JUNE 2015

Review of Dental Health Services and Benefits

R.91/2015

Foreword

During 2014 the departments of Health and Social Services and Social Security worked together to commission two expert reviews of the Island's dental provision. The oral health of school children was surveyed by a specialist UK dental examiner and our spending on dental services and benefits was independently examined by a team of external experts. Both reports are presented here in full.

The research offered some good news. The dental disease experience of five-year-old children in Jersey is well below the average experienced in England and lower than the best performing region in England and the South East. But even so, this research shone a spotlight on some significant challenges.

The review of dental spending estimates a States spend in the region of £1 million a year, some of which is targeted towards low income families and pensioners and some of which is a universal provision for children or for people with special needs. But there are gaps in the data and information we collect, and these gaps hamper our attempts to assess how effective we are at meeting demand. In addition, it is not possible to offer reassurance that the current service model can adapt to and absorb the demands of our ageing population.

We have considered these challenges in the departmental report which acts as a preface to the independent studies. Here we set out the background to this research, the key findings and a programme of work that aims to create the foundations on which a coherent and sustainable service may be built. Our action plan begins with the collection of better data and improved governance; with these two foundation stones in place we can be confident that our budgets can be focused on areas of real need and deliver clinically appropriate services.

The review gathered views from a wide range of people. In the course of their discussions, and viewed through the eyes of independent observers, a series of simple and short-term actions have been identified. We have already started to make changes which have the potential to improve the services people experience. We have strengthened leadership and management structures in the dental department; identified ways to improve benefit schemes and ways to increase uptake among eligible people; and we have initiated a new way of collecting data - for the first time, Islanders have been be asked about their experience of dental disease in the Jersey Annual Social Survey. And there are more changes that can be made over the coming year. In particular we are seeking to invest more funding into dental benefits in the

65+ healthcare scheme for pensioners, but this will ultimately be determined by the content of the Medium Term Financial Plan.

The final part of our Action Plan points to the creation of a sustainable and coherent oral health strategy. We use 'sustainable' in that the strategy must be affordable as our population ages and the needs of islanders change and we use 'coherent' to mean it is joined up between departments and with other States strategies and priorities. The oral health strategy will be developed using the frameworks provided by our external experts and will be informed by our own data, as it builds. A fundamental requirement is that the strategy sits within the wider Sustainable Primary Care Strategy, adopting common principles and values and reporting into the Ministerial Oversight Group. Delivery against these actions will be launched in September 2015 with the establishment of a Dental Strategy Working Group, formed by officers across States departments.

Our ambition for improvement is high – however, we have to acknowledge that we will be undertaking service re-design during unusually challenging times as the States takes measures to address a significant budgetary deficit.

Finally, we would like to thank the community dentists, consultants and hospital staff who have shared their views, and various organisations, including the Jersey Consumer Council, Jersey Dental Fitness Scheme Board of Management and Jersey Dental Association, for their support with this review. We would also like to thank the Island's Primary schools which worked with us to benchmark children's dental health. Their opinions and the conclusions set out in these reports provide a valuable platform from which we can take the next steps in developing a service fit for our needs and for the future.

Deputy Susie Pinel
Minister for Social Security

Senator Andrew Green MBE
Minister for Health and Social Services

A report from the departments of Health and Social Services and Social Security

Progress and Action Plan: Delivering dental services within a sustainable oral health strategy

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Introduction

In November 2013 the Minister for Health and Social Services and the Minister for Social Security gave a joint commitment to undertake a programme of work to review dental benefits and services. The four deliverables identified at that time were:

1. An epidemiological survey recording the dental health of children
2. A review of States spending on dental services and benefits
3. Completion of a business case to deliver dental education
4. An implementation plan to deliver enhanced dental services

This report provides a summary of the work that has been completed and presents an Action Plan for further tasks. The external reports completed in respect of tasks one and two are reproduced in full.

During 2014 a dental examiner (trained to BASCD standards) conducted a survey among 5-year old children. The dental examiner used the same methodology as that applied in the UK, allowing direct comparisons with the UK. Oral Health among the children examined was generally good, exceeding the averages noted in the UK.

A review of States spending was completed during 2014 using a team of independent experts ('OCC'). The review took a strategic look at provision across the Island and the respective roles and spend of SSD and HSSD. It identified short term and longer term actions and identified some significant challenges.

As a result of the review, tasks three and four have been reconsidered. The original intention, to write a business case to develop dental education, has been revised and a new action is proposed to develop oral health education within public health messages. This is in line with OCC recommendations. In addition, the OCC review suggested there are some basic but essential pieces of housekeeping which must be completed before we embark on any whole scale change. Our implementation plan has changed focus to become an Action Plan which will develop the foundations on which a coherent and sustainable strategy can then be built.

Key Findings - Epidemiological survey

The epidemiological survey in March 2014, reported that the oral health of the children reviewed was generally good and comparable to regions in England with the highest levels of good oral health. As in previous years there was disparity in the level of dental health between schools. The review of dental services suggested that these data may not be relied on to target interventions at specific schools since the pattern of decay and distribution of poor dental health is not sustained as children grow older; at age 7 epidemiological data would prioritise a different set of Jersey schools from those identified at age 5.

Key findings – Dental services and benefits

The OCC review of spending on dental services and benefits proposed a number of recommendations, scalable from short term tactical actions up to challenges which impact system wide. The review identified three areas of concern which should be addressed as a priority to facilitate the development of oral health care across Jersey.

1. Management information: the review suggested that existing management information was insufficient to be able to fully determine the extent to which the States achieve value for money against an estimated £1 million per annum spend. A key recommendation is to improve our intelligence around demand, capacity, service delivery, quality and care outcomes.

2. Governance: the review identified gaps and inadequacies in governance across all services. The roles played by bodies, departments and stakeholders needed to be clarified and strengthened and it was not possible to easily demonstrate adherence to GDC requirements. Governance surrounding initial and ongoing eligibility for the dental schemes and for reimbursement of dental charges should be strengthened.

3. Strategy: The review identified a lack of strategic direction for oral health services and recommended that a cohesive strategy, involving all stakeholders is developed. Since the field work underpinning the review was undertaken, considerable progress has been made on developing a primary care strategy and an acute services strategy, both in line with the overarching strategy agreed by the States in 2012 (P.82/2012). The future of dental services must be considered in line with these other strategies.

Action Plan

The original intention was to use the external reviews to help to shape an implementation plan to deliver a new system. However the research has identified challenges in our current management information and governance which must be addressed before further development can take place.

Our commitment to deliver an 'implementation plan' has therefore been superseded by a commitment to develop and commence implementation of an Action Plan which will address the recommendations of the review. The plan contains six elements comprising four enablers (required to take the service forward) and two directionally correct initiatives, (which can be tackled in the short to medium term). The evaluation and learning from these will then influence the content of an Oral Health Strategy.

The elements of the Action Plan are:

Enabler: Strengthen Governance

The OCC review identified gaps in local governance arrangements and highlighted this as a pressing concern. As a result of their observations this Action Plan suggests that the service is offered strong leadership (by the Primary Care Governance Team or a Head of Profession). The aim would be to further the quality of care and monitor adherence with the requirements of the General Dental Council, contributing clinical expertise to the delivery of a sustainable strategy.

The Governance stream of work also calls for greater clarity in the roles and responsibilities of departments, bodies and other stakeholders, these will be agreed and clarified. A new Dentistry (Jersey) Law has recently been developed by HSSD to provide for the local registration of all types of professional involved in providing dental care. The implementation of this new law will be a useful step in the future development of an appropriate governance system.

Enabler: Workforce Development

Workforce development is key to delivering good governance, an efficient and value for money service and to develop a service which is sustainable. The review did not complete a workforce survey but anecdotal reports suggest a sizeable cohort of clinicians are due to reach retirement age within short succession of one another. There is an opportunity to ensure that the most appropriate practitioners are identified, via workforce strategy development, to enable Jersey to attract and develop the right mix of skills for a sustainable service. The Action Plan should also consider mechanisms to invest in the workforce so they may develop the skills to manage dental data and regulatory compliance.

Enabler: Develop a needs assessment

The OCC review recommended that a needs assessment be conducted, offering better intelligence on the demands placed on Jersey's oral health system. While the value of epidemiology surveys was questioned, the review identified opportunities to collect information by recording the oral health of children examined as part of the Community Dental Service school visits. Further opportunities may be found in the school survey conducted by Education among children in years 6, 8 and 10. The opportunity has already been taken to include questions in the 2015 Jersey Annual Social Survey to collect data on the experience of dental disease among adults.

Enabler: Develop management information

The review encountered difficulties in quantifying the service currently offered and identified gaps in management information, particularly in the Dental Department. As a priority the Action Plan should seek to identify opportunities to improve the functionality of the current IT systems as part of the HSSD IT strategy and to integrate this, possibly via future upgrades, to its Patient Management systems.

Initiatives: Public Health Education

In 2013, the Ministers for Health and Social Services and Social Security gave a commitment to develop a business case for dental education. Independent of this commitment the OCC review recommended the introduction of an education programme. The review stressed, however, that this programme should not be isolated and badged as 'Dental' or 'Oral Health' but that it be fully integrated into the Public Health agenda, arguing that common determinants of disease cut across issues such as obesity, diabetes, alcohol misuse. The education plan should also recognise a life course approach and initiate interventions and messages appropriate to specific life stage.

Initiatives: Improve existing delivery systems

The OCC review suggested the island will struggle to move forward with our provision of dental services and benefits without putting in place improved management information and governance. However it is possible to identify some short and medium term activities which are directionally correct. These activities will be identified and championed by a working group and are likely to include a rationalisation of administration cost (creating savings which might be diverted to revise existing services), prioritisation of dental hospital services and changes to the process for identifying and supporting people wishing to receive benefit.

Some activities have already been completed. The Jersey Dental Fitness Board of Management has looked at how its scheme is advertised, and has financially supported direct mailing to

eligible school children and attended open evenings where packs promoting the scheme were distributed directly to parents. Over a thousand information packs have been distributed to children and their parents during 2014. Social Security has also increased communications with pensioners. Each August a leaflet has been sent to pensioners informing them of the benefit schemes they may be entitled to. A second leaflet was sent in January, these communications are being redesigned and will become part of the regular programme of communications.

Social Security has also surveyed pensioners who are members of the 65+ healthcare scheme but have not made any claims for benefit. Contact was made with 20% of non-claimers and half of those interviewed said they had not made a claim because they'd forgotten they were entitled. This is being taken forward in discussion with the company who administer the scheme.

These actions are in line with the agreement in the 2013 debate "to undertake a publicity campaign to promote dental health services provided in Jersey." The other action agreed at that time was to examine "the potential for expanding the range of those eligible to partake in the Jersey Dental Fitness Scheme." The future development of that scheme will be considered, alongside the 65+ Healthcare scheme and other dental spend, as part of the Action Plan and in conjunction with the development of the primary care strategy.

Outcome: Development of a Sustainable and Coherent Oral Health Strategy

The OCC review recommends that Jersey develop an oral health strategy. In order for this to integrate with the strategic direction and development of other services, this strategy should be formed mindful of wider developments across the Island's healthcare. For example oral health should feature in the Public Health Strategy, acute dental care should be encompassed in the Acute Service Strategy and all other dental services within the Primary Care Strategy. In particular, the Acute Service Strategy has identified the requirements and clinical model for the complex dental services requiring hospital facilities and/or expertise. The Acute Service Strategy does not currently envisage making provision for any other dental services as, in line with the strategic principles agreed by the States, these should be located and managed within Primary Care.

It is proposed that an oral health service model is developed by a cross department/multi-discipline working group informed by a series of lower level tactical and information gathering projects. The group will work with the authors of the public health, acute services and primary care strategies and identify, prioritise, initiate and monitor projects that support an oral health service plan for the island.

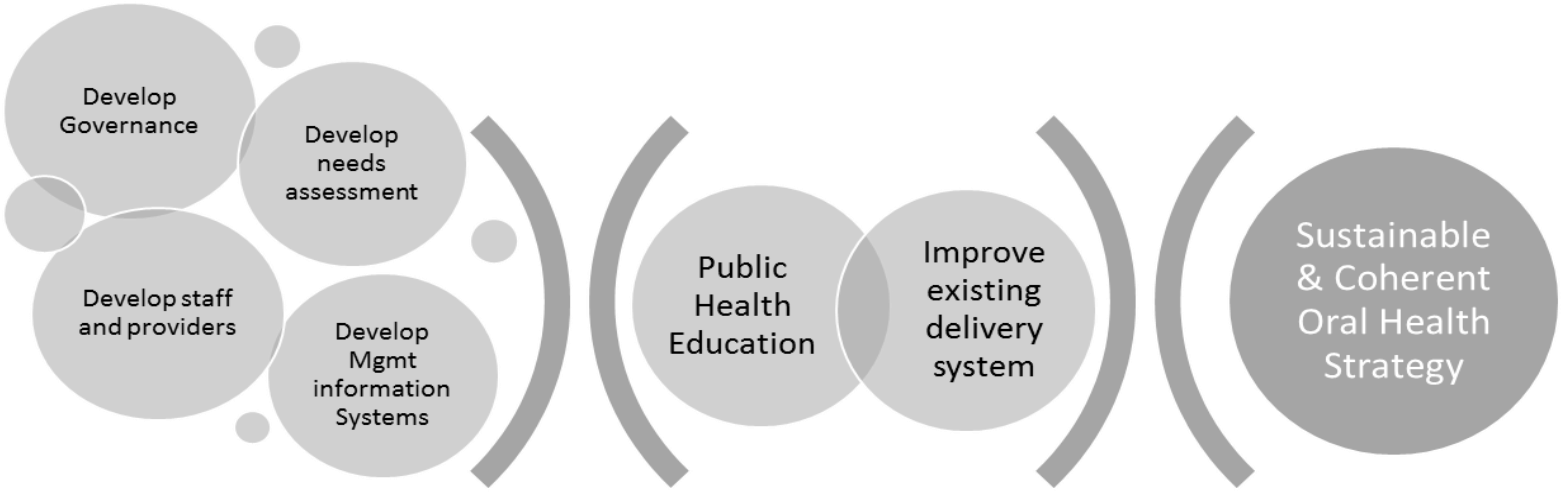
Outcome: Future delivery system

The OCC review, drawing on models of dental care in other jurisdictions, suggested that our future delivery system consider contracting out services from the existing Community Dental Service and that these contracts are based on a reduction of treatment need, with payment through capitation schemes or insurance schemes. State funded support based on need will be an important principle, as will interventions to tackle the determinants of disease.

Next steps

All Departments are facing significant funding challenges at present and any new initiatives must be carefully prioritised against a range of competing demands. Whereas actions have been identified in this report, it has not been possible to allocate a clear timetable to their completion. Both departments will use their best endeavours to address these actions as resources allow, and to ensure that the ongoing development of other areas of health strategy fully reflect the need for the introduction of a sustainable and coherent oral health strategy.

Action Plan: Delivering a sustainable & coherent oral health strategy



Enablers	Initiatives	Outcome
JASS; School census at year 6, 8 and 10; data from CDS school visits; develop functionality of TrakCare; review workforce capability; define the role & responsibilities of HSSD, SSD, PCGT, JDA and others and deliver (improved) adherence to GDC requirements; patient satisfaction; care plans; transparent cost of care; CPD; establish complaints procedure; consider head of profession/'board' to develop dental service	Identify 'life course' and common determinants of poor oral health; PHE interventions for children; work with other care providers; identify short term 'wins' considering prioritisation of services in HSSD; explore fixed prices for income support cases; reduce admin spend on dental service & benefits ('Lean' projects), review eligibility & improve uptake within existing budgets.	Contract a strategy which is coherent across departments & providers and sustainable within budgetary restraint; aligned with the values and principles of the SPC Strategy and Acute Care strategy; built on improved governance, and mgmt information, operationally consider outsourcing from CDS to community; contracts based on reducing treatment need; capitation and insurance models; performance monitoring

The Oral Health of five–year-old school children in Jersey

A report on an epidemiological survey carried out in March 2014 to measure the prevalence and severity of decay in five-year-old school children.

Report commissioned by the States of Jersey Health and Social Services Department and Social Security Department

Fieldwork and Report written by:
Kate Cullotty BDS FDS RCPS

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EXECUTIVE SUMMARY

This report presents results from a dental epidemiological survey in Jersey, on dental disease prevalence in five year old school children, undertaken in March 2014. It was undertaken using the standard arrangements for dental epidemiology introduced in England in 2007. Since 2007/08 positive consent is required from parents and as this is a change in protocol and methodology, results of surveys carried out after 2008 cannot be compared directly with surveys prior to 2008 where negative consent was used. Positive consent has been used in England in the 2007- 2008 and 2011- 2012 five year old surveys.

Likewise the results for the Jersey survey in 2008, where negative consent was used, cannot be compared directly to this survey where used positive consent was used.

Twenty-nine schools and a total of 659 children took part. All state schools participated, and parental consent ranged from 100% to 39.2%. The overall consent rate for Jersey was 70.4%.

The standard measurement of decay/dental disease used for the BASCD surveys is visual decay at the dentinal level. This decay experience is measured by an index represented as dmft for primary teeth. This is a measure of the number of decayed (dt), missing (mt), and filled (ft) primary teeth as a result of dentinal decay

A low dmft is an indicator of low disease experience and conversely a high dmft indicates greater disease experience.

The survey carried out in 2008 reported a decay experience (mean dmft) of 0.76 comprising a dt component of 0.5, mt component of 0.17, and ft component of 0.09. The 2014 survey components are a mean dmft of 0.57, a dt of 0.37, a mt of 0.06, and a ft 0.14.

Whilst the dmft appears to have decreased and dental health may be improving, as this is the first survey using positive consent, real comparisons cannot be made at this time and ongoing surveys are recommended

Valuable data can be obtained by the use of standardised surveys, the limitation at this point is the impact of positive consent and the unknown prevalence of decay in the non response group. The dental decay experience of those surveyed in Jersey, is lower than the average for England and lower than the lowest region in England the South East (dmft 0.67).

174 of those surveyed in Jersey already have decay experience at five years old and work with families earlier for example, preschool, may be beneficial.

It is recommended that there is pro active work to improve response rates and further surveys are undertaken to enable comparisons. The use of other indicators such as ethnicity and measures of deprivation in future surveys are also recommended.

Dental Survey of Five year old schoolchildren, March 2014

1. Introduction

This report presents the summarised results of a commissioned dental epidemiological survey of the dental health of five year old schoolchildren in Jersey surveyed in March 2014.

2. Background

Jersey first undertook an epidemiological survey in 1987 and participated in a programme of surveys between 1998 and 2008. These surveys employed the 'British Association for the Study of Community Dentistry 'BASCD' methodology and allowed for direct comparison between Jersey and UK data. The States of Jersey wished to conduct a repeat of these surveys, focussing on children aged 5. The States of Jersey commissioned an independent, BASCD trained, freelance examiner to complete the fieldwork, analyse the data and to produce a report. The intention was that the resulting data should allow, where possible, comparisons between Jersey and other jurisdictions and comparisons across time with previous local surveys. As data from dental surveys can be used to plan and evaluate local services and plan programmes for dental health improvement, this survey will be used to inform policy development and will provide a benchmark of dental health.

3. Current survey

In the UK nationally co-ordinated dental epidemiological surveys of specific age groups have been run since 1987 using standards set by BASCD for sampling, examination, disease recording and reporting. In England these surveys are now part of the dental public health programme within Public Health England (PHE).

This survey in Jersey was undertaken using the standard arrangements for dental epidemiology introduced in England in 2007. Prior to 2007/08 dental surveys were carried out using the principle of negative consent i.e. parents were informed about the planned survey but had to proactively opt out. Directions from the Department of Health for England (2007) required that the method of consent should change. Since 2007/08 positive consent is required from parents and this change in protocol and methodology means the results of surveys carried out after 2008 cannot be compared with previous surveys where negative consent was used.

The survey carried out in Jersey in March 2014 therefore needs to be viewed as a baseline survey for Jersey. The methodology used is the same as that used for the survey of five year old children in England in 2007/2008 and 2011/12 and therefore comparisons can be made with England. As part of the National Dental Epidemiology programme the next survey of five year old school children is due to take place in England in the academic year 2014/15.

4. Method

All State and private schools were approached to participate as well as Mont a L'Abbe special school; this is a variation from the surveys in England where only children attending mainstream schools were sampled.

A letter was sent to the head teacher of each school explaining the purpose of the survey and requesting the schools involvement. Participating schools were contacted and a date for the survey agreed. Class lists were obtained with dates of birth to determine which children would be five on that day.

All children who were five on the day of examination could be included in the survey and a letter was sent via schools to the parents of these children asking for written, positive consent for their children to take part. No child was examined if positive written consent had not been obtained.

5. Examination and data collection

The examination process and diagnostic criteria used were those defined by BASCD (Pine et al 1997; Pitts et al 1997). This involves a visual examination using a plain mouth mirror and a standard light source, (Daray lamp). Dental recording is only of the primary dentition. Teeth are examined for decay (dt) at the dentine level, missing teeth (mt) and filled teeth (ft). Children were also examined for the presence or absence of dental plaque and dental sepsis (visual dental abscess). It is acknowledged in literature that this level of examination is an under estimate of the true level of disease as it is a visual examination only and the decay has to involve dentine, i.e. to have breached the hard outer surface of the tooth, the enamel. It is however a standardised, calibrated, method of recording to allow comparison.

All examinations were carried out by a BASCD trained examiner who is also a regional trainer. This was a different examiner to that used in the surveys in Jersey up to 2008.

The examiner used had also been involved in the fieldwork for the decennial Child Dental Health survey from November 2013 to January 2014. The data recording in the dicennial survey involves similar coding, but also involves decay detection at the enamel level. As part of the fieldwork the examiner also noted enamel decay. As this is not part of the standard BASCD reporting the results presented do not reflect this coding but the clinical findings of the examiner are used in the discussion/recommendations.

Data was recorded at the schools on to paper by trained recorders and the data was later entered into the Dental Survey Plus 2 computer programme specifically designed for survey analysis.

6. Results

6.1. Participation in the survey

All State and private schools were invited to participate in the survey. One private school declined and another has been excluded from the analysis due to a misunderstanding of the sample required and a resulting inability to revisit the school in the time scales available for fieldwork.

All state schools participated, and there was a range of consent from parents from 100% to 39.2% across all schools, State and private. The overall consent rate for Jersey was 70.4%

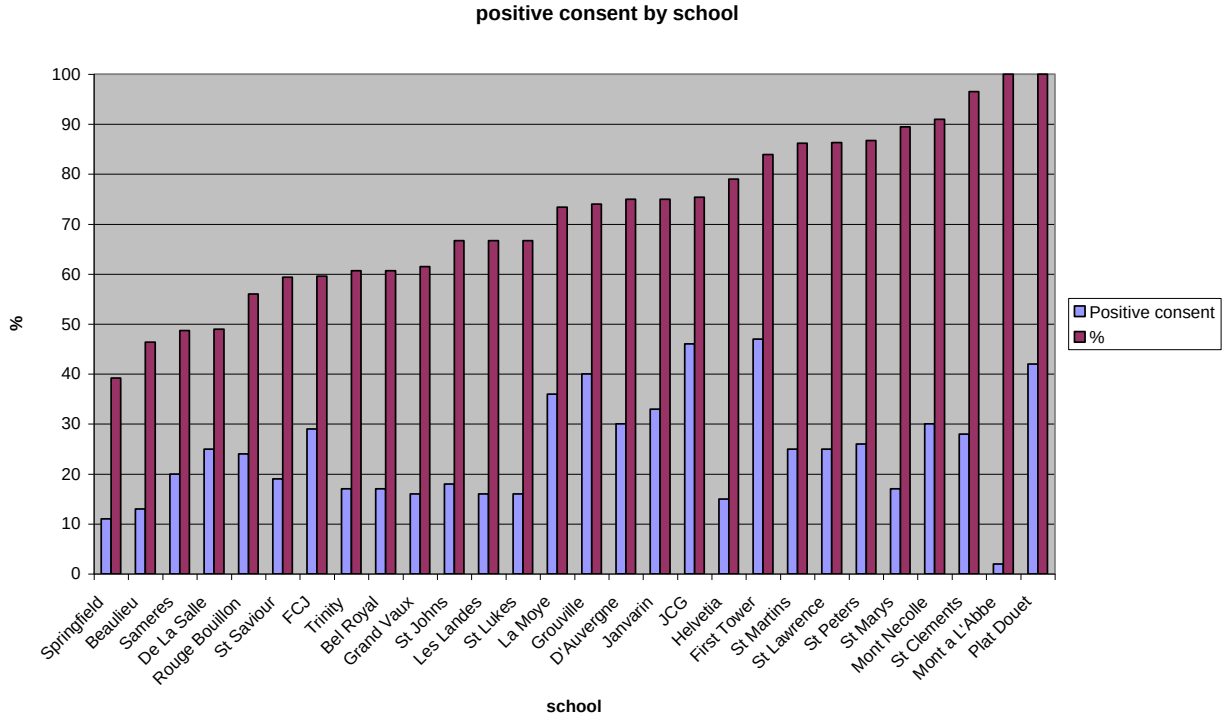
A total of 29 schools were visited, although the data from St Georges, (a private school), has been excluded due to a misunderstanding of the survey requirements.

A total, therefore, of 659 children were examined which represents 68% of the five year children sampled. Twenty children whose parents had consented were absent on the day of the survey (3%) and although no consent was received from 285 parents (29.6%), only two parents actually refused permission for their child's participation. Only one child refused to participate on the day (table 1, section 10).

The percentage of eligible children examined, at 68%, compares favourably with the percentage of 65.2% children examined in the 2011/12 survey in England and 66.8% in the 2007-08 survey.

The number and percentage of consent response rates for each school is shown in figure 1 below. The data for this table is represented in table 1, section 10, at the end of this report.

Figure 1



It is worth noting that at the school with the lowest response rate, Springfield, (39.2%) a standard school screening was also being carried out on the same day. There was a higher response rate for this screening and it may be that parents were unaware of the difference in the two processes and didn't understand the need to complete two consent forms. Another point to note is that at Rouge Bouillon there was one class where no consent forms were returned.

6.2 Prevalence of decay experience in five year old school children (dmft)

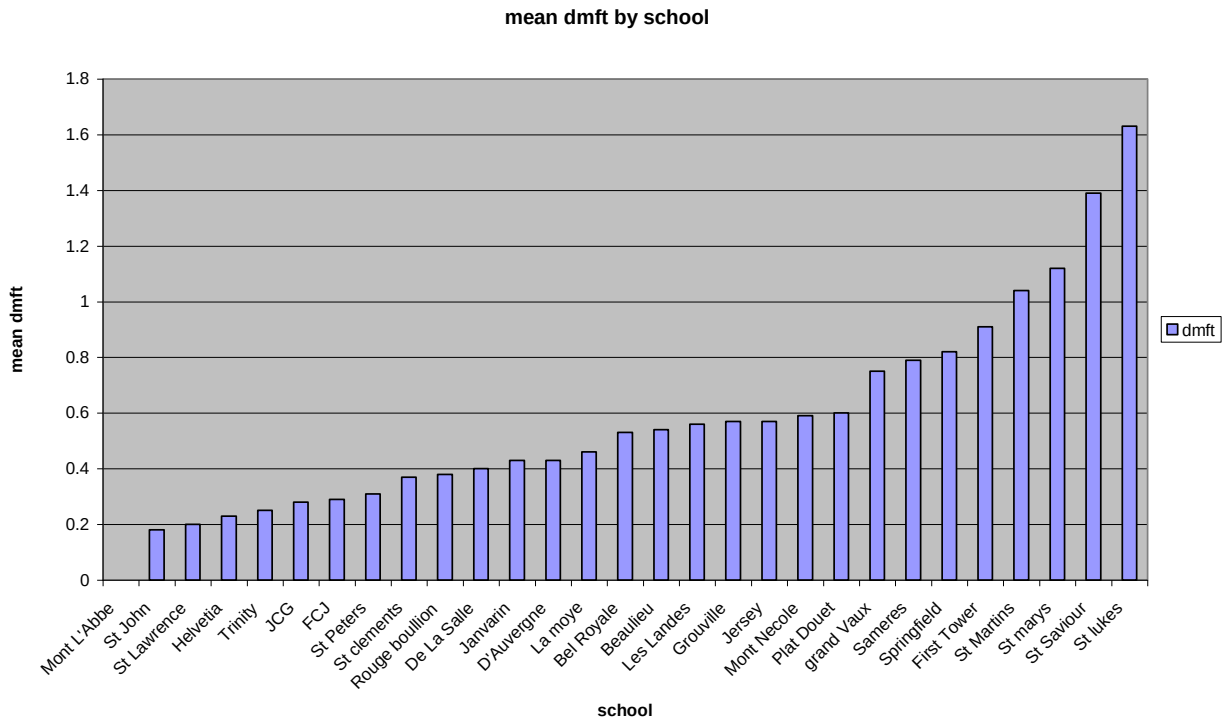
The standard measurement of decay/dental disease for the BASCD surveys is visual decay at the dentinal level. This decay experience is measured by an index represented as dmft for primary teeth. This is a measure of the number of decayed (dt), missing (mt), and filled (ft) primary teeth as a result of dentinal decay.

26.3% of five year old children in Jersey whose parents gave consent, had experienced dental dentinal decay, evidenced by untreated decay, extracted/missing teeth, or fillings due to decay (dmft). The comparison percentage for England in 2012 was 27.9%.

The mean dmft for Jersey of 0.57 compares favourably to England at 0.94 and that of the region with the lowest level in England the South East whose dmft was 0.67. Data again is from the 2011/12 five year old survey in England.

Figure 2 shows the individual Jersey schools ranked by mean dmft, the data for this chart is in the data tables in section 10.

Figure 2 (Section 10, data tables, table 2,)



A low dmft indicates low disease experience or good dental health. The higher the dmft the greater the disease experience in the surveyed population. The mean dmft ranges from 0 at Mont L'Abbe to 1.63 at St Lukes across the total population of five year olds surveyed in each school.

6.3 Proportion of children with decay experience

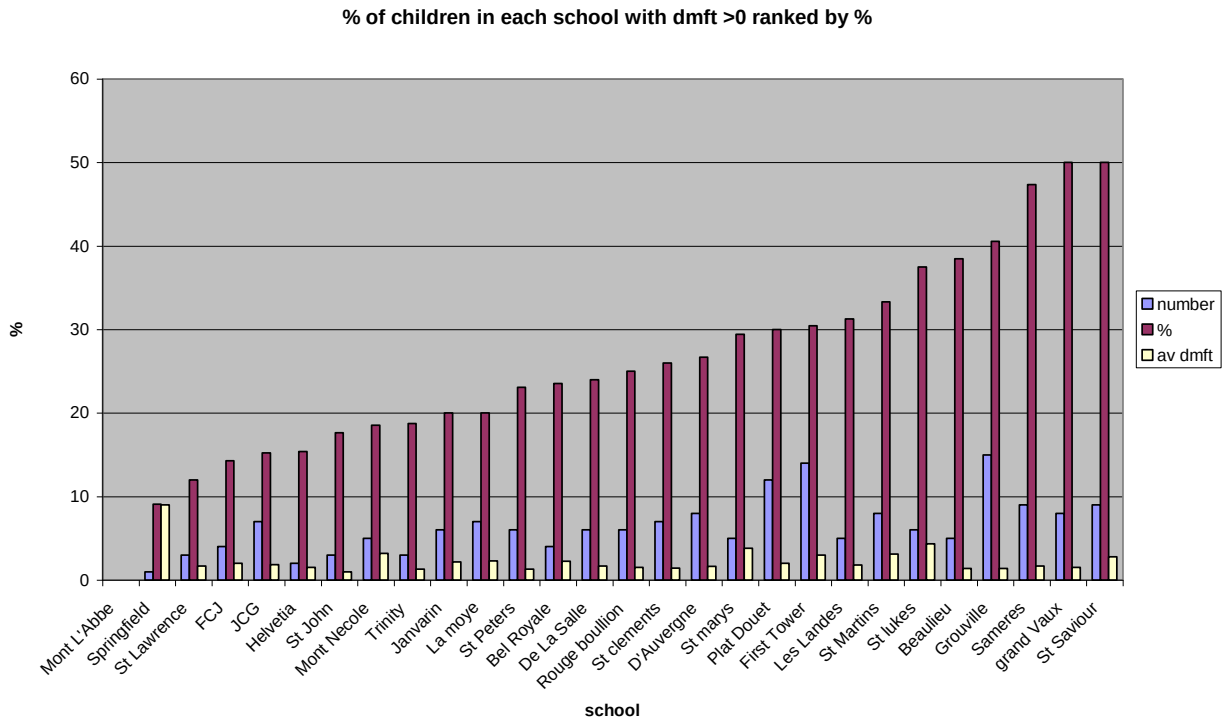
The mean dmft for Jersey is 0.57 which is calculated across all the children surveyed. The majority of children however have no decay experience and to examine the data more closely the number and proportion of children with dmft>0 is used.

Across all Jersey schools 174 children were identified as having decay experience (dmft >0,) this represents 26.3% of those surveyed, with a mean dmft for this group of 2.15.

Figure 3 demonstrates the proportion of children with dmft >0 by school and also shows the mean dmft for these children.

The proportion of those surveyed with decay experience (dmft > 0), ranges from 0% at Mont a L'Abbe to 50% at Grand Vaux and St Saviour.

Figure 3 (Section 10, data tables, table 3)



The data tables in section 10, table 3, shows the values of the mean dmft for each school which ranges from 1 tooth in St Johns to 9 teeth at Springfield. This table also indicates the number of children in each school making up the mean school dmft. It has to be recognised that a small number of children make up these averages, 3 children in St Johns and 1 child at Springfield and caution should be used in extrapolating this data.

6.4 Untreated dentinal decay

The mean dt component is dental decay that is untreated at the time of the survey. As with mean dmft, to identify the numbers contributing to this component the proportion and number of those with d>0 is used. Across the five year old children surveyed in Jersey as a whole this represents 126 children with a Jersey mean of 1.94 teeth having untreated dentinal decay.

Figure 4 demonstrates the number and percentage of children with d>0. Within the figure the data is ranked by the mean decayed teeth, (dt), of these children. This ranges from 0 teeth at Mont a L'Abbe and Springfield to 5.67 teeth at St Marys.

Figure 4 (Section 10, data tables, table 4)

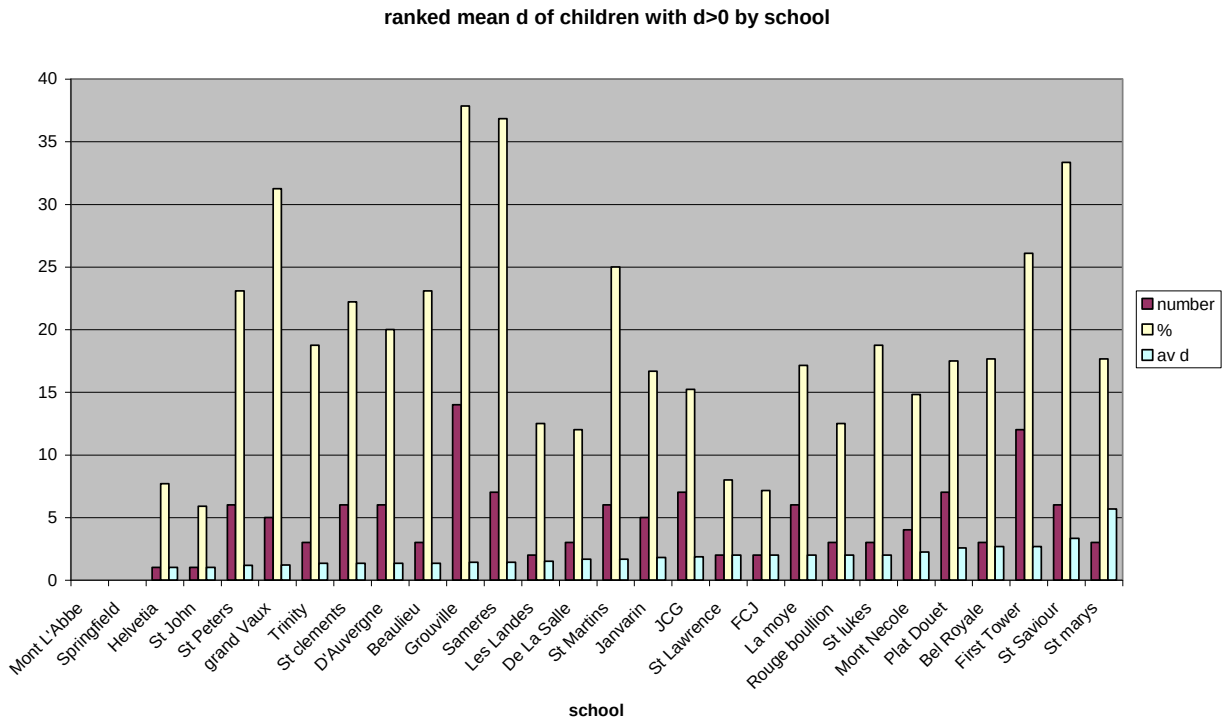
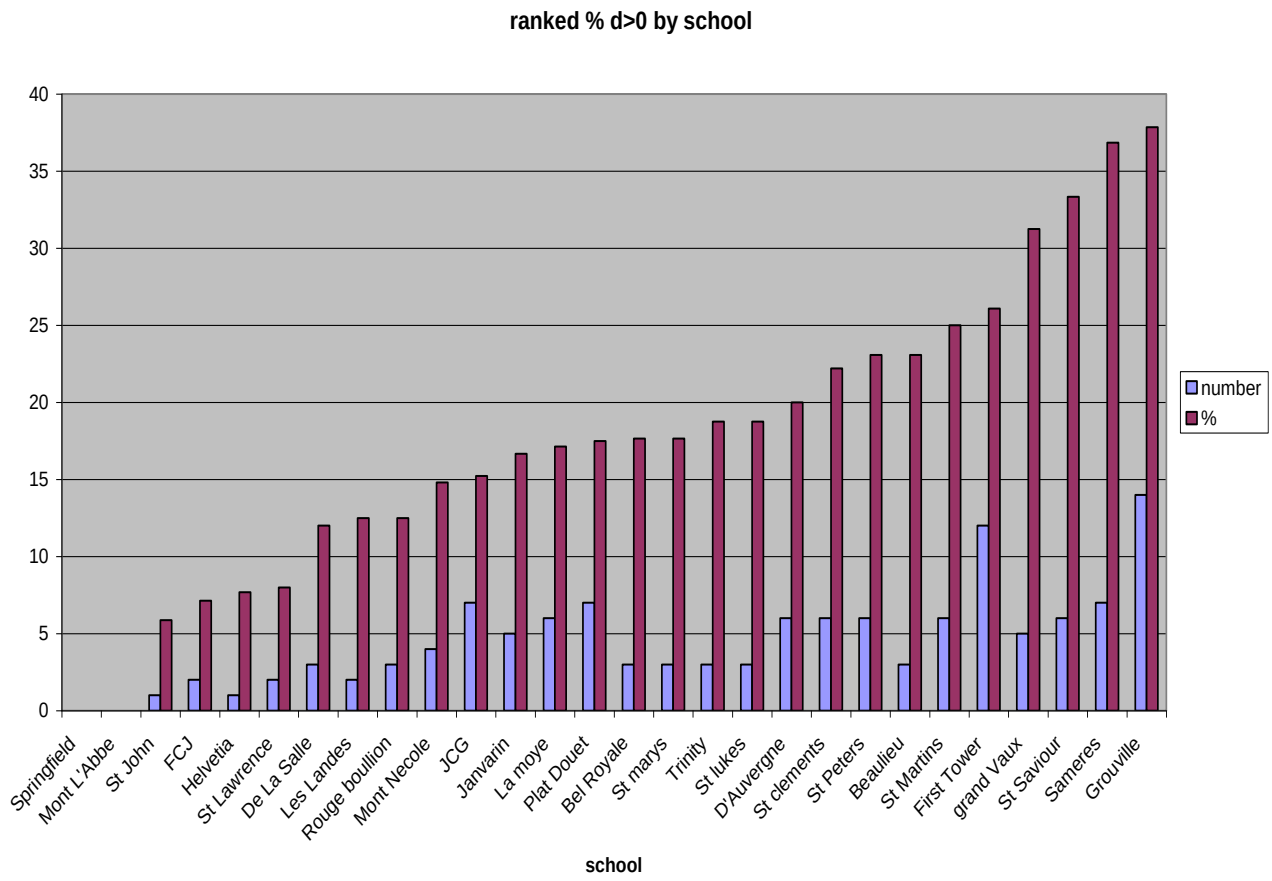


Figure 5 uses the same data, (table 4, section 10), as figure 4 but demonstrates the number of children with d >0 and the % this is of those surveyed by school, ranked by %.

Figure 5 (table 4, section 10)



The proportion of children with d>0 for Jersey is 19.06. There is variation in the proportion of children with untreated decay across the schools and ranges from 0% at Springfield and Mont L'Abbe to 37.84% at Grouville.

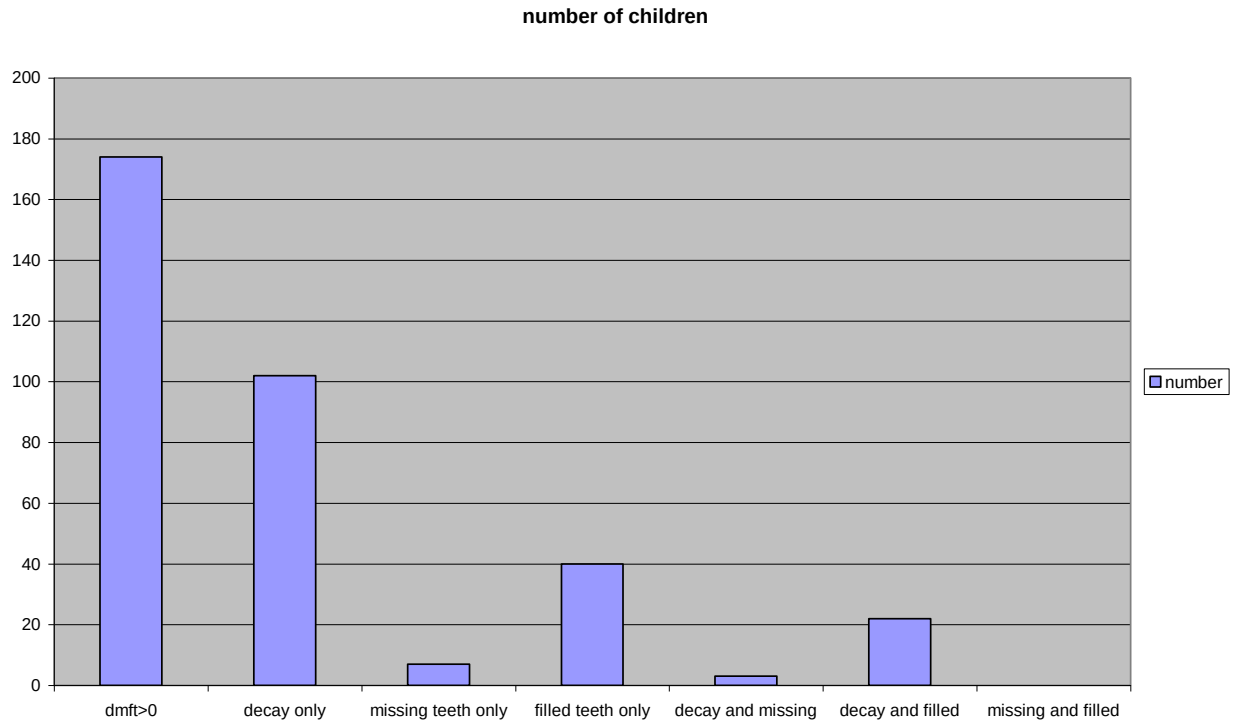
6.5 Missing and filled teeth

Analysis of the other components of the dmft index of the174 five year children surveyed who had a mean dmft >0 is shown in figure 6. It can be seen that nearly three fifths of these children (59%) had untreated decay only. Over one fifth (23%) had evidence of fillings and no decay which would indicate these children have accessed dental services. Seven children (4%) had evidence of missing teeth and no active decay or fillings.

The proportion for missing teeth in the 2012 survey in England was 3.1% although this varied across local authorities and regions.

It cannot be stated that those children with untreated decay are not attending dental services as there are different treatment views for deciduous decay with not all cavities in deciduous teeth being restored.

Figure 6



6.6 General observations

A further observation made, the data for which is not analysed and presented in BASCD data, was the number of stainless steel crowns that had been placed. A total of 18 children had stainless steel crowns placed on 28 teeth. A stainless steel crown is not only placed as a result of the decay process it may for example, be placed to protect a structurally weakened tooth (hypoplastic) tooth. As a result these crowns are not currently part of the dmft index. Their presence demonstrates dental care but no judgement can be made on whether a decay process was involved.

Oral cleanliness and dental sepsis were examined and the general finding was that the oral cleanliness was very good with only 3% having visible plaque on the index teeth.

There were only 3 children (0.45%) who had evidence of dental sepsis,(visible dental abscess) at the time of the survey. Whilst any child with dental sepsis is not positive this figure is lower than the 1.7% level in England overall; with the lowest level in England being 1% in the South East.

In addition 17 children were identified with enamel caries, a National Child Dental Health survey measure not BASCD measure. This is not a standardised measure for BASCD surveys and is a small number spread across 16 schools. This cannot currently be compared to levels in England therefore no significant analysis can be made.

7 Discussion

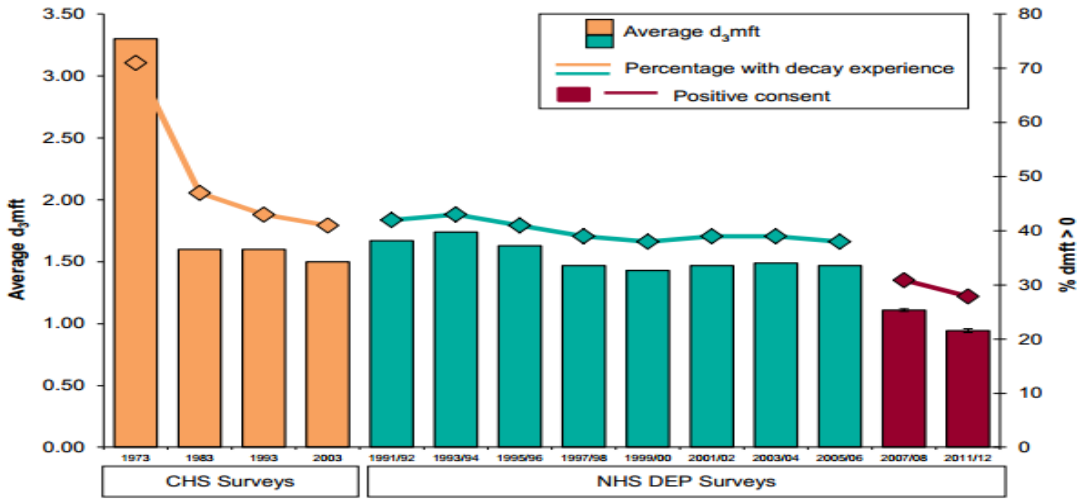
7.1 UK data

The methodology used for these surveys has changed since 2008 and comparisons cannot be made with previous surveys. Within the National Epidemiology programme for England's report on prevalence and severity of dental decay in 2012, it is stated that:

> 'this change (positive consent) has introduced an unquantifiable response bias and means that direct comparison should not be made between this survey and the surveys conducted between 1992 and 2006 (in England)'.

The report also comments however on general trends over time that is there has been a slight drop in decay severity and prevalence from 1991 – 2006, but a much greater drop in 2007-08 and a further drop in 2011-2012. This change has been across all regions in England with the exception of London. The National picture is shown in the copy of the figure below, taken from the same report.

Figure 12: Results of caries surveys of five-year-olds in England from National Child Health Surveys and NHS DEP surveys, 1973 to 2012.



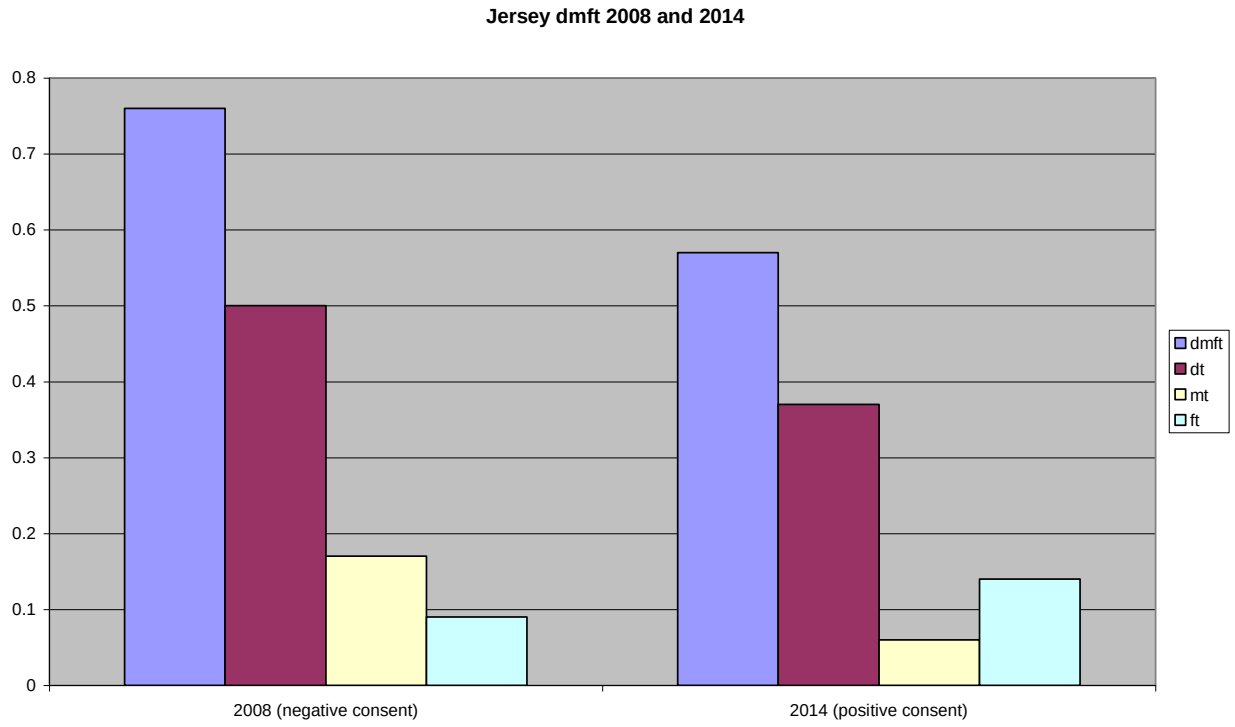
The observation that decay levels have apparently reduced significantly between 2006 and 2008 cannot be stated as an actual change in disease levels due the changed methodology.

7.2 Jersey data

Looking at results for Jersey the last survey in 2008 used negative consent and this current 2014 survey has used positive consent. The survey carried out in 2008 reported results for mean dmft of 0.76 comprising a dt component of 0.5, a mt component of 0.17, and a ft component of 0.09. The 2014 survey components are mean dmft 0.57, dt 0.37, mt 0.06, and ft 0.14

Figure 7 demonstrates the difference with 2008 and the 2014 results, (new methodology).

Figure 7



In 2008 the percentage of children with decay experience (dmft > 0), was 24% and the percentage of untreated decay (dt >0) was 19% compared to a dmft > 0 of 26% and a dt>0 of 19% in 2014.

Whilst the dmft appears to have decreased and dental health may be improving, (potentially due to measures such as increased levels of fluoride in toothpaste since 2007 as recommended by Delivering better Oral health, an evidence based toolkit for prevention), as this is the first survey using positive consent real comparisons cannot be made at this time and ongoing surveys are recommended.

7.3 Implications of results

Davies et al, key personnel involved in dental epidemiology at Public Health England recently published a paper in the Community Dental Health journal (March 14, vol 31 p21-26) titled; Investigation of bias to non return of consent for dental epidemiological survey of caries among five-year olds. The aim being to try and establish the effect of non return of parental consent, including the role of deprivation.

Some key findings of this paper were;

- It was recognised that there is a lack of information on non responders, although they did have the home postcode information hence could use this to investigate potential influence of deprivation, they found there was an association between deprivation and consent return and deprivation and caries severity but was not able to show a link between disease levels and consent returns.

- There was recognition of the scientific causes of decay and that lifestyle factors cause decay to progress, not deprivation itself.

- The reduction in decay was greatest where consent returns were lowest but this was only a part effect so other factors must also be involved.

The study concluded that the relationship between consent and disease levels is complex and the magnitude is unknown which is why comparison cannot be made with previous surveys.

7.4. Impact for Jersey

The same principles could be applied to the 2014 survey in Jersey. There was a 29.6% non response rate and the dental health of this group is therefore unknown and may change the overall disease prevalence picture for the island. Consequently it would be useful to know more about non responders.

Davies et al proposed reasons for non return of consent forms such as;

- Difficulty in understanding the form or reduced literacy skills
- Lack of motivation/interest or organisation
- Possibility that parents know their children have poor oral health and might have wanted to conceal the fact

These could be applicable in Jersey and measures to improve consent response rate should be considered in the planning stages of any further surveys. The influence of school staff and culture is also important and was demonstrated particularly in one school in Jersey where the dental department have already been working with the school. At this school, there was obvious pride and commitment that they had managed

to get 100% of consent forms returned. Other good proactive examples were notice boards in the school entrance informing parents that the survey was taken place that day and it would appear there is a good relationship basis already which could be potentially developed to target/work with non responders.

Ethnicity was not recorded for this survey which may wish to be considered in the future. The 2001 census for Jersey reported 46% of respondents considered their ethnicity to be Jersey, 33% British, 8% Portuguese or Madeiran, 3% Polish. It may be that different methods are needed to target different populations. However as stated already knowledge is needed about the non responders before targeted action can be taken.

8. Conclusion

Valuable data can be obtained by the use of standardised surveys, the limitation at this point is the impact of positive consent and the unknown prevalence of decay in the non response group. The dental disease experience of those surveyed in Jersey, is lower than the average for England and lower than the lowest region in England the South East (dmft 0.67).

174 of those surveyed in Jersey have decay experience at age five and work with families earlier, for example preschool, may be beneficial. In England 3 year old children were surveyed under BASCD standards in 2012/13 but the prevalence data is not yet available for comparison or service planning.

It is recommended that there is pro active work to improve response rates and further surveys are undertaken to enable comparisons. The use of other indicators such as ethnicity and measures of deprivation are also recommended.

9. References

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National Dental Epidemiology Programme for England: oral health survey of five year old children 2012, A report of the prevalence and severity of dental decay Public Health England September 2013.

Pitts, N.B, Evans DJ and Pine, CM (1997) British Association for the Study of Community Dentistry (BASCD) diagnostic criteria for caries prevalence surveys, Community Dental Health

10: DataTables

Table 1: **Consent response rates**

School	Number of 5yr olds	Positive consent	%	Number Seen	%	Number absent	Refusal (Parent)	Refusal (child)
Springfield	28	11	39.2	11	39.2	0	0	0
Beaulieu	28	13	46.4	13	46.4	0	0	0
Sameres	41	20	48.7	19	46.3	1	0	0
De La Salle	51	25	49	25	49	0	0	0
Rouge Bouillon	43	24	56	22	51	2	0	0
St Saviour	32	19	59.4	18	56.25	0	0	0
FCJ	47	29	59.6	27	57.4	1	0	0
Trinity	28	17	60.7	16	57.1	1	0	0
Bel Royal	28	17	60.7	17	60.7	0	0	0
Grand Vaux	26	16	61.5	16	61.5	0	0	0
St Johns	27	18	66.7	17	52.9	1	0	0
Les Landes	24	16	66.7	16	66.7	0	0	0
St Lukes	24	16	66.7	15	62.5	1	0	0
La Moye	49	36	73.4	35	71.4	1	0	0
Grouville	54	40	74	37	68.5	3	0	0
D'Auvergne	40	30	75	330	75	0	0	0
Janvarin	44	33	75	33	75	0	0	0
JCG	61	46	75.4	46	75.4	0	0	0
Helvetia	19	15	79	13	68	1	1	1
First Tower	56	47	83.9	45	80.4	2	0	0
St Martins	29	25	86.2	24	32.7	1	0	0
St Lawrence	30	25	86.3	25	83.3	0	0	0
St Peters	30	26	86.7	26	86.7	0	0	0
St Marys	19	17	89.5	16	66.7	0	0	0
Mont Necolle	33	30	91	27	82	3	0	0
St Clements	29	28	96.5	28	96.5	0	1	0
Mont a L'Abbe	2	2	100	2	100	0	0	0
Plat Douet	42	42	100	40	95	2	0	0
Jersey	964	679	70.4	659	68	20	2	1

Table 2: **Dental disease experience (dmft) by school**

School	Mean dt	Mean mt	Mean ft	Mean dmft
Mont a L'Abbe	0	0	0	0
St Johns	0.06	0	0.12	0.18
St Lawrence	0.16	0.04	0	0.2
Helvetia	0.08	0	0.15	0.23
Trinity	0.25	0	0	0.25
JCG	0.28	0	0	0.28
FCJ	0.14	0	0.14	0.29
St Peters	0.27	0	0.04	0.31
St Clements	0.3	0	0.07	0.37
Rouge Bouillon	0.25	0	0.13	0.38
De La Salle	0.2	0	0.2	0.4
Janvarin	0.3	0.13	0	0.43
D'Auvergne	0.27	0	0.17	0.43
La Moye	0.34	0	0.11	0.46
Bel Royal	0.47	0	0.06	0.53
Beaulieu	0.31	0.08	0.15	0.54
Les Landes	0.19	0.38	0	0.56
Grouville	0.54	0	0.03	0.57
Mont Necolle	0.33	0	0.26	0.59
Plat Douet	0.45	0	0.15	0.6
Grand Vaux	0.38	0	0.38	0.75
Sameres	0.53	0	0.26	0.79
Springfield	0	0.82	0	0.82
First Tower	0.7	0	0.22	0.91
St Martins	0.42	0.21	0.42	1.04
St Marys	1	0	0.12	1.12
St Saviours	1.11	0	0.28	1.39
St Lukes	0.38	0.75	0.5	1.63
Jersey	0.37	0.06	0.14	0.57

Table 3 : **Number and proportion of children with dmft >0 by school**

School	dmft>0 Number of children	%	mean dmft
Mont a L'Abbe	0	0	0
Springfield	1	9.09	9
St Lawrence	3	12	1.67
FCJ	4	14.29	2
JCG	7	15.22	1.86
Helvetia	2	15.38	1.5
St Johns	3	17.65	1
Mont Necolle	5	18.52	3.2
Trinity	3	18.75	1.33
Janvarin	6	20	2.17
La Moye	7	20	2.29
St Peters	6	23.08	1.33
Bel Royal	4	23.53	2.25
De La Salle	6	24	1.67
Rouge Bouillon	6	25	1.5
St Clements	7	26	1.43
D'Auvergne	8	26.67	1.63
St Marys	5	29.41	3.8
Plat Douet	12	30	2
First Tower	14	30.43	3
Les Landes	5	31.25	1.8
St Martins	8	33.33	3.13
St Lukes	6	37.5	4.33
Beaulieu	5	38.46	1.4
Grouville	15	40.54	1.4
Sameres	9	47.37	1.67
Grand Vaux	8	50	1.5
St Saviour	9	50	2.78
Jersey	174	26.32	2.15

Table 4: **Number and proportion of children with dt>0 by school**

	d>0		
School	number	%	mean d
Mont a L'Abbe	0	0	0
Springfield	0	0	0
Helvetia	1	7.69	1
St Johns	1	5.88	1
St Peters	6	23.08	1.17
Grand Vaux	5	31.25	1.2
Trinity	3	18.75	1.33
St Clements	6	22.2	1.33
D'Auvergne	6	20	1.33
Beaulieu	3	23.08	1.33
Grouville	14	37.84	1.43
Sameres	7	36.84	1.43
Les Landes	2	12.5	1.5
De La Salle	3	12	1.67
St Martins	6	25	1.67
Janvarin	5	16.67	1.8
JCG	7	15.22	1.86
St Lawrence	2	8	2
FCJ	2	7.14	2
La Moye	6	17.14	2
Rouge Bouillon	3	12.5	2
St Lukes	3	18.75	2
Mont Necolle	4	14.81	2.25
Plat Douet	7	17.5	2.57
Bel Royal	3	17.65	2.67
First Tower	12	26.09	2.67
St Saviour	6	33.33	3.33
St Marys	3	17.65	5.67
Jersey	126	19.06	1.94

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It would not have been possible to carry out this survey without the help and support of all the participating schools and I would like to thank them all, the staff and the pupils for their help and contribution in making the fieldwork run smoothly and making the school visits enjoyable. I also wish to thank the States of Jersey, Health and Social Services Department, Social Security Department and Mr Mike Cassidy, Consultant in Restorative Dentistry and Head of Community Dental services for allowing me to undertake this survey. I especially would like to thank the Dental department for welcoming me and looking after me so well. The nursing support was excellent and ensured smooth school visits and the administrative organisation by Catherina Marcroft and Caroline Carpenter enabled an effective timetable of school visits.

Review of States spending on Dental Health and Benefits and the services provided

ORAL CARE CONSULTING
SEPTEMBER 2014

CONTENTS

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Finally, we would like to thank Clare Fitton, Primary Care Manager based in the Primary Care Governance Team for her insight into the work of the team and its progress to date.

EXECUTIVE SUMMARY

Oral Care Consulting (OCC) was awarded a contract to undertake a review of the States of Jersey spending on dental health and benefits and the services provided. The agreed proposal had as its aims:

- To work with the States of Jersey to collate the available data on the status of publically funded non specialist oral health care provision.
- To review this information and make reference to recognised good practice, nationally and internationally, as applicable.
- To make recommendations on how services can be improved within existing budgets and prioritise these recommendations.
- To provide a framework for the management of recommended systems to allow performance to be assessed against good practice.

To achieve the above, the agreed framework for the work was to provide the following:

- A series of options for the development of non specialised, state funded dental care arrangements based on data made available to the consultants and discussions with stakeholders.
- For the options provided, an analysis of associated risk and prioritisation based on discussions with the Health and Social Services Department and the Social Security Department.
- The options will be based on a framework that would allow comparisons between differing care arrangements and the prioritised options for Jersey and other comparable systems.
- The options will be based on the key themes of finance, delivery and governance, highlighting key findings and recommendations.
- A presentation of results to a senior management audience.

OCC was provided with previous reports and data. It also undertook a number of visits to establish details of the existing arrangements and the issues as seen by the various parties.

There are a range of State sponsored schemes in operation that provide care through differing arrangements to differing sub-groups of the population. Each of the schemes has administration arrangements in which either clinical or non-clinical assessments are made to determine the entitlements and interventions that determine the States contribution to the identified care. The degree and complexity of administrative arrangements (and costs) varies considerably between schemes. There is also a blurring of the roles of the two Departments, Health and Social Services (HSSD) and Social Security (SSD) in determining patient entitlements.

Overall, data availability is poor, that which are available is of limited value in helping inform the development of services. Addressing this shortfall would make a major contribution to identifying the appropriateness of any options for service development and is central to any future work. Governance arrangements are weak in all aspects of the current system. Addressing this aspect will strengthen the basis for and the qualities of existing and any future delivery arrangements. Furthermore, although it is not covered by our present remit, possible developments in governance arrangements may provide considerable benefits for the health system as a whole. Given the current work around primary health care we recommend that the suggestions for improving dental governance are raised with the Sustainable Primary Healthcare working group.

To help examine the impact of these issues, this report is divided into five further sections. These are: an overview of the current States' sponsored primary dental care schemes (some of which are delivered in secondary settings); an analysis of the existing arrangements; issues arising from the analyses; principles underpinning service development, and; options for service development

We would suggest the major challenges are:

- The roles of the two Departments. We would argue that the role of the Department of Social Security should be limited to identifying individuals who are entitled to access the benefits of whatever dental schemes the States of Jersey decide to develop. All other roles within the dental care delivery system should be the responsibility of the Department of Health and Social Services, in particular clinical decision making. The arrangements will need to acknowledge the findings of the Sustainable Primary Healthcare Review and the proposed developments,

- The governance arrangements in all aspects of the current delivery system. We would wish to see a strengthening of the management and information systems within the sector as a whole. The information requirements would include patient management details and provide the opportunity to assess the qualities of care. The work would also include working with the relevant regulatory bodies to ensure that public and patients can have improved confidence in the system, and

- The development of a structure, or introduction of a head of profession, to facilitate a sustainable arrangement that provides continuity of clinical service delivery by the State at an appropriate level into the future. This includes training and development programmes, in both clinical and non-clinical fields, to help contribute to the culture and expertise necessary to ensure services develop in line with the evolving needs of the population.

We have explored three models, although all are predicated on addressing the shortcomings highlighted above. These options are:

Maintaining the status quo

This would see a continuation of the variety of schemes that treat differing sub groups of the population. Improved governance and management could lead to increased efficiencies and effectiveness and provide clinical gains. However, this would still be a relatively inefficient and incoherent arrangement. It is likely that continual tension between the various schemes would arise from priority setting. The fragmentation is likely to impact on the confidence that the public has with the dental system;

Merging State provision into a single prioritised system.

This would see the bringing together of existing schemes under a single umbrella. The major advantage of this arrangement is the relative reduction in administration arrangements and the ability of the service to develop as the changing needs and social circumstances of the population evolve. We would wish to see closer working relations with the other health sectors that have a bearing on health especially the health promotion team to ensure a chronic disease management programme that is public and patient centred.

- **An external (outsource) arrangement**

In this model, the majority of the current arrangements are contracted out to independent contractors, for example as currently happens with the Jersey Dental Fitness Scheme. This option raises contractual issues, including service definition and delivery, governance and so on, the complexities of which should not be underestimated. All aspects of the system could be outsourced to varying degrees and may help address some of the sustainability issues raised.

In terms of priorities, we recommend that in the short term:

Short term development options

1. The Departments of Health and Social Services and Social Security establish a working party to agree arrangements for dental entitlements funded by the States of Jersey in which the former is responsible for all aspects of care treatment provision and the latter, for establishing which individuals are entitled to the defined benefits.

2. The Department of Health and Social Services seek to engage with the dental profession on developing standards of care through their involvement in the Primary Care Governance Team. The development of more transparent arrangements surrounding costs of care and the use of patient satisfaction measures would be key. In addition, we would recommend that the States utilises the need for adherence to the General Dental Council guidance on the provision of care plans and costings prior to the commencement of treatment.

3. The Department of Health and Social Services explore ways to improve current information systems for the States provided dental services. The information system should provide, at minimum, an ability to record the booking of appointments, patient records and clinical activity. We would strongly urge the Hospital Service to explore the options available in dental management systems and their integration with the current hospital IT arrangements.

4. The value of the current epidemiology work is questionable. There is a need to develop a more coherent approach to oral health needs assessment that may include a clinical component. International experiences have highlighted a number of possible instruments that could be used. Given current resource expenditure, the improvements could be achieved on a cost neutral basis.

5. The Department of Health and Social Services work with the dental profession to explore options for the provision of dental care for individuals under the age of 16. There could be considerable efficiency savings and patient benefits if the more routine care of children was undertaken by existing primary care practitioners through an agreed contractual arrangement with the current hospital services undertaking a more specialised role. This would require better integration over the present arrangements and not least, leadership and management training. We would also suggest that the States explore the idea of introducing a capitation centred scheme for children using existing resources.

6. Governance arrangements for assessing the qualities of treatment provided under all arrangements funded by the States of Jersey should be improved. The value of current arrangements to assess the qualities of care must be questioned and these resources could be allocated to provide a more efficient solution.

The following long term actions may be considered:

Longer term development options

7. There is lack of any coherent vision for the provision of oral care services across the States and it is strongly recommended that the Department of Health and Social Services work with the public and the dental profession on the development of an oral health strategy which addresses key areas: the determinants of disease; service provision; training, and; sustainable funding arrangements based on need. One part of the work should explore the extent to which current hospital based activity could be transferred to primary care settings and the sustainability of the current Consultant led hospital service.

8. The future oral health needs of the population of Jersey are unknown but are likely to see a substantial increase in demands for more complex care in particular, in the elderly age groups.

The States need to give considerable thought to how the needs of this growing sector of the population could be managed. We would suggest that planning should centre on an integrated approach involving other care workers as well as ensuring the capability of the dental professions to meet identified needs.

9. The States explore with third party health insurance schemes options for dental benefits packages for adults. The arrangements would need to take into account the context of current care provision within the States of Jersey and the present weak governance structures.

10. The Department of Social Security will need to develop monitoring arrangements on dental benefits expenditure to allow for budgetary challenges that may arise as economic circumstances alter. Should the number of individuals entitled to benefits increase, commensurate service resource implications would arise.

INTRODUCTION

This report provides a summary of the work undertaken by Oral Care Consulting (OCC), the findings and recommendations to meet the project brief to review of the States of Jersey spending on dental health and benefits and the services provided.

Working with both the Departments of Health and Social Services and the Department of Social Security, the work undertaken covered four aims:

- To work with the States of Jersey to collate the available data on the status of publically funded non specialist oral health care provision.
- To review this information and make reference to recognised good practice, nationally and internationally, as applicable.
- To make recommendations on how services can be improved within existing budgets and prioritise these recommendations.
- To provide a framework for the management of recommended systems to allow performance to be assessed against good practice.

To achieve the above, OCC agreed a framework with the States of Jersey for the work. The structure is as follows:

- A series of options for the development of state funded dental care arrangements based on data made available to the consultants and discussions with stakeholders.
- For the options provided, an analysis of associated risk and prioritisation based on discussions with the Health and Social Services Department and the Social Security Department.
- The options will be based on a framework that would allow comparisons between differing care arrangements and the prioritised options for Jersey and other comparable systems.
- The options will be based on the key themes of finance, delivery and governance, highlighting key findings and recommendations.
- A presentation of results to a senior management audience.

OCC were provided with previous reports and data to help with their work and undertook a number of visits to establish the nature of the existing arrangements and the issues as seen by the various parties involved.

THE ORAL HEALTH STATUS OF AND DENTAL CARE DELIVERY SYSTEM OF THE STATES OF JERSEY

Overview

This section of the report provides an overview of the available data on the oral health status and existing arrangements for the delivery of oral health care to address the needs of the population of the States of Jersey. The section is subdivided into two main sections covering, first, the oral health status and secondly, the actual delivery system.

For the oral health status we have reported on the surveys commissioned by the States, the emphasis of which to date has been on the child population. For the delivery system we have provided an overview of the total system and subsequently a more detailed description of the elements in which the States of Jersey is currently allocating resources.

We have broken down the elements of the system into their financing, delivery, and governance. These issues will be explored in more detail in subsequent sections.

The oral health status of the population of the States of Jersey

The most systematic collection of information about oral health need is derived from occasional examination of children in Jersey Schools, carried out by a trained and calibrated epidemiologist. A single adult dental epidemiological survey of the over 65s was carried out in 2001.

Since 2000 eight surveys of the oral health status of children's teeth have been carried out. These were:

5 year olds (2000); 12 year olds (2001); 5 & 7 year olds (2002); 14 year olds (2003), and; 5 year-olds (2004, 2007, 2008, and 2014).

Surveys of 5 year-olds

On each occasion there was an attempt to examine the 5 year-old children in all state schools on the island, and until the most recent survey, a high proportion of such children in each school was examined. The surveys have also included some, but not all private schools although all were invited to take part. This is important as the population frame from which the sample is drawn is likely to have influence on the subsequent data. If a section of the population is omitted from the sample, then the

statistical reporting could be very different to the true situation depending on the nature of the factor or factors and their impact on the relationship to the missing section of the population. This issue may also arise through other methodological changes in the survey when drawing the sample, for example changes in the consent arrangements.

The surveys undertaken in Jersey are comparable with those undertaken in Britain thus allowing comparisons. The surveys are designed to measure experience of dental decay through a count of the number of decayed and unrestored teeth ('d'), teeth missing, presumed extracted ('m'), and teeth with fillings, making the assumption that they were decayed ('f'). The total, 'dmf' is calculated for each child.

Figure 1: An overview of the States of Jersey 5 year-old population surveys undertaken since 2000.

Year	Number examined	Proportion of 5 year olds on rolls of schools examined	Average number of decayed teeth (d)	Average number of missing teeth (m)	Average number of filled teeth (f)	Average number of teeth with decay experience (dmf)	Proportion of children examined who had no decay experience (dmf=0)	Proportion of children examined who had no active decay (d=0)
2000	681	n/a	0.56	0.09	0.16	0.81	72%	77%
2002	766	96%	0.48	0.17	0.09	0.74	77%	82%
2004	821	n/a	0.68	0.14	0.28	1.10	68%	75%
2007	659	n/a	0.62	0.13	0.13	0.88	73%	78%
2008	681	93%	0.50	0.17	0.17	0.76	76%	81%
2014	659	70%	0.37	0.06	0.14	0.57	74%	81%

The 2014 survey was carried out with a changed protocol which echoed that of the UK epidemiological survey programme. In 2014 parents were required to provide written positive consent for their child to take part in the survey. The return rate for positive consent forms ranged between 39% and 100% across the schools. Very few parents returned consent forms actually refusing the examination. The majority of children not examined had not returned the form at all.

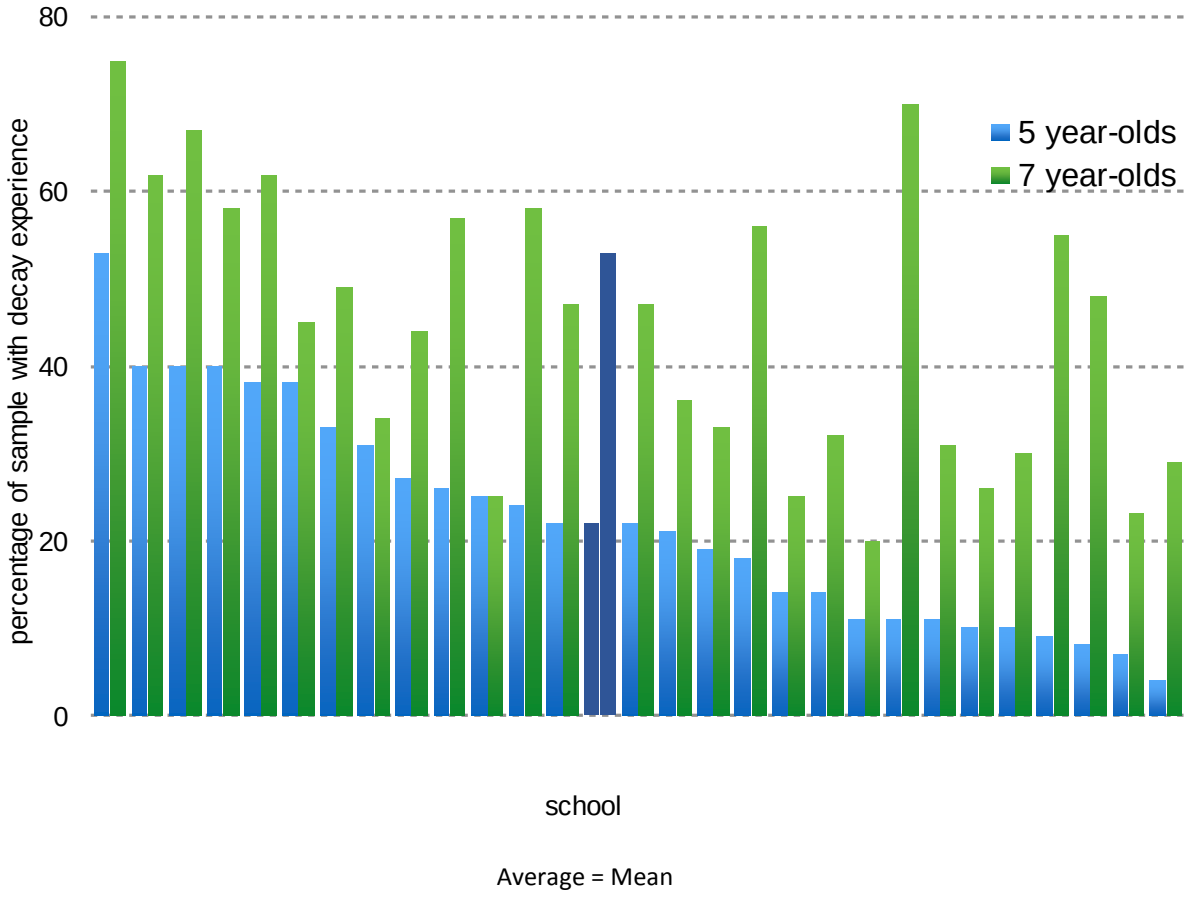
For 5 year-olds, the reports would suggest that the decay experience (dmf), that had been improving since the first survey was carried out in 1987, fluctuated only slightly during the 2000s (Figure 1).

Most, between two thirds and three quarters, of Jersey children were found to have no visible decay experience (dmf=0) when examined at the time of each of the surveys. The picture is one of good overall dental health, which compares very favourably with the areas of England with the lowest levels of decay experience. What little change in the levels of dental decay experience that has been observed over the past 14 years could be explained by variation in the conduct of the examination or sampling biases.

The epidemiological data of 5 year-olds from individual schools have in the past been used to construct a ranked table of schools; those with the highest levels of decay experience being targeted for interventions. The interventions have comprised health promotion/health improvement initiatives delivered by dental nurses providing health education teaching in the classrooms. These have been linked to the children and young peoples' initiatives run and commissioned by the Health Promotion Unit. We are also aware of a dentist-led initiative that has begun recently to distribute toothbrushes and toothpaste to support school-based brushing programmes, initially in schools with higher levels of dental decay experience.

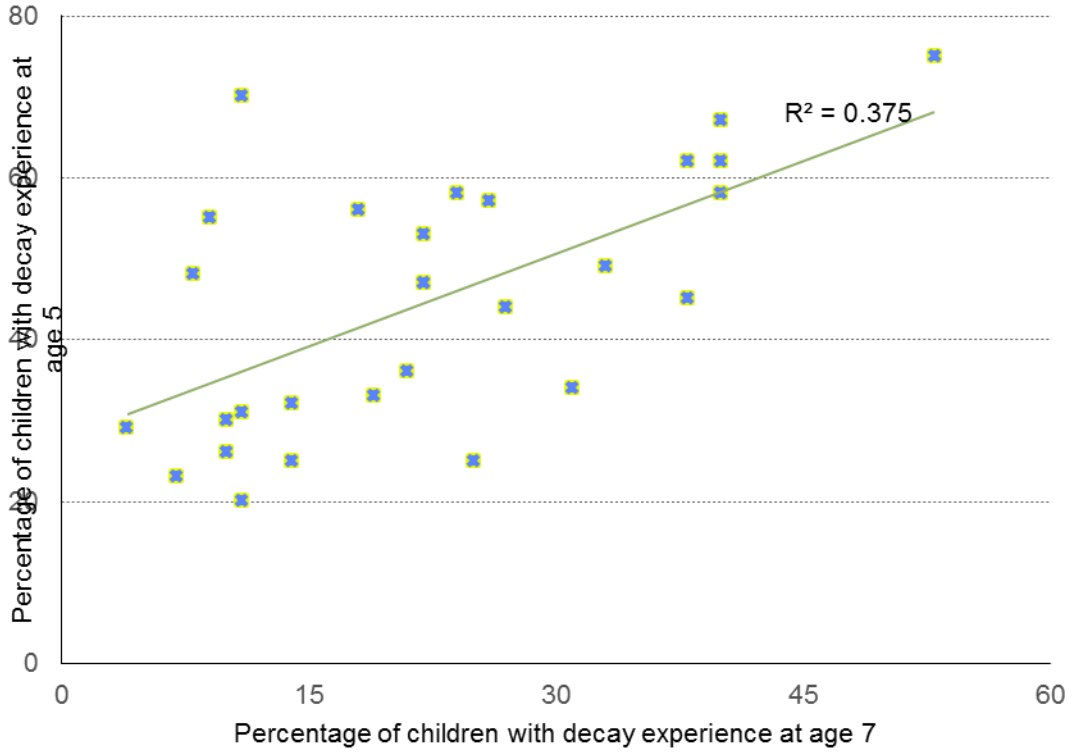
The use of an epidemiology survey to target health education pose some risk in that a snapshot of oral health for one age group cannot reliably capture the shifting pattern of dental decay at different ages. Evidence for this comes from the Jersey school surveys carried out in 2001 (Figure 2). In this year, two age groups (5 year-olds and 7 year-olds) were examined at the same time, by the same epidemiology team, producing consistent data quality. In addition, a very high proportion of children of both ages were examined in every school, minimising the negative effect of selection bias on data quality.

Figure 2: Comparison of the percentage of 5 and 7 year-olds children with decay experience ranked by school in 2002



Results of the survey demonstrated that if schools are ranked by the proportion of their pupils with decay experience at age 5 there is a very weak correlation with decay prevalence at aged 7 in the same schools at the same time (correlation coefficient $r^2 = 0.375$) (Figure 3). In addition the quality of any data collected from such surveys, now that prior written consent is needed, is diminished due to selection biases, particular in schools with small rolls. This suggests the need for great caution when using these epidemiological surveys as a tool for targeted school-based oral health interventions. A further consideration is that such surveys are costly and divert staff from clinical work.

Figure 3: Correlation of the same school according to the percentage of 5 and 7 year-olds children with decay experience.



We suggest that the use of epidemiological surveys of dental decay at age 5 as the sole (or main) basis for planning targeted preventive interventions or service prioritisation is not continued. Indeed, at a cost of £14,000 options for other data capture arrangements that could be used for planning improvements may provide a better use of resources including addressing the lack of needs data on the elderly population identified below (see also section '*Options for service development*').

The Community Dental Service currently undertakes school-based screening (case–finding) to identify pupils with unmet treatment need. This screening activity, if it continues, might be used to provide direct clinical observations to underpin service planning and delivery.

Oral Health Survey of over 65s

A survey of 400 randomly-sampled people aged 65 and over living at home was undertaken in 2001. The survey involved both a dental examination and interview but has not been repeated. Unfortunately, the data are probably now too out of date to be of value. At the time, the research concluded that the uptake of dental services declined with age and discussed potential barriers to accessing treatment.

These included cost, practical difficulties of access (including mobility), a lack of awareness that treatment was required and social isolation or 'helplessness'.

The dental care delivery arrangements within the States of Jersey

While the make-up of a dental care delivery system varies between any country, in the vast majority of countries the system consists of two elements: that in which the Government plays no part in the financing (normally referred to as the 'private' sector) and that in which the Government has taken an active decision to take public funds and allocate them for a specific purpose, in this case the provision of dental care, (the 'state' system).

Irrespective of the source and subsequent distribution of funds, other necessary elements of a system include the regulatory framework for the delivery of care and the contractual agreement between the parties involved. Regulatory elements would include definitions of who is legally able to provide care, the nature of the care and the arrangements for its provision. Contractual agreements could be between an individual and the care provider alone, or between the States of Jersey and the contractor. An example of the latter would include care provided through the Jersey Dental Fitness Scheme.

Dentists who wish to practice in Jersey are required, by the Dentists (Registration) (Jersey) Law 1961 to register with the Royal Court. Acceptance on this register is determined by the dentist being registered under UK law (Dentists Act 1984 of the United Kingdom). The Royal Court may arrange to remove a dentist from the register if they are no longer maintained on the UK list, if convicted of a criminal offence or misdemeanor or for 'infamous or disgraceful conduct in a professional respect'. No local governance arrangements are in place, the regulatory body overseeing the provision of care and by default, helping ensure the public are protected, is the General Dental Council in the UK.

Jersey has a large non-state sector of approximately 70 dentists. These independent dental practitioners are responsible for the premises in which they operate and the staff they employ. Practitioners are free to set their own level of fees for their activities. Although outside of the direct management of the Government, the pricing arrangements and standards of care achieved can impact on how the population view Government and any issues may have an impact on the demands placed on either, or both, the dental or medical state sector.

The remainder of this section provides an overview of provision of dental care that is under the direct responsibility of the States of Jersey. We have divided the dental care system into three components: the element of the primary dental sector formed by the independent contractors in which the States of

Jersey has contracted; the hospital primary care sector (Community Dental service), and the hospital secondary care sector.

Figure 4: Primary Dental Care Arrangements in which the States of Jersey make financial contributions.

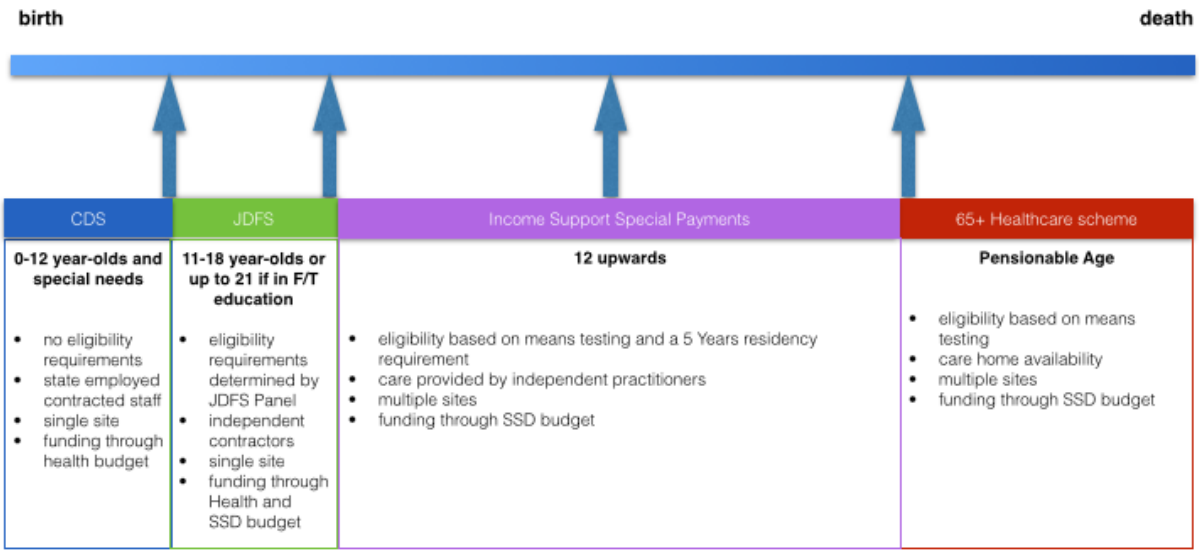


Figure 4 shows the four primary dental care arrangements that the States of Jersey have financial commitments to and that contribute towards care provision for eligible residents. The four primary care schemes are:

- the Community Dental Service, (CDS, treatment based in the General Hospital Dental Department)
- the Jersey Dental Fitness Scheme (JDFS)
- Income Support Special Payments (ISSP)
- the 65+ Healthcare scheme (also commonly referred to as the Westfield scheme) .

In addition to these primary dental care arrangements, there is a secondary (hospital) based arrangement providing orthodontic care, oral surgery and special needs care on referral only.

The Department of Health and Social Services funded and managed dental services

The Hospital Dental Department

All States' dental services are based in the General Hospital Dental Department, a multi surgery clinic in Newgate Street, adjacent to the main Jersey General Hospital buildings. Three physically distinct

services are provided; oral surgery, orthodontics and the primary care Community Dental Service (CDS)
These three services share arrangements for support staff including;

- a dental nursing and administration manager (job share)
- dental nurses
- dental receptionists, and
- medical secretaries

There are 10.2 substantively contracted support staff currently in post from a total establishment of 10.7. Bank staff are used when circumstances dictate but flexible working or part-time staff is required as a condition of recent contracts.

Nursing is generally provided as dedicated support to each of the three services, rather than managed as a common 'pool' approach. There are barriers to achieving rotation across the services and plans that these might be addressed. Dental nurses are required to cover absent colleagues on an *ad-hoc* basis but there is no structured approach to ensuring they develop and retain skills to provide nursing support across the range of dental services provided.

Clinical records are kept in the paper-based patient notes, an arrangement common to all departments within the hospital. As a result of this system, there are occasional problems where the notes are not available with the patient when needed. Patient registration and appointments are made through the Healthcare Information System software used throughout the hospital, InterSystems *TrakCare*. This software is not ideal in this situation and in particular has severe limitations (as currently configured) in terms of the utility of management reports currently produced.

The reception area, though busy, is welcoming and has low counters to allow communication with patients in wheelchairs. There are two entirely separate comfortable waiting areas, one mainly for children and their parents. The other area allows oral surgery patients (some of whom may have facial trauma or disfigurement) to wait without mixing with child patients.

There are six broadly similar dental surgeries, which in principle are able to be used for treating any category of patient. Pragmatically though, because of the need for distinctive equipment associated with each branch of the service, two surgeries are dedicated to each. One room, Surgery 3, is larger than the others and is used by the CDS as it allows for easier access for wheelchairs and additional space for carers. The chair is suitable for a wide range of patients and treatment; the purchase of a device to allow patients to be treated comfortably without leaving their wheelchair is under consideration.

There are scheduled Departmental team meetings but universal attendance is not routinely achieved. The meetings cover clinical matters although there is no clear multidisciplinary clinical focus covering the three strands of the service. Some audit of outcomes has been undertaken (for example through orthodontic Peer Assessment Rating rating) but there is no agreed programme for audit or peer review to influence adoption of improved clinical protocols and good practice guidance.

Within the Hospital management structure, the Dental Department sits within the Ambulatory Care Division. There are monthly Dental Executive Committee meetings to oversee the work of the Dental Department; proposals for developments requiring additional funding are dealt with through submitting a business case to a competitive funding process at autumn and spring reviews. The Hospital commissioned a review of the work of the Dental Department which was undertaken by the Divisional Lead for Support Services and the Lead for Theatres and Anaesthetics. Produced last year, the main conclusion was a lack of strategic direction and that the 'did not attend' (DNA) rate was high, in part due to the timings of clinics. To date, recommendations have been partially actioned

There is no routinely collected data from the *TrakCare* system to provide information about the number of patients seen in the dental department as outpatients or the treatments they received. A wide range of clinical problems associated with the head, neck and mouth is seen, some involving multidisciplinary management involving the orthodontic and other hospital consultants. The data which are available suggests that in 2013 – across all disciplines some 18,000 consultations were held, of these 56% were in community dental, 24% in Orthodontics, 20% in Oral surgery. Due to challenges in data quality, these proportions should be treated with caution.

Community Dental Service

The role of the Community Dental Service (CDS) is to provide care for pre-school and primary school children, people with special needs and restorative dentistry problems referred from other hospital departments and primary care practitioners. The department is also required to undertake responsibilities for oral health promotion, regular screening programmes for school children, epidemiological surveys and participation in the Jersey Dental Fitness Scheme. These are set out in the role specification of the lead clinician.

In addition to the lead clinician, the CDS houses two established Dental Officer posts. Three Dental Officers are employed; one full-time, the other job share between two part-time Dental Officers. These Dental officers are employed on a States civil service contract which varies from that used to employ Consultants. Differing terms are noted in key areas including entitlement to study leave; the States civil service contract does not compare favorably with contracts applied in the UK. These differences could impact on succession and retention and should therefore be considered in the review of civil service terms and conditions (work force modernization) which is currently underway.

Clinical sessions are provided throughout the week. Most patients are able to accept care in the dental chair with local analgesia, although a small number do require a general anaesthetic to complete treatment (most commonly as a day-case procedure). There are scheduled CDS theatre sessions in the hospital for this work, although recently the number of CDS sessions was reduced in an attempt to improve utilisation as some were not being filled. There may sometimes be a delay for urgent treatment being provided on a routine scheduled session. Domiciliary work is being undertaken with visits to people in care homes and wards in outlying hospitals such as St Saviours' Hospital (adult mental health & learning difficulties and old age psychiatry) and Overdale (rehabilitation). Very few visits were recorded suggesting that the actual data are unreliable.

There are significant waits for both initial assessments and follow up treatments, which can be in the order of 6 months. At the time of researching this report, about 500 people were waiting for their first outpatient appointments. There are no agreed departmental protocols or algorithms in place to be applied for prioritisation of available appointments, these decisions being made by either clinicians or reception staff on an individual basis.

School based activity is restricted to primary schools and comprises screening examinations and support for epidemiological surveys. During screening children in schools are examined and those who probably have disease or problems requiring treatment are given a letter to take home suggesting they make an appointment for a full clinical examination. There is, however currently no systematic approach in place to follow up these children and determine if a visit to the dentist takes place and the oral health of children is not recorded to provide any insights to the level of disease.

The remaining services provided by Health from the Dental department of the General Hospital fall outside the main focus of this review but are described below to provide context.

Hospital Consultant-led Orthodontic Service

The service has been in place for over 25 years. A Consultant delivers 9 sessions per week. As with other parts of the hospital-managed dental service, recruitment of suitably trained staff has been an ongoing problem. Over the past three years an orthodontic post has been occupied by an off-island Consultant who works 2 days (4 sessions) per week, subject to her availability. Between 6th January and 20th May 2014, 50 days were worked on this basis. In addition, a single weekly clinical session is provided by a general dental practitioner with experience but no registerable specialist orthodontic qualifications.

There are normally 7 weekly assessment and treatment clinics including evening and Saturday sessions.

To increase capacity the Dental Department is currently training a member of staff to become a General Dental Council (GDC) registered Orthodontic Therapist. Successful completion would permit her to carry out some of the clinical procedures previously only able to be carried out by orthodontists – subject to the further necessary approval of the States of Jersey for a category of local registration to carry out these additional duties.

Orthodontics patients are seen only on referral from their general dental practitioner, general medical practitioner or other hospital Consultants. All children and young people up the age of 16 can be seen for an assessment and Consultant opinion. Active treatment is only offered to those with a 'great' or 'very great' treatment need. This is determined by application of the Index of Treatment Need Dental Health Component (IOTN DHC), which is a validated index and provides a widely-used threshold for intervention internationally. There is no means testing of families of patients accepted for active treatment (braces) in the department.

Definitive orthodontic treatment is generally carried out in adolescence. The population of 12 year-olds at the time of the 2011 census was 1094. Typically about a third of the population will fall into the 'great' or 'very great' treatment need category of (IOTN DHC). This suggests that approximately 370 cases per year would meet the threshold for treatment on the Island. This is a theoretical maximum; not all of those will want to have orthodontic treatment and some who do will have treatment provided privately elsewhere.

Currently there are lengthy waiting times both for initial assessment appointments and to start treatment (where indicated). About 350 referrals are waiting to be seen. No orthodontic patients are treated privately at the Hospital.

Hospital Consultant-led Oral Surgery service

This is another well-established service and is currently led by a GDC-registered specialist in Oral Surgery, supported by an Associate Specialist with extensive experience in oral surgery. The majority of patients are seen through state funded arrangements although some private work is undertaken. There are no other facilities on the island where hospital (inpatient) oral surgery is undertaken. Some primary care dental practices will carry out quite advanced oral surgery as part of the general care they provide for their (fee-paying) patients whereas other practices appear to refer in very straightforward cases that should be within the scope of an experienced dentist.

Oral surgery patients are seen for assessment, review and some minor surgical procedures under local anaesthesia in the Dental Department. Patients requiring more major surgery and/or requiring general anaesthesia or sedation for treatment are seen in the hospital theatres. The majority of these procedures

are undertaken on a day-case basis. In 2013, 518 state-funded cases were seen in theatre; 393 were managed as day case procedures and 125 were admitted for treatment.

At the time of researching this report 400 patients were currently awaiting first assessment appointments. There is a regular Monday morning operating session. This is helpful as patients are usually discharged by midweek although trauma cases occurring over the weekend can generate pressure on the planned Monday afternoon clinic. Also, planned patient admissions for the Monday list which have not had pre-assessment may require staff to address unexpected complications immediately prior to surgery. Limited staff means there is a burdensome 1 in 2 on-call commitment.

In 2013 there were 133 privately funded procedures undertaken in theatres - 113 were carried out as day cases and 20 were inpatients.

The Department of Social Security funded dental schemes

The Jersey Dental Fitness Scheme

The Jersey Dental Fitness Scheme (JDFS) was established via a States Act in 1991. It is overseen by a Board of Management and aims to support lower income families in maintaining the dental health of their children by creating a monthly payment scheme that covers all routine treatment. Children must be dentally fit to join the scheme. They are examined by an independent dentist who sets a monthly fee for which all future routine dental care will be undertaken. The States, from Social Security Department funding, pay £6.00 per month towards this fee. The remaining cost is met by the parent.

As of June 2014 1,134 children were registered on the scheme attended to by 46 primary care dentists working in private practice.

On average dentists charge £13.82 per month to maintain dental fitness; thus, minus the States subsidy, parents pay on average £7.82 per child per month. The highest average fee charged to parents by any one dentist to parents across the children in their care is £16.33, several dentists do not levy any charge on parents and provide the service remunerated by the States subsidy only.

Young people aged 11 to 18 are eligible to join, as can people up to the age of 21 if they remain in full time education. The scheme has an element of means testing – being open only to Islanders with a household income below £46,000. However compliance with this income test among members is not audited.

As set out in the Act of the States, the JDFS accounts are independently audited. Clinical outcomes are also audited once every three years by an independent UK consultant. The dental health of children on the scheme is exceptionally high – suggesting services are provided to a high standard by the community dentists.

Children are required to be dentally fit before joining the JDFS. Up until the age of 11, immediately before joining the scheme, the CDS at the General Hospital, funded by HSSD has responsibility for children's dental care. Due to a lack of capacity the requirement for a child to be dentally fit before joining the JDFS has been 'outsourced' by the CDS to community dentists who carry out remedial work. Community dentists are remunerated by the CDS according to a fixed fee per item of service. The fee is set by the CDS and managed within a budget capped at £29,500 in 2013

Excluding the budget maintained by HSSD to make children dentally fit - the scheme runs at cost of approximately £120,000 (2013 value). This sum includes costs for outsourced administration, clinical and financial audit. Across recent years the States subsidy to parents (£6.00 per member per month) comprises around 70% of total cost. The administration of the scheme (including external administrative support, the clinical audit, financial audit and the maintenance of a Board of Management) may be disproportionate to the value of benefit distributed.

Income Support Special Payments (ISSP)

Income Support is a means tested benefit available to people with a low household income and a minimum of 5 years' residency on the Island. The value of the benefit is designed to meet basic living costs including the costs of regular health care. However the legislation has also made provision for larger 'one off' awards to meet urgent and/or essential expenses. Support in the form of grants or loans can be given to assist with the cost of household goods, removal expenses, employment expenses and health costs. Individuals apply to the Social Security Department and are assessed for their eligibility under the Income Support benefit rules.

In the case of dental costs, claimants are restricted in the type of care that will be funded through Income Support. For example, extractions, dentures and essential fillings are allowed, but cosmetic dentistry and dental implants are not. Claimants are normally required to obtain two comparable quotes for the required care. These estimates are submitted to the Department and a Determining Officer (non-clinically qualified) makes a decision as to which of the proposals is to be funded and whether the funding will be available as a grant or a loan. There may be some variation in cost when comparing the treatments proposed. Staff are able to contact dentists to discuss their treatment plans however SSD staff will identify the level of funding which will be offered according to the quotations received. (The justification for variations in these treatment plans may be a clinical matter).

The amount available to income support claimants as a grant for dental treatment is capped at £500 over a two year period. Exceptions are made for people with disabilities and the Elderly. In general if support is required in excess of £500 claimants are offered a loan that is repaid by deductions from their weekly benefit package.

There is currently no longitudinal analysis of applications and awards thus preventing any assessment of the decision making processes by SSD determining officers or the value for money and effectiveness of the funds allocated.

In 2013, Social Security made 396 income support special payments to address dental costs. Some 296 grants were awarded at a cost of £96,951 and loans were made to a total value of £48,033.

The 65+ Healthcare Scheme

The 65+ Healthcare scheme supports primary care costs (dental, chiropody, opticians) of the elderly including those in residential care. The States pay £16.08 per member per month into the scheme creating a fund from which members may claim back money offsetting some of the cost of treatment they have received and paid for. Treatments are limited to dental, ophthalmic and chiropody and the amount of money a member may claim back is capped. For dental, members may claim a maximum refund of £22 per annum to offset the cost of an examination and up to £250 for dental treatment. The latter can be rolled over for 2 years to provide a total grant of £500, but may still be insufficient to meet the costs of dentures. The States play no role in influencing which high street providers members obtain their treatment from and do not seek to monitor the quality of the treatment they received.

Members of the 65+ healthcare scheme must be on a low income defined as not paying tax and having limited assets (currently, £20k if single or £30k if married). The scheme is for pensioners only (aged 65+) with at least 5yrs residency in Jersey. The assessment of assets excludes the value of the primary home.

In 2013, 2,415 people aged over 65 were members of the 65+ Healthcare scheme, 87% of members had, at some point in their membership submitted a claim for a refund. During 2013 12% of members had claimed for a dental checkup and 18% of members for dental treatment. In comparison to the maximum claim back of £22, on average scheme members paid around £35 for a dental checkup and in comparison to the maximum claim back of £250 on average members paid £180 for treatment. In total refunds of £134,825 were paid to scheme members in respect of dental care.

The 65+ Healthcare scheme is administered by an external company (Westfield). Inclusive of management fees and across the full range of services (including ophthalmic and chiropody) the scheme operated at a cost of £285,000

Summary of the delivery arrangements

There is a range of state sponsored schemes in operation that provide care through differing arrangements to differing sub-groups of the population. Each of the schemes has administration arrangements in which either clinical or non-clinical assessments are made to determine the interventions that the state will fund. There is no overall co-ordination of the arrangements between departments and in each case either clinical information, or management information is weak.

The financing of State funded dental care within the States of Jersey

State funded dental arrangements are derived from two primary sources; the Health and Social Services Department (HSSD) and the Social Security Department (SSD). The table below shows the States spend comprising benefits and health services.

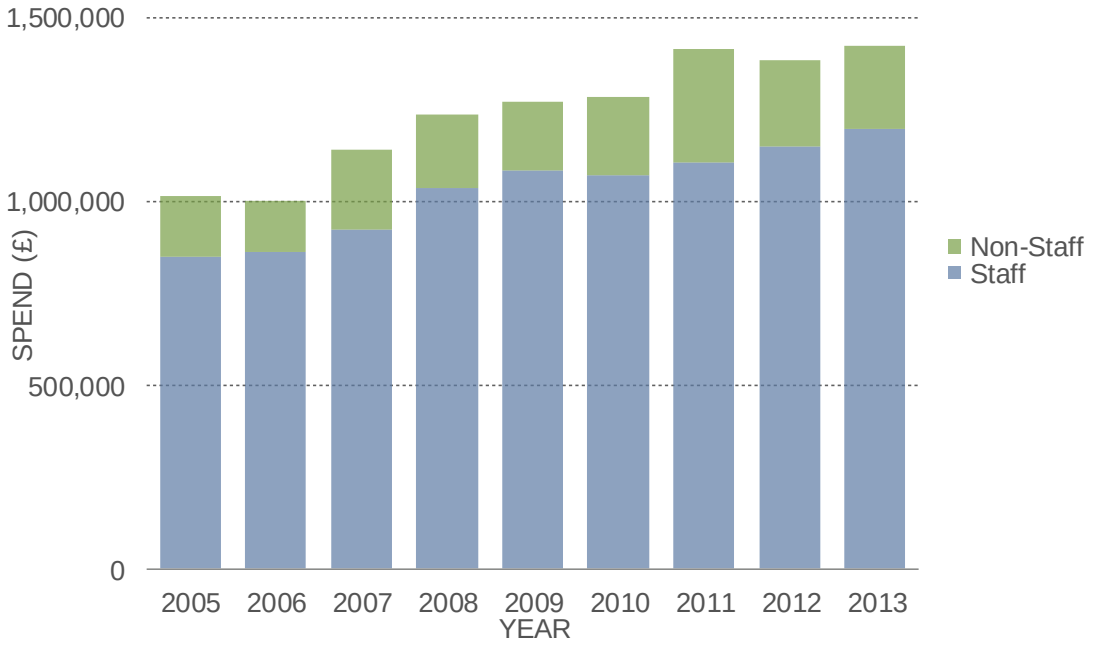
STATES OF JERSEY DENTAL SPEND IN 2013	HSSD	SSD
Community Dentistry (Children 0 to 11 years and Special needs children and adults)	£350,691	
Orthodontics (Young people assessed as 'High' and 'Very High' need, aged up to 16)	£259,794	
Oral surgery (All ages, trauma, cancer etc.)	£405,403	
Clinical Support and Administration across all dental hospital services (including hospital support staff, operational staff, materials and supplies)	£387,081	
Jersey Dental Fitness Scheme (Children aged 11 to 18 and 21 if in full time education, household income less than £46,000)	£20,993	£85,600
Income Support Special Payments (Grants and Loans) (Low income , all ages, gross value including loans which are re-couped)		£145,000
65+ Healthcare Dental Benefit (Aged 65 and over, income below tax threshold and low assets)		£134,800
Administration estimated across SSD benefits and schemes (Costs of administration, clinical and financial audit)		£63,700

From these headline figures it is estimated that in 2013 the States spent in the region of £1million on primary dental care. This excludes orthodontics and oral surgery and roughly approximates the value of the Dental Department administration that might be associated with Community Dental. It is not possible to estimate how many people or households benefited from States schemes given that individuals may be in receipt of support from more than one scheme or benefit. Equally it is not possible to offer a view on whether value for money has been achieved given the paucity of data on clinical outcomes. Any further understanding of States spending is frustrated by gaps in data collection.

Figure 5 below shows the total spend of dental services from the HSSD General Hospital Dental Department budget. The spend has increased from just over £1 million in 2005 to nearly £1.5 million in 2013. These increases modestly exceed RPI which would have resulted in a budget in the region of

£1.3 million. The available data have been divided into two components: staffing costs and non-staff costs.

Figure 5: Health and Social Services total dental spend for the period 2005 to 2013 (including Oral surgery and Orthodontics)



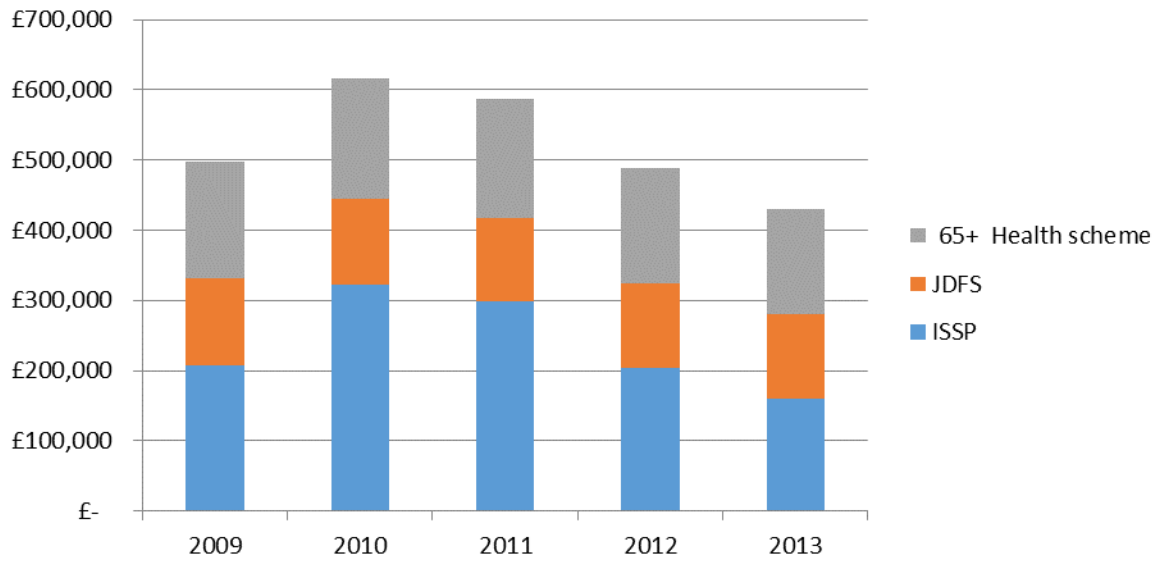
The key point to note is the importance of staffing costs relative to non-staff costs. For the last year staff costs represent nearly 85% of spend; this is high when compared to other health care delivery systems where staffing costs form about 70% of total expenditure. However it should be noted that, for salaried dental care systems, in particular more specialised arrangements, (i.e. secondary care), and in which the total population is served is small, the percentage can be larger. While the current staffing costs in Jersey appear high, the service is more specialised and opportunities to achieve any real reductions, if the current staffing grades are maintained, may be limited. Each service has between 0.8 and 1 FTE at Consultant level, a level which is consistent over recent years. As such unless, a Consultant leaves the post, relative staffing costs will not change to any substantial extent.

It may be possible to explore options concerning dental administration costs although it would appear from the number of FTE in each post to be running an efficient arrangement. Furthermore, the pressure on staff in the waiting area and requirement for dental nurses to work flexible sessions should be noted.

Figure 8 shows spending over the period 2009 to 2013 by the Social Security Department (SSD). Spend peaked in 2010 when £600,000 was spent on dental benefits and schemes. There has been a year on year decrease and in 2013 SSD directed £430,000 towards primary care dental costs. The difference in these amounts has been driven, in the main by ISSP grants and loans. In 2010 the amount awarded totaled over £300,000 that has halved to £150,000 in 2013.

The chart below shows the value of benefits, grants, loans combined with administration cost to give the total SSD spend (some of which is gradually recouped when ISSP loans are repaid).

Figure 8: States of Jersey Department of Social Security spending, 2009 to 2013

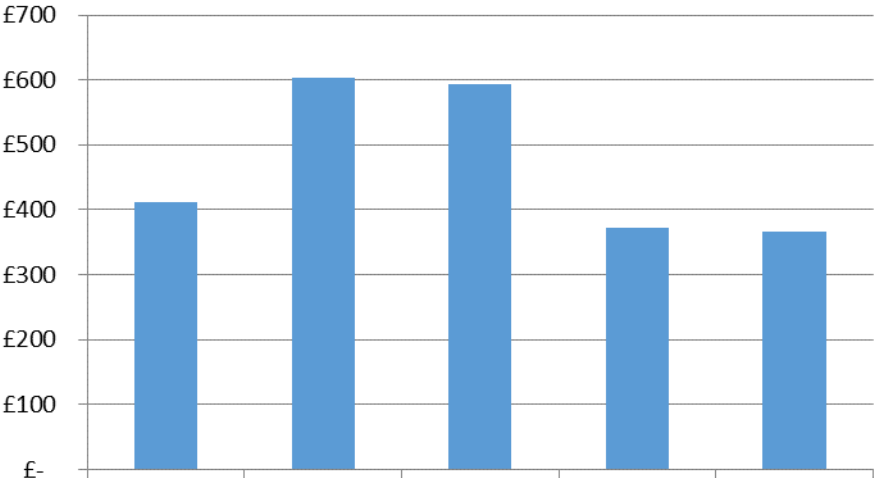


In 2009 465 people received an ISSP grant or loan. The number of cases peaked at 505 in 2010 and stood at 476 in 2011, 499 in 2012 before reaching a low of 396 in 2013.

A reduction in the cost of ISSP is evident following the implementation of policy whereby the amount a claimant may receive by way of a grant was capped at £250, with an option to 'roll over' two year's allowance to a maximum of £500. People who require support in excess of £500 may still access a loan. In 2009 and 2010 loans were offered in just a handful of cases and costs were met with grants, The chart above below includes the amount of ISSP awarded with grants and loans combined.

The chart below shows the average amounts awarded per claim.

Figure 9: Average value (grant and loan) per ISSP dental award



	2009	2010	2011	2012	2013
Total Award (Grant and Loan)	£412	£604	£593	£372	£366

Incident level data suggests that ISSP recipients received dental treatment from 32 different care providers. Data suggests there are two dental surgeries who have provided services in respect of over 300 claims and 12 surgeries with less than 10. This suggests that a relatively restricted number of dentists are engaged in providing services to ISSP recipients.

The data also highlight wide variation between contracted dentists in the cases of treatment per patient. The majority of patients attended for single a course, while one individual attended for 9 separate courses to the same contractor. The nature of the data prevents any interpretation of the qualities of care provided.

Due to the nature of the data captured and the decision making processes involved it would be unwise to make any major recommendations from the existing material. More detailed case study analysis of these records would provide some indication of the types of treatment against charges made. This may help establish the basis for an agreed tariff for care items with the dental profession. However we would caution this development until improved governance arrangements are in place to help ensure that treatment is provided and meets agreed quality standards. The data currently prevent any follow up of work undertaken to help establish whether the arrangements provide value for money.

Governance arrangements of State funded dental care in Jersey

With the fragmentation of dental care across different schemes and sectors, it is perhaps not surprising that governance becomes a more complex issue to address. Along with this fragmentation comes greater difficulty to coordinate governance activities into a coherent and effective whole. This is in addition to any problems arising from Jersey's size and associated diseconomies of scale.

Throughout our deliberations we have had in mind the issue of governance in its widest possible sense. This would include ensuring the qualifications of practitioners, the necessity and quality of treatment provision and, where public funds are involved, ensuring that monies are spent effectively and efficiently and in accordance with the States intentions.

A number of key issues arose during our discussions with various parties concerning the existing levels of governance. These were :

- Although a dentist wishing to practice on the Island must register both with the Royal Court and also the GDC there appears to be no fully effective local route of complaint for patients (although there is a complaint procedure established for hospital services). The specific role of the Royal Court is not clear and no example was provided of it censuring a dentist. The Jersey Dental Association (JDA) will mediate where its members are involved but we were told that up to one third of practitioners were not members of the JDA.

- There is a lack of clarity in the States intentions with regard to oral health and a lack of coherence in the provision of dentistry funded by public funds obscures any assessment of its effectiveness

- The Social Security Department (SSD) currently has a role in the funding of dental care to families in receipt of benefits through the States' special payment scheme. Inadvertently, this leads, potentially, to non-clinicians influencing the decision on treatment to be provided (by offering alternatives for treatments requested but not on the approved list, for example excluding implants). We feel this is inappropriate. Equally, it was said that the SSD staff would albeit occasionally suggest individual dentists that the patient could approach to provide second estimates (diagnosis/cost). A standard list might be more appropriate. SSD should not have a role beyond assessing the individual's right to receive benefits. Care and treatment aspects are better considered by the Department for Health and Social Services (HSSD), involving the CDS.

- Overall, the statistical (including financial) information provided to us was of too poor a quality to be of use in judging the probity, efficiency or effectiveness of the service provided. In the case of the public service, the data systems did not identify with accuracy the detail required by the managers intent on driving continual improvement and identifying emerging trends. In the case of benefit schemes, claimants purchase care from high street providers and the quality of care received in return for public money is not recorded. No 'Value for Money' analysis is possible. The lack of good quality information precludes appropriately targeted audit facility. The exception to this being, arguably, the Jersey Dental Fitness Scheme where the board of Management and audit regime may be excessive in comparison to the level of benefit distributed.

Overall comments on the delivery, finance and governance arrangements

There are a number of striking features about the current arrangements. These centre on the lack of overall clarity on a clearly defined strategy for oral health and the direction in which each element has evolved. It would be a considerable step forward if there was an overall strategy to help provide direction to the various elements of the dental delivery system, not least to enable those responsible for managing the arrangements to have clarity in purpose. The evolution to the current situation has lead to blurred boundaries on the roles of the two Departments that may impact on the qualities of patient care.

Although figures are available on the total spend according to each sector, the subsequent lack of detailed and reliable information on clinical activity makes assessment of the efficiency or effectiveness of the current delivery arrangements impossible to quantify. This is but one element of the poor governance arrangements that should be addressed as a priority to help inform subsequent decision making.

OUR ANALYSIS OF THE EXISTING ARRANGEMENTS

Overview

In this section we have presented our analyses into three components. The first provides our framework for analysing the performance of the delivery system in general. In the second section we report on our findings with respect to the financing of the delivery system. This covers all elements of the system in which the States of Jersey are making resource allocations. In the third we subsequently report on the delivery and governance arrangements in more detail; the issues highlighted in the previous section of the report and have been divided between the roles of Health and Social Services and Social Security.

In addition, we also report on the work of the Jersey Consumer Council. While their work has centred on health care in general, they have reported on aspects of the dental care system that should be noted.

A framework for evaluating the dental care system's performance

Dental care differs from general medical care in a number of important ways that have a bearing on how policy objectives can be achieved. The vast majority of dental care is carried out in the primary care sector by individuals who are both diagnosticians and treatment providers, the rationale for the benefits of attendance are centred on the idea of regular attendance to address potential problems prior to them arising, and the treatment options are elective. This has implications for addressing issues such as access, equity and effectiveness.

One of the goals of policy making is to achieve a synergy between the various arrangements that contribute to improving health and dealing with issues such as equity and efficiency. While the broad objectives set out by the Department of Health and Social Services, i.e. improve oral health, are generic, the subsequent elements of the care system which are responsible for contributing to the policy may not be totally coterminous. As we have highlighted previously, differing elements of the delivery system serve differing population groups. There should be a degree of co-ordination to help ensure the goals of equity and efficiency are met.

Figure 11: A Framework for Analysing Dental Care within a State.

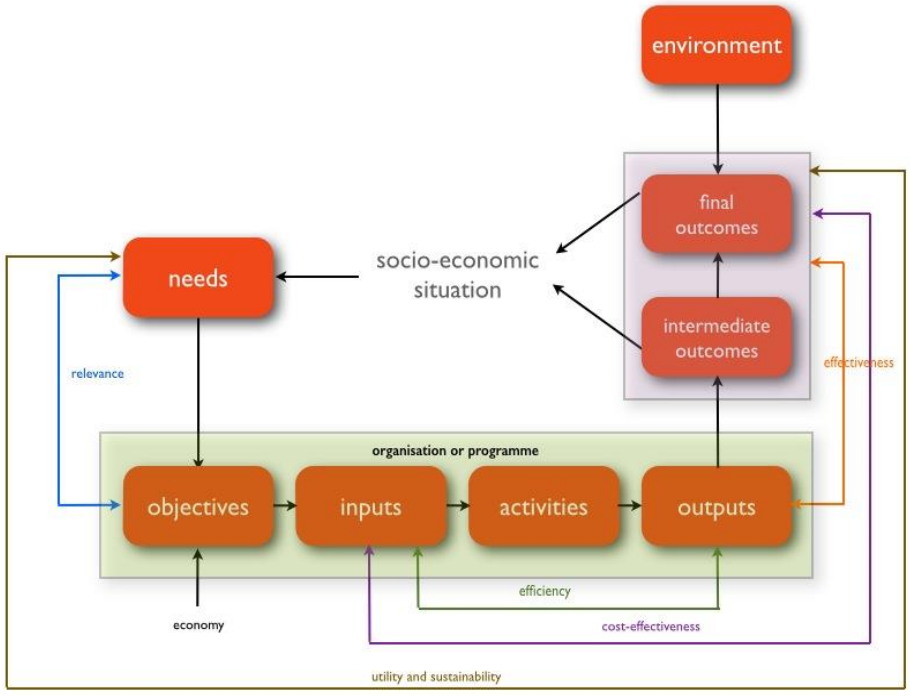


Figure 11 provides a framework for analysing dental care provision within a jurisdiction. The need of the Jersey population would ideally be quantified using a range of data sources, for example surveys and demand data, and subsequently a series of programmes or organisations created with the underlying purpose of addressing the needs. Examples of programmes include the children's screening programme or oral health promotion activities; examples of organisations could include the Jersey Dental Fitness Scheme Board of Management or a care delivery arrangement specifically for children.

The organisation or programme can be broken down into four elements: its objectives; the inputs, a series of defined activities, and; the outputs. Whether it is a programme for reducing the risk of future disease, for example a fluoride rinse programme conducted in a school setting or a care service, for example, a special needs service, there should be a defined set of objectives for the arrangement. In addition, the resources should be identified, not least the financial aspects, what activities are being undertaken and the expected outputs. This allows the efficiency of the programme or organisation to be quantified and the extent to which differing arrangements might achieve the same outcomes.

The remaining aspects of the framework for analysing dental care arrangements are the intermediary and final outcomes of any activities. There is an important distinction to be made between the outputs

of a programme or organisation, for example the number of restorations provided or fluoride applications undertaken, and the outcomes, namely whether their provision leads to improvements in oral health and in consequence a diminution in need.

The framework also recognises the role of external factors in determining levels of oral health. The environment and socio-economic circumstances all play a role in helping determine levels of oral health and in turn, need.

Financing of the delivery system

It is also important to recognise structural differences between differing delivery schemes that have a bearing on the risks and benefits to any one of the parties involved (citizens, providers and government). Dental practices are independent units and it is the ownership of the production of care that varies. Thus, a system may use non-state owned services through independent contractors, who are chosen to provide care, for example, the 65+ Health Care Scheme, will place greater risks on the contractors when compared to employed state funded providers in premises owned by the state, for example the CDS provision of care to children aged under 12 in the dental hospital. (In this example however, the contractors in the 65+ dental scheme may offset costs with a co-payment, as opposed to a service funded fully by capitation.) The contractors bear the business risks and as such can be expected to be rewarded commensurately when compared to employed staff.

The government benefits when using independent contractors, achieving more flexibility without responsibility for the capital outlay required for the initial purchase and consequent upkeep of premises. The long term capital value of premises will be dependent on property price fluctuations. Again whether it is the state or the individual contractor who carries the risk, a reward system recognising this must be part of the overall financing of the remuneration package of the care system.

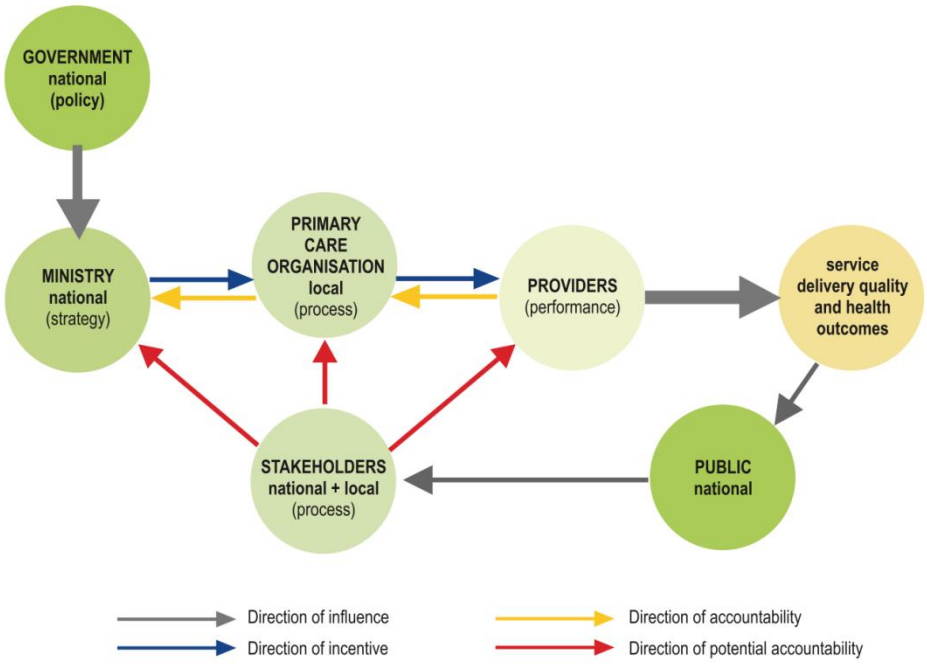
When using employed staff the government carries risks, to a greater extent, when compared to an arrangement using independent contractors. However, providing that strong management arrangements exist, the degree of control over the activities of staff is far greater when compared to independent contractors.. The balance in ‘risk bearing’ offers costs and benefits and is something that each party will need to consider when identifying relevant arrangements.

The Governance Process

One of the roles of Government is to provide 'stewardship' to the delivery system and ensure that the resources are allocated as it intends while achieving the desired outcomes. There is a need to distinguish policy and delivery as far as equity is concerned; the policy might be inequitable in that resources, usually money, are taken from the wealthy and given to the less affluent but the delivery can be without discrimination, in that all parties entitled now get equal care for equal need. Ideally, for any given policy the delivery should be equitable between those that are eligible.

The Government's role is however concerned with all elements of the system, not simply the dental element. This raises the question about the extent to which the various elements involved in any delivery system have the resources, especially skills and expertise, to deal with the current roles they are undertaking. Furthermore, even if a decision were to be taken to transfer some of the existing activities to another element of the system, it would be prudent to ensure that there was sufficient justification for continuing with the activity prior to it being transferred.

Figure 12: The governance process



(Batchelor, 2012)

One of the major drivers for efficiency and effectiveness should be to ensure that there is a strong evidence base to support this activity before simply transferring the responsibilities to another element where a differing cost:control model is likely to apply.

The central principles for governance include accountability, monitoring, and control. Given that the outcomes of any oral health care system centre on improving levels of oral health, the governance arrangements must centre on addressing the determinants of oral health for both individuals and the population as a whole and the care delivery arrangements.

Figure 12 highlights the role of various agencies in helping ensuring governance arrangements in a large country. While in Jersey 'Government' and 'Ministry' are essentially the same, each body has a specific and important role in the process.

At governmental/ministry level there should be a clear policy, subsequently the various Departments formulate strategies to explain how these policy goals will be achieved given the resource constraints. In larger organisations there may well be a degree of 'localisation' in which the strategies are implemented in differing ways, this is less likely in Jersey. These processes would have a series of performance measures which service providers would get rewarded for when achieving them. For services, there would be an agreed set of quality and outcome measures that the public should be involved in establishing. The overall policy and strategy can be monitored informed by these quality outcome measures.

Considering the principles above, in our view, there are a set of shortcomings in all areas which make defining the best options difficult (evidence base, policy, strategy, standards, performance and reward for performance). While there are some immediate steps that can be taken to help provide a firmer base for decision making and subsequent policy development, we would strongly urge the States focus on a cross department oral health strategy. Such a move would give direction to the other players within the system. Most importantly, such a move would start to address our ongoing concerns about levels of governance.

It is welcoming to note that the Jersey Consumer Council has been actively involved in starting the debate about the qualities of and priorities for the health care delivery system and so we have reported their findings below.

The public's views on the current Primary Dental Care delivery arrangements: Need for reform

The Jersey Consumer Council undertook an Island-wide survey in June 2012, seeking the public's view of experiences when paying for primary healthcare services (including dentistry), the perceived quality of customer care and their ideas about ways of paying for primary care in the future. The results were published in 2013 and are available on-line (Jersey Consumer Council, 2013). Over six and a half thousand replies were received from a self-selected group of respondents.

The key themes identified by the Council were:

- a lack of clarity about the costs of primary care:
    - About half of the respondents were unsure if a list of dental charges was on view at their dentist's surgery, a quarter thought it was and the other quarter thought not
    - Only about 60% of people, including those in the lowest family income bands, ask the dentist for a cost estimate
- that people were put off seeking dental care because of cost; using A&E was seen as an option:
    - 27% of respondents felt dental charges were so expensive it stopped them visiting the dentist
    - 18% of people with a household income of £115k or more have used A&E for non-urgent care
- there was a need to develop better relationships between public/patients and providers
    - Although 73% of respondents rated their dentist's customer service as 'good' or 'excellent', 68% of respondents would not inform their primary health care provider immediately if they were dissatisfied with the treatment received
- need for quality assurance systems, suggesting a formalised complaints procedure and a public information strategy
- financial aspects of care for the elderly and free healthcare services for the under 5s (although this primarily focused on GP services)

The Jersey Consumer Council has commissioned more detailed qualitative research, involving a series of focus groups, to more fully understand the themes arising from this study. We would urge the Departments involved in the development of the dental care delivery system to engage with the work.

ISSUES ARISING FROM THE ANALYSES

Overview

We have divided this section into three components: some general issues which have been highlighted in the previous sections and which make the risks and benefits of the options in the final section difficult to quantify; some key principles that form our basis for the option appraisal, and; some high level measures which would help provide direction to the deliberations that the States will need to make to help establish an appropriate direction for the dental care system.

We are also conscious that there are ongoing discussions on the future arrangements for the provision of primary care in general. We would argue that the outcomes of the Sustainable Primary Care Review will also be central to those concerning the dental arrangements: the dental care system should be consistent with the values, principles and strategic direction established for other parts of primary care. At the time of writing this report the recommendations of the review have not been published.

Our discussions with the Primary Care Governance Team give us confidence that their approach to the development of the dental system is in line with that for general practitioners. This is to be welcomed.

We hope that that the Jersey Dental Association will engage fully with the Sustainable Primary Care review in their deliberations and with the PCGT team as their governance role expands.

General issues

Policy decisions should seek to achieve a synergy between various arrangements, in this case primary medical, benefits and the non-state funded dental systems, to achieve equity and efficiency. The issues facing the dental care delivery arrangements of Jersey are universal; rising costs, demographic changes, technological advances, and increasing consumer expectations. As health care systems attempt to address the above issues a series of trade offs are made between social values such as universality, accessibility, and social solidarity and drivers, like the financing systems and organisational constraints.

Dental systems throughout the world have tended to evolve on a haphazard basis, with the state often failing to define the terms used as general principles. Terms such as ‘equity’ and ‘need’ although central to establishing whether a system is performing, are particularly problematic for dental care.

Defining a well functioning health care system

The World Health Organisation has suggested that a well functioning health system responds in a balanced way to a population's needs and expectations by:

- improving the health status of individuals, families and communities
- defending the population against what threatens its health
- protecting people against the financial consequences of ill-health
- providing equitable access to people-centred care, and
- making it possible for people to participate in decisions affecting their health and health system.

One of the major drivers in the reform of health systems is associated with costs. The challenge for policy makers lies in trying to expand coverage to promote health outcomes and financial protection, while at the same time controlling expenditure. More specifically, the overall aims of health care reforms are to first to raise sufficient and sustainable revenues efficiently and equitably to provide individuals with a basic package of essential services that both improve health outcomes and provide financial protection against unpredictable catastrophic or impoverishing financial losses caused by illness and injury. Second, any reforms should manage these revenues to pool health risks equitably and efficiently so that individuals are provided with "insurance" coverage against unpredictable catastrophic medical care costs, and thirdly, ensure the purchase of health services in an allocative and technically efficient manner.

For the States of Jersey we would argue that the reform already under design should also form the basis for the development of the dental care arrangements. These can be further defined using the following framework:

- establishing coherent criteria for the number of people to be covered by the States of Jersey funded dental care services financing initiatives (breadth of coverage);
- working to define the extent of services covered (number, type and depth of coverage), and;
- ensure that the resulting impacts on health outcomes and financial protection against high out-of-pocket expenditures are monitored to provide the continued justification against other possible interventions.

Currently we would argue that the data to help establish the above framework are not available and as such the quantification of the extent to which the present arrangements are meeting the goals cannot be made. This shortcoming must be addressed as a priority not least as it helps identify the appropriateness of any options for service development.

Developing a patient centred healthcare system

Allied to the need for improved governance is a development of process in which the patient has an increased say in how health care arrangements function. There is a growing realisation that by involving patients in decision making at every level of the system there are improved outcomes in both clinical and managerial terms. A patient-centred performance management system would help clinicians and patients make individualised decisions about optimal care for common clinical situations, explicitly incorporate patient preferences, and reinforce such decisions through patient-centred performance measures. Such a system would harness the power of comparative effectiveness research and shared decision-making to consider the full spectrum of medical interventions' net benefits by (1) comprehensively rewarding high-benefit care; (2) facilitating and documenting shared decision making for services of modest or uncertain benefit; and (3) discouraging inappropriate or harmful care. Ryan and Cunningham (2014) provide additional support for this approach.

We would suggest that that the dental profession and the States should explore with the Jersey Consumer Council ways to engage with the public to help address the findings of the Council's work. This could include establishing priorities for dental care, especially those deemed of high-benefit.

Health promotion

The burden of oral disease (chiefly tooth decay and gum diseases) is largely behaviourally determined and so potentially amenable to social, societal and contextual influences (See Dalton A (2008)).

State provision and commissioning of health promotion is the responsibility of the Medical Officer of Health within the Ministry for Health and Social Services. Current key targets are immunisation programmes, alcohol reduction and weight management but there have been a broad range of approaches to health promotion and health improvement, notably programmes and initiatives for children and young people, which have the potential to impact on oral disease.

This work has followed recognised contemporary approaches, through working across health and other sectors (such as Education, Sport and Culture, in developing a Healthy Schools initiative with support for healthy eating through food procurement, control of vending machines etc.). Commissioning of services from Family Nursing and Homecare (a charitable organisation) includes appropriate elements of health promotion. Some initiatives are more targeted, such work with as Brighter Futures, which supports parenting within families with additional needs.

Detailed information about health-related behaviours (including dietary habits) is gained from census samples of school students in year 6, 8 and 10. Dental epidemiology relating to dental disease in 5 year-

olds, again gained through census sampling, was used up to 2008 to target interventions on the schools found to have pupils with highest levels of dental decay experience.

Attributing health outcomes such as a reduction in decay experience to health promotion /health improvement interventions is complex, since other influencing factors might be at work, and rates of progression of disease are slow. Public Health England has recently reviewed evidence of good practice in this field and published a document Commissioning Better Oral Health for Children and Young People (PHE, 2014) and provides examples of approaches and interventions most likely to have greatest impact.

The growing recognition of the importance of a common-risk approach to inform oral health promotion work in which improvements in dietary habits, not least sugar consumption, provide an opportunity to reduce levels of obesity, diabetes and tooth decay in later life. We would argue strongly that a unified approach involving all parties delivering health promotion should be developed.

Summary

A health care system should be regarded as a living organism that evolves dependent upon its surroundings and circumstances. While the present dental care arrangement has contributed to oral health levels in Jersey, current best practices would suggest that there are a number of developments in key areas of each of the three domains we have used in this report.

Current governance arrangements can be improved both in the short and long terms to help ensure the efficiencies of the system. Arising from any improvements is a better understanding of the current finances, knowledge of which can subsequently be used to improve both health promoting activities (designed to tackle the determinants of disease) and service developments to meet both present need and likely future demands through improved efficiencies and service redesign.

The developments of the general delivery system have provided an opportunity for dental care arrangements to benefit through working synergistically with the current health care reform work programme, not least the governance work programme.

The principles underpinning the development of state funded dental care arrangements

Overview

In this section we describe a framework formed of several key principles that can be used to help inform the debate about how state funded dental care could evolve. They highlight areas in which development

work should take place and where possible we have highlighted how other dental delivery systems have used this approach. The principles are based on the findings of the OECD Health Project, a summary report of which was published in 2004 (OECD, 2004) entitled '*Towards High-Performing Health Systems*'.

The OECD project set out to address how to support health system performance improvement and posed a number of questions that are pertinent to the present review. These included issues of sustainability (the need to ensure that spending on health care is affordable both today and into the future); how the qualities of care can be improved (ensuring that health care was safe, effective and that the system responded to patients and other stakeholders' needs), and; how value for money be improved. Although the report covered health care systems in general, i.e. was not dental specific, we would argue that the recommendations remain relevant.

The report suggested that there were six key practices and approaches that the performance of any system would need to have answers to help ensure it was performing well and are applicable for the States of Jersey current programme of work.

First, for improving population health status and health outcomes the root causes, such as poverty and social exclusion, must be tackled. There must be efforts to implement and ensure that practice is consistent with practice guidelines and performance standards and the appropriate incentives, both economic and administrative are used to help attain desired outcomes. There is also a need to ensure that systems for monitoring the quality of health and long-term care are sufficient to assist in meeting improvement goals.

The second approach consisted of actions to help achieve adequate and equitable access to care. Steps suggested included working to reduce financial barriers, including exploring non-state health insurance for high-risk groups and dealing with intended inequalities in access because of differing health coverage arrangements through policy interventions reimbursement limits or common waiting times.

Thirdly, the health systems responsiveness could be increased by exploring differing reimbursement arrangements, supporting care recipients control over services and choice of providers for eligible beneficiaries. A further example identified was for the State to examine how informed consumer choice could be strengthened.

The fourth aspect concerned sustainability and particular emphasis was given to budgetary and administrative controls over payments. Cost-sharing (Co-payment arrangements) was not seen as making a major contribution in the overall financing of any system, not least due to the inequities arising from those most likely to make demands on the system tending to have less resources than other societal members. A further step in contributing to high performance within the care system centred on the

prioritisation of care modalities to interventions that are seen as core: treatments that deal with pain relief is given priority over those that offer minor aesthetic benefits.

The fifth area concerns improving efficiencies in the delivery of care. This it is suggested could be through: demand management arrangements of elective surgery and other discretionary care through gatekeepers; the aforementioned prioritisation of care modalities, and; information from consumers and users of services. Work in constructing payment arrangements for the health care workforce that seeks to reward productivity and defined qualities of care are also areas that can help.

The final area for development centred on information systems. Data derived from the system are required to benchmark against established goals or to assess peer performance.

The six areas identified above all provide opportunities to improve the performance of the Jersey dental care system. In the following section we have identified options for each area.

General Comments

Perhaps one of the most important aspects of any arrangement is to identify and ensure that adequate information requirements are met. Currently, there is an emphasis on the idea of performance management to bridge the gap between policy formulation and service delivery. This whole process is predicated on focusing on outcomes and using information to judge both efficiency effectiveness and quality improvements. This is a significant culture change in a professionally dominated health care system.

In the present context the dearth of management information in Jersey makes the next steps challenging. There are limited data on population health (national surveys) and both the independent practitioners contracted within the States' sponsored dental care arrangements and salaried services produce very limited activity data. These data sets are not audited or qualified by independent assessors.

To ensure that the whole system is on sure foundations would require congruent design interventions throughout the State sponsored dental care arrangements, which currently straddle two Departments. The blurring of the roles of the two Departments on their functions within the dental care delivery system needs to be addressed.

We would recommend that there is clear separation between the clinical and non-clinical aspects of the delivery arrangements. In particular, we would recommend that the role of the Department of Social Security is confined to establishing whether any individual is entitled to receive dental benefits. All clinical aspects and the subsequent management and budgetary arrangements of care provided once an individual's entitlement is established should lie with the Department of Health and Social Services and the preferred delivery system.

A key element in developing dental care arrangements is the recognition of the importance of a number of aspects that will need to be addressed. Examples of such areas would include:

- A programme of work involving the introduction of a data capture system for management purposes that would enable practice management, service activity outcome data and measures that can be used to assess performance at varying levels within the system.

- The implications of poor dental health are felt throughout life. There is a need to develop a prioritisation process to identify which programmes and outcomes offer the most benefit over time. This might be age related, for example reducing the incidence tooth decay in children, or setting standards, for example ensuring access within a given time period for individuals in pain.

- Agreeing an inspection/auditing process that is linked to a quality framework.

We would recommend such a work programme be set up immediately and operate with a clear timetable which would include technical skills to collate and analyse better management information data. In parallel there would need to be a review of management competencies/structures to support this approach. This includes both competence in managing dental data and managing professional personnel, whether they are salaried or independent practitioners.

The current differing elements of States' interventions in the dental care delivery arrangements have a number of resource implications, not least the considerable administration resource implications. There would appear to be very high administration to delivery costs for the Jersey Dental Fitness Scheme.

We would recommend that the Department of Health and Social Services explore the possibility of merging the various dental programmes in which state funding is involved with a view to pooling current resources to create a single dental delivery arrangement. Access to the scheme might be defined in general terms as an automatic entitlement, for example children up to a certain age, or as a targeted group based on oral health need. As oral health needs evolve, access to these services would change.

An attempt has been made to produce an oral health strategy but this did not address sustainable funding, governance or management information. Its content does not seem to have influenced service evolution.

We are also aware that there are ongoing discussions on the future of primary health care. The work on developing the dental care arrangements must pay heed to the wider primary care service design

Irrespective of the future decisions on the dental care delivery arrangements we would wish to see the potential role that dental care can play take in account the deliberations of the work exploring the future of primary health care. Not least, this will help establish a more holistic approach to patient care and would support the approach being taken when considering the benefits entitlements.

Management Arrangements

Organisations that provide services always have to work hard to ensure that these are, and remain, of high quality. This is not new and applies to both private and public providers. Currently one of the key challenges is to deliver user-centred services. Quality control processes have to extend beyond those for manufacturing products because all services, to some degree, are co-produced in the moment through the interaction of service provider and service user. Being responsive to service users' needs is not simply a matter of a market transaction, even in the private sector. Therefore ideas about quality improvement have to extend widely throughout a service organisation. With a move to more user-centred services, there is a greater need for creativity and innovation throughout a service organisation.

There are two forces shaping the way services are delivered. People have to be properly trained (professional competency) and they have to have the necessary resources of equipment, time, support etc.. They are accountable to the administrative hierarchy for their use of resources. They need a lot of autonomy in the administrative hierarchy to play their part, but they need to be accountable for this to their professional hierarchy. The challenge is for them to be able to see, and to share responsibility for the whole of the process of service delivery, not just their own part. This is partly about actively thinking about what would help others to play their part better; and partly about recognising that management has a legitimate responsibility for the delivery of the service as a whole.

The management challenge is to find ways to manage the whole service, not just the individual departments or specialties that are components of it. Managers bring a crucial 'external' view and add value when they work with professionals to challenge professional pigeon-holing. These issues were also reported in the review of the "*States of Jersey; a proposed new system of Health and Social Services*" (KPMG, 2011). They commented:

> *"Health and social care economies that have strong clinical and professional leadership are more likely to be successful in implementing large scale change. Clinical and service leaders must be fully engaged in, and understand, the development and implementation of any change. They must also be visible and vocal leaders in order to bring their peers with them on the change journey."*

We would reiterate the above and argue that there is a need to add coherence and focus on continually improving the quality and effectiveness of delivery across the States of Jersey sponsored dental care delivery services. We would recommend that as part of the organisational development of the services, an organised programme is identified and the appropriate individual(s) identified and supported to help facilitate the development in clinical leadership within the current services.

Irrespective of the above, our review identified a dearth of appropriate information for management purposes. Such data are central to ensure valid informed decision making, and should form the central element of the service delivery, planning, and governance components.

We would recommend that the Hospital explore opportunities to improve the current dental clinical management system. The present arrangements have major shortcomings that neither meet the requirements in full of the hospital sector nor the dental team within the current arrangements. A priority for the States of Jersey dental services is to identify and invest in the management infrastructure within the current dental care system arrangements

Strengthening governance arrangements

Our overriding concern centres on the weak governance arrangements that are currently in place. As we have highlighted the data capture, analyses and controls for all elements of the system are in our view in need of considerable reform. The weaknesses mean that any assessment of performance of the overall service elements cannot be made with any degree of confidence. To address the weaknesses we wish to highlight key principles that would help establish good governance within the whole dental care delivery system both state funded and privately provided. These are:

- Openness. There needs to be improved openness about the costs and treatment plans for all individuals who attend for dental care. While we heard of some good examples, a recurring theme from some clinicians and the Jersey Consumer Council was the lack of transparency about costs and what treatment was being proposed. Decisions about entitlements should be made in a manner that the public can understand. They should use language that is accessible and understandable for the general public. This is of particular importance in order to improve the confidence in a complex system such as the dental delivery arrangement.
- Participation. The quality, relevance and effectiveness of any policy depends on ensuring wide participation throughout the system: from policy conception to its subsequent implementation. Active participation is likely to create more confidence in the system.
- Accountability. Roles in the legislative and executive processes need to be clearer. Each of the bodies involved in the dental care delivery system must explain and take responsibility for what it does.
- Effectiveness. Policies developed to improve the delivery system must be effective and timely, delivering what is needed on the basis of clear objectives, an evaluation of future impact and, where

available, of past experience. Effectiveness also depends on implementing policies in a proportionate manner and on taking decisions at the most appropriate level.

- Coherence. Policies and action must be coherent and easily understood. Coherence requires political leadership and a strong responsibility on the part of the health system elements to ensure a consistent approach within a complex system.

System sustainability

One of the most striking issues arising from our discussions with the clinical staff was the growing risks around staff replacement and, if deemed appropriate, recruitment. The overall size of the population means that the justification for having a full 'firm' of staff at differing grades based within Jersey alone would be difficult, if not impossible to justify.

The change seen in training programmes, costs of living, not least housing, since the last round of senior appointments within the publically funded dental care delivery system will make their replacement difficult. We understand that these issues are not simply confined to the dental sector.

Options

In this section we have provided three general approaches to inform the debate within the States of Jersey for the development of the dental care delivery system. We have termed these: the status quo (+), i.e. continuing generally the existing arrangements although the key developments outlined above, including governance, data etc. would still apply; a merged state 'priority' system in which the current arrangements work more synergistically with all elements of the dental care delivery system and priorities evolve based on need and resources; and, an external (outsource) arrangement.

Option 1: The status quo (+)

In the current arrangement a number of agencies deliver care, each with different perspectives and requirements. The two main Departments, (HSSD and SSD) are both involved in funding and, importantly, both play a role in clinical decision making.

There are a number of schemes each providing care to defined groups although the extent to which they work to the same end is debatable. With improved governance processes some of the shortcomings could be addressed but it is difficult to see how any major efficiency savings, especially in the administration costs, could be made.

Improvement may be short lived as there is limited scope for development as the population ages. The epidemiological data show relatively low levels of disease within children compared to UK national averages. While no data is available regarding the elderly, there will be substantial increases in need due to previous care modality arrangements which will be compounded by co-morbidities in this age group.

The current funding would not address this need and there is a concern as to the ability of the local dental profession to handle the clinical demands arising from these changes.

The reliance on the non-state sector to deal with the problem, especially given the weak existing governance structures would leave the Departments open to increased risk of a challenge from the public.

Option 2: A merged state priority system

In this arrangement the various schemes that are currently operating are pooled into a single unified arrangement albeit with differing objectives for the identified elements. The elements would see a secondary care (hospital) arrangement that would deal with those cases that are beyond the abilities of the primary (ambulatory) care arrangements. There would need to be a decision on what services would be provided within the hospital sector for differing specialities. In addition to the management of clinical activities, the hospital sector would take on a supporting role to help provide advice to help manage patients.

The 'pooled' primary care arrangements would consist of the current Community Dental Services arrangements and those independent practitioners who would wish to provide care through any State funded arrangement. Both groups would work to a common framework helping establish a common basket of care, either by individual or intervention, established on the priority needs of the population. The emphasis of the service will change according to the needs of the population. An agreed performance/outcome measure framework would be required.

The risks of this arrangement are again the lack of governance but this time compounded by the lack of needs data for planning purposes. The costs could be controlled through a number of arrangements not least the importance of salaried staff to provide the non-independent contract sector activity. However performance management arrangements would need to be improved substantially.

The role of the Department of Social Security would simply be to identify individuals who meet the requirements to access the dental benefits package. All subsequent activities associated with the system, including care provision, monitoring and evaluation would become the responsibility of the Department of Health and Social Services.

To ensure the benefits of this possible approach, investment in clinical leadership and management would be crucial.

Option 3: An external (outsource) arrangement

In this model, the majority of the current arrangements are contracted out to independent contractors, for example as with the current Jersey Dental Fitness Scheme. This work would require that the contractual issues of specifying the required service could be met, the complexities of which should not be

underestimated. As with the previous options, governance arrangements would need to be considerably strengthened. Indeed it is possible to contract out all care activity with the important caveat below, to alternative providers, although there are likely to be considerable costs associated with changes to existing staff. We would also stress that for complex procedures a multi-disciplinary team approach would be required. We do not feel that such work should be included if outsourcing was felt to be a suitable option.

Investment in monitoring, in particular probity arrangements would need to take place. Processes to identify which individuals were entitled to what care and access to this for contractors would need to be made available. We would also suggest that outcomes measures should also be adopted.

For all of the options identified, differing delivery arrangements could be used but these issues are relatively minor when compared to the overarching requirements identified initially. A coherent strategy to provide guidance would still be a priority.

Options for policy implementation of dental care arrangements

We would suggest that while the three options identified all provide potential benefits over the current arrangements, the actual extent of these benefits cannot be accurately quantified nor would reforms bear fruition until the underlying shortfalls are addressed. The table on page 52 summarises recommendations, arranged by policy area and split into short and long term goals. These are general areas of activity, indicating the direction of travel we recommend developments should take, many are enablers that will support the States in the development of strategy and delivery.

More specific and complementary recommendations are listed below which address possible changes to the current delivery system.

Short term development options

1. The Departments of Health and Social Services and Social Security establish a working party to agree arrangements for dental entitlements funded by the States of Jersey in which the former is responsible for all aspects of care treatment provision and the latter, for establishing which individuals are entitled to the defined benefits.

2. The Department of Health and Social Services seek to engage with the dental profession on developing standards of care through their involvement in the Primary Care Governance Team. The development of more transparent arrangements surrounding costs of care and the use of patient satisfaction measures would be key. In addition, we would recommend that the States utilises the need for adherence to the General Dental Council guidance on the provision of care plans and costings prior to the commencement of treatment.

3. The Department of Health and Social Services explore ways to improve current information systems for the States' provided dental services. The information system should provide, at minimum, an ability to record the booking of appointments, patient records and clinical activity. We would strongly urge the Hospital Service to explore the options available in dental management systems and their integration with the current hospital IT arrangements.

4. The value of the current epidemiology work is questionable. There is a need to develop a more coherent approach to oral health needs assessment that may include a clinical component. International experiences have highlighted a number of possible instruments that could be used. Given current resource expenditure, the improvements could be achieved on a cost neutral basis.

5. The Department of Health and Social Services works with the dental profession to explore options for the provision of dental care for individuals under the age of 16. There could be considerable efficiency savings and patient benefits if the more routine care of children was undertaken by existing community practitioners through an agreed contractual arrangement with the current hospital services undertaking a more specialised role. This would require better integration over the present arrangements, leadership and management training.

6. Governance arrangements for assessing the qualities of treatment provided under all arrangements funded by the States of Jersey should be improved. The value of current arrangements to assess the qualities of care must be questioned and these resources could be allocated to provide a more efficient solution.

Longer term development options

7. The sustainability of current Consultant led services for oral surgery, orthodontics and special care is weak. Current staff have been in post for a considerable time and there is a lack of detail in planning for their replacement. There is lack of any coherent vision for the provision of oral care services across the States and it is strongly recommended that the Department of Health and Social Services work with the public and the dental profession on the development of an oral health strategy which addresses key areas: the determinants of disease; service provision; training, and; sustainable funding arrangements based on need. One part of the work should explore the extent to which current hospital based activity could be transferred to primary care settings.

8. The future oral health needs of the population of the States of Jersey are unknown but are likely to see a substantial increase in demands for more complex care in particular, in the elderly age groups. The States need to give considerable thought to how the needs of this growing sector of the population could be managed. We would suggest that planning centres on an integrated approach involving other care workers as well as ensuring the capability of the dental professions to meet identified needs.

9. The States explore with third party health insurance schemes options for dental benefits packages for adults. The arrangements would need to take into account the context of current care provision and the present weak governance structures. We would also suggest that the States explore the idea of introducing a capitation centred scheme for children using existing resources.

10. The Department of Social Security will need to develop monitoring arrangements on dental benefits expenditure to allow for budgetary challenges that may arise as economic circumstances

alter. Should the number of individuals entitled to benefits increase, commensurate service resource implications would arise.

POLICY AREA	SHORT TERM	LONGER TERM
Tackling the determinants of poor oral health	develop an approach which identifies common risk factors and adopt a life course approach to tackling the determinants of poor oral health through working with the health promotion unit.	monitoring the impact of programmes established to ensure the effectiveness and efficiency of any arrangements.
Ensuring adequate and equitable care	undertake a needs assessment of differing sections of the Jersey population, especially the elderly to help establish priorities for service development.	develop monitoring arrangements for the States funding of dental care.
Reimbursement changes		explore independent contractor agreements to provide a universal care package for children based on outcomes of reducing treatment need. explore opportunities for the development of dental health insurance packages for the population.
Improving controls	develop governance processes that provide improved management data to help ensure effective and efficient delivery arrangements.	(see information system development)
Efficiencies in delivery	develop with all sections of the dental care delivery system a better defined role for each element to ensure their expertise is made best use of.	undertake a workforce assessment to ensure that that the States of Jersey have the most appropriate blend of personnel to provide an efficient and effective care delivery system.
Information system	undertake an options appraisal of dental software systems to identify the arrangement which best meets the identified requirements of the current hospital based services and that integrates with current general management systems.	develop a probity improvement arrangement that has as its objective a need to continually improve the qualities of the care delivery system.

Benefits and Risks of the above approaches.

Within the current system, even acknowledging the poor qualities of information available, there will be opportunity for major efficiencies to be made.

The integration of oral health into general health promotion may offer some benefits although data are scant. There are a number of toothbrushing programmes to tackle the determinants of poor oral health being evaluated in the UK that may provide a cost-effective approach. Against this the costs of ChildSmile programme in Scotland is very high, even accepting that their disease levels are far worse that those found in Jersey.

The other group that requires care development centres on the elderly. We have not seen any needs assessment work data but would suggest that need is likely to be high and will continue to grow at least in the short term. Failure to reduce the unmet need is likely to place greater demands on the Hospital sector as the complexities of care management in this group who are likely to suffer from a range of co-morbidities that make even what may be termed routine treatment beyond the capabilities of many general dental practitioners.

We would strongly urge that some form of needs assessment work is undertaken as a priority for this segment of the population. There are examples from Sweden as well as the UK which highlight that relatively simple questionnaire data can provide such information and the cost could be met from reallocation from the current children's survey programme budget.

The risks of such an approach is that, should need be considerable, the ability of services to cope with the demand could be questioned.

In respect of reimbursement changes, the dental epidemiology data would suggest that there is a sizeable segment of the child population with little or no disease. The efficiencies of developing a contract with the States dental profession to undertake the care of children in general should provide benefits. Such a system has been tried and developed in the Basque country using an incremental capitation based system.

The major risk of this centres on the current poor governance arrangements. The States must address this issue as part of the work programme. Designing such a contract will not be easy and will require consultation and negotiation with the dental profession.

There are a number of external health benefit companies that could be approached to explore how they might work with the States in supporting the possible implementation.

We would strongly urge the development of improved controls and probity systems – and improved management and outcome data, supported by appropriate information systems. And finally that the Department of Health and Social Services work with the Jersey Consumer Council to ensure that the public are provided with costed treatment plans prior to the commencement of care.

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