



Public Health
England

Protecting and improving the nation's health

Commissioning High Quality Information to Support Oral Health Improvement

A toolkit about dental epidemiology for
local authorities, commissioners and
partners

About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.

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Executive summary

This toolkit provides information and support to local authorities with regard to the Public Health England Dental Public Health Epidemiology Programme. Local authorities have a key role as commissioners and users of information arising from the dental epidemiological surveys. This guide to the aims, methods and utility of dental surveys will support local authorities in these roles, as will a variety of tools provided as appendices.

Robust intelligence about health and social conditions is essential if the correct services and programmes are to be commissioned. England is fortunate in having a national programme of standardised dental health surveys as this provides robust, comparable data about levels of dental decay in the child population and a range of other dentally related information about various other population groups.

Within this guide the roles of all the stakeholders in the Dental Public Health Epidemiology Programme are described, including the key actions required of local authorities. An overview of the survey process is given, along with examples of the many uses of the resulting survey data. Advice about variations of sampling for local need is provided and, finally, several appendices provide a model service specification and tools that could be used during the procurement and contract management processes.

The aim of this guide is to provide all stakeholders, including local authorities, with the information they need to understand fully the purpose, process, partnership working and benefits of the Dental Public Health Epidemiology Survey Programme.

Section 1: Background and legislative framework

Robust intelligence about health and social conditions is essential if the correct treatment services and preventive programmes are to be commissioned. England is fortunate in having a national programme of dental health surveys as this provides robust, comparable data about dental decay levels in the child population and a range of other dentally related information about various other population groups.

Information arising from these national dental surveys is used by local authorities to monitor oral health and gives them the ability to fulfil their role as overseers of the health of the population. It enables them to hold NHS England to account with regard to the provision of primary, specialist and secondary care services. Where information is provided at lower tier local authority level is it useful to elected members and officers of councils. It shows how their population are faring with regard to general and dental health and it informs the design, reach and coverage of oral health improvement programmes.

The survey programme includes provision of detailed information about dental decay levels among five-year-olds which is a Public Health Outcome Indicator. This programme should be viewed in a similar vein as height and weight measurement as it provides a single measure of the result of early years care of a child. The measure is of value to directors of children's services and commissioners of interventions for young children as it indicates how well a child has been weaned, fed and parented with regard to daily routines and supervision. It is a proxy of the quality of early years services.

Partnership working between PHE, the British Association for the Study of Community Dentistry, local authorities, NHS England and NHS community and salaried dental services ensures that these national services take place as part of an annual programme, the Dental Public Health Epidemiology Programme. Different population groups are surveyed each academic year and the surveys are centrally co-ordinated and quality assured.

The fieldwork is commissioned locally and is now the responsibility of local authorities. Responsibility for health improvement, including oral health improvement, and measurement of health needs in the population was transferred from the NHS to upper and lower tier local authorities by the 2012 Health and Social Care Act.¹ This superseded the National Health Service Act (2006).²

This was supported by Statutory Instrument 2012 No. 3094 *The NHS Bodies and Local Authorities (Partnership Arrangements, Care Trusts, Public Health and*

*Local Healthwatch) Regulations 2012.*³ Part four of the Instrument describes the dental public health functions of local authorities:

(2) A local authority shall provide, or shall make arrangements to secure the provision of, the following within its area –

to the extent that the authority considers appropriate for improving the health of the people in its area, oral health promotion programmes;

(b) oral health surveys to facilitate –

- (i) the assessment and monitoring of oral health needs,
- (ii) the planning and evaluation of oral health promotion programmes,
- (iii) the planning and evaluation of the arrangements for provision of dental services as part of the health service, and
- (iv) where there are water fluoridation programmes affecting the authority's area, the monitoring and reporting of the effect of water fluoridation programmes.

(3) The local authority shall participate in any oral health survey conducted or commissioned by the Secretary of State under paragraph 13(1) of Schedule 1 to the 2006 Act (powers in relation to research etc.)(49) so far as that survey is conducted within the authority's area.

In addition to this legislation the requirement to undertake oral health surveys has been strengthened as they are now included in the local authority single data list.⁴ This is a list of all the datasets that local government must submit to central government. Results from oral health surveys at lower tier local authority level have to be reported. This is done annually on behalf of all local authorities who commission a survey, by PHE, using centrally collated data. PHE securely collects all data, checks and cleans it then analyses at a variety of organisational levels before publishing it and sending it for inclusion in local health profiles, child and maternal health reports and in the public health outcomes framework, on behalf of local authorities.

The data generated by these surveys provide key information for commissioners on the oral health of different groups to help reduce health inequalities, and support equality and diversity. For example, the data can inform considerations on advancing equality of opportunity in access to dental care, and oral health improvement interventions and so support public bodies to address the equality duty (Equality Act 2010). In addition, the Health and Social Care Act 2012 introduced legal duties to have due regard to the need to reduce health inequalities, for certain health bodies including PHE and clinical commissioning groups – the data collected is important evidence which supports fulfilment of these duties.

Section 2: Roles and responsibilities

Public Health England

Delivery of the Dental Public Health Epidemiology Programme is the responsibility of PHE. It has the role of agreeing an annual programme with local authorities so that oral health information is collected on population groups that are of interest to them and to the NHS. PHE has a central co-ordinating role, with the production of national protocols and provision of national training and calibration. Standardisation via training, calibration and quality assurance allows valid comparison between and within population groups. Training and calibration is provided centrally to a small team of regional dental epidemiology co-ordinators and standard examiners. They then cascade this training to local fieldwork teams who undertake surveys to ensure reliable information is provided at lower tier local authority level.

Regional dental epidemiology co-ordinators (DECs), based in PHE centres, support the fieldwork teams in the area covered by their centre (see Appendix 1). As well as providing regional training and calibration they are able to advise on additional or more intensive sampling methods for specific local authorities.

Dental epidemiology co-ordinators also act as a conduit of information from the central PHE dental public health epidemiology team to the fieldwork teams. Checked and cleaned data is sent from fieldwork teams to dental epidemiology co-ordinators for collation and uploading to a secure site.

When the national report of the survey has been published dental epidemiology co-ordinators are given access to the raw, cleaned, anonymised data for the local authorities in their areas so that they can undertake local analyses and maximise the yield and use of the data. Dental epidemiology co-ordinators are the first point of contact for local authorities and other partners for any matters relating to the dental epidemiological surveys and the information arising from them.

Centre-based consultants in dental public health and dental epidemiology co-ordinators should be in communication with relevant public health colleagues in local authorities to keep them informed of progress on surveys and the details of the annual national programme. They can advise on sample sizes where local authorities wish to commission a sample that is larger than the minimum. Consultants in dental public health can advise on procurement, contract monitoring and ways local authorities can support fieldworkers in an effort to gain greatest co-operation with institutions and increased consent to take part by potential volunteers.

The PHE Dental Public Health Intelligence Team receives the raw data from each survey and checks, cleans, analyses and reports it.

Local authorities

A variety of officers of local authorities will want to use the information arising from these surveys. Responsibility for commissioning lies with local authorities but in many cases this may be done in partnership with NHS England. Assistance from dental epidemiology co-ordinators and PHE consultants in dental public health is available for commissioning, procurement and contract monitoring (Appendices 3, 4, 5).

Fieldwork can be commissioned for several years ahead rather than annually as this reduces effort and allows providers to plan their services. Longer contracts may also be more attractive to potential providers. Co-commissioning with NHS England may be advantageous as this agency is likely to be contracting with the same potential providers for clinical services. It should be noted that each individual survey period runs from September to August, following the academic year. Surveys therefore fall into two financial years.

Public health or commissioning colleagues in local authorities who have oral health and health monitoring in their portfolios should communicate with their region's dental epidemiology co-ordinator with regard to the Dental Public Health Epidemiology Programme. This enables them to have a view about sample sizes so they are well prepared for forthcoming surveys.

Discussion with providers should take place well ahead of the start of the academic year so that specific requirements and expectations can be accommodated. For example, if a larger sample is to be commissioned then this needs to be arranged in good time for sufficient numbers of examiners and support workers to be available and aware of their need to attend regional training and calibration. In such cases additional resources need to be funded and checks made as to capacity of the provider service.

Local authorities will be asked to provide numbers of children on roll for school surveys as this is a necessary stage in the sampling sequence.

Data sharing agreements between local authorities and NHS trusts that allow secure sharing of data for other health provision and surveys (immunisation and vaccination, height and weight measurements) should also be applied for the dental epidemiological surveys. This can greatly assist the fieldwork teams and reduce the requests made to schools.

Local authorities should take actions to ensure maximum co-operation with the surveys by institutions, for example by communicating their support to schools and optimising consent returns by potential volunteers (see 'maximising consent').

Local authorities should monitor contract compliance and support fieldwork teams where there are difficulties accessing survey populations and gaining consent (see Appendix 4).

Local authorities will receive results and share them with relevant colleagues within the local authority, for example directors of public health, information officers, heads of children's and adult services, health visitors and others in the early years workforce (see Section 3).

If more detailed analysis of local data is required then local authorities can request this from dental epidemiology co-ordinators who have access to raw anonymised data. Local authorities can also apply to have direct access to raw, anonymised data by registering to become super-users via dentalphintelligence@phe.gov.uk or via www.nwph.net/dentalhealth.

British Association for the Study of Community Dentistry

The British Association for the Study of Community Dentistry (BASCD) provides the standards for studies about dental decay which allow comparison over time and between geographies. The standards set down by BASCD with reference to sampling, examining, recording and some aspects of analysis of the data have been in place for decades. These are incorporated into the protocols produced by PHE.

BASCD, in partnership with PHE, provides the clinical training and calibration, including involvement of a UK standard examiner, against whom regional standard examiners are calibrated.

Fieldwork teams

Usually a clinician is required to undertake standardised dental examinations. Support workers are required to undertake administrative actions and assist with child volunteers in schools. All stages in the survey process are covered by a national protocol which seeks to ensure high standards and the production of results that are comparable within and between local authorities.

Team members are required to attend training and calibration sessions to ensure that the surveys are carried out in a standardised fashion.

The teams plan their sampling and send their intentions to their dental epidemiology co-ordinators for checking and approval. They then contact sampled schools or other institutions and seek co-operation.

With help from school administrators, age-eligible children are identified and letters for parents prepared for distribution. This should result in consent forms being returned to school.

Examinations and questionnaires take place in schools or other institutions involving individuals for whom consent has been given. Data arising from these examinations is coded and recorded onto charts or directly onto secure computers.

Data is entered onto a secure computer programme immediately after each day's fieldwork. At the end of the survey the data is checked and sent securely to dental epidemiology co-ordinators who forward them to the PHE DPH Intelligence Team for collation and analysis. Any records with errors are sent back to fieldwork teams for verification.

Section 3: The survey process

Appendix 2 shows, in diagrammatic form the process of a typical caries survey of school children, with indication of the roles each partner organisation takes.

Commissioning services

Local authorities are required to undertake procurement of fieldwork and this may be done as a single lower tier local authority, by clusters of local authorities or by an upper tier local authority on behalf of all the lower tiers it covers. Procurement may be done completely independently or in partnership with NHS England. In the main, community dental services provide the workforce and expertise for the fieldwork and their main contracts for clinical care are held by NHS England.

There are several issues to consider when procuring dental epidemiology services:

Quality issues

Data that is collected by a team with the correct experience, expertise and training is likely to be robust and comparable within and between localities. Compliance with the protocol, understanding of it, successful calibration and appropriate communication with work partners is essential if useable data is to be obtained. In the absence of these qualities there is a significant risk that the data cannot be used locally or in the national collation which would be an unethical outcome and wasteful of public funding.

(Appendices 3, 4, 5)

Any provider seeking to bid for the service would need to show they can fulfil the above requirements and comply with the agreed national standards, as well attending local training and providing the specified, standard equipment.

Intelligent communication is required to ensure good co-operation from work partners and maintain positive working relationships over the long term. Fieldwork surveys are reliant upon co-operation of school staff and of other institutions so skills of persuasion are essential, as are excellent social skills and empathy with the needs of work partners.

Ethics

When speaking with volunteers clinical teams need to be aware of their ethical and professional obligations with regard to volunteer confidentiality and to the giving of advice where a possible clinical need is detected. Examiners are required to be registrants with the General Dental Council and have appropriate indemnity cover.

Data security

Fieldwork teams need to be trained in and aware of their responsibilities with regard to information governance. This is usually a mandatory requirement of NHS employed staff. This will apply to security of information supplied by schools and other partner agencies, documents required to organise the survey process and to data generated from examinations and questionnaires, data entry and secure transfer.

Estimated costs

The costs of carrying out the fieldwork may vary slightly from one survey population to another but the protocols are designed to use similar levels of resource. It is not possible to estimate additional costs that apply locally as management and other on-costs and travelling distances and times vary.

The estimate below is based on a typical child cohort survey in which a minimum sample is required, this being 250 children examined from a minimum of 20 schools. It allows for training and calibration time for the team, administration time for contacting schools, gaining co-operation, accessing class lists, sampling, preparing and collecting consent letters, arranging examination sessions, purchasing equipment and supplies, preparing equipment daily and entering and checking data. It is assumed that two schools per day will be visited for examinations and that there may be a need to return to one or two. In rural areas this may not be possible and only one school per day can be visited. The estimated staff costs are based on the use of a clinical dental officer (at Band C on the salary scale for dentists in public health, the community health service and salaried primary dental care. In some instances dental therapists can be employed as examiners (Band 5 or 6 on the Agenda for Change pay scale). In addition one or two dental nurses (at Band 5 on the Agenda for Change pay scale) are also required for assisting with fieldwork. Estimates are drawn from the mid-point of the salary scale but commonly the experienced teams will include staff who have reached the top of their pay scale.

The estimated cost the fieldwork for a dental epidemiological survey for one lower tier local authority is between £9,000 and £11,000. Commissioners are strongly advised to consider the local circumstances when procuring this work to ensure it is fully resourced (Appendix 7).

Maximising consent returns

The value of epidemiological surveys is maximised if high proportions of potential participants agree to take part. Dental surveys of five-year-old children in England require parents to give written consent and there are varied levels of response for each school and each local authority. Non-return of consent forms is far more prevalent than parents refusing to give consent so action by a range of agencies should focus on encouraging parents to return completed forms. Local authorities, fieldwork teams and schools all have a role here.

What can local authorities do?

Local authorities can play a key role in engagement with schools via the directorate responsible for schools and education. A letter of support for the survey from the relevant director and director of public health outlining the purpose of the survey, details of data-sharing arrangements in place and encouraging general support for the survey can usefully alert headteachers and decision makers to the survey before fieldworkers attempt initial contact. This should ideally be addressed by name to the head of each sampled school a week or two in advance of contact being made with schools by fieldwork teams.

Local authorities could ensure information about the surveys is published on their websites and is visible in community and health centres local to schools taking part in the survey. If a member of the public health team in the local authority leads on oral/dental health then this person should be well informed about the purpose and general running of the survey and able to answer any related queries or forward these to the relevant fieldwork team.

Many local authorities contract an oral health improvement worker or team and these should be included in discussions with the fieldwork team as early as possible as they are likely to have useful links within the community. Finally, with school nurses and health visitors now falling under the remit of local authorities there may be opportunities in the future for involvement of these groups in maximising consent returns.

Efforts to maximise consent returns should be at the school level (requiring co-operation from heads of school and from all staff involved in the delivery of consent forms) and at the level of parents and guardians of children to be surveyed. Reasons for non-participation at the school level include non-receipt of information by decision makers, concerns or confusion over data-sharing agreements, high workload of staff and lack of clarity over what the survey involves. Reasons for non-participation by parents and guardians include non-receipt of information, issues with language or literacy and low engagement with dental services in general.

What fieldwork teams can do

While there is no single solution that can overcome issues associated with poor consent return levels, a number of strategies have been found to positively impact on the response. Improvements of 12-22% in overall consent returns have been achieved by implementing some of the points below.

One of the principal reasons for reduced consent rates is due to non-return of forms irrespective of whether parents have chosen to consent to the survey or not. Practical experience has shown that school administrative processes and even individual staff within school offices can make the difference between success and failure in getting forms back from parents. Evidence has also shown that schools in some of the most deprived areas can achieve high levels of consent and the reverse seems to hold equally true. Developing a working relationship between the fieldwork team and the school is essential.

Planning and resourcing the effort

Where feasible, advanced agreement should be sought to ensure sufficient fieldwork staff are available to resource the consent process. It may be more efficient to concentrate resources over a short pre-determined time period, within which forms will be distributed and collected. A timetable of when each stage of the consent process will be undertaken could be used to allocate staff for shorter periods of time.

Communication with schools

Consent rates from previous surveys can be used to determine non-participating schools and those with historically low returns. A separate plan can then be devised to target these schools with additional administrative support. This has been shown to increase consent by up to 22% through developing a named point(s) of contact with whom regular communication is maintained. Experience suggests that meeting staff in person rather than over the phone is more likely to lead to a good working relationship.

The information sheet included in the protocol can be used and enhanced by adding in what steps the fieldwork team will take to support the school to optimise the return of consent forms. If a school has been sampled previously it may help to show the previous consent level in comparison with others.

It may be helpful for fieldwork teams to make reference to Ofsted's statement that applies:

Example text in relation to Ofsted:

“School attainment and health are closely linked. Children’s health and wellbeing is an important area of Ofsted inspections and inspectors will continue to monitor this as part of the common inspection framework.

“Working with health providers, including through measuring and screening, can be an important way of demonstrating a focus on pupil health and wellbeing and can be used to inform parents and local communities about how successful the school is. This then has the potential to impact positively on the Ofsted inspection.”

Administering the forms

Persistence is crucial as follow-up of non-responding and poor consent return schools will yield increased responses. Competing priorities in schools may mean forms are forgotten, left undistributed or are collected at the class level but not returned to the administrative office. Experience has shown that splitting the locality into areas and targeting each area in turn can be helpful in scheduling delivery and follow up.

Key actions

A number of simple tips can also assist schools in supporting the consent process. Some are more resource intensive than others but again the important points are persistence and working to lessen the impact on the school:

- ask the school for a named point of contact with whom to liaise on matters relating to consent
- recruit a named person at a school who can speak with parents and chase up non-returns (eg school nurse, family liaison worker, classroom assistant or parent volunteer)
- provide materials in suitable format to publicise the survey to parents in newsletters, emails or posters on display in the school
- use a table like that provided in the protocol to provide schools with written checklists of pupil names already divided by class list for ease of use. This should show which children have been sent consent letters and have a column to record returns
- provide a clearly labelled large collection envelope for returned forms with simple step-by-step instructions on it
- ask schools about parent evenings or similar events where parents could be asked to consent

- provide schools with spare forms and take copies along when visiting schools, delivering by hand whenever possible
- consider whether posting letters and consent forms to home addresses with stamped, addressed envelopes may help if schools feel unable to directly support the process themselves
- consider handing letters and consent forms directly to parents at pick-up time
- consider aligning with signing for other health issues by parents at start of school

Section 4: Data quality and more intensive sampling

The various strengths and limitations of the data arising from the PHE Dental Public Health Epidemiology Programme are listed in the table below.

Strengths	Limitations
<ul style="list-style-type: none"> Data is drawn from a population representative sample, not just that of service users 	<ul style="list-style-type: none"> The need for positive consent from parents introduces some bias such that fewer children with decay experience are examined. This means that some results may underestimate the true levels of decay in the population
<ul style="list-style-type: none"> Standardisation of methods and calibration of clinical examiners means that comparison between and within geographies is valid Comparison with recent surveys allows observation of trends 	<ul style="list-style-type: none"> The need for standardised methods means that there is underestimation of decay (approximal and enamel decay)
<ul style="list-style-type: none"> Consistent methods and a UK standard examiner allow comparison over time and identification of trends since 2008 	<ul style="list-style-type: none"> The requirement of positive, written consent from parents for child participation since 2007 has meant that comparison with results before that time is not valid
<ul style="list-style-type: none"> Data is collected regularly in the shortest time frame to show changes in disease levels. 	<ul style="list-style-type: none"> Decay is usually a slowly progressing condition so undertaking surveys more often than every two years is not appropriate to detect changes in successive birth cohorts
<ul style="list-style-type: none"> Data is reported at lower tier local authority level. Compliance is very good, with the vast majority of local authorities being represented 	<ul style="list-style-type: none"> Minimum sample sizes are insufficient to allow for detailed local planning. Well-designed enhanced samples are required to produce large enough samples for geographic or other areas of interest
<ul style="list-style-type: none"> The framework allows for increased samples to be taken to meet local needs 	
<ul style="list-style-type: none"> National surveys satisfy local authority statutory duties and provide Local Authority Single Data List requirements 	

<ul style="list-style-type: none"> • Data is shown with sample size, response level and 95% confidence intervals so readers can assess level of certainty of estimates for each geography 	<ul style="list-style-type: none"> • Where samples sizes are small, or response levels are poor, the resulting estimates are less reliable • Where there is wide variability of disease experience or sample sizes are small the confidence intervals will be wide
<ul style="list-style-type: none"> • Central collation and analysis allows for weighting of samples to allow closer matching with deprivation profile of each local authority 	
	<ul style="list-style-type: none"> • The surveys are cross-sectional only

More intensive sampling

The minimum sample size of 250 children for the biennial dental decay surveys of five-year-old schoolchildren is sufficient to provide a robust estimate at lower tier local authority level but is unlikely to provide information for all ward clusters and certainly not for all wards. If local authorities wish to have information at a finer granularity then larger samples are needed and these require additional investment. Advice about sampling methods which ensure representation for all geographies can be gained from PHE consultants in dental public health, in particular from the dental epidemiology co-ordinator at the relevant PHE centre.

More intensive sampling can be carried out for wards or clusters of wards where there is particular concern, or specific schools can be included in the survey, in addition to the minimum sample. Non-standard samples may or may not be suitable for inclusion in the main sample, but coding of individuals according to their sampling method allows for separate analysis.

Where contracts for epidemiology are held by NHS England there will be a need for the local authority and NHS England to work in partnership to procure additional fieldwork activity.

An example of a local authority requiring a tailored sampling method

A local authority in the North West was aware of the poor oral health among their five-year-old schoolchildren, which was revealed in the 2008 and 2012 surveys. Analysis of the minimum sample at ward cluster level by the local PHE dental epidemiology co-ordinator showed that two clusters of wards had higher levels of decay than other clusters.

The local authority wanted to have more detail about the wards in these clusters and discussed this with their dental epidemiology co-ordinator. The dental epidemiology co-ordinator worked out a sampling method which would give sufficiently large samples for the wards in question, in addition to the minimum sample.

They also worked out how much more this would cost, considering how many more schools would be involved.

NHS England was linked, by the dental epidemiology co-ordinator, with the local authority commissioner and it was agreed that NHS England would write a contract variation and would pay an additional amount to the service provider who had sufficient capacity to carry out more fieldwork. The local authority was invoiced for this extra funding and the funds transferred to NHS England.

When the cleaned, anonymised data was available the dental epidemiology co-ordinator conducted analysis at ward and ward cluster level to provide the detailed information the local authority had requested.

Section 5: Making the most of the data

Local authorities and NHS England use the data from epidemiological surveys for a variety of reasons:

- responding to the public health outcomes framework indicator and reporting comparable figures
- mapping dental decay levels to identify areas with higher disease levels (Figure 1)
- establishing if there are inequalities in decay levels within the local population and in comparison with neighbouring local authorities or statistical partners
- inclusion in joint strategic needs assessments, decay levels among five-year-olds being used as an early indicator of the success or otherwise of interventions to improve weaning and feeding of young children and to increase parenting skills
- deciding which oral health improvement approaches to take, that is mainstream or targeted and aimed at which population group, for example children in the first 12 months or older pre-school children
- monitoring progress and impact from oral health improvement interventions on subsets of the population
- establishing where treatment services are required
- combining the figures with other data sets to enhance small area profiles, eg Local Authority Health Profiles and Fingertips profiles by PHE

Data is published on the website: www.nwph.net/dentalhealth.

A main report is published and tables given for a range of measures at lower and upper tier local authority levels, regional office and PHE centre areas.

Case study of the use of data locally

Data arising from the survey of five-year-olds in 2012 was analysed by 'Children's Centre reach' level and mapped for one local authority (Figure 1). This revealed on a locality basis where caries affected higher proportions of children and indicated which children's centres required more intensive actions to reduce decay in pre-school children; areas North 2, West 2 and South 1.

A second map was created using the same data to show where larger proportions of children were affected by incisor caries, mainly caused by long-term bottle use with sugared drinks (Figure 2). This showed that this was a significant problem in particular localities and showed the need to take action at the weaning stage to encourage feeding practices which reduce the risk of decay. This involves supporting parents and other carers to stop the use of sugared drinks, especially at night, and change to trainer cups. The analysis revealed that this was a significant problem in West 1 where a higher proportion of children than expected had incisor caries. This concerted action was required in four, not just three areas. It is likely that successful action to reduce bottle use in West 1 would have greatest effect in reducing the proportion of children with any decay in that area.

Figure 1. Example of use of data - Dental decay prevalence among five-year-olds in Bolton by ward cluster, 2012

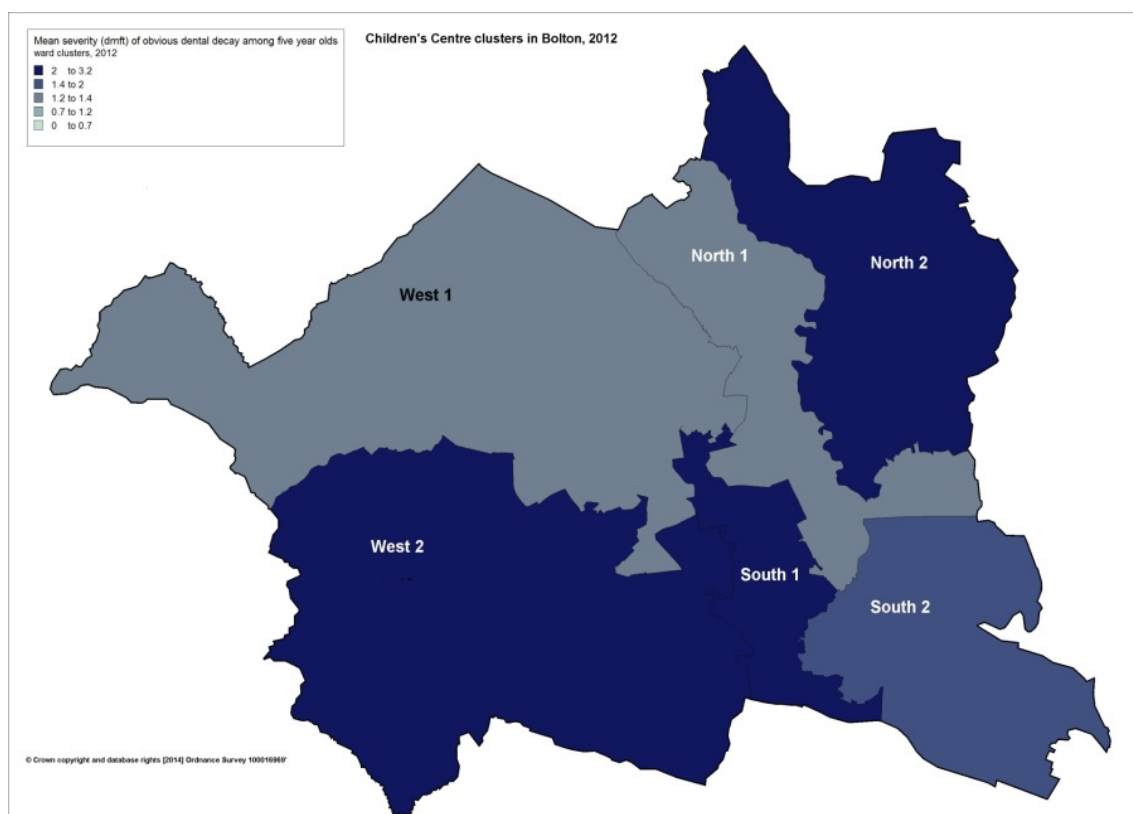
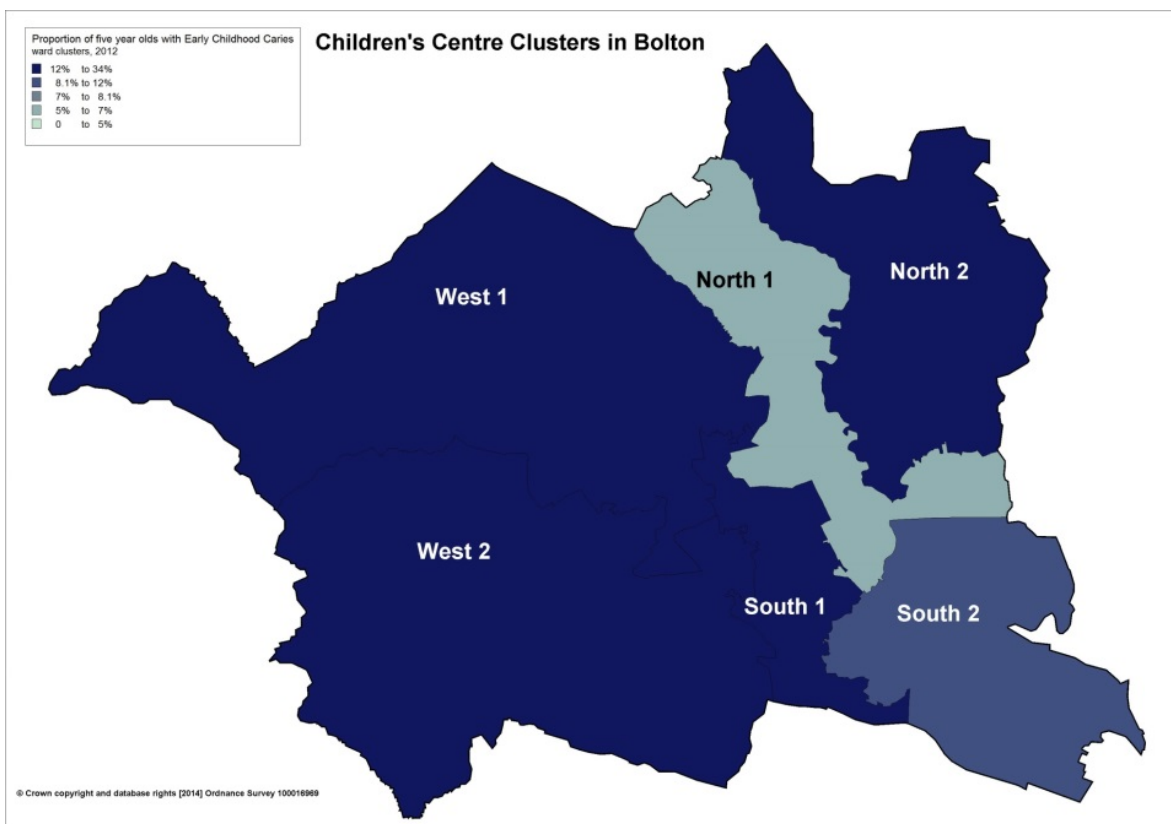


Figure 2. Example of use of data – Prevalence of incisor caries among five-year-olds in Bolton by ward cluster, 2012



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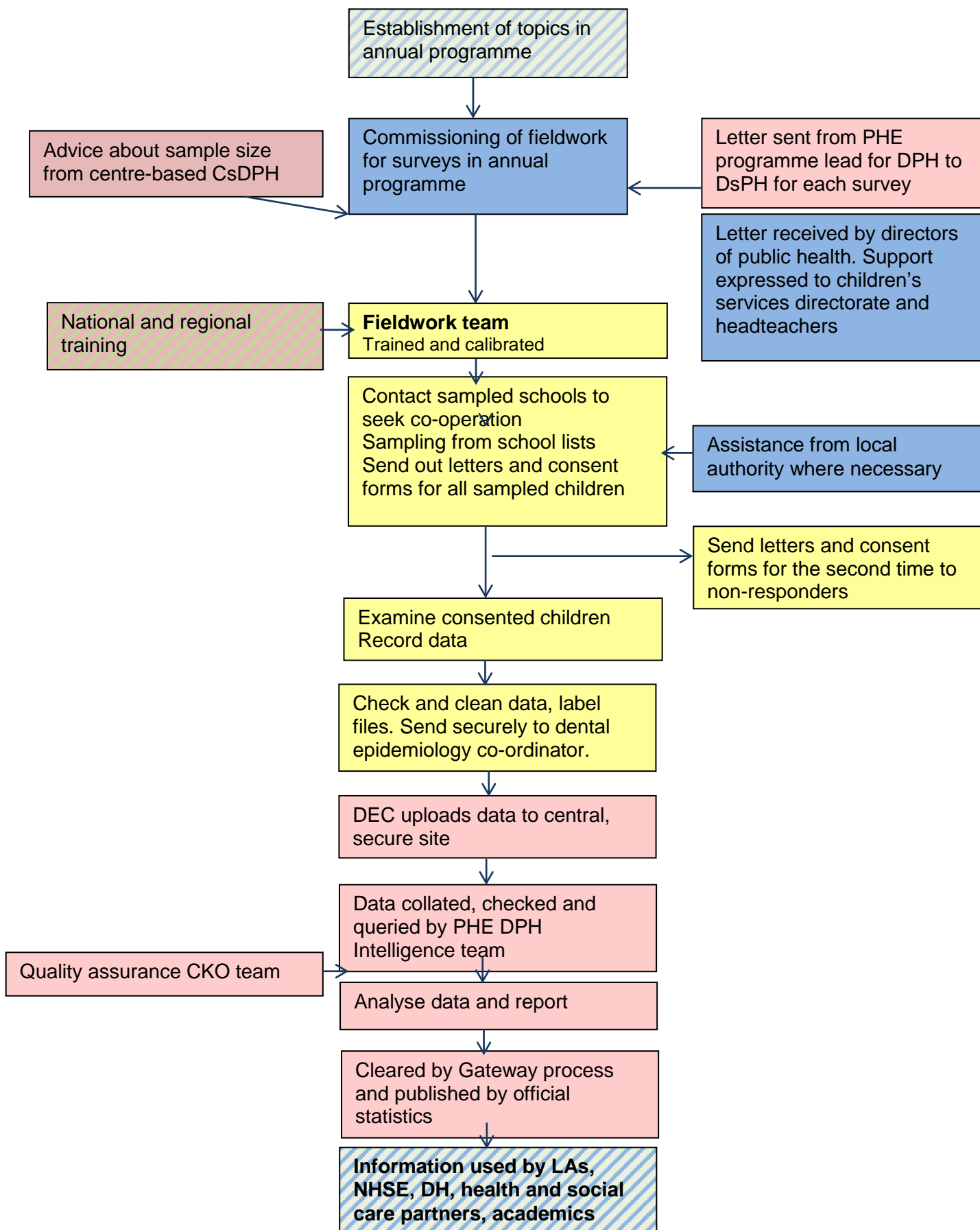
Appendices

Appendix 1. Contact details of dental epidemiology co-ordinators

PHE centre	Name of DEC	Email address
North West	Gill Davies	gill.davies@phe.gov.uk
North East	Kamini Shah	kamini.shah@phe.gov.uk
Yorkshire and The Humber	Kate Jones	kate.jones@phe.gov.uk
West Midlands	Anna Hunt	anna.hunt@phe.gov.uk annahunt@nhs.net
East Midlands	Sandra Whiston	sandra.whiston@phe.gov.uk
East of England	Linda Hillman	linda.hillman@phe.gov.uk
South West	Paul Harwood	paul.harwood@phe.gov.uk
South East	Anna Ireland	anna.ireland@nhs.net anna.ireland@phe.gov.uk
London	Desmond Wright (interim)	desmond.wright@phe.gov.uk

Appendix 2. Flow diagram of stages of a typical dental epidemiology survey

PHE actions Fieldwork team actions LA actions Shared action



Appendix 3. DRAFT Generic Dental Epidemiology Fieldwork Service Specification

Service	Dental Epidemiology Fieldwork Service
Local Authority	***** Council
Provider	To be confirmed
Period	1 April 201* –
Date of review	April 201*

1. Population needs

1.1 National context and evidence base

Oral health is an integral part of overall health. A significant proportion of the population in England experiences very good levels of oral health.¹ Successive oral surveys² have shown that child and adult oral health has been improving over the past 40 years. However, vulnerable, disadvantaged and socially excluded groups are at greater risk of oral diseases affecting their teeth, gums, supporting bone, and soft tissues of their mouth, tongue and lips. People in the North West and Greater Manchester in particular are at higher risk of oral disease than those in other parts of the country.

The most prevalent oral disease among children and young people in England is tooth decay, affecting 24.7% of five-year olds in 2015.³ This prevalence varies geographically; 20% of five-year-olds had experience tooth decay in South East England compared to 33.4% in the North West of England, with even greater inequalities within local authority areas.

The 2012 Health and Social Care Act conferred responsibility for oral and general health improvement to local authorities.¹ Local authorities are now statutorily required to provide or secure oral health surveys.⁴ Public Health England (PHE) supports local authorities to meet their minimum statutory responsibilities with respect to oral health surveys by co-ordinating the national Dental Public Health Epidemiology Programme (DPHEP)⁵ and facilitates standardised collection of oral health data as part of this annual programme.

1 Public Health England. Local authorities improving oral health: commissioning better oral health for children and young people. An evidence-informed toolkit for local authorities. June 2014.

2 <http://www.nwph.net/dentalhealth/>

3 Public Health England. National Dental Epidemiology Programme for England: Oral Health Survey of Five-Year-Old Children 2012. A report on the Prevalence and Severity of Dental Decay. 2013.

4 The NHS Bodies and Local Authorities (Partnership Arrangements, Care Trusts, Public Health and Local Healthwatch) Regulations 2012, Statutory Instrument No.3094, Part 4; page 8 /www.legislation.gov.uk/ukSI/2012/3094/made

5 Dental Public Health Intelligence Programme. Dental Health www.nwph.net/dentalhealth (2013).

The DPHEP surveys are conducted annually, usually over an academic year and are carried out on randomised samples of a variety of population groups. Commissioning organisations can opt to conduct larger surveys than the minimum required by the national protocol to fulfil local, specific aims.

1.2 Local context

Data from the dental epidemiology programme over several decades has shown that oral health varies across the country with children in the ***** and ***** in particular having worse levels of decay.

The 2015 survey data showed that the prevalence of dental decay in 5-year-olds in ***** was ****%, which compares ***** with a prevalence of 25% for England overall. Within ***** there is variability with a prevalence of **% in ***** compared with **% in *****.

1.3 Inequalities

There is an association between deprivation and prevalence and severity of dental decay. It is a priority of the ***** for oral health improvement to narrow the gap between the decay levels of those in the most disadvantaged and vulnerable groups and that of the rest of the population. Activities that promote oral health and prevent absence from school or work are in line with the national focus on helping the most disadvantaged and challenged families to turn their lives around. The “Troubled Families” programme works with these families to reduce worklessness, antisocial behaviour, crime and school exclusions and to increase school attendance.⁶

Robust, comparable data is required to monitor the impact of activities which seek to reduce inequalities in dental health.

2. Key service outcomes

2.1 National outcomes

The Dental Epidemiology Fieldwork Service will support the Public Health Outcomes Framework indicator (2013-16) ‘4.2: tooth decay in 5 year old children’.⁷

6 Department for Communities and Local Government 2012) Working with Troubled Families. A guide to the evidence and good practice

<https://www.gov.uk/government/publications/working-with-troubled-families-a-guide-to-evidence-and-good-practice>
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/11469/2117840.pdf

7 Department of Health. Improving Outcomes and Supporting Transparency: Part 1: A Public Health Outcomes Framework for England, 2013-2016. 2012.

Local authorities need to have access to dental epidemiological data in order for them to be able to monitor progress in relation to this indicator. Participation in the DPHEP will enable local authorities to collect this data.

Outcomes from surveys of other population groups will fulfil the local authority's responsibility to measure and report on the health needs of the population and contribute to a national picture.

2.2 Local outcomes

Provision of data for the local authority and NHS England will assist with achievement of:

- improved oral health for the local population
- improved access to NHS dentistry
- reduced health inequalities relating to dental care, with a priority focus on children, older people and vulnerable groups

3. Scope

3.1 Aims and objectives of the service

The aim of the service is:

- To carry out the fieldwork for ***** local authority area in line with the DPHEP annual survey programme and in accordance with the survey protocol and timescales published

The objectives of the service are to:

- Engage with local authority leads to consider each forthcoming survey
- Agree the sample size with the commissioners and use agreed sampling methods
- Ensure that the method for data collection is in line with national protocols
- Ensure all clinical examiners are trained and calibrated (when necessary) to the national gold standard and maintain their skills
- Work in collaboration with dental epidemiology co-ordinators and dental epidemiology trainers
- Engage with local providers and stakeholders to access potential participants for examination
- Undertake the required fieldwork to collect the specified information
- Provide and submit a complete, cleaned set of data to an agreed deadline direct to the designated dental epidemiology co-ordinator

3.2 Service description

- The provider will carry out dental epidemiological surveys for ***** local authority. This will require the provider to complete clinical examinations and/or questionnaires on an agreed population, in settings located within the ***** local authority boundary
- The provider will be required to liaise with the relevant settings and work with them to

encourage participation in the surveys and in obtaining consent from individuals, parents and carers according to the national protocol.⁸ This may involve the provider visiting the settings and communicating with governors, parents, teachers and managers and this is inclusive within the value of the contract

- Suitable clinical examiner(s) will be identified by the provider, along with sufficient support staff for administration, recording and data entry. Staff carrying out clinical examinations must be operating within their scope of practice⁹ as determined by the General Dental Council
- The fieldwork team will undergo local regional training and be familiar with, and comply with, the standards and procedures laid down in the relevant national protocol, including the use of specified equipment. This will include but not be limited to:
 - Compliance with the sampling process (to be signed off by the regional dental epidemiology co-ordinator)
 - Approach to specified target populations
 - Gaining of consent
 - Examination method
 - Application of measures for clinical recording
 - Questionnaire administration
 - Data entry and storage
 - Back-up and handling of data
- The fieldwork team will make the anonymised, cleaned survey data available to the dental epidemiology co-ordinator in a secure way. The process will be planned, executed and completed in the nationally agreed time frames

The initial service requirement is to undertake the DPHEP surveys as a minimum, however it is recognised that this may require changing over the lifetime of the contract following review of oral health needs assessment and analysis of data. The local authority may require the provider to carry out surveys, to meet local needs, which are not part of the DPHEP. In these circumstances the commissioner will give sufficient notice to the provider and negotiate any changes and additional costs.

3.3 Employees

- Relevant members of the fieldwork team will attend all necessary training and calibration events provided by PHE at regional level
- The provider will only use a clinical examiner/s who have successfully calibrated at an appropriate calibration session, usually using clinical guidance provided by British Association for the Study of Community Dentistry (BASCD).¹⁰

8 <http://www.nwph.net/dentalhealth/>

9 Scope of Practice. General Dental Council, September 2013. Available at: <http://www.gdc-uk.org/Newsandpublications/Publications/Publications/Scope%20of%20Practice%20September%202013.pdf>

10 British Association for the Study of Community Dentistry (BASCD) Guidance on the Statistical Aspects of Training and Calibration of Examiners for Surveys of Child Dental Health. Community Dental Health 1997 Volume 14 (Supplement 1) 18-29.

- All staff carrying out survey work will have been suitably trained and calibrated (when required) to a recognised standard regional examiner and be suitably qualified to practice in line with the General Dental Council Scope of Practice
- All staff involved in the service must have completed recent training in child protection and the protection of vulnerable adults and conform to ***** local authority's protocols.

3.4 Information for sample population

- The provider will be service user focussed, ensuring good communication, clear service user information and working to national standards on consent and confidentiality.

3.5 Confidentiality and safeguarding are of paramount importance

- The provider will ensure that all staff have a satisfactory Disclosure and Barring Service¹¹ (DRB) check
- All staff will receive annual training on confidentiality and information governance
- All staff will abide by the safeguarding policies operated by the relevant local authority's safeguarding children's board and safeguarding adults' boards. This will include understanding safeguarding referral procedures and referral pathways to social care
- All staff will receive training about child sexual exploitation and adhere to local policies and protocol published by the local authority's safeguarding children's board.

3.6 Service Model

The provider will:

- Provide the required number of staff with the appropriate skills, qualifications (dental examiners will be registered dentists, therapists or hygienists on the General Dental Council Register) and competencies to carry out the fieldwork
- Ensure staff carrying out clinical examinations participate in training and calibration events and have been successfully calibrated (where required by the protocol)
- Provide the administrative support required to enable the fieldwork to take place in accordance with national protocols
- Commence and complete the fieldwork in accordance with the DPHEP protocols and timelines
- Carry out sampling for the designated area, in accordance with protocol and agreed approach with commissioners
- Liaise with, and book appointments at, settings
- Ensure appropriate infection control policy and procedures are in place
- Carry out survey dental examinations and record findings in accordance with protocol
- Enter data in a timely fashion

¹¹ Disclosure and Barring Service <https://www.gov.uk/government/organisations/disclosure-and-barring-service>

- Carry out data cleaning according to the guidance provided
- Transmit the survey data securely to dental epidemiology co-ordinators within the required timescales.

The provider will demonstrate that they have effective links with local organisations whose co-operation shall be required for successful completion of the fieldwork.

Venues

In order to undertake the fieldwork the provider will be expected to operate in a range of venues specified in the national protocol within the local authority boundary to collect data and will be expected to provide a transport solution to enable this.

Days/hours of operation

- The service will routinely operate Monday to Friday during working hours
- Survey hours should be responsive to the preferences of the sample population and may need to operate outside the above hours to enable collection of data
- Surveys which involve schoolchildren will need to have data collection take place during term times.

3.7 Population covered

The provider will survey residents and children attending schools within the local authority area, dependant on the population group under scrutiny in the survey.

3.8 Any acceptance and exclusion criteria and thresholds

The provider will not carry out surveys for populations outside of the local authority area under this specification.

3.9 Interdependencies with other services

The provider shall be required to work closely with organisations to ensure maximum participation in the surveys.

The provider will maintain efficient working relationships with allied services, agencies and stakeholders to enhance the quality of care delivered and to strengthen and extend established partnerships across the local dental public health economy.

Partners will include but are not limited to:

- PHE national lead for DPHEP
- PHE Dental Public Health Intelligence Team and Risk Factors Intelligence Team
- PHE dental epidemiology co-ordinator for the local authority area
- Dental epidemiology trainer and standard examiner for the region
- Consultant in dental public health for the area
- Public health leads responsible for oral health in the local authority
- Schools

- Early years settings
- Relevant agencies and managers relevant to the target population
- Community dental service, if this is not the provider
- Local professional network for dentistry
- NHS England

4. Applicable service standards

The surveys will be conducted according to a national standard protocol and examiners will be trained and calibrated, when necessary, to a national standard. The sampling procedure will conform to the national standard and will be agreed with the PHE dental epidemiology co-ordinator before fieldwork is carried out. Dental epidemiology co-ordinators are employed by PHE. They work on a regional basis and are responsible for the quality assurance of the fieldwork carried out in their area. This quality assurance and standardisation allows local, regional and national comparisons of the data.

4.1 Applicable national standards

NB: this is not an exhaustive list of the guidance available; the websites for each organisation provides detailed information. The provider will ensure services reflect updates in guidance and recommendations as and when they are produced.

The provider will conduct the DPHEP surveys in accordance with the national protocols. In the instance where a survey is conducted outside of the DPHEP the provider will be provided with a suitable protocol in agreement with the commissioner.

4.2 Applicable local standards

The provider will use local resources where available and apply local policies guiding principles when planning and undertaking the fieldwork.

These will include:

- The relevant local authority's safeguarding children procedures
- The relevant local authority's safeguarding adult procedures
- Local NHS policies with regard to infection control, use of allergen free gloves, reporting of adverse or serious incidents, off-site safe working, provision of interpretation services and data protection

4.3 Data requirements

- The provider will provide and fund all suitable information and communication technologies (ICT) systems (hardware and software), that will support data collection and reporting with the capacity to transmit data securely in line with policy and national standards. It will also ensure secure storage of confidential service users' notes, preferably using a computerised system and be registered with the

Information Commissioner's Office (ICO)

- The provider shall submit a completed set of clean data to the PHE DPHEP Team via the dental epidemiology co-ordinator or the appropriate institution as defined in the national protocol relevant to the survey conducted each year
- In the instance of a local survey being conducted which is not part of the National Dental Public Health Epidemiology Programme completed and cleaned data will be submitted to the organisation agreed with the commissioners
- It is acknowledged that the data collected as part of this specification will not be owned by either the commissioning authority, or the provider and that the responsibility for its governance lies with Public Health England. Only centrally checked and PHE authorised data will be used for local analyses.

5. Indicative activity plan

Sample sizes shall be agreed in line with the DPHEP when appropriate.

The initial requirement is to undertake the DPHEP surveys as a minimum, however it is recognised that individual local authorities may require larger samples to be drawn for some surveys occurring during the lifetime of the contract. Where a local authority requires the provider to carry out enhanced or larger sized sample surveys, or surveys in addition to the national programme the authority will give sufficient notice to the provider and negotiate any changes, including changes in funding, to allow this to occur.

6. Activity reporting and quality monitoring

The provider will supply a project plan and timely reports of progress to the local authority lead for oral health. This will aid partnership working and give the opportunity for partnership working to gain support with relevant departments.

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Appendix 4. Suggested quality and key performance indicators

All quality targets will be reported through an annual quality and performance report that will be submitted to the commissioner prior to the annual contract review meeting.			
Indicators for providers to assure	Threshold	Method of Measurement	Consequence of breach
i. Regulation and legislation			
Infection control policy in place to ensure appropriate infection prevention and control when carrying out dental surveys	Essential requirements of HTM 01-05 met	HTM 01-05 audit	Remedial action plan
Equality and diversity policies in place	Equality and diversity policies in place	Equality impact assessment undertaken on policies and services and action plan to improve services	Remedial action plan
Policy in place to ensure all data are handled in accordance with data protection requirements	Current NHS Information Governance Toolkit (IGT) completed and appropriate level achieved	Confirmation of achievement of appropriate level of NHS IGT	Remedial action plan
ii. Service user and public safety			
Systems are in place to ensure all untoward incidents/near misses are reported, investigated, action plans in place, implemented and monitored	All incidents/near misses recorded and actioned appropriately	Evidence of incident reporting policy in place Annual report of all incidents with action plan. Evidence of learning and changes to practice including team meeting notes	Remedial action plan

All serious untoward incidents (SUI) including 'Never Events' reported to commissioner within two days	100% of SUIs reported to commissioners within two days	Audit and action plans for each SUI and updates and progress	Remedial action plan
Safeguarding adults and children policies and procedures in place	All staff aware of safeguarding policies	Policies in place Audit Staff training	Remedial action plan
iii. Governance and risk management			
Checking procedures in place for: <ul style="list-style-type: none"> Professional registration Professional indemnity Occupational health clearance DBS checks Lone worker or doubled up working policy 	All staff: <ul style="list-style-type: none"> On professional register Received occupational health clearance DBS checked 	Policies in place Audit Staff records	Remedial action plan
Performance			
<p>The provider shall provide a monthly activity and quarterly report detailing performance against key performance indicators below. The provider will include details of, and reasons for, any failure to meet any of the key performance indicators. The provider shall provide the following activity information to the commissioner on a monthly basis during the agreed fieldwork survey time period:</p> <ul style="list-style-type: none"> Total number of eligible population to be sampled Number of sample population surveyed Number of survey sample consenting to participate in the survey 			

Performance indicator	Suggested threshold	Method of measurement	Frequency	Consequence of breach
Evidence of compliance with the PHE protocol	100%	Quality and performance report	Yearly or as expedient to the commissioner	Time-bound remedial action plan
Evidence that staff are appropriately trained and calibrated to deliver the epidemiological surveys	100%	Quality and performance report	Yearly	Time-bound remedial action plan
Percentage of sample population returning completed consent forms per setting	>65%	Quality and performance report	Monthly	Time-bound remedial action plan
Percentage of consented sample population surveyed	85%	Quality and performance report	Monthly	Time-bound remedial action plan
Number of sessions cancelled due to staffing issues	Fewer than one per month	Quality and performance report	Monthly	Time-bound remedial action plan
Staff are up to date with the relevant level of safeguarding training	100%	Quality and performance report	Yearly	Time-bound remedial action plan
Number of service users making formal complaints about the service (verbal or written)	Actual number	Quality and performance report	Monthly	Time-bound remedial action plan
Evidence of improvements made to service as a result of feedback	N/A	Quality and performance report	Yearly	Time-bound remedial action plan
Number of service users complimenting the service	Actual number	Quality and performance report	Monthly	Time-bound remedial action plan
Submission of a complete cleaned set of data by agreed deadline to PHE	100%	Quality and performance report	Yearly	Time-bound remedial action plan

Appendix 5. Suggested questions for tender bids

	Elements of a satisfactory answer
What is your understanding of the purpose of these surveys?	<ul style="list-style-type: none"> • Provision of robust, comparable information for use by a range of agencies (local authorities, NHS England, DH, Indicators in health profiles, child and maternal health profiles and Public Health Outcomes Framework) • Production of standardised data to allow comparison over time and between and within various health and local government geographies • Identification of places and population groups where oral health is poor <p>Answer suggestive of risk – incorrect knowledge of purpose of data and who uses it and no appreciation that standardisation is important</p>
Could you describe what experience and expertise your organisation has that is relevant to this specification?	<ul style="list-style-type: none"> • Previous experience in delivering an epidemiology service and delivering required final products within the timescale required • Understanding of the need for, and compliance with, national protocols • Trained examiners who have been calibrated in the past and/or examiners who are willing to undergo training and calibration • Experience of working in a non-clinical environment • Maintaining infection prevention and control in a community setting. • Experience of working with schools, residential homes and working well with a range of partners • Experience and willingness to put effort into achieving good consent rates and low numbers of errors in the completed data set <p>Answer suggestive of risk – no previous experience and no demonstration of awareness of infection control in community setting, importance of engaging well with partners, activities required to achieve good consent return levels, no recognition of the existence of national protocol</p>
Could you describe the team that your organisation will put forward to undertake each stage of the survey?	<p>Team comprises :</p> <ul style="list-style-type: none"> • an experienced examiner – (either a dental surgeon, dental hygienist or dental therapist) • an experienced support worker to undertake preparation stages, support examiner in the field and enter coded data into dedicated computer programme • A team manager who will support efforts and ensure sufficient time is given to ensure the survey is undertaken to a high standard • Team members to be willing to attend training and calibration and adopt all standards in national protocol • Team members to have high level communication and social skills <p>Answer suggestive of risk – no clinician or support worker with suitable</p>

	<p>experience or appreciation of the need for training, calibration or compliance. Comments that suggest speed of completion or low cost supersede need for accuracy</p>
<p>What experience and expertise do the team members have with regard to dental epidemiological surveys?</p>	<ul style="list-style-type: none"> • Clinicians and support workers with experience of dental epidemiology in the UK • Previous application of standards and national protocol • Previously calibrated examiner with BASCD standards • Familiarity with local schools and methods of approach <p>Answer suggestive of risk – None of team with experience of dental epidemiology, no previous application of standards or of working to a national protocol. No understanding of the need for calibration of examiner. No recognition that work partners need to be approached with sensitivity</p>
<p>Do you know what guidance and legislation there is relating to this work?</p>	<ul style="list-style-type: none"> • Familiarity with relevant sections of Health and social care Act 2012 and or Statutory Instrument SI3094 • Local authority responsibilities • National protocols • DH guidance for positive consent • Information governance <p>Answer suggestive of risk – no understanding of the need for IG or consent process. Unaware that a national protocol in place for each survey</p>
<p>Could you describe agencies and individuals with whom your organisation will need to work to be able to deliver this work?</p>	<ul style="list-style-type: none"> • Description of stakeholders to include <ul style="list-style-type: none"> ▪ national and local DPHEP team members ▪ regional dental epidemiology co-ordinators and trainer ▪ consultants in dental public health ▪ local authorities ▪ schools, school nurses • Illustration of experience of working with these <p>Answer suggestive of risk – unable to identify main stakeholders or why these need to be engaged</p>
<p>Could you describe what contingency plans you have to ensure delivery of all stages of the process?</p>	<ul style="list-style-type: none"> • Description of comprehensive business continuity plan in place, including: <ul style="list-style-type: none"> ▪ staff shortage, equipment issues, transport issues, difficulties accessing survey population and realistic mitigating factors identified <p>Answer suggestive of risk – No Business continuity plan, unable to identify main risks to programme delivery and little attempt to state how service continuity will be maintained</p>
<p>Scenario – if, for example, one of your clinical team was incapacitated how</p>	<ul style="list-style-type: none"> • scenario in business continuity plan, dependent on length of incapacity. Short term by being proactive in getting the survey underway so plenty of time for any short-term delays to be caught up with before deadline for data submission. Longer-term plans in

<p>would you manage to maintain a clinical service and deliver all parts of the survey?</p>	<p>place for locum for clinical services and spare examiner(s) trained and calibrated in event of this problem, keeping commissioner informed of progress and identifying potential risks early</p> <p>Answer suggestive of risk – no realistic solutions given, no reference to a business continuity plan</p>
<p>What quality measures will you apply to ensure your organisation meets the requirements of this work?</p>	<ul style="list-style-type: none"> • List of quality measures which includes familiarity with protocol, need for training and calibration, having adequately experienced staff with sufficient time to undertake work, provision of specified equipment, recognition of policies relating to infection control, use of allergen-free equipment, child protection and data protection • Outline plans of how each quality measure would be met <p>Answer suggestive of risk – limited recognition of quality requirements and little effort to document how any quality measure has been met previously by the provider</p>
<p>Do you have an inventory of the standard equipment required to undertake the surveys?</p>	<ul style="list-style-type: none"> • Inventory to include: <ul style="list-style-type: none"> ▪ Specified light ▪ Mat for supine examination ▪ Sufficient mouth mirrors for examination of about 60 children per day. With specified probes for potential use for most of these ▪ Disposables to include gloves, cotton wool rolls or buds for drying and trays for instruments ▪ Method of transporting clean and contaminated instruments <p>Answer suggestive of risk – limited list of equipment with little attempt to source or cost this</p>
<p>Please describe what measures you will adopt to ensure high standards of infection control.</p>	<ul style="list-style-type: none"> • Identification of main sources of cross infection, reference to HTM 01-05 and how this would be adhered to, local policies on infection prevention control in a survey setting and completed audits demonstrating adherence to good practice <p>Answer suggestive of risk – limited reference to any national standards and national protocol with little attempt to interpret these in a survey setting</p>
<p>What plans do you have for dealing with volunteers who are found to have a treatment need?</p>	<ul style="list-style-type: none"> • Reporting of a policy or intention about this, planned discussion with NHSE, clear means of giving information to volunteers or parents <p>Answer suggestive of risk – statement suggestive of encouraging attendance to the provider’s own practice(s), no understanding of professional responsibility</p>

<p>Do you plan to incentivise the team to complete the survey on time? If yes, what measures will you apply?</p>	<ul style="list-style-type: none"> • Response indicates recognition that accuracy and adherence to protocol are more important than speedy completion. • Recognition that local surveys are part of a national one so time limits should be adhered to and the fieldwork team will be given adequate time and resources to complete the task within the time constraints <p>Answer suggestive of risk – any incentive methods which may reduce accuracy or impact on compliance with protocol, such as financial rewards or deductions. Indications that the provider will restrict resources and allow insufficient time for completion of fieldwork according to requirements of protocol</p>
<p>Please describe what measures you will adopt to ensure complete data security</p>	<ul style="list-style-type: none"> • Response indicates recognition of importance of data security for surveys • Data security protocol in place • Registration with Information Commissioner • completion NHS information governance toolkit, importance of consent in sharing data • secure transmission data via NHS net • locking away any person identifiable data • secure portable ITC equipment • policy to minimise loss of any collected data, adhere to protocol and any further survey guidance <p>Answer suggestive of risk – no acknowledgment of importance in surveys, no protocol in place</p>

Appendix 6. Suggested contract monitoring questions to ask of provider of fieldwork

<p>If additional samples are being commissioned. Ask five months before regional training (usually provided in September):</p>	
<p>Are you aware of the requirements for a larger sample? Have you sought advice about drawing the additional sample? Could you describe how you plan to go about this?</p>	<p>[Satisfactory answer – Requirements confirmed with commissioners, advice sought if necessary from dental epidemiology co-ordinator/consultant in dental public health, sampling plan described and been approved by dental epidemiology co-ordinator, number of examining teams requiring training and calibration identified Answer suggestive of risk – not discussed with dental epidemiology co-ordinator or consultant in dental public health or commissioner or discussed but no plan in place if additional sampling required]</p>
<p>Preparation phase – three months before regional training</p>	
<p>Have you identified who in your team will be undertaking the clinical examinations? And who will be providing administrative support?</p>	<p>[Satisfactory answer – team identified, includes more than one of each for contingency, ideally at least one member of each team is experienced Answer suggestive of risk – individuals or teams not identified or not enough for contingency]</p>
<p>Are they booked onto the regional training and calibration sessions?</p>	<p>[Satisfactory answer – yes session identified and in calendar Answer suggestive of risk – no]</p>
<p>Are there any anticipated problems with capacity to complete the fieldwork? What contingency plans do you have in case a member of the fieldwork team cannot complete the survey?</p>	<p>[Satisfactory answer – no anticipated problems or anticipated problems identified and plan in place to address these, plan in place with timings to ensure completion of fieldwork by deadline, contingency plan in place Answer suggestive of risk – no anticipated problems and no contingency plans or anticipated problem but no plan]</p>

<p>When do you intend to start the fieldwork? What steps will the team take to maximise consent form return levels? How can the LA help?</p>	<p>[Satisfactory answer – as soon as training and calibration completed. Schools already booked for October if possible, plan to maximise consent agreed with CDPH and commissioner and local authority engagement agreed Answer suggestive of risk – not sure when to start or delayed intended start date, no plan in place to maximise consent, local authority can't help or unclear of local authority role]</p>
<p>Will data be entered onto computer on each day of the survey? What is your estimated date of completion?</p>	<p>[Satisfactory answer – yes as far as possible or next day with plan as to how data will be kept secure and identified as needing to be entered. Completion date before deadline set by protocol Answer suggestive of risk – data entered as and when, no plans for secure storage or how to identify what's been entered and what's not. Not sure when data need to be submitted to PHE or how.]</p>

Appendix 7. Estimation of costs of a typical survey of caries among school children (local overheads, travel time and travel costs not included)

Activity	Admin or Dental nurses Approx Band 5 Time involved	Dental Officer or Senior Dental Officer Time involved
Training and calibration	1 session = 3.7 hours	3 sessions = 11 hours
Initial sampling		1 session = 3.7 hours
Contacting schools – approx 20 Sampling within schools Seeking consent	4 sessions = 15 hours 8 sessions = 30 hours	
Examining in 20 schools	20 sessions = 75 hours	20 sessions = 75 hours
Data entry	3 sessions = 11 hours	
Data checking and preliminary analysis, summary reporting and sending to central collection		4 sessions = 15 hours
Total	36 sessions = 133 hours	28 sessions = 103.6 hours

2016 costs		
Mid-point Band 5 nurse or administrator = £12.97 per hour	4182.82	
Mid Band C Dental Officer = £40.01 per hour		8327.86
Equipment - IT, disposables, non-disposable items		250
Estimated total to which locally relevant overheads, travel and travelling time should be added		8577.86