substantially different from the other studies these are presented separately in Table 7.

Table 5. Characteristics of studies reporting prevalence rates for physical health problems in the population of LACYP

Study		Characteristics
1	Hadfield et al. (17)	▪ Small English sample (n 106) ▪ All children looked after by a Midlands County Council receiving statutory health assessments. No information on included care settings ▪ Outcome data from health assessment case notes
2	Meltzer et al. (18)	▪ Scottish Survey (n 407) ▪ Representative sample of all looked after 5-17 year olds (all care placement types included) ▪ Data from structured and semi-structured questionnaire to carers, teachers and young people (including SDQ). Clinician review of response to determine clinical significance
3	Rodrigues et al. (19)	▪ Small English sample (n 121) ▪ Random sample of total point prevalence sample looked after by Surrey Social Services on June 1 2001 ▪ All ages (no range given) ▪ Includes 4 main placement categories ▪ Data from statutory medical assessment record review.
4	Scottish Executive (20)	▪ Small Scottish sample (n105) of 6-17y children in Residential Care in NHS Lothian 2000-2003 (response rate not clear) ▪ Data from care entry assessment
5	Sempik et al. (21)	▪ All LACYP entering care for first time in six English LAs and remaining in care for at least one year between 1996-1999 ▪ Age 0-16 years ▪ Case note review for medical information ▪ No info given on care placement types
6	Steele et al. (10)	▪ Large US sample (n 6177) ▪ All children entering care in Utah over four year period between 2001-2004. Not clear what placement types used in Utah ▪ Age 0-18 ▪ Data from care entry medical assessments

Table 6. Point prevalence rates for physical health problems in LACYP

Physical Health Problem	Point Prevalence Rate Range from Literature	Point Prevalence Observed in Individual Studies	
Overweight / Obesity	18%-35%	Steele et al. (10)	▪ 18%
		Hadfield et al. (17)	▪ 35% sample overweight/obese
Acute dental	6%-22%	Rodrigues et al. (19)	▪ 6% prevalence of dental caries
		Steele et al. (10)	▪ 22% prevalence of acute dental problems
Vision	5-19%	Steele et al. (10)	▪ 5%
		Meltzer et al. (18)	▪ 19% had eye or sight problems from informant self-report
Nocturnal enuresis	14-18%	Meltzer et al. (18)	▪ 14%
		Sempik et al. (21)	▪ 18%
Asthma	4-12%	Steele et al. (10)	▪ 4%
		Meltzer et al. (18)	▪ 12%
Skin	3-8%	Steele et al. (10)	▪ 3%
		Rodrigues et al. (19)	▪ 6%
		Meltzer et al. (18)	▪ 8%
ENT	6-7%	Meltzer et al. (18)	▪ 6%
		Steele et al. (10)	▪ 7%

Table 7. Point prevalence of physical health problems in a Scottish residential sample

Physical Health Problem	Observed Point Prevalence	Study Characteristics
Acute dental problems /No check-up in last 12 months	61%	105 six to seventeen year old children in Residential Care in NHS Lothian 200-2003 (response rate not clear) Care entry assessment Scottish Executive (20)
Skin problems (including acne, eczema/psoriasis/warts/impetigo/athletes foot)	41%	
Vision	38%	
Asthma	19%	
ENT	17%	
Nocturnal enuresis/encopresis	7%	
Obesity	3%	

The wide variation in prevalence rates may largely reflect the heterogeneity present in the available studies. It is not clear whether the often higher rates of physical problems observed in the study of young people in residential care in Scotland is due to artefact (e.g. different diagnostic criteria),confounding (by for example age, reasons for care, cultural context) or the quality of care provided in a residential setting.

The absolute prevalence rates of health problems in this predefined sub-population of children are useful for corporate parents with responsibility to meet health needs. However relative rates are required to consider how best to prevent these health problems (i.e. are they related to causes or consequences of care) and also to a lesser extent in determining the extent of targeted service required.

Only three of the identified studies that reported prevalence rates for physical health outcomes compared LACYP with a control population. One compared rates in LACYP to a general population control (17), one to an age and sex matched control (22) and one to a deprived sub-group control (23). LACYP appeared to be at higher risk for some physical health problems but lower risk for others. They were observed to have higher rates of: acute dental problems; vision and hearing problems, nocturnal enuresis, and lower rates of atopic illness including asthma, hay fever and eczema compared to a general population. However, these findings from cross-sectional studies are limited by potential ascertainment bias and deprivation confounding. For example although Williams et al. (22) found LACYP had a 14% increased risk of need for dental treatment at last dental check-up compared with age and sex matched controls, it is not clear whether this increased risk would have remained if they had adjusted for deprivation. Only one study controlled for deprivation in assessing the association of physical illness with being looked after: Ford et al. (23) when comparing data from three nationally representative surveys of looked after children in Scotland, Wales and England with that of a UK wide survey on the mental health of the general population of children and young people, found that rates of parental self-report of a range of "neurodevelopment difficulties" (including cerebral palsy, epilepsy, co-ordination problems, muscle weakness or disease) were much higher among the population of looked after children than both the general population and the most deprived sub-group within the general population. Given the high rates of parental drug and alcohol misuse for LACYP it may be hypothesised that there is an association between antenatal exposure to alcohol and/or illicit drugs and subsequent neurodevelopment difficulties; however, reverse causality obviously cannot be excluded in cross-sectional studies.

Dubowitz et al (24) found a number of undiagnosed and/or untreated health problems when they compared the known medical histories of 407 (78% of all) children in kinship care in Baltimore in 1989, as elicited from case note review and primary care physician interview, with assessment by a nurse, paediatrician and psychologist. These undiagnosed and/or untreated problems included impaired visual and hearing acuity, dental caries, asthma and obesity. It is not clear whether the observed rates of undetected need are comparable to those of the general population. It is also not clear from this work whether the lack of diagnosis and/or treatment is a result of barriers to service access or of poor engagement once in the service. Routine childhood vaccination may be another area of unmet need. (25)

6.4 The Mental Health of Looked after Children and Young People

Summary Points

- There appear to be high levels of psychiatric morbidity in this population and these are not explained by deprivation.
- Prevalence rates are highest for behavioural problems and this is consistent across care settings.
- Co-morbidity rates may also be high.
- It is not clear how much of the mental illness experienced by LACYP is a result of the causes and/or consequence of care.
- A difference in rates has been observed between care setting sub-groups but this may be confounded by other important differences between sub-groups.

There were 11 studies which reported point prevalence rates for mental illness in looked after children and young people. Table 8 describes the characteristics of these studies. Table 9 shows the consistently observed mental health problems and corresponding point (unless otherwise stated) prevalence rates for those studies likely to include all care placement categories. Table 10 gives rates observed in care placement sub-categories.

Table 8. Characteristics of studies reporting prevalence rates for mental health problems in LACYP

Study		Characteristics
1	Burge et al. (26)	▪ Random sample of all LACYP in Ontario on 31/12/03 (n= 429) ▪ 0-18 years ▪ Care placement categories not specified other than does not include at home ▪ Case file review to ascertain psychiatrist given diagnosis
2	Erol et al. (27)	▪ 350 eleven- eighteen year olds in residential care in Turkey ▪ Child Behaviour Checklist used to measure psychiatric morbidity
3	Ford et al. (23)	▪ Large random sample all LACYP aged 5-15 years across UK (n 1453; 42% response) ▪ All care placement categories included ▪ Multi-informant Development and Wellbeing Assessment and SDQ used to measure psychiatric morbidity
4	Garcia et al. (28)	▪ 732 seventeen to nineteen year old care leavers who had been in care at least one year prior to 19th birthday. ▪ 64% response rate ▪ Included kinship, foster and residential care ▪ Composite International Diagnostic Interview gives **lifetime** DSM-IV diagnoses
5	Milburn et al. (29)	▪ 121 Care entry cohort Melbourne (2002) ▪ 0-17 year olds ▪ Therapeutic assessment
6	Oswald et al. (12)	▪ Literature review, included studies not described ▪ Care placement categories not given

7	Sawyer et al. (30)	▪ 326 six to seventeen year olds in foster care (not defined) in Adelaide between 2004-06 ▪ 77% response rate ▪ Child behaviour checklist
8	Scottish Executive (20)	▪ 105 six to seventeen year olds in residential care in NHS Lothian 2000-2003 (response rate not clear) ▪ Care entry assessment
9	Sempik et al. (21)	▪ All children entering care and remaining in care for one year in six English local authorities between 1996 and 1999 (n 453) ▪ No information on placement categories included. ▪ 0-16 year olds ▪ Carers asked “Does the child display any behaviour patterns that have been of concern to current or previous carers”
10	Stahlberg et al. (31)	▪ Small Swedish sample (n 100) ▪ 12-19 year olds consecutively committed to secure care between 2004-2007 ▪ Clinical assessment by multi-disciplinary team some use of standardised tools.
11	Steele et al. (10)	▪ Large US sample (n 6177) ▪ All children entering care in Utah over four year period 2001-2004. Not clear what placement types used in Utah ▪ Age 0-18 years ▪ Data from care entry medical assessments

Table 9. Point prevalence rates for mental health problems in the population of LACYP

Mental Health Problem	Point Prevalence Rate Range from Literature*	Point Prevalence Observed in Individual Studies	
One or more mental health problems	25-72%	▪ 25% lifetime prevalence to age 17-19 years.	Garcia et al. (28)
		▪ 32%	Burge et al. (26)
		▪ 32-44% across studies for 0-18y	Oswald et al. (12)
		▪ 44%	Steele et al. (10)
		▪ 46%	Ford et al. (23)
		▪ 62% major psychiatric diagnoses	Milburn et al. (29)
		▪ Carer’s asked “Does the child display any behaviour patterns that have been of concern to current or previous carers” ▪ 72% emotional and behavioural problems	Sempik et al. (21)
Behaviour problems unspecified	2-61%	▪ 2%	Burge et al. (26)
		▪ 18% - large variation across age groups (37% 13-18 year olds)	Steele et al. (10)
		▪ 61%	Sawyer et al. (30)
		▪ 36-61%	Oswald et al. (12)

Conduct Disorder	2-50%	▪ 2%	Burge et al. (26)
		▪ 2-8%	Oswald et al. (12)
		▪ 27%	Ford et al. (23)
		▪ 50%	Sempik et al. (21)
Adjustment Disorders (incl. PTSD)	0.5-28.9%	▪ 0.5-21%	Oswald et al. (12)
		▪ 2%	Ford et al. (23)
		▪ 3% (2% PTSD)	Burge et al. (26)
		▪ 29%	Milburn et al. (29)
Attention Deficit Disorder / Attention Deficit Hyperactivity Disorder	10-21%	▪ 10% - large age variation (16% 6-12 year olds) ▪ 10-12%	Steele et al. (10) Oswald et al. (12)
Mood Disorder (incl. depression, dysthmia, bipolar affective disorder)	2-15%	▪ 15% - large age variation (34% 13-18 year olds)	Steele et al. (10)
		▪ 2%	Burge et al. (26)
		▪ 2-15%	Oswald et al. (12)
		▪ 3%	Ford et al. (23)

Anxiety	**3-12%**	**▪ 2%**	**Burge et al. (26)**
		▪ 11%	Ford et al. (23)
		▪ 12%	Steele et al. (10)
		▪ 3-12%	Oswald et al. (12)
Attachment	3-17%	▪ 3%	Burge et al. (26)
		▪ 4-17%	Oswald et al. (12)
		▪ 13%	Milburn et al. (29)
Oppositional Defiant Disorder	4-12%	▪ 4%	Burge et al. (26)
		▪ 4-10%	Oswald et al. (12)
		▪ 12%	Ford et al. (23)
Intentional self-harm	6.7%-10%	▪ 13-17 year old sub-group ▪ 6.7% attempted suicide.	Sawyer et al. (30)
		▪ 10%	Oswald et al. (12)
*Unless otherwise stated			

Table 10. Point prevalence rates for mental health problems in care setting sub-groups

Mental Health Problem	Study Characteristics	Point prevalence rates for mental health problems in care setting sub-groups (%)					
		Living Independently	Residential Care	Secure Residential	Looked After at Home	Kinship Care	Foster Care
Any psychiatric disorder	N 100, 12-19 year olds Sweden (31)	*	*	63	*	*	*
	N 1453, 5-15 year olds UK (23)	49	71	*	48	32	39
Mood Disorder	N 105, 6-16 year olds Scotland (20)	*	29	*	*	*	*
	N 100,12-19 year olds Sweden (31)	*	*	20	*	*	*
Anxiety	N 105,6-16 year olds Scotland (20)	*	12	*	*	*	*
	N 100,12-19 year olds Sweden (31)	*	*	18	*	*	*
Emotional Disorder unspecified	N 1453, 5-15 year olds UK (23)	18	19	*	18	8	10
Conduct Disorder	N 1453, 5-15 year olds UK (23)	39	61	*	36	27	32

Behaviour Problems	N 350, 11-18 year olds Turkey (27)	*	15	*	*	*	*
ADD/ADHD*	N 100, 12-19 year olds Sweden (31)	*	*	47	*	*	*
	N 105, 6-16 year olds Scotland (20)	*	5	*	*	*	*
	N 1453,5-15 year olds UK (23)	2	10	*	9.2	6	8
Intentional Self-harm	N 105,6-16 year olds Scotland (20)	*	10	*	*	*	*

As with the prevalence of physical health problems, there is a large variation in rates of observed mental health problems. As previously discussed this could be secondary to the heterogeneity of the included studies, including differences in: sample age range, included care placements, different child welfare contexts and diagnostic criteria used. Similarly, apparent differences in mental health problem rates between different care settings may be due to artefact or confounding. This is discussed further below.

The observed burden of psychiatric morbidity in this population appears to be substantial with the *lowest* observed prevalence of one or more psychiatric problems being 25%. Furthermore, there is evidence that co-morbidity rates may be high: in one Melbourne study 19% of looked after children met the criteria for two or more psychiatric diagnoses (5% the criteria for three) (29); and 53% of those in an American study of residential treatment care having two or more psychiatric diagnoses. (32) There is also some evidence of increasing psychiatric morbidity over time. One study reported that the proportion of young people with mental illness at admission to residential treatment care in the US state of Omaha increased from 55% to 79%

between 1995 and 2004. Although it is not clear whether admission criteria remained constant over the time period considered.

As with the studies on physical illness rates, the majority of studies found were descriptive. Only four analytical studies were found. Kanbur et al. (33) compared 52 thirteen to seventeen year old boys in residential care in Turkey with age and sex matched controls and found that the looked after boys had statistically higher anxiety and depression scores and lower self-esteem as measured by the Brief Symptom Index. Erol et al. (27) compared the emotional and behavioural problems in a random sample (n 350) of all 11-18 year olds in residential care in Turkey with that of a large, age-matched, general population sample. Young people in residential care had higher rates of abnormal scores on three different measures: 15% compared with 8% using The Child Behaviour Checklist (CBCL); 20% compared with 9.5% using the Teacher Report Form; and 47% compared with 10% using the Youth Self Report. Marquis et al. (34) used parent/carer-rated Strengths and Difficulties Questionnaire (SDQ) scores to compare the mental health of a sample of 429 eleven to fifteen year olds looked after in foster and residential care in Ontario (representativeness of sample not made clear) with those of a large general population sample of British 11-15 year olds. A higher percentage of the looked after young people had abnormal SDQ scores (32% compared with 10%). These studies all suggest that LACYP are at higher risk of mental illness than the general population but the use of a general population sample means that we cannot assess whether this apparent association is confounded by deprivation.

Ford et al. (23) carried out a methodologically robust secondary analysis of data from large random samples (42% response) of looked after children in Scotland, Wales and England and compared this with data on a representative sample of the general population of children from across the UK to explore the prevalence of both emotional and behavioural problems. They found that the population of looked after children had a much higher rate of psychiatric morbidity (after adjusting for age and gender) than both the general population of children and children in the most deprived sub-group (defined as those whose parents had either never worked or worked in unskilled occupations). Overall 46% of looked after children had at least one ICD-10 psychiatric diagnosis compared with 15% of children in the most deprived households and 8% of private household children generally. In terms of type of psychiatric disorder the greatest difference between looked after children and both deprived and general population controls was for conduct disorder, with 27%, 5% and 1% being the respective percentages with the disorder in each group.

If being looked after is associated with mental illness, a key question is whether this is related to the reasons for, and/or consequence of, care. There is some evidence that rates of particular disorders vary by reason for care, with young people with a history of physical or sexual abuse having significantly higher rates of post-traumatic stress disorder than those without these types of maltreatment history (12). There is also some evidence that children and young people have high rates of mental disorder at first entry to care (21). Both of these findings suggest the importance of pre-care experience. Insufficient evidence exists, however, in relation to the beneficial nature of care then received. Although Fernandez et al. and McCrae et al. (35, 36) show an improvement in psychological health and behaviour problems (respectively) once children and young people are in care, Sullivan et al. (37) suggest that emotional health deteriorates over time in care.

Related to the question of whether the provision of care improves the mental health of looked after children and young people, is the issue regarding whether outcomes differ between care placement categories. Stanley et al. (38), in their survey of 159 carers of looked after children found that residential care staff reported higher mental health needs for the young people in their care than did foster carers. Ford et al. (23) found that unadjusted estimates of mental health differed between care placement categories across the range of problems measured by the SDQ (Table 10).

However, care placement categories differ in respect of a number of important confounders. McCrae et al. (36) studied a random sample of all American young people aged 7-14 years in foster and residential care as their first out of home placement. They found a number of important baseline differences between the two placement category populations. Young people in residential care were more likely to be older and come from communities with high levels of poverty. They also found higher levels of baseline behavioural problems and rates of depression in the residential care group. The important modifying effect of age is seen in those studies where age-specific rates are given. For example the prevalence of oppositional defiant disorder/ conduct disorder varies from 2% in the 0-<3 year group to 37% in the 13-18 year group (10). Gracia et al. (28) looked at a birth cohort of young people aged 17 years (thereby removing the potential confounding effect of age) and still found cross-sectional differences on a lifetime prevalence measure of mental disorder between care placement categories with 34% prevalence in those in residential care, 26% in foster and 18% in kinship care. However, although Egelund et al. (39) also found higher rates of emotional and behavioural abnormality as measured by SDQ in young people in out of home care compared to those in at home care in a 1995 Danish birth cohort, other potentially important risks such as family history of mental illness, substance abuse, criminality, care and socioeconomic deprivation, were also significantly higher for the out of home care group. When Mennen et al. (40) studied 302 nine to twelve year olds in California (77% response), they did not find any difference in mental illness rates between care placement categories.

Certain sub-groups of looked after children and young people – such as older young people, boys and those with disabilities – may be particularly at risk of mental health problems (41). However it is not clear whether this is also true for these sub-groups within the general population or whether there is an interaction between these characteristics and being in care which results in the increased risk.

6.5 Health Related Behaviours of Looked after Children and Young People

Summary Points

- Rates of tobacco and illicit drug use may be higher among LACYP than among the general population.
- There may also be increased rates of sexual risk taking behaviours (e.g. early age at first intercourse).
- It is not clear whether observed rates are in excess of what might be expected given pre-care and post-care experience of material deprivation.

Three studies were found which recorded prevalence rates for health related behaviours. Stahlberg et al (31) found that 55% of all 12-19 year olds admitted to secure residential care in Sweden over a three year period between 2004-2007 (n 100) reported substance abuse (undefined by authors other than includes alcohol). High rates of adverse health related behaviours were also found in 105 six to seventeen year olds in residential care in Lothian in 2000-2003 (20). In this sample, 67% smoked, 87% used alcohol (13% drinking >14 units per week), and 61% admitted to use of other substances, the most common being cannabis (52%). Meltzer et al. (18) explored the mental health of a random sample of all 5-17 year old LACYP in Scotland in 2002 (n 355; 40.5% response rate). The sub-sample of looked after young people aged 11-15 years (n 121) used computer assisted methods to complete questions on health related behaviours. In this cross-sectional sample the researchers found that 40% smoked[i], 22% drank alcohol at least once a month and 21% had used cannabis in the last month.

Two studies explored the association between being looked after and health related behaviours. Williams et al. (22) found that children aged 5-16 years in residential, foster, and kinship care in Wales were more likely to smoke and take illegal drugs than age and sex-matched controls and Meltzer et al. (18) found that the rates for smoking, drinking and cannabis use were all significantly higher in looked after young people (4

---

[i] This compares with 13% of 15 year olds being regular smokers in 2010 Scottish Schools Adolescent Lifestyle and Substance Use Survey.

times for smoking; 1.5 times for alcohol and 10 times for cannabis use) than the general population of young people in Britain. It is not clear how the high rates observed in LACYP compare with those of equivalently deprived young people.

The Meltzer et al. study (18) also reported higher rates of smoking and illegal drug use among Scottish looked after young people compared with young people looked after in England and Wales (e.g. for current smoking 40% compared with. 32% and 34% respectively). This study also shows unadjusted higher rates of adverse health-related behaviours in young people living in residential care relative to the non-residential group. However the authors comment that this is likely to be confounded by the relatively older average age of this setting sub-group.

Three studies (42-44) were found which indicated that looked after young people may be at increased risk of sexual risk taking behaviour defined variably as: younger age, and decreased likelihood of condom use, at first intercourse; higher median number of partners; sex with a casual partner; and sex for drugs or money. One of the aforementioned studies (42) also found that those with a reported history of care had increased risk of sexually transmitted infections. All three studies used general population control populations and therefore did not control for deprivation. No studies were found which reported the prevalence of sexual risk taking behaviours in looked after young people.

6.6 The Social Health of Looked after Children and Young People

Summary Points

- Education and employment outcomes at 9 months post-school are poorer than those of the general population of school leavers in Scotland.
- Children looked after at home have the poorest outcomes on a number of measures.
- LACYP may be at increased risk of imprisonment compared to the general population.
- It is not clear how much of the difference seen in these outcomes between LACYP and the general population is confounded by levels of deprivation.

A range of social health measures are explored in the literature. These include school attendance and exclusion rates, educational attainment, school leaver destinations, homelessness, and criminality.

LACYP in Scotland have a lower average attendance rate than that of all children (88.6% compared with 93.1%) (45). Stahlberg et al. (31) in their study of all 12-19 year olds in secure care in Sweden found that 97% had school problems including experience of bulling, learning problems, need for special tuition or supervision or truancy. Exclusion rates in Scotland in 2010/11 were also much higher for LACYP (32.6%) than for all school children (4%). In a North American study, Dubowitz et al. (46) found that children in kinship care had poorer study habits and concentration skills, as assessed by teacher and caregiver self-report, compared to teacher expectations of children of the same age. Ford et al. (23) found that LACYP in all care placement categories were more likely to have educational difficulties (defined as: teacher report of special educational needs or literacy or numeracy problems; or teacher assessing mental age to be less than 60% of chronological age) than both the general population of children and socially disadvantaged children. These learning problems translate into poor educational attainment. Sawyer et al. (47) found that children in kinship care were more likely to experience grade retention, require remedial help and have poorer overall academic achievement than other children their age. In 2010/11 the attainment of LACYP in Scotland at school exit in was significantly lower than that of all school leavers (average 79 exam tariff points compared to 385 points). LACYP are also less likely to be in a positive post-school destination (defined as further or higher education; training; voluntary work; employment) at nine month follow-up (55% of LACYP compared to 87% of all school leavers) (45).

Three of the educational measures reported annually by Scottish Government are broken down by care placement group. Children and young people who are looked after at home have the poorest average attendance, the second highest exclusion rate after young people in residential care and the lowest attainment as measured by total qualification points.

Three further studies reported on social outcomes for looked after children and young people. Fowler et al. (48) in their survey of 265 nineteen to twenty-three year old care leavers (34% response rate) in one American mid-western state found that 20% were chronically homeless and that there was a significant association between emotional and behavioural problems and housing instability. One study found that children looked after in kinship, foster and residential care were more likely to have been cautioned or charged by the police than age and sex-matched controls (22). In their secondary analysis of two national surveys of psychiatric morbidity among, adults in private households in Britain and Prisoners in England Wales, Yang et al. (50) found that the odds of experiencing imprisonment were four times higher for women and six times higher for men who had been in foster or residential care than they were for the general population.

6.7 Effective Prevention and Treatment

Summary Points

- There is limited evidence for effective primary and secondary prevention of maltreatment.
- There is some evidence for the effectiveness of multi-dimensional foster care in improving behavioural outcomes.
- There is some evidence that mentoring and skills training improves mental wellbeing in LACYP.
- Placement stability may be an important factor in improving mental wellbeing and more work is required to understand the determinants of stability.
- More work is needed to evaluate whether out of home care is beneficial to the mental health of LACYP and whether different settings are more or less beneficial.
- International expert consensus indicates the importance of a joint health /child welfare data system to the evaluation of needs and outcomes.

Preventing Maltreatment

Two studies were found which looked at interventions to prevent maltreatment. Barlow et al. (49), in their review of the effectiveness of individual and group-based parenting programmes for secondary prevention of physical abuse and neglect, found mixed evidence of effectiveness in improving outcomes associated with physically abusive parenting and were unable to draw firm conclusions. Zeanah et al. (51) undertook a before and after evaluation of a multi-disciplinary infant mental health programme aiming to foster healthy attachment and development in looked after infants and toddlers in New Orleans in the late 1990s. In 1995 the authors looked at permanency and recidivism for a ‘before’ group of 145 children under 2 years old and taken into care between 1991 and 1994 and compared this (in 1999) with the same outcomes for a group of 95 children under 2 years old taken into care between 1995-1998. They found that rates of termination of parental rights in the period following intervention were twice those of the period prior to implementation of the intervention and that the risk of recidivism (defined as another incident of validated maltreatment) was 67% lower following implementation of the programme.

Physical Health Outcomes

No literature was found on interventions to improve physical health outcomes for looked after children and young people.

Mental Health Outcomes

Most of the literature on interventions to improve outcomes for LACYP focused on mental health.

As discussed above there is some evidence to suggest that care itself may be an important intervention in improving the mental health of LACYP (35, 36). Furthermore Tarren-Sweeny (52) in their look at predictors of mental wellbeing of 347 four to nine year olds in New South Wales found that older age at entry to care was associated with poorer mental health as measured on a range of validated measurement tools even after adjusting for reason for care. Unfortunately, however, no literature on interventions to improve early detection of need for care was found. In the same study, Tarren-Sweeny found that placement stability (number of placements) was also an important predictor of mental wellbeing for LACYP. The importance of placement stability to mental health for LACYP is supported by the work of Stanley (38) who found, in her qualitative study of looked after young people in England, that both young people and carers emphasised the relationship between placement disruption and psychological distress. Carbone et al. (53) also found that 6-17 year old LACYP in Adelaide with three or more placements had statistically lower health related quality of life scores than those with less than three placements.

The potential association between care placement type and health outcomes has been discussed above. Care placement type is therefore also a potentially effective intervention for LACYP. Hurlburt et al. (54) found that kinship care may be more effective in achieving placement stability than “non-relative care”. Children aged 5-12 years in non-relative care had four times the odds of negative placement disruption (defined as exit from placement due to behaviour problems, child running away or need for more intensive or restrictive level of care) compared with children in kinship care - after adjusting for child age, race and baseline behaviour, over a four and twelve month period. The potential effectiveness of kinship care for improving outcomes relative to other care placement settings is further supported by the work of Winokur et al. (55). In their Cochrane Review of the effectiveness of kinship care in improving safety, permanency and wellbeing of children removed from the home for maltreatment these authors found that data suggest children in kinship care experience better behavioural development, mental health functioning and placement stability than children in non-kinship care. However, they also state that the conclusions needed to be tempered by the pronounced methodological and design weaknesses of the included studies. One important methodological weakness which may have confounded the findings is the likely heterogeneity of the non-kinship group, which is comprised of outcomes averaged across all other care setting sub-groups.

Treatment Foster Care[j] is another care placement intervention for which there is some evidence of effectiveness in the literature. In their blinded randomised control trial, Fisher et al. (56) found that Treatment Foster Care decreased and maintained lower carer stress levels over 12 months compared with regular foster carers. They also showed an association between parent stress and improved child cortisol profile which itself may be an indicator of psychological wellbeing. Macdonald et al. (57) in their Cochrane Review of Treatment Foster Care found that it may be effective in improving mental health and placement stability for children and young people with complex emotional, psychological and behavioural need but that the evidence base is less robust than is usually reported. Similarly there is insufficient evidence that independent living programmes improve the independent living skills or educational attainment of care leavers (58). All studies found by the reviewers, although generally reporting favourable outcomes for participants, used non-random or non-comparative designs which prevent reliable inferences being drawn.

Parenting Skills Programmes may be potentially effective interventions not only in preventing maltreatment, as discussed above, but also in preventing and treating behavioural disorders in LACYP. In their qualitative study of foster parent focus groups in the US, Spielfogel et al. (59) found an expressed need for more support and training in how to address children’s behaviours. However, Everson-Hock et al. (60) found mixed results in their systematic review of Randomized Controlled Trials (RCT) of behaviour management training for foster parents, with some studies showing improvement in, and others showing no effect on, child behavioural outcomes at six to nine month follow up.

Two studies provide evidence of the potential for mentoring in improving the mental wellbeing of LACYP. In the National Longitudinal Study of Adolescent Health 1994-2002, Ahrens et al. (61) undertook secondary analysis of data on 310 fourteen to eighteen year olds who reported they had been in care. They found that 150 of the young people had experienced mentoring since age 14 (as assessed by the question

---

[j] A therapy-focused model of alternative care where a child is placed singly, follows a highly structured daily behaviour management plan, receives psychological therapy and where the child’s carers receive on-going professional supervision and support.

"has a non-parental adult made an important difference in your life since you were 14?"). After adjusting for a range of important confounders including parental income, the investigators found that being mentored was associated with improved self-reported general health, decreased suicidal ideation and fewer sexually transmitted infections. Taussig et al. (62, 63) in their un-blinded RCT of the fostering health futures programme, a mentoring and therapeutic skills programme for 9-11 year old LACYP, found that the mentored children showed a large relative decrease in mental health problems compared to the control group of children, after adjusting for a wide range of confounding factors.

Health Related Behaviour and Social Health Outcomes

Karadag et al. (64) found that exposure to sports activities (undefined) was associated with decreased rates of daily tobacco, and weekly alcohol and illicit drug use ever (with the difference in point prevalence rates between those exposed and unexposed for each of the outcomes being 28%, 15% and 12% respectively). However the cross-sectional nature of this study prevents the very plausible reverse causality from being excluded.

Tideman et al. (65) found that intensive educational support (involving amongst other things comprehensive baseline assessment; individualised education plan with clear goals and accountability; daily 1-2h individualised lessons for some; foster carer training in educational support; class teacher supervision) improved age appropriate IQ and educational attainment at two year follow-up.

Robst et al. (66) found a decrease in mean felony charges for LACYP in treatment foster care compared to treatment group care, a finding supported by that of MacDonald et al. (57) in their Cochrane Review of Treatment Foster Care.

Economic Costs for Emotional and Behavioural Interventions

No economic evaluations of interventions to improve outcomes for looked after children and young people were found. However, a grey literature report provided cost per treated child in American dollars for three anti-social behaviour interventions for young people (67). Functional Family Therapy, a type of family therapy provided to delinquent youth or those at risk of delinquency, for 3 to 5 months, cost $2,000 per treated young person. Multisystemic Therapy, is for youth at risk of becoming looked after or transitioning back home from care who have problems with anti-social or substance abusing behaviours. The goal is to develop the skills to cope with family, school or neighbourhood problems in parents and young people through 3-5 months of intense therapy which takes place in home, school and community settings. It costs $5,000 to $8,000 per treated young person. Treatment foster care is the most expensive of the three interventions costing $26,000 per treated young person. Unfortunately evidence of the effectiveness and therefore cost-effectiveness for each of these interventions was not referenced in this report.

Importance of Assessment and Outcome Tracking

Finally, in the absence of a good evidence base for interventions to improve outcomes for LACYP, the expert conclusions of two North American, multi-agency and multi-disciplinary conferences are considered. Romanelli et al. (68) in the Best Practice Guidelines for Screening, Assessing and Treating Mental Illness in Child Welfare, which originated out of a 2007 expert conference, make three main recommendations:

i) that looked after young people should be assessed for risk of self-harm within 72 hours of becoming looked after, undergo screening for mental illness within 30 days and for those screening positive receive a comprehensive assessment within the first three months;
ii) that validated assessment instruments should be used and that assessment should look at strengths as well as deficits; and
iii) that psychosocial and placement stability outcomes should be tracked over time for young people in care.

Schneiderman et al. (69), in their report of a similar multi-disciplinary expert summit in 2005, argue that the main barriers to delivering effective healthcare to LACYP are poor collaboration between systems of care and poor communication of health information. Their main solution-focused recommendation concerns the need for a centralised computer data system between child welfare and health at local and national levels to allow aggregate evaluation of needs and outcomes.

SECTION 7: LOOKED AFTER CHILDREN AND YOUNG PEOPLE ON SUPERVISION REQUIREMENTS IN SCOTLAND

Summary Points

- There is likely to be a variation between health board areas in the proportion of LACYP with Supervision Requirements.
- There are a greater number of 14, 15 and 16 year olds with Supervision Requirements, relative to other single year age categories.
- There are more boys than girls in Scotland with Supervision Requirements. The gender difference is largest for 10-18 year olds.
- Levels of parental area deprivation for LACYP with Supervision Requirements in Scotland are high (76.5% in the two most deprived SIMD quintiles).
- Lack of parental care is the most frequently accepted and/or established ground for referral for LACYP with Supervision Requirements (71% of the sample had this ground accepted or established at least once).
- There may be a gender difference in the accepted and/or established grounds for referral to the Children's Panel for those with Supervision Requirements, with girls more likely to have inadequate provision of care grounds accepted and/or established and boys more likely to have behaviour problem grounds accepted and/or established.
- LACYP with problem behaviour grounds accepted and/or established are older on average than those in other grounds for referral sub-groups.
- Care setting sub-groups are heterogeneous in terms of age, sex, parental area deprivation and grounds for referral.
- The vast majority of 0-8 year olds with Supervision Requirements were on their first episode of supervision.
- Children in the 0-8 year age group were on average 2.4 years old when their first Supervision Requirement was applied.
- The average duration of supervision for the 0-8 year old group was 1.6 years, with only 7.5% of this group having their current Supervision Requirement for 5 years or more.

7.1 Introduction

As discussed above, from existing accessible data sources we have been unable to say anything about: the sex or deprivation profile of Scotland's population of LACYP (or age profile at local level), the reasons children and young people become looked after; or anything about care trajectories. It is hoped that the analyses of specially requested data in this section and section 8 will allow us to address some of the gaps in our knowledge of potential determinants of health for this sub-population of children and young people. Unfortunately there is little, routine quantitative health outcome data available for analysis.

7.2 Supervision Requirements

The following analysis is based on a point prevalence sample of all children and young people in Scotland with a Supervision Requirement on 30th June 2012.

A Children's Hearing makes a Supervision Requirement (SR) under section 70 of the Children's (Scotland) Act 1995 (6) when compulsory measures are required to protect the child or young person or to address behaviour problems. Local authorities have statutory responsibility to implement Supervision Requirements and therefore a child or young person with a Supervision Requirement is a looked after child or young person. On 31st March 2011, 81% of all LACYP in Scotland had Supervision Requirements. This proportion has ranged from 81-90% over the last four years. The remaining proportion of LACYP mainly[k] comprises children/young people who are looked after without the need for compulsory measures (e.g. because the child's family is accepting of and co-operative with local authority care). The proportion of LACYP with Supervision Requirements varies across health boards, from 53.4% to potentially 100% (Table 11).

There is no routine information available to indicate whether the sub-population of LACYP with Supervision Requirements differs from those who are not subjects of Supervision Requirements.

There were 13,011 children and young people with Supervision Requirements on 30th June 2012. This equates to 1.3 % of all 0-17 year olds in Scotland.

7.3 Age, Sex and Deprivation

The age range was 0-17 years and the mean age 9.6 years. The number of LACYP in each year group was fairly equal between the ages of 3 and 13. Thereafter there is a

---

[k] Some looked after children and young people not on supervision requirements are looked after under other sections of The Children's (Scotland) Act 1995 such as Child Protection Orders, Place of Safety Warrants or Permanence Orders.

sharp rise to age 15, with age 15 being the most frequently observed single year age group (Figure 2), and a fall thereafter.

Table 11 Total LACYP and number with Supervision Requirements by local authority and health board

NHS Local Authority Partners			Health Boards					
	Total 31/7/11	Total number of LACYP with SRs 30/6/2012		Total number of LACYP 31/7/11	Number or LACYP with SRs 30/6/2012	Percentage of all LACYP with SRs	Percentage of all 0-17 year olds* looked after	Percentage all 0-17 year olds* with SRs
East Ayrshire	508	391	Ayrshire and Arran	1427	1247	87.4	2.0	1.7
North Ayrshire	583	531						
South Ayrshire	336	325						
Scottish Borders	208	111	Borders	208	111	53.4	0.9	0.5
Dumfries and Galloway	418	365	Dumfries and Galloway	418	365	87.3	1.5	1.3
Fife	832	650	Fife	832	650	78.1	1.1	0.9
Clackmannanshire	221	174	Forth Valley	872	707	81.1	1.4	1.2
Falkirk	399	337						
Stirling	252	196						
Aberdeen City	642	472	Grampian	1347	1003	74.5	1.2	0.9
Aberdeenshire	498	355						
Moray	207	176						
East Dunbartonshire	145	133	Greater Glasgow and Clyde	5497	4440	80.8	2.3	1.9
East Renfrewshire	154	175						
Glasgow City	3,761	2853						

Inverclyde	285	284						
Renfrewshire	769	674						
West Dunbartonshire	383	321						
Argyll and Bute	219	166	Highland	716	575	80.3	1.2	1.0
Highland	497	409						
North Lanarkshire	734	606	Lanarkshire	1281	1184	92.4	1.1	1.0
South Lanarkshire	547	578						
East Lothian	201	164	Lothian	2312	1705	73.7	1.4	1.1
Edinburgh City	1,362	1026						
Midlothian	302	168						
West Lothian	447	347						
Orkney	18	23	Orkney	18	23	127.8**	0.5	0.6
Shetland	28	23	Shetland	28	23	82.1	0.6	0.5
Angus	250	206	Tayside	1160	942	81.2	1.5	1.2
Dundee City	709	579						
Perth and Kinross	201	157						
Eilean Siar	55	36	Western Isles	55	36	65.5	1.1	0.7
Scotland Total	16 171	13 011		16171	13011	80.5	1.6	1.3

*Using 2011 Midyear population estimates

**Due to small numbers and different years in which total number and number on SRs measured

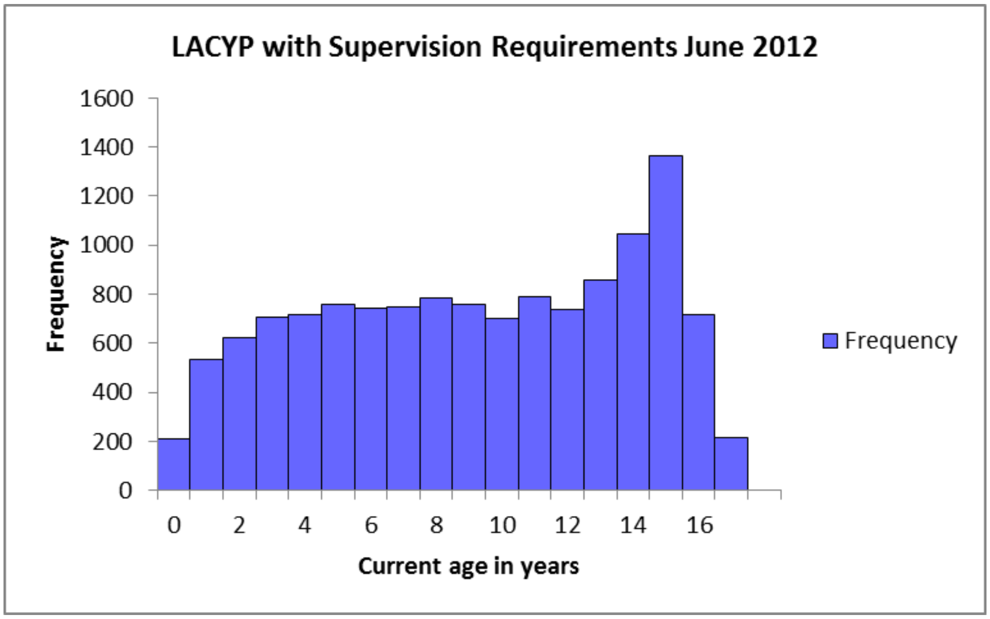


Figure 2. Age distribution LACYP in Scotland with Supervision Requirements June 2012

54% (95% CI[I] 53.1-54.9%) of LACYP with Supervision Requirements in Scotland were male and there were more boys than girls in all age categories. The higher proportion of boys was most pronounced in the 10-17 age group and as a result boys were on average 0.3 years older than girls (95% CI 0.1 to 0.5 years) (Figure 3).

[I] 95% Confidence Intervals give the range within which 95 times out of 100 the true value in the population is likely to lie.

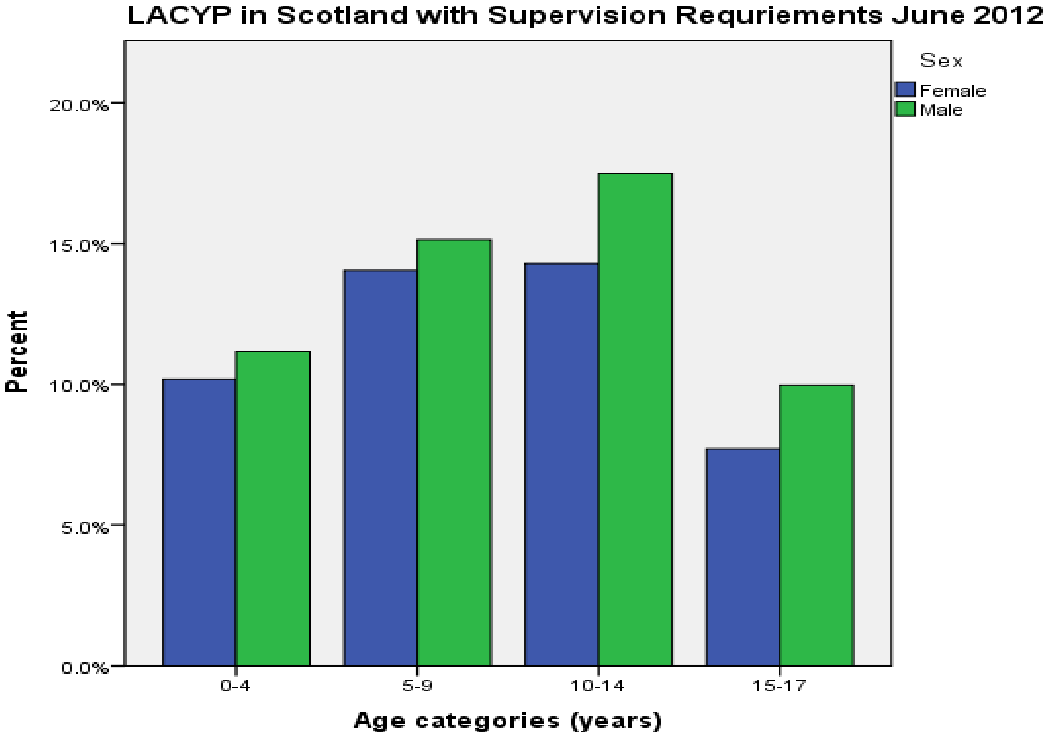


Figure 3. Age/Sex distribution of LACYP in Scotland with Supervision Requirements June 2012

Parent's current home address was used as a proxy for experience of area deprivation prior to care. This information was available for 11,495 (88%) of the sample. The parent address of 56% of LACYP with Supervision Requirements was in the most deprived SIMD[m] quintile with parental address for only 9% of LACYP with Supervision Requirements being in the two most affluent quintile areas (Figure 4).

---

[m] SIMD 2009 was used for all area deprivation analyses.

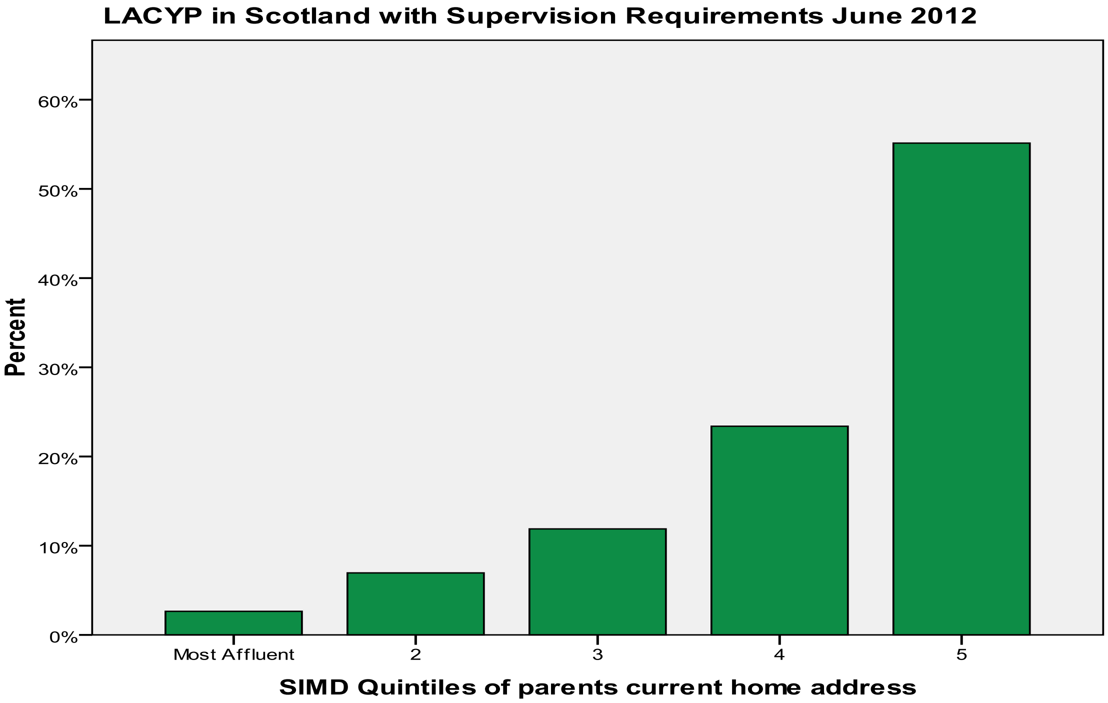


Figure 4. Parental area deprivation profile: LACYP in Scotland with Supervision Requirements June 2012.

7.4 Accepted and/or Established Grounds for referral to Children's Reporter

It is essential that there is good intelligence about the reasons children and young people come into care in order to target primary prevention, determine whether need within care differs according to the reasons for care, and plan appropriate secondary prevention. There is currently no routinely accessible information on the reasons children become looked after in Scotland.

Grounds for referral for Supervision Requirements are detailed in section 52(2) of the Children (Scotland) Act 1995(6), and are summarised in table 12. A Children's Hearing will consider the accepted and/or established grounds for referral to the Children's Reporter in making a Supervision Requirement (section 70 of the Children (Scotland) Act 1995).

Table 12. Grounds of Referral on which Supervision Requirement made

Grounds of Referral on which Supervision Requirements are made		
A	Beyond control of any relevant person	
B	Bad associations or moral danger	
C	Lack of parental care	
D	Victim of schedule 1 offence* including:	
	i	Child victim – incest, sexual offences or homosexual offences
	ii	Child victim of begging, burning, performing etc.
	iii	Child victim of bodily injury
	iv	Child victim of lewd, indecent or libidinous practice or behaviour
	v	Child victim – other
	vi	Child victim (ill treatment , abandonment, neglect and exposure)
E	Member of same household as a victim of a Schedule 1 offence	
F	Member of the same household as a Schedule 1 offender	
G	Member of the same household as an incest victim or perpetrator	
H	Not attending school	
I	Allegedly committed an offence	
J	Misused alcohol or drugs	
K	Misused solvents	
L	In the care of the local authority and special measures are necessary	
*Any offences mention in Schedule 1 of the Criminal Procedure (Scotland) Act 1995		

Accepted and/or established grounds for referral are not the same as reasons for care. They are the legal grounds on which sufficient evidence has been available for a Supervision Requirement to be made. This limitation must be borne in mind in considering the following analysis[n]. It is nonetheless hoped that these data will provide a starting point for considering the causes of need for care.

---

[n] These grounds for referral will change slightly when the Children's Hearings (Scotland) Act 2011 comes into force in June 2013. This new Act introduces a few new grounds for referral (e.g. close connection with someone who has committed domestic abuse; subjected to pressure to marry); removes more obsolete grounds (e.g. misused solvents) and simplified the language of some existing grounds.

Information on the grounds for referral was not available for children or young people who had the same Supervision Requirement for more than nine years (n 541). In addition, this information was not available for another 19 children/young people.

Across the 12,451 children/young people with information on the accepted and/or established grounds for referral there were a total of 18,620 accepted grounds. Some children had more than one accepted or established grounds, although often the same ground was accepted or established more than once for the same child. For example a single child may have been referred to the Children's Reporter on grounds of lack of parental care twice by social work, once by the police but also for school non-attendance by the police. The five most frequently accepted/established grounds for referral are shown in Table 13.

Table 13. Most frequent accepted and/or established grounds for referral from multiple sources in point prevalence sample all LACYP in Scotland with SRs

Grounds for referral for Supervision Requirement	Number of times recorded in sample*	Percentage of all accepted grounds
Lack of parental care	9941	53.4
Child victim of emotional, physical or sexual abuse or risk of such abuse (grounds d to g in table 12)**	4081	21.9
Allegedly committed an offence	1917	10.3
Not attending school	1270	6.8
Beyond the Control of any relevant person	983	5.3

*Some children/young people will have contributed more than once to the numbers within each category and/or different categories.

**may be some overlap with lack of parental care and include children exposed to domestic abuse. Also children with accepted and/or established 'g' grounds excluded due to small numbers

In contrast table 14 gives the five most frequent grounds for referral accepted and/or established at least once per child (in other words if a child was referred on grounds of lack of parental care twice and school non-attendance three times they would only contribute one lack of parental care and one school non-attendance to the frequencies for these categories).

Table 14. Five most frequent grounds for referral to Children's Reporter which have been accepted and/or established at least once per child: LACYP in Scotland with Supervision Requirements June 2012

Grounds for referral for Supervision Requirement	**Number of children with grounds accepted and/or established at least once**	**Percentage of all children/young people with information on grounds**
Lack of parental care	8890	71.4
Child victim of emotional, physical or sexual abuse or risk of such abuse (grounds d to g in table*)*	3004	24.1
Not attending school	1256	10.1
Beyond control of any relevant person	867	7.0
Allegedly committed an offence	625	5.0

* may be some overlap with lack of parental care and include children exposed to domestic abuse. Also children with accepted and/or established 'g' grounds excluded due to small numbers.

A significant number of children and young people had multiple accepted and/or established grounds for referral to the Children's Reporter (3,644, 29.3% of those with available information) although often the same ground was accepted and/or established a number of times for the same child, sometimes from the same source (e.g. multiple grounds of offence referred to SCRA by the police). Comparing tables 13 and 14 above we might reflect that "allegedly committed an offence" in particular may be recorded more than once for the same child/young person give the fall between overall number of times recorded in sample and number of times recorded at least once per child/young person.

Of the 12,451 children with information on accepted and/or established grounds for referral 2,593 (20.8%) had more than one type of ground accepted or established. Table 15 shows the five most frequently observed combinations of different grounds per child.

Table 15. Five most frequent combinations of accepted and/or established grounds for referral to the Children's Report for LACYP in Scotland with Supervision Requirements June 2012

Combination of Grounds for referral for Supervision Requirement	**Number of children/young people**	**Percentage of all children with SRs with information on grounds for referral.**
Lack of parental care *and* Abuse or risk of abuse*	1679	13.5
Lack of parental care *and* Bad associations or moral danger	140	1.1
Lack of parental care *and* Not attending school	85	0.7
Beyond control of any relevant person *and* Not attending school	82	0.7
Not attending school *and* Allegedly committed an offence	73	0.6
*Including emotional, physical, sexual abuse and domestic violence		

Differences between grounds for referral for Supervision Requirement sub Groups

In order to prevent a need for care it is important to understand its determinants. An examination of the features of the LACYP in the different "grounds for referral for Supervision Requirement" (grounds) sub-groups provides opportunities to generate hypotheses relevant to preventive action.

Grounds were grouped into five broader categories as detailed in Table 16

Table 16. Categorisation of legal grounds for Supervision Requirement

	New Category	**Legal Grounds**	**Number of children with ground accepted/established at least once (% total with grounds).**
1	Inadequate Provision of Care	Lack of Parental Care	7590 (61.0)
		Bad associations or moral danger	
		Not Attending school if <13 years	
2	Problems related to child behaviour	Beyond control of any relevant person	1794 (14.4)
		Not attending school if >12 years	
		Allegedly committed an offence	
		Misused alcohol or drugs	
		Misused solvents	
		In the care of local authority and special measures are necessary	
3	Emotional, physical, sexual abuse or risk of such.	Victim / MSH* of victim or perpetrator of incest, sexual offences or homosexual offences	1191(9.6)
		Victim / MSH of victim or perpetrator of child victim of begging, burning, performing etc.	
		Victim / MSH of victim or perpetrator of bodily injury	
		Victim / MSH of victim or perpetrator of lewd, indecent or libidinous practice or behaviour	
		Victim / MSH of victim or perpetrator of child victim – other	

		Victim / Member of same household(MSH) of victim or perpetrator of ill treatment, abandonment, neglect and exposure	
		Member of the same household as an incest victim or perpetrator	
4	Inadequate care and abuse/risk of abuse	Options from 1&3 combined	1743(14.0)
5	Other	Options from 1&2 or 2&3 combined	133(1.1)
TOTAL			12451 (1.0)
*Member of the same household.			

Table 17. Grounds for Supervision Requirement by age group

Age Group (years)	**Grounds for Supervision N (%)**					**Total**
	Inadequate Provision of care	**Problems with behaviour**	**Emotional, physical or sexual abuse or risk of such**	**Inadequate care and abuse**	**Other**	
0-4	2053(73.6)	0(0)	299 (10.7)	436(15.6)	1(<0.1)	2789(100)
5-9	2676(7037)	15(0.4)	437(11.6)	640(16.9)	15(0.4)	3783(100)
10-14	2274(59.3)	637(16.6)	344(9.0)	527(13.8)	50(1.3)	3832(100)
15-17	587(28.7)	1142 (55.8)	111(5.4)	140(6.8)	67(3.3)	2047(100)
Total	7590(61.0)	1794 (14.4)	1191(9.6)	1743(14.0)	133(1.1)	12451(100)

Observed differences between grounds for referral sub-groups included:

- Young people currently aged[o] 10-14 and 15-17 years with Supervision Requirements were more likely to have accepted and/or established grounds for referral to the Reporter related to problems with their behaviour and less likely to have accepted and/or established grounds related to inadequate provision of care compared to younger age groups (Table 17);
- there was a significant association between gender and accepted and/or established grounds for referral with a higher proportion of boys than girls with problematic behaviour (17.0% compared to 11.0%) and a higher proportion of girls than boys with accepted grounds of inadequate provision of care (63% compared to 59%) (chi squared p-value <0.001); and
- there was also a significant association between deprivation and the accepted and/or established grounds for a Supervision Requirement. Children and young people whose parents were currently living in the most deprived quintile were more likely to have accepted and/or established grounds for referral of lack of care and abuse and less likely to have accepted and/or established grounds related to behaviour problems than children or young people whose parents were currently living in more affluent quintiles (Table 18).

---

[o] Although current age not reflective of age when supervision requirement applied, the average duration of current supervision requirement is similar for all age groups exception of the 0-4 year group which has a significantly shorter average duration of SR compared to the others (with a mean duration of 1.3 years compared to the 10-14 year old age group which had the highest mean duration of 2.9 years).

Table 18. Grounds for Supervision Requirement by deprivation quintile

SIMD Quintiles	Grounds for Supervision N (%)					Total
	Inadequate Provision of care	**Problems with behaviour**	**Emotional, physical or sexual abuse or risk of such**	**Inadequate care and abuse**	**Other**	
Most affluent	163(61.5)	65(24.5)	19(7.2)	18(6.8)	0(0)	265100)
2	408(57.6)	151(21.3)	85(12.0)	57(8.1)	7(1.0)	708 (100)
3	754(60.2)	241(19.2)	112(8.9)	127(10.1)	18(1.4)	1252 (100)
4	1565(59.8)	298(11.4)	308(11.4)	308(11.8)	34(1.3)	2617(100)
Most deprived	3804 (61.3)	785(12.7)	544(8.8)	1014(16.4)	52(0.8)	6199 (100)
Total	6694(60.6)	1654(15.0)	1085(9.8)	1524(13.8)	111(1.0)	11041 (100)
Chi squared p-value <0.001						

7.5 Sources of Referrals to the Children’s Reporter for Accepted and/or Established Grounds for Supervision Requirements

There were 18,620 different referrals to the Children’s Reporter (with some children having more than one referral from the same and/or different sources) which were accepted/established for this sample. Most of these (47.7%) were from social work and the police (39.7%). Of the remainder, 8% were from education, 1.5% from health and 3.1% from a variety of other sources including parents, other relatives and other parts of the judiciary including the procurator fiscal. It is important to note that referrals from the police include both those related to need for care and protection and those due to offence.

7.6 Care Setting

Care setting information was available for 12,637 (97.1%) of the sample. Half of LACYP with Supervision Requirements were looked after at home (Table 19).

Table 19. Care settings of LACYP in Scotland on Supervision Requirement

Placement Type	Number	Percentage of Total
Home	6351	50.3
Kinship	2099	16.6
Foster	3253	25.7
Residential	839	6.6
Other*	95	0.8
Total	12637	100
*Other includes assessment centre, in hospital, independently living, other non-residential not otherwise specified		

Differences between care setting groups

Differences between care setting sub-groups may result in differential need and outcomes. There are differences in educational outcomes for different care setting sub-groups, but there is little information on how these sub-groups differ on potential determinants of outcomes.

Table 20. Parental SIMD by care setting sub-group

Care Setting	SIMD Quintiles N (%)					Total
	Most Affluent	2	3	4	5	
Home	165 (2.7)	394 (6.4)	728 (11.8)	1477 (23.9)	3418 (55.3)	6182 (100)
Kinship	23 (1.5)	68 (4.6)	139 (9.3)	351 (23.5)	911 (61.1)	1492 (100)
Foster	57 (2.0)	173 (6.1)	314 (11.1)	625 (22.2)	1650 (58.5)	2819 (100)
Residential	17 (2.3)	63 (8.5)	94 (12.7)	207 (28.0)	358 (48.4)	739 (100)
Other*	2 (3.3)	8 (13.3)	6 (10.0)	19 (31.7)	25 (41.7)	60 (100)
Total	264 (2.3)	706 (6.3)	1281 (11.3)	2679 (23.7)	6362 (56.3)	11292 (100)

*Other includes assessment centre, in hospital, independently living, other non-residential not otherwise specified

For the population of LACYP on Supervision Requirements the following differences between care setting sub-groups were observed:

- young people in residential care had a substantially older average age than those in other care setting sub-groups (14.7 years compared to 8.6 for kinship and foster care);
- young people looked after at home were slightly older on average (9.8 years) than those in kinship and foster care (8.6 years);
- 60% of LACYP with SRs in residential care and 54% of LACYP at home were male. There was a more even gender balance in the other setting sub-groups; and
- LACYP in kinship care were more likely to have parents living in the most deprived areas than those in other care setting categories (although deprivation levels were high for all care setting sub-groups). LACYP in residential care were relatively less likely to have parents currently living in the most deprived SIMD quintile when compared to the other care setting sub-groups; although even so almost 50% had parents currently living in deprived areas (Table 20); and
  the distribution of grounds for referral differed by care setting sub-group, with children in kinship and foster care more likely to have inadequate provision of care accepted and/or established. Those in residential care were conversely more likely to have behaviour problem grounds accepted and/or established (Table 21).

Table 21. Accepted and /or established grounds for Supervision Requirement by care setting

Care Setting	Grounds for Supervision Requirement N(%)					Total
	Inadequate care	**Behaviour Problems**	**Abuse or risk of abuse**	**Inadequate care and abuse**	**Other**	
Home	3564 (57.3)	1185 (19.1)	650 (10.5)	754 (12.1)	63 (1.0)	6216(100)
Kinship	1406 (70.3)	74 (3.7)	166 (8.3)	339 (16.9)	16 (0.8)	2001 (100)
Foster	2122 (69.7)	103 (3.4)	283 (9.3)	518 (17.0)	17 (0.6)	3043 (100)
Residential	247 (33.1))	357 (47.8)	46 (6.2)	65 (8.7)	32 (4.3)	747 (100)
Other*	32 (40.5)	31 (39.2)	6 (7.6)	8 (10.1)	2 (2.5)	79 (100)
Total	7371 (61.0)	1750 (14.5)	1151 (9.5)	1684 (13.9)	130 (1.1)	12086 (100)

*Other includes assessment centre, in hospital, independently living, other non-residential not otherwise specified
Chi squared (excluding 'Other' category) p-value <0.001

7.7 Supervision Requirement Trajectories

Information on age at first Supervision Requirement and all previous episodes of supervision was available for 5,828 zero to eight year olds within the sample.

For this group:

- the majority of children had no previous Supervision Requirement (96.2%);
- the number of previous supervision requirements ranged from 0-2;
- the age distribution of first supervision requirement was positively skewed: the range being 0-8 years, the mode being 0 (with 25.1% of the sample having their first Supervision Requirement applied in their first year) and the median being 2.4 years;
- the vast majority (81%) had their first Supervision Requirement applied before their fifth birthday(Figure 5); and

- the range of duration of current Supervision Requirement was 0-8 years, the mode was 0 years and the median 1.6 years. 7.2% of 0-8 year olds had a Supervision Requirement for 5 or more years.

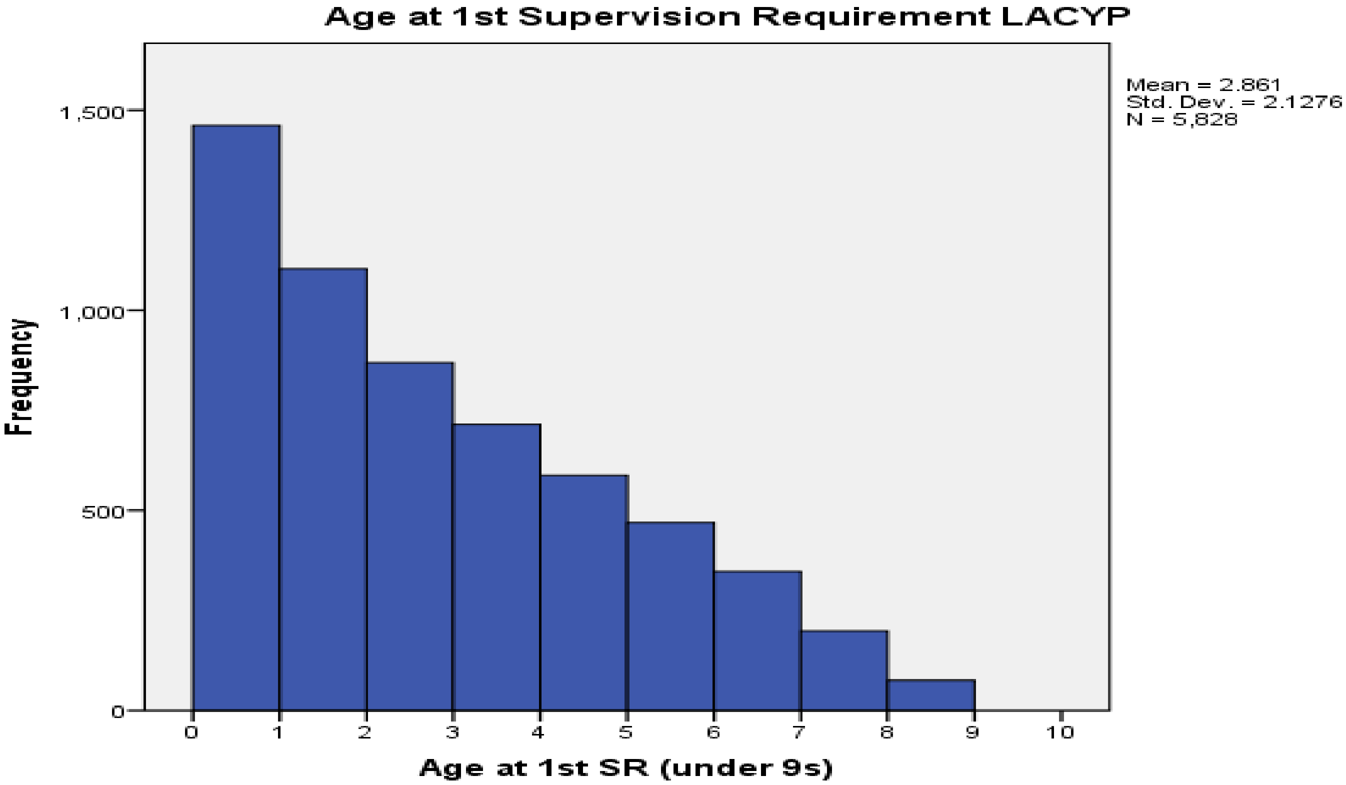


Figure 5. Age at first Supervision Requirement 0-8 year olds

SECTION 8: PROFILE OF CHILDREN AND YOUNG PEOPLE LOOKED AFTER BY GLASGOW CITY COUNCIL

Summary Points

- Of all local authorities in Scotland, Glasgow City Council (GCC) looks after the largest proportion of its 0-17 year old population (3.4% in June 2012).
- The age distribution of GCC's LACYP population is negatively skewed, with 15 year olds comprising the largest single year age group.
- More boys than girls are looked after by GCC, this is particularly the case for LACYP aged 10-19 years.
- There are high levels of maternal deprivation among the LACYP population in Glasgow.
- There is a complex set of reasons for care in operation.
- Inadequate care is the most frequently observed reason for placing a child in care (68%).
- Children and young people looked after because of reasons related to problems with family function or child behaviour are older on average than those in care for other reasons.
- Boys are more likely than girls to be looked after because of problem behaviour (12.9% compared to 7.9% of girls, 95% CI for difference 2.7-6.5%).
- Care due to carer drug misuse becomes more common with increasing parental area deprivation.
- Glasgow City Council has fewer children and young people looked after at home and more looked after in foster care than occurs at a national level.
- Care setting sub-groups are heterogeneous in terms of age, sex, reason for care and previous number of placements experienced.
- Mean age at first entry to care was 5 years.
- 42% of LACYP had experienced more than one placement during the current episode of care.
- Experience of placement instability seemed to increase with time in care.

The following analysis of a point prevalence cohort of all children and young people looked after by Glasgow City Council on 25th June 2012 aims to address some of the gaps in knowledge of the potential determinants of health outcomes, discussed above (section 5.1), for the local population of LACYP.

8.1 Population Size

There were 3,721 children and young people (91 of whom were aged 18 or older), equating to 3.4% (3.3% if 91 over 18s excluded) of all 0-17 year olds in Glasgow City[p], looked after by Glasgow City Council on 25th June 2012. This was the highest proportion of the 0-17 year old population of any Scottish local authority.

8.2 Age, Sex and Deprivation

The age distribution of GCC's LACYP was negatively skewed, with a range of 0-25 years, a mean age of 10 years and a mode of 15 (figure 6).

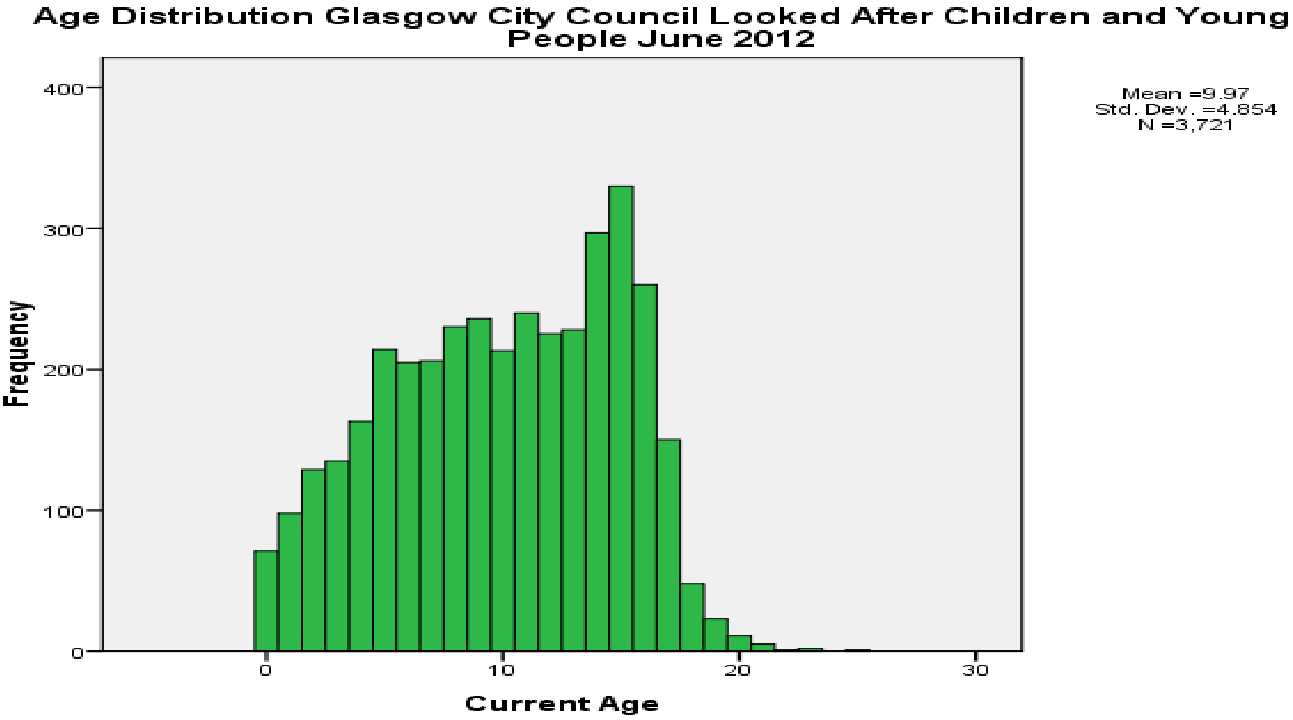


Figure 6. Age distribution of children and young people looked after by GCC June 2012

---

[p] Using 2011 mid-year 0-17 year old population for Glasgow City as denominator

As with the national sample of children and young people with Supervision Requirements there were more boys (54%, 95% CI 52-56) than girls (46%, 95% CI 44-48) in the local sample. Boys were also 0.6 years older than girls on average (95% CI 0.3 to 0.9 years) (Figure 7).

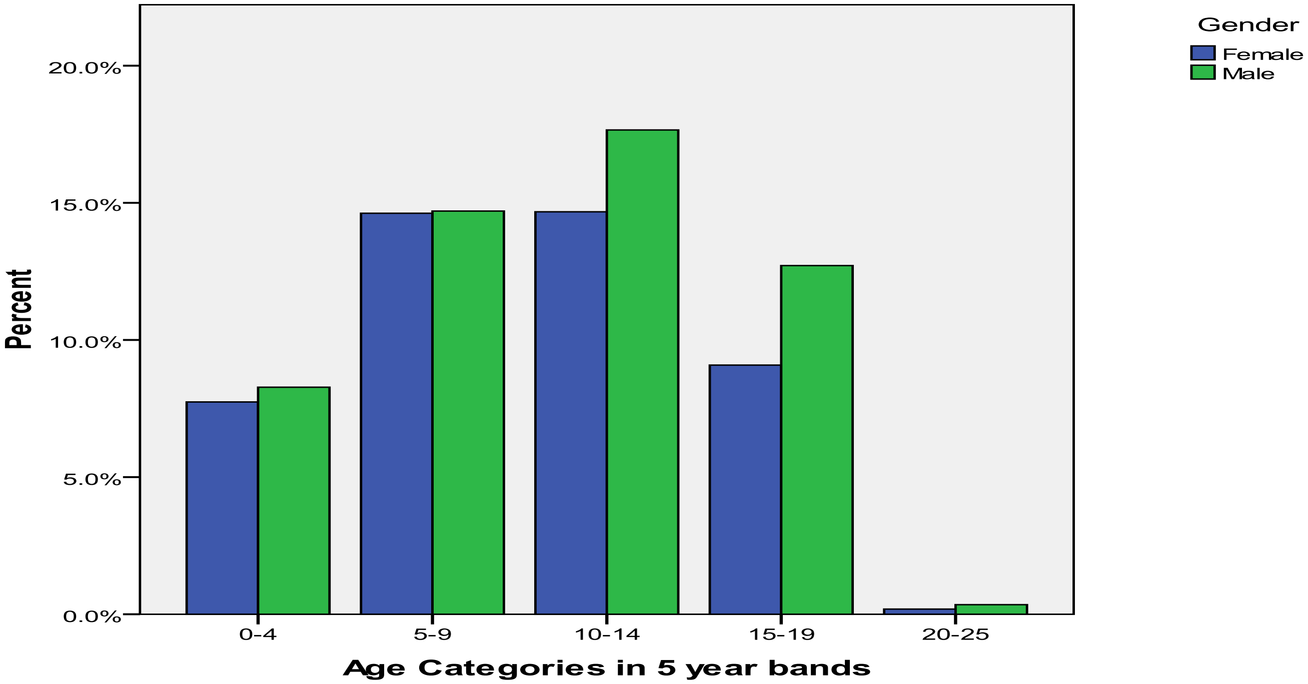


Figure 7. Age/Sex distribution of children and young people looked after by GCC June 2012

Current maternal postcode was used as a proxy for the area deprivation experienced by the LACYP prior to coming into care. The area deprivation profile of GCC's LACYP is described within both the Scottish and NHS GGC context. The mothers of 85% of the children and young people looked after by GCC live in the most deprived Scottish quintile (94% in two most deprived); 67% live in the most deprived quintile of Greater Glasgow and Clyde (87% in the two most deprived quintiles). Only 4% of mothers live in the two most affluent NHS GGC quintiles (Figure 8).

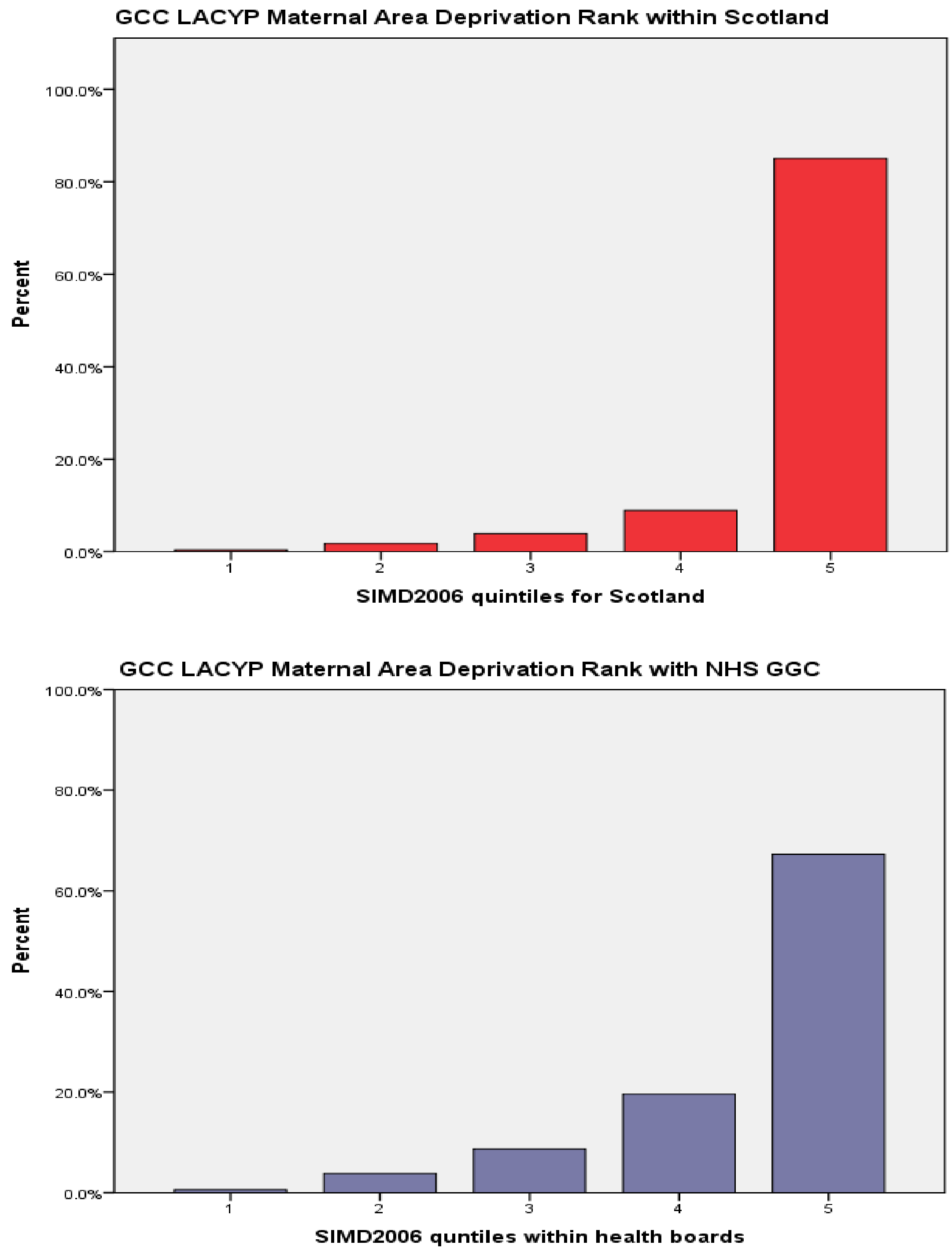


Figure 8. Deprivation profile of mothers of GCC's LACYP

8.3 Reasons for Care

Within the GCC sample there were 23 different primary reasons recorded within the dataset (Table 22). Most children had multiple reasons for care (secondary reasons were not included in this analysis). Although the free text description of reasons for care allows the complexity of individual cases to be described it is problematic for considering population needs in a number of respects. First, as a consequence of the lack of objective definitions and the resultant inherent subjectivity of the categorisation, it is not always clear what is meant by the reason given nor where overlaps between different reasons might be (e.g. lack of parental care and child protection). Second, a lack of categorisation means that the possible commonalities between individual reasons relevant to primary (e.g. service intervention in terms of parenting/ addictions/CAMHS support) and/or secondary prevention (e.g. relevant to the potential impact on the child or young person) are not evident. Using the reasons for care recorded for this sample a suggested typology is given below (Table 23).

Table 22. Reasons children and young people are looked after by GCC June 2012

Reason for being looked after		Frequency	Percentage of Total
1	Lack of parental care	1376	37.0
2	Carer drug misuse	576	15.5
3	Child protection	449	12.1
4	Carer alcohol misuse	312	8.4
5	Carer mental illness	213	5.7
6	School Non-attendance	208	5.6
7	Domestic Violence	189	5.1
8	Outwith parental control	94	2.5
9	Deteriorating relationship with carer	76	2
10	Offending behaviour	58	1.6
11	Carer death	44	1.2
12	Desertion/abandonment by carer	41	1.1
13	Carer Imprisonment	20	0.5
14	Carer physical illness	16	0.4
15	Homelessness	14	0.4
16	Child/young person sexual offence	9	0.2
17	Adoption	7	0.2
18	Leaving Care support	5	0.1
19	Young person drug misuse	4	0.1
20	Young person alcohol misuse	3	0.1
21	School Exclusion	2	0.1
22	Young person pregnancy	2	0.1
23	Other	3	0.1

Table 23. Reasons for care typology LACYP GCC June 2012

Reason for being looked after	Possible Typology
Lack of parental care	Inadequate provision of care Not otherwise specified
School non-attendance if <13years	
Desertion/abandonment by carer	
Carer alcohol misuse	Inadequate provision of care in context of parental primary alcohol misuse
Carer drug misuse	Inadequate provision of care in context of parental primary drug misuse
Carer mental illness	Inadequate provision of care in context of parental primary mental illness
School non-attendance if >13 years	Problems with Family Function/Child Behaviour
Outwith parental control	
Offending behaviour	
School exclusion	
Young person drug misuse	
Young person alcohol misuse	
Deteriorating relationship with carer	
Carer physical illness	Family Separation
Carer imprisonment	
Carer death	
Child protection	Child Protection
Child/young person sexual offence	Child/young person sexual offence
Domestic Violence	Domestic violence
Homelessness	Other
Adoption	
Pregnancy of young person	

Leaving Care support	
Other (undefined)	

Using the above typology, the vast majority of children cared for by GCC are looked after because of inadequate provision of care which is not otherwise specified (Figure 9). Unfortunately it was not possible to disaggregate the reasons within child protection, nor was there information on underlying causes within the not otherwise specified category.

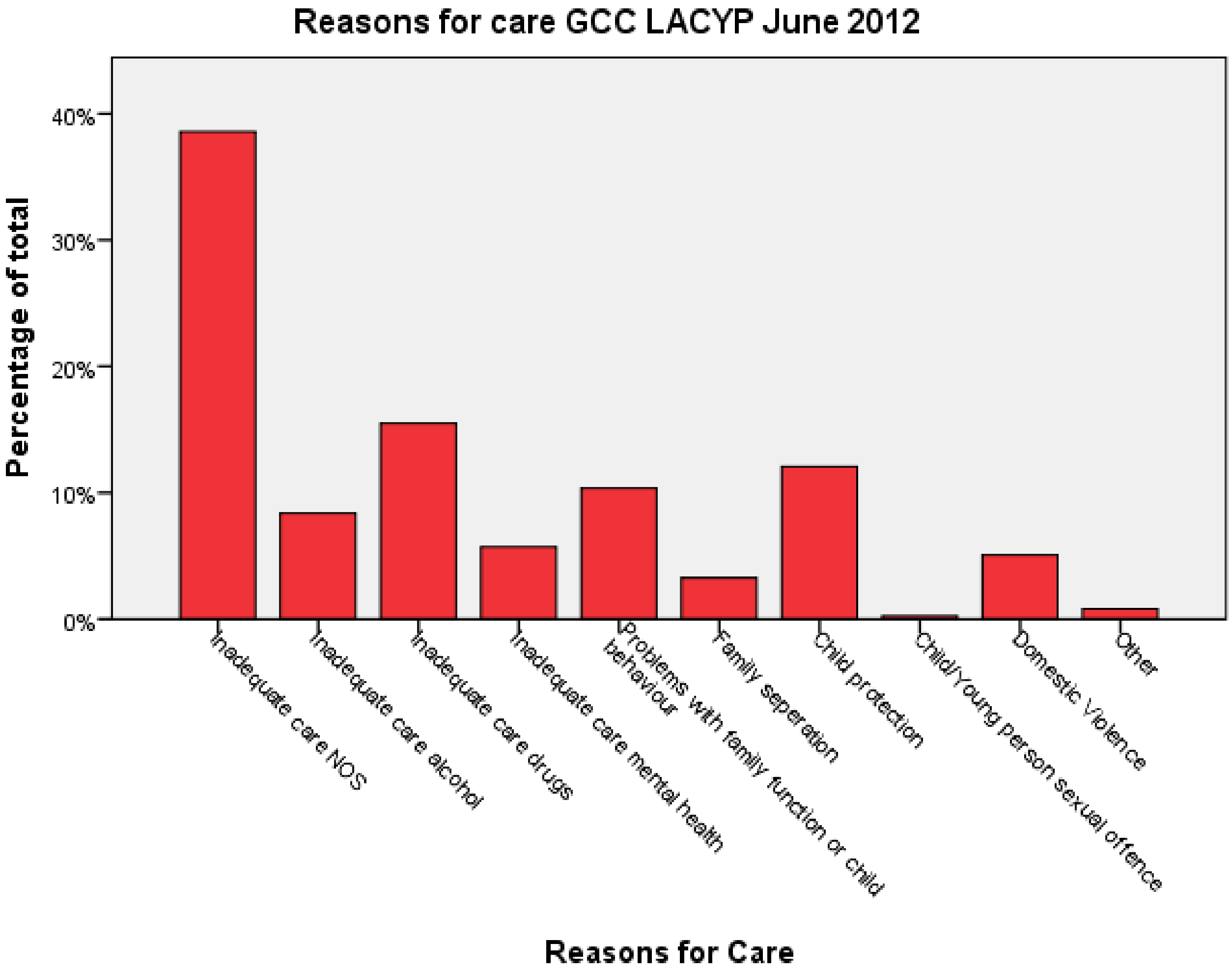


Figure 9. Reasons children and young people are looked after by GCC June 2012

Differences between primary recorded reason for care sub-groups

Examination of the differences that exist between children in care for different reasons may be a useful process in generating hypotheses relevant to preventative action.

Observed differences included:

- young people currently aged[q] 10-14, 15-19 and 10-25 years were more likely to have a recorded reason for care related to problems with family function and/or behaviour than younger age groups;
- a higher proportion of boys than girls had problems with family function/behaviour (12.5% compared to 7.9%, 95% CI for the difference between sexes being 2.7% to 6.5%) and child/young person sexual offence was exclusively male (n = 9);
- there appeared to be a socioeconomic gradient in the proportion of LACYP whose primary recorded reason for care was inadequate care due to parental drug misuse (ranging from 9.5% of those coming from the most affluent quintile to 17.2% of those coming from the most deprived); and
- there was also a higher proportion of LACYP whose mothers lived in the most affluent GGC quintile with a recorded reason of “carer mental illness” compared to other socioeconomic sub-groups (19% compared with 5.8% of total sample); however, the small numbers in the most affluent quintiles means that there is a high degree of uncertainty around these point estimates (e.g. 95% CI for 19% due to carer mental illness is 2% to 58%).

8.4 Care Settings

A third of the LACYP in this Glasgow City Council sample were looked after in kinship care. A further third were fostered. This differs slightly from the recent national distribution where one third of all LACYP were looked after at home in 2011 and only 24.3% were looked after in foster care. Only 7% of GCC’s LACYP were living in residential care, with 0.6% of the entire sample living in secure accommodation (Table 24).

---

[q] Average duration of care was similar for 5-9, 10-14 and 15-19 age groups (range of medians being 3.3 to 4.0 years) but differed for 0-4 year (median 1.5 years) and 20-25 year age group (median 12.0).

Table 24. Care settings of children and young people looked after by GCC

Placement Type	Frequency	Percentage Total
Home	**1012**	**27.2**
Foster	**1197**	**32.2**
Provided	*881*	*23.7*
Purchased	*295*	*7.9*
Adoptees	*21*	*0.6*
Kinship	**1251**	**33.6**
Relative	*1185*	*31.8*
Non-relative	*66*	*1.8*
Residential	**257**	**6.9**
Child Unit	*117*	*3.1*
School	*45*	*1.2*
Secure	*21*	*0.6*
Special Purchase	*74*	*2.0*
Other	**4**	**0.1**
Total	**3721**	**100**

Differences between care setting sub-groups

It is important to explore whether there are any demographic differences between care setting sub-groups as these may result in differential needs and outcomes.

Observed differences included:

- variable mean age (Table 25), young people in residential care being substantially older on average than LACYP in other setting sub-groups and those looked after at home also older on average than those in foster care (95% CI for difference of 1.2 to 2y years) and kinship care (95% CI for difference of 0.8 to 1.2 years); and
- a much higher proportion of boys than girls were in residential and home care(Figure 10). This finding may be confounded by an association between male gender and behaviour problems (Figure 11 below) or may reflect a gender bias in either perception of risk, or ability to find alternative care placement; and
- variability in the distribution of reason for care in each care setting sub-group: a larger proportion of those looked after at home or in residential care had problems with family function/behaviour compared to other care settings, and a larger

proportion of those in kinship care were being looked after because of inadequate care, compared to other care setting groups (Figure 11).

Table 25. Average age by care setting GCC June 2012

Care setting	Mean age in years
At Home	10.6
Kinship care	9.4
Foster care	9.0
Residential care	15.0
Secure care	16.5
	ANOVA p-value <0.001

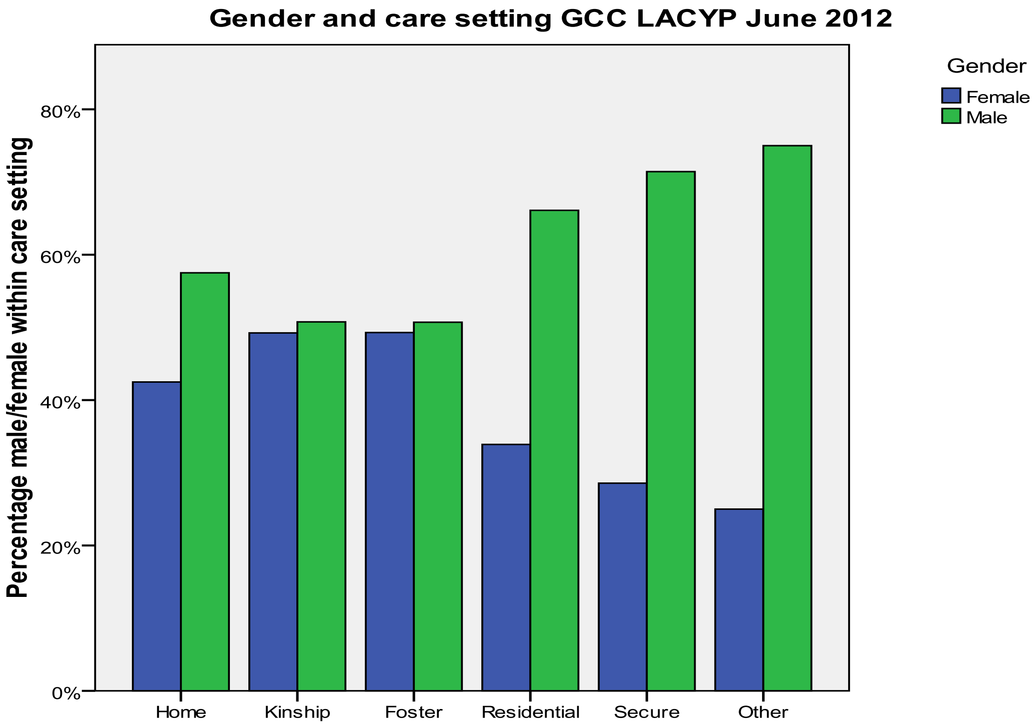


Figure 10. Gender distribution within care settings LACYP GCC June 2012

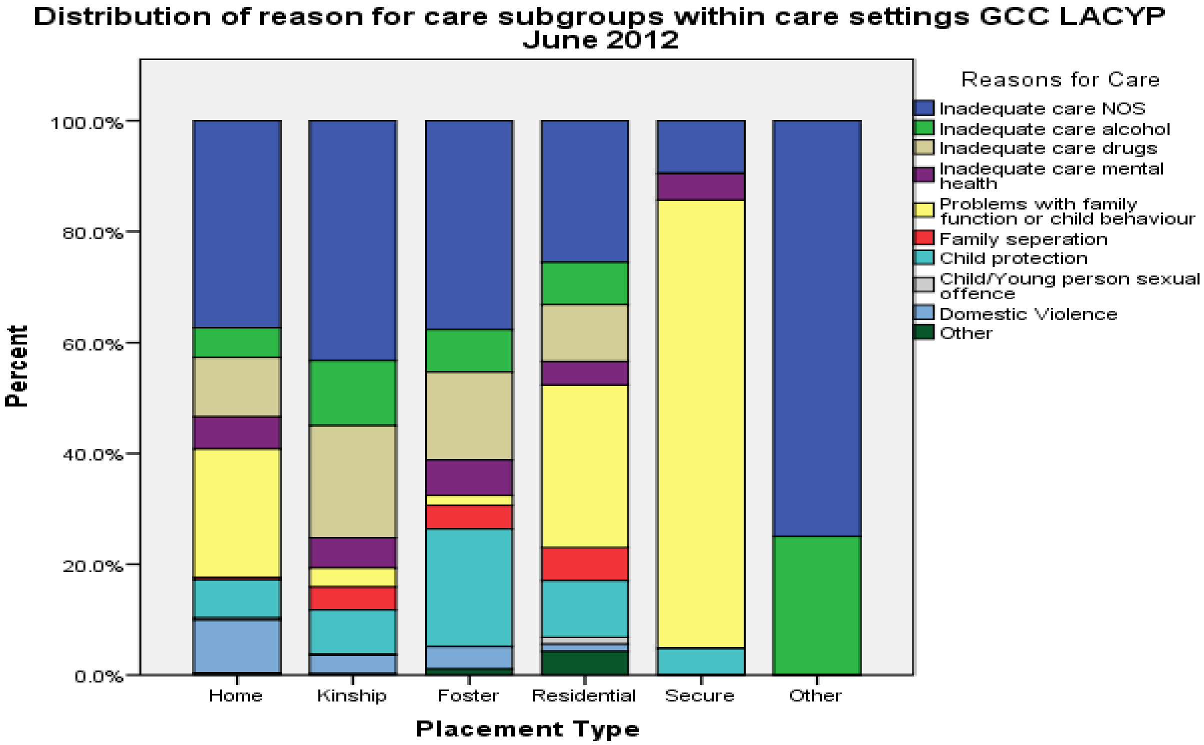


Figure 11. Reasons for care within care settings LACYP GCC June 2012

There was no obvious pattern between mother's SIMD and care setting.

8.5 Care Trajectories

General observed differences in the trajectories of care in this sample included:

- 19% of children were under 1 when first taken into care (age at first entry to care range 0-17, median 4, mean 5 years) (Figure12);
- the duration of current episode of care ranged from 5 days to 18 years with the median being 4 years;
- for 76% of the sample this was their first ever episode of care, although 1.5% had three or more episodes of care, with the range being 0-6 episodes; and
- there was nonetheless a degree of placement instability, with 42% of the sample having had more than one placement during this care episode, and over 20% having experienced three or more placements (range 1-20).

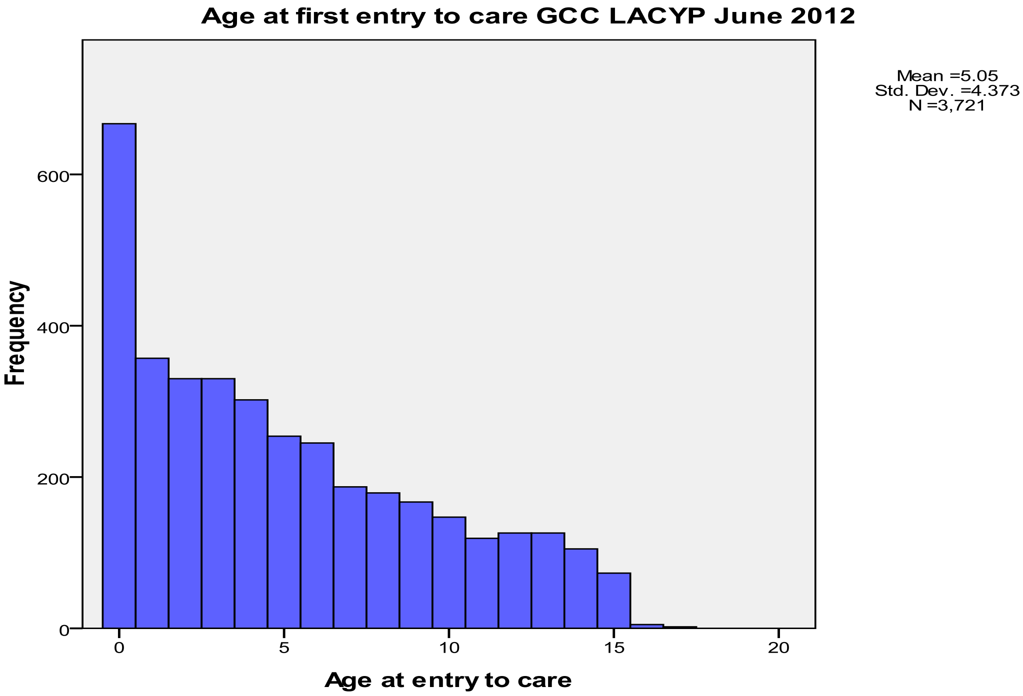


Figure 12. Age at first entry to care LACYP GCC June 2012

Differences between stable and unstable care sub-groups

Given the potential importance of placement stability to outcomes (Section 6.7) we were interested in exploring whether there were any demographic differences between those LACYP who had experienced stable compared to unstable placements in the current episode of care[r]. Table 26 gives definitions and frequencies for each stability group.

---

[r] One important limitation of this analysis is inability to control for experience of instability prior to this episode of care. 523 (14% of total cohort) with no placement changes in current episodes had previous episodes of care. It is not clear how many of these would have involved placement change. However placement stability analysis excluding those LACYP experiencing multiple episodes of care gives very similar results.

Table 26. Placement stability LACYP GCC June 2012

Placement Stability Category	Number of placements in episode of care	Frequency	Percentage of Total
Stable	1	2158	57.9
Fairly stable	2	763	20.5
Unstable	3-5	670	18.0
Highly unstable	>5	130	3.5

Observed differences between placement stability categories included:

- increasing average current age with increasing instability (highly unstable mean 13.5 years compared with 9.0 years mean for stable group; ANOVA p-value 0.001);
- decreasing age at first entry to care with increasing instability (highly unstable mean of 4.6 years compared with stable mean of 5.7 years; ANOVA p-value 0.02);
- increasing duration of care with increasing instability (mean duration of 8.9 years for the highly unstable group compared with a mean duration of 3.4 years for the stable sub-group; ANOVA p-value 0.02);
- children in care because of domestic violence or family function/behaviour problems were more likely to have stable placements than other reason for care sub-groups;
- children/young people in care because of problems with family function/child behaviour were more likely to have experienced highly unstable placements compared to other reason for care sub-groups (Figure13);
- there was a difference in the distribution of the experience of stability/instability between care setting sub-groups, with the proportion of children experiencing instability increasing from home to kinship to foster to residential care; and
- the higher proportion of children who have experienced numerous placements in foster and residential care may be a result of these being settings of last resort or because of some other confounder which dictates both setting choice and frequent moves (e.g. reason for care) (Figure 14);

Unfortunately we cannot say anything about the association between initial care setting and placement stability.

There did not appear to be an association between gender or deprivation and placement stability.

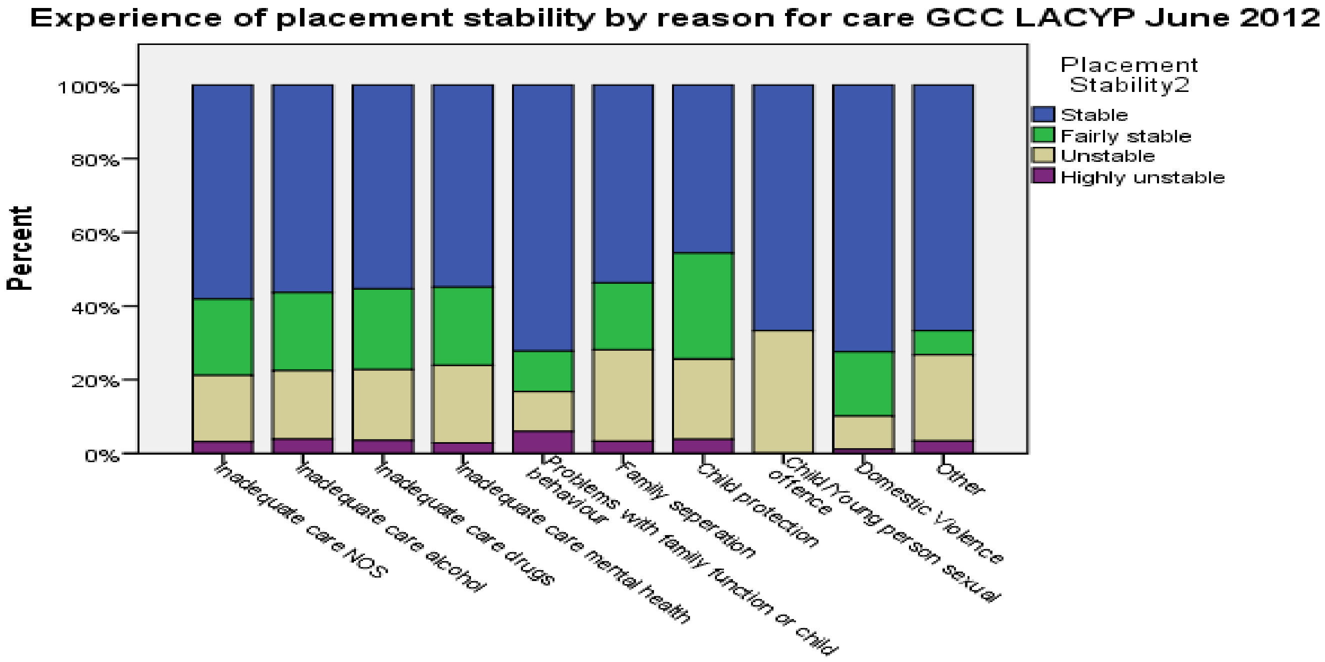


Figure 13. Experience of placement stability according to reason for care LACYP GCC June 2012

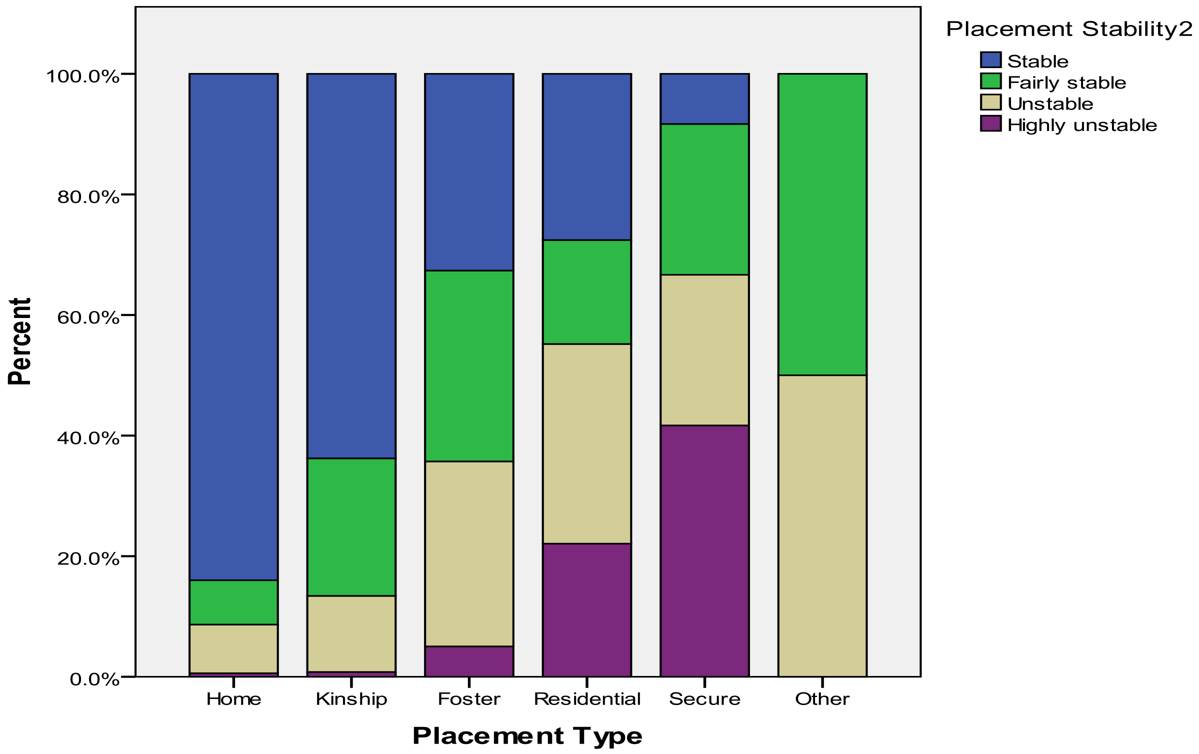


Figure 14. Experience of placement stability by care setting LACYP June 2012

8.6 Planned Future Work

NHS GGC is in the process of commissioning a health and wellbeing survey of 11 to 16 year olds looked after by Glasgow City Council. This will include a range of health outcome measures including the SDQ and measures on health related behaviours. It is hoped that this will be valuable in filling important gaps in our current knowledge and understanding of the health of looked after young people. The results of this work will be available in autumn 2013.

SECTION 9: STAKEHOLDER VIEWS: HEALTH INTELLIGENCE NEEDS AND FUTURE OPTIONS

Summary Points

What do we want to achieve?

- There was broad agreement that a national health surveillance system for LACYP would help improve services and health.
- Perceived benefits included evidence-informed service planning and improved evaluation of service effectiveness.
- Mental health, health related behaviours, health service access measures and contextual variables were highlighted as important indicators to capture in a future system.
- Suggested contextual measures included presence of parental addiction, care setting type and number/type of previous placements.
- The importance of chosen measures being comparable with those available for the general population was stressed.

How do we get there?

- Use the expertise of existing local strategic leadership structures for LACYP in developing a strategy for a national health surveillance system.
- Learn from the good inter-agency data-sharing practice which already exists at individual level to improve population level data linkage.
- Make use of the currently untapped IT capability for interagency data sharing.
- A national directive, similar to that which results in the linkage of social care and education data for LACYP, may be required to ensure the collection and collation of health outcome data.
- National co-ordination will be required to ensure the compatibility of indicators and measures from local data returns necessary for annual publication of health outcome data.

This section describes the findings from 14 semi-structured interviews with key stakeholders in health, children and families' social services, and education services across Scotland. The interviews explored health intelligence needs and how these might be achieved.

9.1 What do we want to achieve?

All of the respondents commented that reporting on health outcomes for looked after children would be beneficial. Examples of potential benefits included providing evidence to target resources more effectively, assisting with the development of new and innovative services and providing some commentary on the effectiveness of local intervention strategies.

> *“We may be missing opportunities by not taking the time to look at emerging trends and themes in a systematic and co-ordinated way”*
> (LAC nurse)
>
> *“I think the publication of education outcomes for looked after children has made a difference and has resulted in a targeting of resources at this group. I’m sure that a similar report on health outcomes would result in the same benefits”*
> (Senior manager education services)
>
> *“Services like multi-systemic therapy and treatment foster care are developed on an ad-hoc basis at the moment. We need to turn that on its head and say, the demand for multi-systemic therapy, the demand for treatment foster care is going to be…and therefore we need to start funding and creating and developing those sorts of service responses. So it’s important to have the knowledge and understanding to feed the service planning framework”.*
> (NHS lead director children services)
>
> *“Services are a bit of a patchwork at the moment. People are doing their best but I think they would benefit from a National overview that such a publication would bring”*
> (Senior clinician at a National health information service)
>
> *“We haven’t enough work around health needs assessment data to measure outcomes and determine if our interventions have influenced these outcomes in a positive way but it seems like something we really should get round to doing”*
> (NHS child health commissioner)

We asked people to tell us what health intelligence would help them improve outcomes for LACYP. The views expressed by respondents covered a range of process and broad outcome measures.

The majority of respondents indicated that mental health was a priority area for improvement in this group and that it would therefore be essential to capture mental health outcome measures in any future health intelligence system:

> *"For me the most important aspect is looking at the mental health…the emotional trauma that these young people have gone through…the journey they have taken…where and what they have come from and gone through and how this is impacting on their presentation at school"*
> (Educational support officer)

Anxiety, depression and deliberate self-harm were specifically mentioned as important disorders by a couple of interviewees.

Health related behaviours were also commonly mentioned as issues that it would be useful to record:

> *"For older children it would be important to note things like smoking habits, do they participate in an hour's moderate exercise every day? How much do they drink and do they take drugs...We tend to deal mostly with older children and a key issue is sexual vulnerability, early intercourse often with multiple partners. The use of social media sites has increased this risk and behaviour".*
> (LAC nurse)

Other health outcomes which participants suggested as important for inclusion in any future health intelligence system included: measures of age-appropriate development; injury incidence; dental health; and obesity prevalence. Respondents also indicated that ensuring (and measuring) access to effective health care would be important for the improvement of outcomes, with one respondent commenting on their experience of the poor uptake of health services by LACYP:

> *"I think health inequalities exist within the looked after population and often this is related to poor uptake of services caused by parental motivation or even sometimes financial restrictions on attendance".*
> (Health visitor)

Six other respondents from across the services also articulated the need to record process measures like GP and dental registration and immunisation uptake as an indicator of how well services are reaching this vulnerable group.

> *"It's important to have information on this population that tells us about their uptake of services such as immunisation record, registered with a GP, dentist etc."*
> (NHS child health commissioner)

> *"It's important to capture and report on whether a child is registered with a GP and whether they are registered with a dentist. It's also important to note if they have followed through on any necessary treatment"*
> (LAC nurse)

The majority of respondents felt it was important to capture contextual indicators in order to better understand the determinants of outcomes:

> *"Other social contextual factors like household income are important to capture. These help with early intervention strategies"*
> (NHS lead director LAC)

Several of the respondents suggested that contextual issues like parental addiction were likely to be associated with need for care and that it was therefore important to quantify these:

> *"Drugs and alcohol issues with the parents is a massive issue and provides important contextual information on the children's needs and causative factors"*
> (LAC nurse)

The majority of respondents indicated that they expected health needs to differ by age and care setting and as such this would be an important contextual indicator to include in any planned health intelligence system:

> *"Older children in residential settings may have more acute presentations if they have previously failed in substitute family setting...alcohol and drug taking can sometimes be an escape from the emotional trauma"*
> (Head of children and families social work)

> *"Children looked after at home have poorer educational outcomes than those looked after away from home...I'm sure children looked after by foster*

> *carers or in residential settings will have better health outcomes as they will be positively encouraged to adopt healthier lifestyle attitudes and attend appointments like the dentists as a matter of routine".*
> (Educational support officer)

One respondent thought it was also important to include data on the number of care placements experienced:

> *"It would also be good to note placement information as I feel this can have an influence on health like too many moves having an impact on emotional well-being or even causing issues with access to primary care services"*
> (NHS child health commissioner)

Finally a couple of respondents stressed the importance of the comparability of any health data for looked after children and young people with those of the general population of children and young people:

> *"Measurable outcomes should be across the population of Scotland's children as a whole. Looked after children should be seen as one group within the population average in the same way as deprived v not deprived, British born v non British born etc. Again it's an equalities issue".*
> (Consultant in public health)

> *"I think that it would be advantageous to measure outcomes for this population in order to gauge the level of inequality against the general child population for these same outcomes and to determine that focused interventions are making a difference"*
> (NHS child health commissioner)

9.2 How do we get there?

It was clear from these interviews that good multi-agency collaboration and data-sharing practice for individual case management already exists in many places. The majority of respondents felt that data sharing had improved and this opinion was shared across the services. Some expressed the view that the GIRFEC process had contributed greatly to inter-agency collaboration and data sharing but this was very much at individual case level:

> *"Data sharing even confidential information has improved between the main agencies where the interests and well-being of the child is seen as paramount. Data protection is seen as less of a barrier to sharing"*
> (Social worker)

> *"I think things have improved as a result of GIRFEC. Agencies are co-operating better at a local level"*
> (Health visitor)

The improvement in the culture of information sharing and collaboration at an individual level has also led to local initiatives where multi-agency input is co-ordinated to achieve better health outcomes for the child population.

> *"Health and well-being is a big part of curriculum for excellence. Sometimes this involves health professionals working with us in our schools"*
> (Education support officer)

Local strategic leadership structures required to drive change are also already in place in some areas. All areas reported having cross agency structures that met regularly whose focus was the looked after child population. Some of these steering groups had sub-groups that focused on specific issues within the looked after population and a couple of respondents felt that this type of system could be utilised to either report on health needs as a collective or at the very least to co-ordinate the planning that was necessary as a result of any locally produced aggregated data on health outcomes.

> *"At the moment we have a sub-group of the LAC core group that deals with educational outcomes and I would see a similar set up being advantageous in identifying, collating, sharing and developing services around health outcomes".*
> (NHS child health commissioner)

However a national directive similar to the requirement for educational outcome returns may be the impetus needed to ensure the collection and collation of health outcome data. It will also be important to persuade operational staff collecting and collating data of the benefits of this for improving the health of the population:

> *"Having a system that reported on health outcomes might increase our administrative workload. Too often we are asked to gather information and statistics with no obvious return but it increases our workload. Sometimes we are swamped with these requests"*
> (Health visitor)

IT solutions are of obvious importance in achieving good health intelligence for this sub-population of children and young people. In some areas it would appear that the technology required exists but is not being used to its fullest potential; in others, improvement of IT for children's services has been identified as a priority and developments are underway. One of the NHS respondents described a system that was in development for their children's community services that should become operational in around 18 months. This new system will be set up to report on outcomes and will be able to sub-categorize children by looked after status. This system would also use validated tools like the SDQ to measure these outcomes.

> *"*[The new] *system will be able to report on health outcomes for children and for those that are looked after. It will also enable us to measure the success of our interventions by uploading the information from tools like SDQ at regular assessment intervals. Pre and post measures will be embedded within [The new system]"*
> (Senior nurse children's services)

In other areas, however, investment in IT will be required. In particular, access to mobile technology for frontline operational staff may be needed to reduce the potentially increased administrative burden:

> *"The GIRFEC assessment is electronic at a desktop level. It involves taking hand written notes and inputting onto the system. This actually takes longer than the old hand written notes"*
> (Health visitor)

> *"I think the admin resource would need to be increased if the health data that we are capturing on our GIRFEC assessment was to be processed and extrapolated to show aggregated information on all our looked after children"*
> (LAC nurse)

A preference was generally expressed for local flexibility in determining appropriate IT solutions as opposed to a single national system. Despite the current complexity of information systems across the agencies, only one respondent suggested a single National IT system across the services as the best way of ensuring a smooth flow of data between them. This view was not shared by the majority of respondents.

> *"It's better to get agreement on what we want to share and then allow local services to determine their own fixes on how they share the agreed data set".*
> (Head of children and families social work)

Nonetheless, if an annual, national, health outcome report for LACYP (in keeping with the current educational outcome report) is an aspiration, a degree of national coordination will be required to ensure that local systems are capable of producing compatible returns. In line with the need for compatibility at a national level of potentially multiple local systems, a core set of consistently measured indicators will need to be agreed:

> *"We need to make sure that we have agreed a standardised battery of assessment tools for those needs we are measuring and collating at a national level. We need to reduce the margin for error that can occur within individual approaches to assessment in order for this data to be meaningful"*
> (Senior nurse children's services)

The suggestions for what might be included in this core set of indicators are described in section 9.1 above. However, as can be seen these mostly lack specificity. One respondent commented on the difficulty of determining priority indicators for inclusion in a core data set when there is a current lack of quantitative data to inform this:

> *"I couldn't comment from an organisation standpoint on what health outcomes might be seen as a priority for this sub-group because we don't have the data to inform".*
> (Consultant public health)

Achieving the required local and national compatibility of data, whilst allowing for individual area autonomy, will be challenging. One option which would be helpful in this would be the introduction of a single unique identifier across agencies. Some social work and education respondents indicated that CHI was already being recorded in their systems, although this was often not consistently the case. A single unique identifier would more easily enable record linkage across agencies. Work is currently underway at a national level to explore the potential for this to provide data on dental health for looked after children and young people:

> *"I am currently working with colleagues on looking at ways information can be shared across the services for the looked after children and young people population. This bid is going in to Scottish Government with a focus on dental health but essentially if we can find a way of identifying children*

> *across these 3 systems in relation to dental health we should be able to roll this out for other health outcomes for that group".*
> (Consultant in public health)

Finally, it will be important to build capacity in services likely to be affected by the need uncovered by improved health intelligence. In commenting on a local initiative to screen pupils using SDQ's, one Education Support Officer noted:

> *"NHS are aware that this might generate more work for AHPs* [Allied Health Professionals] *and other professionals via onward referral and it is something they are monitoring"*
> (Education support officer)

In relation to assessments it was observed:

> *"Referral pathways to specialist CAHMS* [Child and Adolescent Mental Health Services] *services in this area has recently been reviewed and improved but there is still a lengthy wait to get an assessment as there are capacity issues"*
> (Head of children and families social work)

The information provided by the telephone interviews and e-mail responses suggest broad agreement that a national health surveillance system for LACYP would be a worthwhile undertaking that would help inform service planning, allow for monitoring of change, and improve outcomes for this vulnerable group and provide a range of suggestions for what this should include and how this might be achieved.

SECTION 10: CONCLUSIONS AND RECOMMENDATIONS

10.1 Conclusions:

This health needs assessment has established that there is a strong consensus that although LACYP are a particularly vulnerable group, comprising a sizable proportion of children and young people in Scotland (1.6%), there is no comprehensive health and wellbeing profile. Although there would appear to be a great deal of tacit knowledge, held within services, on the health of looked after children and evidence of good multi-agency collaboration and data-sharing at the level of individual case management, there is a lack of a quantitative overview of the health of this sub-population of children in Scotland. It is highly plausible, given their often-times previous experience of maltreatment and disrupted attachment, that looked after children and young people will be at higher risk of poor outcomes. There is some evidence of this in educational terms but a lack of documentation to evidence the situation in health and other social terms.

Some high level statistics are routinely accessible from the annual Children's Social Work Statistics and we have some idea of common health problems in this group of children and young people from the international literature. However developing local health intelligence is important for several reasons. First, differences between child welfare systems make it difficult to extrapolate findings from the international literature. Second, the recent literature has some methodological weaknesses in terms of selection bias and the lack of clarity of exposure and outcome definitions. These limit its validity and usefulness. Finally, existing available population data does not include health outcomes.

From available literature, data and stakeholder response we have been able to conclude:

- 1.6% of 0-17 year olds in Scotland were looked after on 31 July 2011;
- the number and proportion of the child population who are looked after has increased over the last ten years mainly by increased numbers of children looked after in kinship care and to a lesser extent foster care;
- children and young people looked after at home are the largest care setting sub-group, yet the one about which least is known;
- lack of parental care is likely to be the most frequent reason children and young people become looked after (approximately 70% of local and national samples);
- parental drug and alcohol addiction are likely to be an underlying factor in a significant proportion of cases (recorded as an underlying factor in 24% of local sample);

- experience of multiple types of maltreatment is also likely to be common (20% of children and young people with Supervision Requirements had multiple accepted and/or established grounds for referral to the Children's Reporter);
- there is a lack of a practical or consistently used typology of reasons for care;
- material deprivation is likely to be an important upstream risk for need for care - children of families exposed to multiple deprivation in one large, robust, Swedish study had a 1 in 7 chance of being placed in care compared to a 1 in 2000 chance for more affluent children;
- care setting sub-groups differ in terms of a number of important determinants of health including age, sex, reasons for care, parent's area deprivation and previous number of placements in care;
- children looked after at home may be particularly vulnerable to adverse outcomes;
- there are no national health outcome data available for the sub-population of LACYP and it would appear that there is also a paucity of outcome data held locally;
- it is likely that being looked after is associated with an increased risk of mental illness, particularly conduct disorder, although the extent to which this association is related to the causes rather than the consequences of care is not clear (e.g. it is not clear whether rates differ by care setting sub-group);
- smoking rates among LACYP are likely to be higher than those of the general population - more work is required to establish whether they are higher than those of similarly deprived children and young people;
- placement instability may be relatively common, and is likely to be a particular risk for adverse outcomes, yet it is not clear from available data how it may be reduced;
- there is a wealth of potentially useful data, sometimes in duplicate, within individual case records, held by the different agencies involved in the care of looked after children and young people. This represents a missed opportunity to increase our understanding of the health of this population, and seems a relatively inefficient system;
- the use of multiple child identifiers unique to individual services is a barrier to increased understanding of the health of this population; and
- a national directive for reporting of health outcome data may be the required impetus for improving health intelligence on LACYP.

LACYP represent a particularly vulnerable sub-population of children and young people, yet we have very little quantitative information on their health or needs. Implementation of the recommendations of NHS Chief Executive Letter (2009) 16 provides an opportunity to start collecting the data required to increase our knowledge and ensure evidence informed action from services where needed. In the absence of improved health intelligence it will be important to continue to reactively meet the health needs of those looked after children and young people identified through individual health assessments.

10.2 Key questions requiring further consideration

Table 27. Important unanswered questions

Question	Data and/or action required	Comment
What are the modifiable upstream determinants of need for local authority care?	▪ Ecological studies comparing differences in LACYP frequency for different social or service contexts. ▪ Ensure LACYP are identified in national cohort studies (e.g. GUS) and determine whether any existing cohort studies allow retrospective analysis. ▪ Develop a pragmatic and consistently used typology for reasons for care in Scotland.	
Are any health problems associated with being looked after?	▪ Requires at the very least a good cross-sectional data set for a representative sample of looked after children and young people which, contains data on important confounders, well defined, relevant outcome data comparable with a general population data set.	▪ “relevant outcome” data includes those suggested as likely to be associated by plausibility and current literature (e.g. conduct disorder or post-traumatic stress). ▪ It will be important to also have a measure of deprivation in order to adjust for this. ▪ There is a need to further consider whether any excess morbidity/mortality associated with cause and/or consequence of care. Comparison of reason for care and care setting sub-groups after adjusting for potential confounding may be helpful in this respect. ▪ Indication of where health outcomes do not differ from the

		general population will signpost where general population rates can be used to inform service planning for corporate parents with responsibility to ensure need met
Do outcomes differ by reason for care after adjusting for confounders	▪ Longitudinal data as above	▪ Important for targeting both primary and secondary prevention efforts. ▪ Adjustment specifically required for: age at entry to care; care setting, number of care placements; and duration of care.
Do outcomes differ by care setting after adjustment for confounders?	▪ Longitudinal data as above	▪ Adjustment specifically required for: age at entry to care; previous care settings; number of care placements; reason for care; and duration of care.
What are the determinants of placement stability?	▪ Longitudinal data including placement change data.	

10.3 Recommendations

It is likely that LACYP are at risk of adverse health outcomes as a result of either the causes or consequences of care. However we do not currently have the information to fully understand their health needs or how to prevent and meet them. The following options for creating the data needed to improve intelligence can be identified.

1. Ensuring that the comprehensive physical and mental health assessments, which health boards are now required to undertake for looked after children and young people, include a pragmatic, core, electronic, data set which meets all (or at least some) of the requirements in table 27 above and outlined below. These core data could then be extracted at a national level in order to build up a national longitudinal dataset.

2. Incorporating ‘looked after’ Read codes (differentiated by care setting sub-group) on existing child health data systems (e.g. Child Health Surveillance, Scottish Immunisation Recall System, Special Needs System, relevant local surveys) - responsibility for ensuring looked after status is up-to-date on these systems could rest with the child/young person’s GIRFEC named person.

3. Ensuring, where possible, that national surveys which include child health data include questions on looked after status (including differentiation by care setting sub-group). Identification of looked after children (and the incidence of becoming looked after) within prospective cohort studies such as the Growing Up in Scotland study would be particularly useful.

4. Establishing a single unique personal identifier across education, health and social care to enable linkage of records held by separate agencies (although the cross-agency data linkage service in development by Scottish Government may obviate the need for this).

These options are not mutually exclusive.

More work will be required to establish a pragmatic core data set, some of which could form part of the LACYP health assessment. It will be necessary to capture both contextual and outcome data. Taking into consideration all of the findings presented here, the following measures for inclusion are offered as a starting point for further discussions:

- Proposed contextual /process measures:
    - reason for care;
    - age at first entry to care;
    - number of previous episodes of care;
    - care setting;
    - pre-care and in-care postcodes;
    - child young person had dental check-up in last 6 months; and
    - all appropriate immunisations achieved.

- Proposed outcome measures:
    - Body Mass Index;
    - Strengths and Difficulties Questionnaire (SDQ) results;[s]

---

[s] Sensitivity and specificity of SDQ results are improved with incorporation of questions on impact and combination of multi-informant scores (e.g. carer and teacher for children younger than 11 and carer or teacher and young person themselves for those 11 years or older).

  - Indicator(s) of alcohol, tobacco and drug use in keeping with recommendation of children and young people's mental health indicators Scotland (70);
  - For children aged 13 and older, whether sexually active and if active whether condom used at last intercourse; and
  - Previous pregnancies.

As discussed above it will be necessary to also:

- agree a pragmatic and prevention-focused typology for reasons for care which can be used consistently across Scotland; and
- align outcome measures with those available for the general population of children and young people.

All of the proposed outcome measures listed above are compatible with data available for the general population of children and young people and are in keeping with the recently published mental health indicators for children and young people in Scotland (70).

It is further recommended that:

1. Directors of public services work together to share information on a systematic basis and report jointly on the experience and performance of services supporting looked after children;
2. Directors of Public Health should assign a national lead for GIRFEC / LACYP health information, working with Government and other national bodies to derive a strategy and timescale for delivering:
   a. a standard minimum data set and a means by which data can be linked across agencies for each child;
   b. shared data protocols and facilities for sharing good practice and experience, including use of the cross-agency data linkage service which Scottish Government are developing; and
   c. guidelines for regular local and national standard reporting.

Further research is required to begin to answer the questions outlined in 10.2 above. NHS GGC is in the process of undertaking a health and well-being survey of young people aged 11-16 years looked after by Glasgow City Council. The survey will incorporate a range of validated outcome assessment tools including the Strengths and Difficulties Questionnaire, thereby making a valuable contribution to our knowledge in this area. The results of this work will be available in autumn 2013. It is hoped that looked after young people will have an opportunity to contribute to consideration of the implications of these results through the use of a discussion summit following publication of the health and wellbeing survey report.

Appendix 1 Steering Group Membership

Ann Conacher	ScotPHN Co-ordinator
Linda de Caestecker	Director of Public Health, NHS GGC
Andrew Fraser	Director of Public Health Science, NHS Health Scotland (Chair)
John Froggatt	Deputy Director, Child and Maternal Health Division, Scottish Government
Judith Furnivall	Service Development Consultancy Lead, CELSIS
Ray Hattie	Project Manager, NHS GGC
Neil Hunter	Principal Reporter/Chief Executive of the Scottish Children's Reporter Administration
John O'Dowd	Consultant in Public Health Medicine, NHS GGC
Stephen McLeod	Head of Specialist Children's Services, NHS GGC
Phil Mackie	Lead Consultant, ScotPHN
Alison Melville	Policy Officer, Looked After Children's Unit, Scottish Government.
Susanne Millar	Head of Children and Families Services, Glasgow City Council
Dawn Parker	Regional Manager South Scotland, Who Cares? Scotland
Sonya Scott	StR Public Health, NHS GGC
Carol Tannahill	Director, Glasgow Centre for Population Health

Appendix 2 Email Survey to Child Health Commissioners

From: Hattie, Ray
Sent: 18 October 2012 10:20

Subject: Understanding the health needs of looked after children and young people in Scotland

Dear Colleagues,

RE: Understanding the health needs of looked after children and young people in Scotland.

Hopefully you will have received the recently circulated email jointly signed by John Frogatt, Deputy Director Child and Maternal Health Division Scottish Government and Andrew Fraser, Director of Public Health Science NHS Scotland, giving some background to the above and asking for your participation in this process. This letter has been attached for reference.

It is hoped that this research will, amongst other things, provide an understanding of what health intelligence currently exists for looked after children in territorial and relevant specialist health boards

At this stage I would therefore be grateful if you could respond by return with answers to the following questions **no later than 2nd November 2012**:

1. Do you have or use datasets in your organisation which specifically identify children as looked after?
2. If you have answered yes to the above we would like to get more specific information on this (e.g. individual level variables available for looked after children within dataset). Who within your organisation would be most appropriate contact for this?

In addition we will be undertaking short telephone interviews with a sample of stakeholders within health, education and social care to elicit views on health intelligence priorities for looked after children. We may be contacting you in this next few days to invite you to participate in this component of our work and very much hope you will willing again to contribute your time and expertise.

Best wishes,
Ray Hattie
Project Manager
Health Needs Assessment for Looked After Children and Young People in Scotland
Glasgow Centre for Population Health
Ray.hattie@drs.glasgow.gov.uk

Appendix 3 Semi-Structured Interview Topic Guide

Looked After Children Health Intelligence Needs Assessment
Semi Structured Interview Schedule

The context of this discussion is centred on Health Intelligence data

- Firstly I would like to talk with you about your role and experiences in relation to the health and well being needs of looked after children and young people. What do you think the main needs are and what helps you identify them?
-
- Then I would like to explore with you what additional information or data collection you feel might be useful in helping identify those needs and improve outcomes.
-
- Before moving on to the practicalities of developing a useful health intelligence system for this population.

Key Stakeholder Topic Guide

Thinking about the population of looked after children and young people that your organisation has responsibility for….

- ❖ How would you describe your current role in relation to data and information pertaining to the health and well-being of looked after children and young people?

- ❖ Could you describe the supports in place to help *and* increase your understanding of the health and well-being needs of this population?
  - Do you feel you have a good understanding of these needs?

- ❖ In general, what do you feel it is necessary to know in order to plan and improve measureable outcomes for looked after children and young people?

- ❖ In your experience are there health and well-being outcomes that you think need to be improved for this population?

- The Scottish government publishes Annual statistics on the educational outcomes for the population of looked after children for example – ATTENDANCE-EXCLUSIONS-EXAM RESULTS-LEAVER DESTINATION …what health outcomes do you feel it would be important to capture AT A National level in order to establish a baseline and monitor progress over time?

- What would enable your organisation to report on individual level health outcome data to Scottish Government?

Appendix 4 Literature Search Strategy

Search Terms					
	Base Search	**Individual Database Search Term Variation**			
	Medline	ASSIA	CINAHL	Cochrane	PsychINFO
1	infant/	Infant OR infants or Infancy			Infant.TX
2	child, preschool/				Child$ preschool.TX
3	child/	Child*.tw			Child$.TX
4	adolescent/	adolescent*.tw	adolescence		Adolescent$.TX
5	infant welfare/				Infant welfare.TX
6	child welfare/				
7	parenting/				
8	intergenerational relations/				
9	parent-child relations/				
10	(Supervision adj1 (requirement OR order).ti.				
11	foster home care/	Foster Care			Foster Care
12	"kinship care$".tw.	Kinship			
13	"foster$ child$".tw.	Foster child			Foster Child
14	LAC.tw.				
15	LACYP.tw.				
16	Orphanages/		Orphans and Orphanages		
17	(secure adj1 (unit$ or home$)).ti.				
18	(residential adj1 (care or home$ or unit$ or school$)).ti.				
19	((child$ or "young people" or				

	adolescent$) adj3 ("looked after" or foster$ or accommodated)).ti.				
20	Health/				
21	Health Behaviour/				
22	Mental Health/				
23	Mental Disorders/				
24	Health Status/				Health status.TX
25	Oral Health/				
26	Sexual Behaviour/		Sexual Health		Sexual behaviour.TX
27	Stress, Psychological/				
28	Emotional NEAR/1 (problem* OR health OR wellbeing).ti				
29	Needs Assessment/				
30	"health needs assessment".ti.				
31	(OR/#1-9) AND (OR/#10-19) AND (OR/#20-30) 2009-2012				

All searches subject heading searches unless otherwise stated - tw/TX = text word; ti=title word.

REFERENCES

(1) Lachlan M, Millard A, Putnam N, Wallace AM, Mackie P, Conacher A. Mental Health Care Needs Assessment of Looked After Children in Residential Special Schools, Care Homes and Secure Care. 2011.

(2) Looked after children and young people: we can and must do better. 2007.

(3) Christie C. Commission on the Future Delivery of Public Services. 2011.

(4) Delivering a Healthy Future: An Action Framework for Children and Young People's Health in Scotland. 2007.

(5) Scottish Government. Getting it right for every child and young person. 2012; Available at: http://www.scotland.gov.uk/Topics/People/Young-People/gettingitright. Accessed December/4, 2012.

(6) Children (Scotland) Act [statute on the internet]. Available at: http://www.legislation.gov.uk/ukpga/1995/36/contents. Accessed November/15, 2012.

(7) A National Statistics Publication for Scotland. Children's Social Work Statistics Scotland, No.1: 2012 Edition. 2012; Available at: http://www.scotland.gov.uk/Resource/0038/00388582.pdf. Accessed October/02, 2012.

(8) Department for Education. Children looked after in England (including adoption and care leavers) year ending 31 March 2012. Available at: http://www.education.gov.uk/rsgateway/DB/SFR/s001084/sfr20-2012v2.pdf. Accessed October/5, 2012.

(9) Department for Children, Schools and Families (DCSF). Guidance notes for the completion of SSDA903 records. Children looked after by Local Authorities in England. 1 April 2009 to 31 March 2010. 2010; Available at: http://media.education.gov.uk/assets/files/doc/c/ch%20-%20ci/children%20looked%20after%20ssda903%20guidance%202009%2010.pdf. Accessed October, 2012.

(10) Steele JS, Buchi KF. Medical and mental health of children entering the utah foster care system. Pediatrics 2008 Sep;122(3):e703-9.

(11) Greeson JK, Briggs EC, Kisiel CL, Layne CM, Ake GS,3rd, Ko SJ, et al. Complex trauma and mental health in children and adolescents placed in foster care: findings from the National Child Traumatic Stress Network. Child Welfare 2011;90(6):91-108.

(12) Oswald SH, Heil K, Goldbeck L. History of maltreatment and mental health problems in foster children: a review of the literature. J Pediatr Psychol 2010 06;35(5):462-472.

(13) Taussig HN, Culhane SE. Emotional maltreatment and psychosocial functioning in preadolescent youth placed in out-of-home care. J Aggression Maltreat Trauma 2010;19(1):52-74.

(14) Havnen KS, Breivik K, Stormark KM, Jakobsen R. Why do children placed out-of-home because of parental substance abuse have less mental health problems than children placed for other reasons? Children and Youth Services Review 2011 10;33(10):2010-2017.

(15) Vinnerljung B, Sallnäs M. Into adulthood: a follow-up study of 718 young people who were placed in out-of-home care during their teens. CHILD FAM SOC WORK 2008 05;13(2):144-155.

(16) Franzén E, Vinnerljung B, Hjern A. The epidemiology of out-of-home care for children and youth: a national cohort study. BR J SOC WORK 2008 09;38(6):1043-1059.

(17) Hadfield SC, Preece PM. Obesity in looked after children: is foster care protective from the dangers of obesity?. Child: Care, Health & Development 2008 Nov;34(6):710-712.

(18) Meltzer H, Lader D, Corbin T, Goodman R, Ford T. The Mental Health of Young People Looked After by Local Authorities in Scotland. 2004.

(19) Rodrigues VC. Health of children looked after by the local authorities. Public Health 2004 Jul;118(5):370-376.

(20) Scottish Executive. The Residential Care Health Project 2000-2003. 2004.

(21) Sempik J, Ward H, Darker I. Emotional and behavioural difficulties of children and young people at entry into care. Clinical Child Psychology & Psychiatry 2008 Apr;13(2):221-233.

(22) Williams J, Jackson S, Maddocks A, Cheung WY, Love A, Hutchings H. Case-control study of the health of those looked after by local authorities. Arch Dis Child 2001 Oct;85(4):280-285.

(23) Ford T, Vostanis P, Meltzer H, Goodman R. Psychiatric disorder among British children looked after by local authorities: comparison with children living in private households. British Journal of Psychiatry 2007 Apr;190:319-325.

(24) Dubowitz H, Feigelman S, Zuravin S, Tepper V, Davidson N, Lichenstein R. The physical health of children in kinship care. Am J Dis Child 1992 May;146(5):603-610.

(25) Hill CM, Mather M, Goddard J. Cross sectional survey of meningococcal C immunisation in children looked after by local authorities and those living at home. BMJ 2003 Feb 15;326(7385):364-365.

(26) Burge P. Prevalence of mental disorders and associated service variables among Ontario children who are permanent wards. Canadian Journal of Psychiatry - Revue Canadienne de Psychiatrie 2007 May;52(5):305-314.

(27) Erol N, Simsek Z, Munir K. Mental health of adolescents reared in institutional care in Turkey: challenges and hope in the twenty-first century. Eur Child Adolesc Psychiatry 2010 2010;19(2):113-124.

(28) Garcia A, Courtney M. Prevalence and Predictors of Service Utilization Among Racially and Ethnically Diverse Adolescents in Foster Care Diagnosed With Mental Health and Substance Abuse Disorders. J PUBLIC CHILD WELF 2011 11;5(5):521-545.

(29) Milburn NL, Lynch M, Jackson J. Early identification of mental health needs for children in care: a therapeutic assessment programme for statutory clients of child protection. Clinical Child Psychology & Psychiatry 2008 Jan;13(1):31-47.

(30) Sawyer MG, Carbone JA, Searle AK, Robinson P. The mental health and wellbeing of children and adolescents in home-based foster care. Med J Aust 2007 Feb 19;186(4):181-184.

(31) Stahlberg O, Anckarsater H, Nilsson T. Mental health problems in youths committed to juvenile institutions: prevalences and treatment needs. Eur Child Adolesc Psychiatry 2010 2010;19(12):893-903.

(32) Duppong Hurley K, Trout A, Chmelka MB, Burns BJ, Epstein MH, Thompson RW, et al. The Changing Mental Health Needs of Youth Admitted to Residential Group Home Care: Comparing Mental Health Status at Admission in 1995 and 2004. Journal of Emotional and Behavioral Disorders 2009;17(3):164-176.

(33) Kanbur N, Tuzun Z, Derman O. Psychiatric symptoms of adolescents reared in an orphanage in Ankara. Turk J Pediatr 2011 May-Jun;53(3):281-284.

(34) Marquis RA, Flynn RJ. The SDQ as a mental health measurement tool in a Canadian sample of looked-after young people. Vulnerable Children and Youth Studies 2009 06;4(2):114-121.

(35) Fernandez E. How children experience fostering outcomes: participatory research with children. CHILD FAM SOC WORK 2007 11;12(4):349-359.

(36) McCrae JS, Lee BR, Barth RP, Rauktis ME. Comparing three years of well-being outcomes for youth in group care and nonkinship foster care. Child Welfare 2010;89(2):229-249.

(37) Sullivan DJ, van Zyl MA. The well-being of children in foster care: Exploring physical and mental health needs. Children and Youth Services Review 2008 07;30(7):774-786.

(38) Stanley N. Young people's and carers' perspectives on the mental health needs of looked-after adolescents. Child & Family Social Work 2007 08;12(3):258-267.

(39) Egelund T, Lausten M. Prevalence of mental health problems among children placed in out-of-home care in Denmark. Child & Family Social Work 2009 05;14(2):156-165.

(40) Mennen FE, Brensilver M, Trickett PK. Do maltreated children who remain at home function better than those who are placed? CHILD YOUTH SERV REV 2010 12;32(12):1675-1682.

(41) Taggart L, Cousins W, Milner S. Young people with learning disabilities living in state care: Their emotional, behavioural and mental health status. Child Care in Practice 2007 10;13(4):401-416.

(42) Ahrens KR, Richardson LP, Courtney ME, McCarty C, Simoni J, Katon W. Laboratory-diagnosed sexually transmitted infections in former foster youth compared with peers. Pediatrics 2010 Jul;126(1):e97-e103.

(43) Carpenter SC, Clyman RB, Davidson AJ, Steiner JF. The Association of Foster Care or Kinship Care With Adolescent Sexual Behavior and First Pregnancy. Pediatrics 2001 September 01;108(3):e46-e46.

(44) Crocker AR, Carlin EM. Coitarche and care: does experience of the 'looked after' system affect timing of a woman's sexual debut?. Int J STD AIDS 2002 Dec;13(12):812-814.

(45) The Scottish Government. Statistical Bulletin: Educational Outcomes for Scotland's Looked After Children 2010/11. 2012 25 June 2012.

(46) Dubowitz H, Sawyer RJ. School behavior of children in kinship care. Child Abuse Negl 1994 Nov;18(11):899-911.

(47) Sawyer RJ, Dubowitz H. School performance of children in kinship care. Child Abuse Negl 1994 Jul;18(7):587-597.

(48) Fowler PJ, Toro PA, Miles BW. Pathways to and from homelessness and associated psychosocial outcomes among adolescents leaving the foster care system. Am J Public Health 2009 08;99(8):1453-1458.

(49) Jane B, Isabelle J, Denise K, Leon P, Sarah S. Individual and group-based parenting programmes for the treatment of physical child abuse and neglect. Cochrane Database of Systematic Reviews; 2006.

(50)Yang M, Ullrich S, Roberts A, Coid J. Childhood Institutional Care and Personality Disorder Traits in Adulthood, Findings From the British National Surveys of Psychiatric Morbidity. Am J Orthopsychiatry 2007 Jan;77(1):67-75.

(51) Zeanah CH, Larrieu JA, Heller SS, Valliere J, Hinshaw-Fuselier S, Aoki Y, et al. Evaluation of a preventive intervention for maltreated infants and toddlers in foster care. J Am Acad Child Adolesc Psychiatry 2001 Feb;40(2):214-221.

(52) Tarren-Sweeney M. Retrospective and concurrent predictors of the mental health of children in care. Children and Youth Services Review 2008 01;30(1):1-25.

(53) Carbone JA, Sawyer MG, Searle AK, Robinson PJ. The health-related quality of life of children and adolescents in home-based foster care. Quality of Life Research 2007 Sep;16(7):1157-1166.

(54) Hurlburt MS, Chamberlain P, DeGarmo D, Zhang J, Price JM. Advancing prediction of foster placement disruption using Brief Behavioral Screening. Child Abuse Negl 2010;34(12):917-926.

(55) Winokur M, Holtan A, Valentine D. Kinship care for the safety, permanency, and well-being of children removed from the home for maltreatment. Cochrane Database of Systematic Reviews 2009(1).

(56) Fisher PA, Stoolmiller M. Intervention effects on foster parent stress: associations with child cortisol levels. Development & Psychopathology 2008;20(3):1003-1021.

(57) Macdonald GM, Turner W. Treatment foster care for improving outcomes in children and young people. Cochrane Database of Systematic Reviews 2008(1):005649.

(58) Donkoh C, Underhill K, Montgomery P. Independent living programmes for improving outcomes for young people leaving the care system. Cochrane Database of Systematic Reviews 2006(3).

(59) Spielfogel J, E., Leathers S, J., Christian E, McMeel L, S. Parent management training, relationships with agency staff, and child mental health: Urban foster parents' perspectives. CHILD YOUTH SERV REV 2011 11;33(11):2366-2374.

(60) Everson-Hock ES, Jones R, Guillaume L, Clapton J, Goyder E, Chilcott J, et al. The effectiveness of training and support for carers and other professionals on the physical and emotional health and well-being of looked-after children and young people: a systematic review. Child: Care, Health and Development 2012 2012;38(2):162-174.

(61) Ahrens KR, DuBois DL, Richardson LP, Fan MY, Lozano P. Youth in foster care with adult mentors during adolescence have improved adult outcomes. Pediatrics 2008 Feb;121(2):e246-52.

(62) Taussig HN, Culhane SE, Hettleman D. Fostering healthy futures: an innovative preventive intervention for preadolescent youth in out-of-home care. Child Welfare 2007 Sep-Oct;86(5):113-131.

(63) Taussig HN, Culhane SE. Impact of a mentoring and skills group program on mental health outcomes for maltreated children in foster care. Arch Pediatr Adolesc Med 2010;164(8):739-746.

(64) Karadag Caman O, Ozcebe H. Adolescents living in orphanages in Ankara: psychological symptoms, level of physical activity, and associated factors. Turk Psikiyatri Dergisi 2011;22(2):93-103.

(65) Tideman E, Vinnerljung B, Hintze K, Isaksson A, Aldenius. Improving foster children's school achievements. ADOPTION FOSTERING 2011 2011;35(1):44-56.

(66) Robst J, Armstrong M, Dollard N. Comparing outcomes for youth served in treatment foster care and treatment group care. J Child Fam Stud 2011 10;20(5):696-705.

(67) Maryland Disability Law Centre. Evidence-Based Practices for Delinquent Youth with Mental Illness in Maryland: Medicaid Must Cover These Cost-Effective Services. 2007.

(68) Romanelli LH, Landsverk J, Levitt JM, Leslie LK, Hurley MM, Bellonci C, et al. Best practices for mental health in child welfare: screening, assessment, and treatment guidelines. Child Welfare 2009;88(1):163-188.

(69) Schneiderman JU, Brooks D, Facher B, Amis J. Improving health services for foster youth: Multidisciplinary and multistakeholder perspectives and recommendations. Children and Youth Services Review 2007 Mar;29(3):313-328.

(70) Parkinson J. Establishing a core set of national, sustainable mental health indicators for children and young people in Scotland: Final Report. 2012 March 2012.

ScotPHN report

For further information contact:

ScotPHN
c/o NHS Health Scotland
Meridian Court
5 Cadogan Street
Glasgow
G2 6QE

Email: nhs.healthscotland-scotphn@nhs.net

Web: www.scotphn.net