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Dental Public Health in Action

The use of the NICE ten step model to conduct an oral health needs assessment in South Yorkshire and Bassetlaw

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Public health competencies being illustrated
Oral health surveillance
Strategic leadership and collaborative working for health
Oral health improvement
Dental public health intelligence
Appropriate attitude, ethical and legal

Initial Impetus for action

The *Health and Social Care Act 2012* created a new commissioning framework for the provision of health, social care and public health in England (UK Government, 2012). NHS England became the sole commissioner for all NHS dental services, including primary, secondary and unscheduled dental care. Local authorities became responsible for public health, epidemiological surveys, improving the oral health of their communities and for commissioning oral health improvement services including water fluoridation (NHS Bodies and Local Authorities *(Partnership Arrangements, Care Trusts, Public Health and Local Healthwatch) Regulations (SI 2012/3094))*. At the time this needs assessment was conducted, NHS South Yorkshire and Bassetlaw Area Team commissioned all the NHS dental services in the local authority areas of Barnsley, Doncaster, Rotherham, Sheffield and Bassetlaw. The dental Local Professional Network provided clinical and public health input to the commissioning process through its annual work plan. However, there was no up to date information on local oral health needs and how these needs were being met by NHS dental services, hence it was difficult to determine what were the local commissioning priorities.

Solutions suggested

To support the new commissioning arrangements within NHS England, the dental public health team proposed that an oral health needs assessment be undertaken across South Yorkshire and Bassetlaw and this was then included in the work plan of the local dental network. The results of the needs assessment would be used to revise the work plan reflecting any identified local priorities and gaps. It was envisaged that this approach would facilitate commissioning of evidence-based services based on local needs and priorities.

The oral health needs assessment would also support local authorities in their relatively new role of improving oral health through informing oral health improvement strategies, as well as contributing to joint strategic needs assessments and joint health and well-being strategies.

Process described

The South Yorkshire and Bassetlaw oral health needs assessment was one of three oral health needs assessments that were conducted in Yorkshire and the Humber, representing the NHS England commissioning footprints of West Yorkshire, North Yorkshire and Humber and South Yorkshire and Bassetlaw.

An initial literature search was conducted to ascertain the best possible approach to conducting the needs assessment. This search identified a recent systematic review of oral health needs assessments. That review concluded that there was no evidence of an ideal method for the oral health needs assessment process that would result in cost-effective outcomes with clinical efficacy. It proposed a ten-step model for conducting a needs assessment (Chestnutt *et al.*, 2013). The dental public health team agreed that this model would be used to conduct the needs assessment (Figure 1). A blended approach was adopted encompassing epidemiological assessments, comparative assessments that compared the services in distinct local authority areas and corporate assessments that reflected the views of various partners including patient and public representatives.

As an initial step, partnerships were formed with key stakeholders including the commissioners of dental services (South Yorkshire and Bassetlaw Area Team) and oral health promotion services (local authorities), providers of services through collaboration of the dental local professional network and patient representatives (Healthwatch) to facilitate support for the process.

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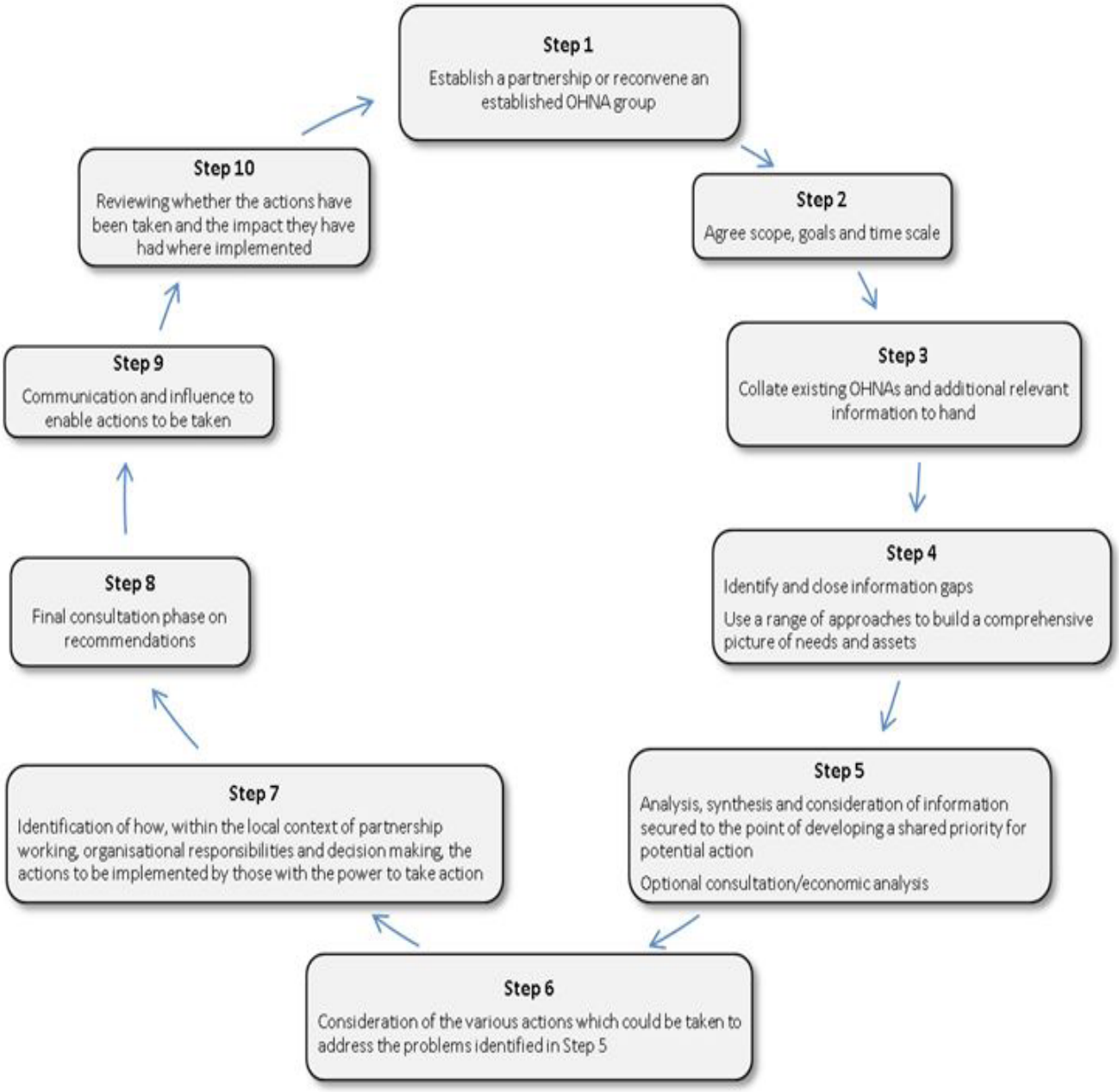

Figure 1. NICE 10-step model to conduct an OHNA
Source: Modified from Chestnutt et al., 2013, p56

The scope and goals of the needs assessment were agreed with the dental local professional network together with a timeframe of six months. After scoping previous local oral health needs assessments and joint strategic needs assessments the dental public health team agreed a broad outline of the sections to be included in the final written report of the oral health needs assessment.

Epidemiological data to describe the demographics, characteristics, general health and oral health of the local populations were sought from various sources including the Office for National Statistics child and adult dental health surveys, Public Health England's national dental epidemiology programme, PHE's knowledge and intelligence team and the local joint strategic needs assessments.

Data to determine the local dental and oral health promotion service provision were requested from the commissioners, NHS Business Service Authority and providers, including the community dental services and local authority partners. Water companies were contacted for clarity about the boundaries of fluoridated areas in Bassetlaw. Dental information from general practitioners' (GP) surveys and information from Healthwatch in the local authority areas was utilised to understand public and patients' perspectives.

The multiple sources of data were synthesised and analysed. Inferences and conclusions were drawn from the analyses. These conclusions informed the list of key issues and priorities drafted for consideration and proposed to the multiple partners (Table 1).

A written report was produced outlining the needs assessment process, the findings of the needs assessment and the key issues for consideration. The report was peer-reviewed and subsequently shared with partners for a dual strand (professional and public) four-week consultation period. The dental public health team reflected on the findings of the consultation to revise the written report and capitalise on the learning points.

Table 1. Identified key issues for consideration

Key issues	*Priorities to consider*
Projected population growth over the next 20 years	Commissioning plans to consider the expected increases in population size
Association of poor oral health with deprivation	Oral health and oral health improvement strategies should address the health inequalities that exist
Five and 12-year-old children were more likely to experience tooth decay relative to the national average	Prevention of tooth decay should be a priority for dental services and oral health improvement strategies targeting children
Vulnerable groups identified locally included: people with learning disabilities, homeless persons, traveller groups, socially excluded persons, and those requiring bariatric care. However, few local data on the oral health of vulnerable groups were available	Undertaking a more detailed oral health needs assessment of vulnerable groups should be considered by commissioners
The Roma Slovak population is increasing in some areas and this group is likely to have difficulty accessing oral health-care services	Service commissioners and public health should work together to ensure access to dental and oral health improvement services for Roma Slovak people
There were marked inequities in service provision	The feasibility of undertaking a health equity audit of access to dental services should be explored
Fluoride varnish rates were higher than the national average, but still not in accordance with *Delivering Better Oral Health* (PHE, 2014)	Dental practices should be supported to ensure evidence-based guidance on fluoride varnish applications and recall intervals is implemented. Key performance indicators to encourage evidence-based practice should be considered for inclusion in any new dental contracts
Most hospital activity was provided on an outpatient basis. The highest spend was on oral surgery day cases and most activity was outpatient oral surgery	NHS England may wish to consider working with secondary care providers to review secondary care local tariffs and develop and agree standard coding for secondary care to ensure value for money
The overall experience of people using primary care dental services was positive. The main reported barriers to accessing NHS dental services included dentists not taking on patients, costs, lack of time and convenience of appointments	Commissioners of services and local Healthwatch organisations should work together to ensure people receive accurate information on how to access dental services and which practices are accepting new NHS patients
Mouth cancer incidence had increased in some areas	Oral health improvement strategies in these areas should include actions to address mouth cancer
Oral health improvement services were predominantly targeted children	Oral health improvement services should consider the vulnerable adults identified
Better public engagement is needed in developing local oral health strategies	Local people's views should be reflected when commissioning services and developing oral health improvement strategies

After the consultation, a stakeholder event was organised by the dental public health team in collaboration with NHS England to raise awareness of the local oral health issues and to discuss the implications of the oral health needs assessment. Commissioners and providers of dental services, epidemiological and dental public health services, as well as public representatives were brought together to collaborate through organised workshops. These workshops facilitated the development of agreed action plans for 2015-17 to address the identified local key issues and priorities.

Outcomes

A number of key issues were identified in the oral health needs assessment and mapped against priorities for local partners to consider (Table 1).

The report of the oral health needs assessment is widely available online and on the websites of PHE and the South Yorkshire and Bassetlaw Dental Local Professional Network. Thus, it is an on-going shared planning resource for local partners.

At the launch event, workshops and subsequent meetings with local partners, the key actions and priorities agreed with NHS England were prevention and health equity audits. The principal priorities agreed with local authorities were the establishment of a Yorkshire and Humber Oral Health Improvement Commissioners' Network and an oral health needs assessment of vulnerable groups.

NHS England in collaboration with dental public health colleagues in PHE is working towards incorporating prevention in any new dental contracts. This has been a priority when developing the service specification for a prison dental services procurement in Yorkshire and The Humber.

Reflecting these agreed priorities, dental public health colleagues have planned to work with NHS England to support evidence-based prevention-focused equitable services for vulnerable groups during the re-procurement of the community dental services. A more detailed oral health needs assessment of vulnerable groups has been conducted by the dental public health team to support this process.

An orthodontic needs assessment and orthodontic services equity audit are being carried out. NHS England has also developed a project proposal for completing a health equity audit of primary care and unscheduled care.

Dental public health colleagues at PHE are exploring the development of a Yorkshire and The Humber Oral Health Improvement Commissioners' Network to support local authorities in their new statutory functions of dental epidemiology and oral health improvement. A director of public health has been agreed to champion the network and terms of reference have been developed and a first meeting scheduled. This network aims to facilitate benchmarking, mutual learning and sharing of resources and good practice.

Challenges addressed

The oral health needs assessment took 10 months longer to complete than initially anticipated. This was because its scope was broad and evolved due to the multiple, competing changing priorities of partners in the new organisational structure. The six-month timeframe was largely arbitrary. Development of a chart to map the scope, goals and what each step would involve may have led to more realistic timeframes. This would also have enabled the dental public health team to capitalise on opportunities to undertake parallel work with Healthwatch to close the emerged local gaps in knowledge about public perceptions of oral health and dental services.

As well as public perceptions, there were gaps in local data about vulnerable groups and clinical activity, which were also highlighted in the consultation. Obtaining dental service activity data was extremely challenging and time consuming and resulted in further delays to the project.

Some of these challenges were ameliorated at the launch event and workshops, which strengthened local partnerships. Those events were valuable in promoting the value of the oral health needs assessment and offering ownership of the work to multiple partners. The workshops fostered a platform for engagement and sharing and it is hoped that these strengthened relationships and ethos will be translated into more efficient future working.

Future implications

This was the first oral health needs assessment undertaken in the new organisational structures, thus it provided a platform for the dental public health team to demonstrate their key role in procuring evidence-informed dental services that are based on local needs and priorities. It was also an opportunity for PHE to form and strengthen relationships with local authority partners to support them in their new statutory role to provide or commission dental epidemiological and oral health promotion services. Furthermore, the needs assessment was intended to provide local authorities some support and the impetus to include oral health in their joint strategic needs assessments and joint health and wellbeing strategies.

Multiple partners have initiated work to address some of the key priorities identified in the needs assessment. However, the numerous issues have been prioritised and will need to be addressed in stages.

To address the final step of the NICE model a review of the planned actions must be undertaken to evaluate the impacts of the implemented actions.

The oral health needs assessment is an on-going shared planning resource that enables dental service commissioners and local authority partners to develop evidence-based action plans based on local priorities. Commissioners and providers can also reflect on the public and patients' experiences section to evaluate services and implement changes that would improve patient reported outcomes.

Local partnerships were formed and strengthened over the stages of conducting the needs assessment. These extended relationships in the new organisational structure are likely to be constructive when advocating future work to improve the oral health of local communities.

Learning points

The initial step of the NICE model involved forming an oral health needs assessment group of key stakeholders. In this project, partners were met individually, the needs assessment was agreed on the dental local professional work plan, was a standing agenda item at the local professional network meetings and earlier drafts of the report were shared with partners.

A key learning outcome from conducting the needs assessment has been appreciating the value of designing a big project before starting. This would include developing a working group, organising a stakeholder event, agreeing the scope and written goals and mapping detailed, staged timeframes. This planned approach, with strengthened partnerships has the potential to achieve more effective and efficient outcomes.

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