NATIONAL DENTAL INSPECTION PROGRAMME

1. Purpose of Paper

This paper describes the main components and processes associated with the National Dental Inspection Programme (NDIP) and demonstrates how the programme meets Caldicott principles and data security requirements. It has been produced by the Scottish Dental Epidemiology Coordinating Committee (SDECC).

2. Background

SHBDEP

2.1 The Scottish Health Boards Dental Epidemiological Programme (SHBDEP) was established in 1987 as a joint venture between the Scottish Committee of Chief Administrative Dental Officers and the Dental Health Services Research Unit (DHSRU) at the University of Dundee. SHBDEP operated under the supervision of a central co-ordinating committee – the SDECC (see section 5). Health Boards provided the dental inspection teams to undertake child dental inspections (in schools); DHSRU had specific responsibility for the training and calibration of examiners and provided advice on sampling and other statistical issues, data processing and analysis and the production of annual reports of the results.

2.2 Since 1987, 11 dental epidemiology surveys were undertaken – on P1, S1 and S3 children. The final SHBDEP report was published in 2000.

NDIP

2.3 Following the 11 SHBDEP surveys, the Chief Dental Officer initiated a review of the programme, the outcome of which led to the establishment of the NDIP surveys which commenced in 2003. This review took into account the framework of the NHS Scotland Act 1978 and the Education (Scotland) Act 1980.

2.4 The Education (Scotland) Act 1980 section 57(2) states that the Secretary of State has a duty to secure the proper dental inspection of pupils and that this means that an education authority may require '*the parent of any pupil in attendance at any school under their management to submit the pupil for … dental inspection'.* (See Appendix 5)

2.5 Similarly, the NHS Scotland Act 1978 places a duty on the Secretary of State (for health) to provide for the dental inspection, at appropriate intervals, of pupils in attendance at any school under the management of an education authority unless a parent gives notice to the authority

that they object to the child's participation in the dental inspection. Hence, positive consent is not required.

2.6 The outcome of the review therefore, proposed a programme which had the principal aims of gathering data which would:

a) Inform parents/carers of individual children as to their dental/oral health status and;

b) Advise the Scottish Executive (now Scottish Government), Health Boards, Trusts and other appropriate organisations on the prevalence and trends in dental/oral disease through the use of appropriately anonymised and aggregated data.

2.7 In addition the programme should support dental attendance when individual child dental needs were identified.

3. Current NDIP Survey

The current NDIP surveys have two parts – a basic inspection and a detailed inspection.

Basic NDIP

3.1 The basic inspections involve a simple annual dental assessment of each P1 and P7 child in Scotland. NHS Boards may determine locally that additional groups of children may be included in NDIP at any time. The dental inspection is preceded by a letter being sent to each parent/carer informing them of the forthcoming NDIP inspection and stating how the information collected will be used. On completion of the inspection, a letter is sent to each parent/carer informing them of their child's dental/oral health status. Each child present at school on the day of the inspection is included, unless a parent/carer specifically withdraws them.

3.2 Data from the inspections are entered onto a laptop using national NDIP software. These data are used to generate letters sent to parents/carers to inform them of the findings of their child's dental inspection. Each local (i.e. NHS Board) NDIP coordinator or nominated deputy exports the basic NDIP data into a spreadsheet and transfers this securely via NHS Mail to Information Services Division (ISD) of NHS National Services Scotland where the data are housed, quality assured and analysed prior to compilation of the annual NDIP report.

3.3 Locally, basic NDIP data are used to inform service planning within NHS Boards. Basic NDIP data should therefore, be retained securely on NHS Board servers when they are judged by Boards to be

necessary for purposes of service planning and supporting dental attendance.

Detailed NDIP

3.4 Trained and calibrated dental teams deliver the detailed NDIP inspections. The detailed NDIP inspections are a more rigorous and comprehensive assessment that involves recording the status of each tooth surface in accordance with international epidemiological conventions. A random representative sample of P1 or P7 children is inspected in alternate years. NHS Boards may determine locally that additional groups of children may be included in NDIP at any time. The detailed inspections are a direct extension of the basic NDIP inspections for the randomly selected children.

3.5 The detailed inspection data are entered onto a laptop via national NDIP software, collated by each local NDIP coordinator or nominated deputy and transferred securely via NHS Mail to ISD where they are similarly housed, quality assured and analysed (in collaboration with the University of Glasgow Community Oral Health Section) prior to forming part of the annual NDIP report.

4. Data Security

4.1 NHS Boards are the Data Controllers for purposes of compliance with the Data Protection Act 1998 and in relation to all NDIP data whilst it is collected, stored and used for local purposes. Boards are also responsible for the way that NDIP data is submitted to ISD. Boards thus determine the purposes for which and the manner in which NDIP data are used by their local data collectors and should have written local guidelines requiring that local NDIP staff act only on instructions from the Board as data controller and comply with the obligations imposed by the seventh principle of the Act.

4.2 Once NDIP data has been submitted to ISD, NHS National Services Scotland (NSS) becomes the Data Controller. NDIP data held within the ISD secure environment are then subject to the data security and confidentiality standards of NSS and the same obligations as above apply.

4.3 A template for Data Security for NDIP (appendix 1) has been agreed by SDECC. The use of personal data within the NDIP programme must conform to the 8 data protection principles and all staff should receive training to ensure that the programme fully complies with the Data Protection Act 1998. NHS Board coordinators are expected to ensure that the template is followed and that it meets respective NHS Boards' data protocols. This includes the secure transfer of data to ISD via NHS Mail. NDIP laptops must conform to NHS Board requirements on data security, transfer and storage. NDIP data will

be retained in line with local data retention requirements and will be removed from laptops on conclusion of the survey.

4.4 Appendix 2 itemises the datasets which are transferred to ISD.

5. Governance

The NDIP programme is coordinated by the SDECC whose role and remit is as follows:

- Coordinate dental and oral epidemiology in Scotland
- Advise the CDO on strategy for dental and oral epidemiology
- Act as a centre of reference on dental and oral epidemiology for all age groups
- Take the lead in managing specific oral epidemiology programmes
- Communicate with NHS Boards and the wider NHS on dental and oral epidemiology
- Govern specific epidemiology programmes as appropriate

Membership of the SDECC is included at Appendix 3

Each of the 14 participating NHS Boards has responsibility for the governance of the local elements of the NDIP process. Individual NHS Boards can request the release of their own NDIP data from ISD for local secondary analysis and this is covered by Board/ISD confidentiality agreements. If requests are received for the secondary analysis of national NDIP data held by ISD, these will be handled according to ISD internal information governance procedures including, where necessary, approval by the NSS Privacy Advisory Committee (PAC). The SDECC should be informed of all such requests and will provide advice to ISD as appropriate.

6. Caldicott

Appendix 4 sets out how the NDIP programme meets the six Caldicott principles.

7. Summary and Future Development

The NDIP programme is a long established national dental epidemiological programme which yields high quality information relating to levels of and trends in dental/oral disease. The basic and detailed NDIP programmes together support NHS Boards to plan and deliver services for children and to assess the impact of these dental services.

Work to link local basic NDIP data with the national Childsmile programme and with existing dental clinical systems is currently being developed by ISD.

Appendix 1

Data Security Protocol for NDIP - Template

Introduction

The National Dental Inspection Programme is undertaken each year to

- collect accurate data on the pattern of dental health of children in specific age groups
- give information to parents/carers on the dental health of their children
- encourage dental attendance.

Consultant in Dental Public Health: <name>

There should be local written guidelines in place that require the data collector (usually the NDIP Co-ordinator) to act only on the instructions of the data controller (usually the Consultant in Dental Public Health). The data collector must comply with obligations equivalent to those imposed on a data controller by the seventh principle (the 'security principle') of the Data Protection Act 1998.

Pre-inspection data are required for every P1 and P7 child. These include name, date of birth, postcode and school. Coded epidemiological data are then recorded for each child at inspection. Completed inspection data are submitted to ISD.

Co-ordinator: <name>

Obtaining child data and populating NDIP database

The NDIP database will be populated by <electronic database/input from paper class lists>. Child data must only be e-mailed from a secure *.gsi, *.gse, *.gsx or *.gcsx e-mail address to the NHSMail address of <name/title>.

If school lists cannot be sent by secure e-mail, paper copies of lists must be collected and managed securely from the school/Education Authority by a member of the NHS Board's NDIP team.

NDIP Inspection Process

Laptop Security:

- Ownership of laptops – sharing/not sharing (note: sharing of laptops containing personal information must only take place between users who have the right of access to that information)
- Populating the database – by inspection teams/coordinator/admin support/IT Support Staff
- Physical security – inspection team responsible for laptop, which should not be left unattended when it is not within NHS premises

- E- security – password protected/fingerprint protected/encrypted (note: laptops holding personal NDIP data should be protected using encryption software)

Use of portable media

- Flash key not allowed/encrypted> (note: portable devices holding personal NDIP data should be protected using encryption software)

Data Security, Transfer and Storage

Following inspection, data entered onto the laptop are saved as NDIPData< >.mdb on <laptop/encrypted key/both>

Data are exported through the export function and the dataset <emailed to the coordinator using NHSMail/saved to central server/saved to secure PC> within < > hours of the inspection.

Following confirmation of receipt by the NDIP coordinator, the Inspection team should ensure that the relevant data files are then deleted from the laptop and any USB keys by a competent member of staff. In both cases the deletion should be permanent. Paper records should be securely shredded following upload to electronic format.

Data must not be passed to any other researcher or member of staff without written permission to do so from <NDIP coordinator/Consultant in Dental Public Health/CADO/Clinical Dental Director>

At year-end, collated NDIP data will be sent by the co-ordinator to ISD via NHSMail for analysis. Data will then be managed according to ISD/NSS data security protocols. A copy of this Excel spreadsheet may be retained by the NHS Board.[1]

Analysed, summary data will be returned from ISD via NHSMail to the NHS Board Co-ordinator and Consultant in Dental Public Health/CADO for (permanent) retention.

Detailed Inspections

Security protocols apply equally to detailed inspections.

Note: All staff involved in NDIP should have received data protection training (including physical security such as laptop transportation, handling of paper records, secure storage etc).

Signature required by NDIP staff member:

I have read the above and agree to adhere to this policy:

Name: …… …… …… Signature: …… …….. Date: ……

Please retain a copy for your records.

[1] Should data be lost or become corrupt at ISD. Thereafter, Board data can be accessed via ISD as required, so there is no need to retain at NHS Board level.

Appendix 2

The following datasets are transferred to ISD

NDIP Basic	NDIP Detailed
ChildID	ChildID
SchoolName	SchoolName
SchoolCode	SchoolCode
CHP	CHP
Local	Local
Examiner Name	Examiner Name
ExID	ExID
Exam Date	Exam Date
Surname	Surname
Forename	Forename
DOB	DOB
Age	YearGroup
Class	Gender
YearGroup	CHI_Number
Postcode	RepeatExam
Gender	Postcode
ExamType	MODid
No Exam	OHygiene
Repeat Exam	Sepsis
Abscess or Infection	Dental Examination codes
Gross Caries	
Carious Permanent Tooth	
Missing Permanent Tooth	
Restored Permanent Tooth	
Erosion	
Poor Oral Health	
Possible Orthodontic Treatment Needed	
Carious Primary Tooth	
Untreated Trauma	
No Obvious Caries	
Restored Primary Tooth	
AMR Chart Completed	
Further Intervention Required (CDS2)	
Notes Added	
Overall Category	
Further Intervention Required (CDS2_ADD)	
Dental Examination codes	

Appendix 3

Membership of SDECC (July 2010)

- Chairs of Adult Dental Health Survey Group; NDIP Operational Group and NDIP Report Group
- Two representatives of Consultants in Dental Public Health/CADO Group
- A representative of Clinical Dental Directors Group .
- A representative of NDIP Coordinators/Examiners
- A representative of the University of Glasgow
- A representative of the University of Dundee
- A representative of the Information Services Division
- A representative of Consultants in Public Health Medicine
- Specialty Trainees in Dental Public Health (in attendance)
- Chief Dental Officer or representative (in attendance)

Appendix 4

Caldicott Principles

Principle 1 Justify the purpose(s)	The national NDIP surveys are required to measure dental disease in children and to identify trends. This provides a robust monitoring system for measuring progress in improving oral health, informing the planning process and providing parents and carers with information on their child's oral health status. Basic NDIP data are used at a local (NHS Board) level to ensure that children's dental needs are met by appropriate local services. This includes sending letters to parents/carers informing them of the outcome of their child's inspection. ISD collates and analyses NDIP data, and this process requires the transfer of patient-identifiable data.
Principle 2 Don't use patient-identifiable information unless it is absolutely necessary	The use of patient identifiable information collected by the NDIP survey is necessary to ensure that the needs of individual children are met with appropriate service delivery. The full dataset is set out in Appendix 2. For example, data fields such as full postcode of child are required for purposes of assigning deprivation status, a key requirement of the survey.
Principle 3 Use the minimum necessary patient-identifiable information	Appendix 2 shows the full dataset required by ISD in order to compile the annual NDIP report. NHS Boards also require this for data linkage purposes, i.e. in order to determine dental registration status and monitor Childsmile activity; key issues in ensuring that services are available to meet identified individual needs.
Principle 4 Access to patient-identifiable information should be on a strict need-to-know basis	The data security template at Appendix 1 provides further detail on this. Data may be deleted from laptops once transferred post inspection to NHS Board NDIP coordinators. It may be necessary to retain some NDIP data on NHS Board servers thereafter in order to undertake data linkage work and to facilitate access to services and to retain a record of clinical activity.
Principle 5 Everyone with access to patient identifiable information should be aware of their responsibilities	Copies of this document and its appendices have been circulated to NHS Board coordinators, Consultants in Dental Public Health and CADOs. Each Board is responsible for ensuring that key staff are aware of their responsibilities.
Principle 6 Understand and comply with the law	Staff involved in NDIP at NHS Board level will all undertake training in Data Protection and Caldicott issues.

Appendix 5

The use of NDIP data to support dental attendance

Sections (2.7) and (3.3) supports the use of child-level NDIP outcome data to facilitate attendance of individual children in NHS dental services. This activity is supported by the Education (Scotland) Act 1980:

Education (Scotland) Act 1980

Section 39

Paragraph (1) It shall be the duty of the Secretary of State to provide for the medical and dental inspection, at appropriate intervals, and for the medical and dental supervision, of all pupils in attendance at any school under the management of an education authority, and of all young persons in attendance at any junior college or other educational establishment under such management.

Paragraph (2) It shall be the duty of the Secretary of State to make such arrangements as are necessary for securing that there are available for such pupils and young persons as aforesaid comprehensive facilities for free medical and dental treatment.

Paragraph (3) It shall be the duty of every education authority to make arrangements for encouraging and assisting pupils and young persons to take advantage of facilities for medical and dental treatment made available under subsection (2) but where, in the case of any pupil or young person, his parent gives notice to the authority that he objects to the pupil or young person availing himself of the said facilities, the pupil or young person shall not be encouraged or assisted to do so.

Paragraph (4) It shall be the duty of every education authority to afford sufficient and suitable facilities for the medical and dental inspection, supervision and treatment, described in subsections (1) and (2).