ITEM No …7……..

REPORT TO: **HEALTH AND SOCIAL CARE INTEGRATION JOINT BOARD – 6 DECEMBER 2016**

REPORT ON: **DIRECTOR OF PUBLIC HEALTH ANNUAL REPORT 2015/16**

REPORT BY: **DIRECTOR OF PUBLIC HEALTH**

REPORT NO: **DIJB47-2016**

1.0 PURPOSE OF REPORT

1.1 The work of the Directorate of Public Health contributes directly to improved healthy life expectancy by supporting people to look after themselves, by contributing to closing the health inequalities gap within a generation, by ensuring that services meet minimum quality standards, especially patient experience, and by being cost-effective in all decisions, actions and services.

1.2 The Director of Public Health in each territorial Health Board is required to publish annually an independent report on public health. This Report is required to be brought to Tayside NHS Board and made public for use by local stakeholders, including individuals, committees, the third sector, local authorities and NHS partners.

1.3 In Tayside the focus has mainly been on the work of the Directorate of Public Health in conjunction with its partner organisations and local communities.

1.4 In 2014 a number of people asked for a shorter, more focused and better illustrated Report covering fewer topics, so for three years that is what we have provided. Feedback on the Reports has been extremely positive. Commissioning, co-ordinating, copy editing and proofreading of this Report and the two previous Reports were delegated to Mrs Lesley Marley, Public Health Directorate Manager. The responsible officer is Dr Drew Walker, Director of Public Health.

1.5 The Report was accepted by Tayside NHS Board in August 2016. The report is brought to Dundee Health and Social Care Joint Integration Board for information.

2.0 RECOMMENDATIONS

It is recommended that the Integration Joint Board (IJB):

2.1 Notes the Report and supports the recommendations outlined in the Report (attached as Appendix 1).

3.0 FINANCIAL IMPLICATIONS

None.

4.0 MAIN TEXT

4.1 The Report identifies progress and improvements which have been made to the health of the population and to narrowing health inequalities. It also outlines further action required to deliver greater improvements in health, and a further narrowing of health inequalities.

4.2 The population profile section of the Report recognises that the demography of our population is an important factor in tackling health issues. Many illnesses, conditions and health-related

behaviours are associated with age, gender or other demographic characteristics. An awareness of population distributions and attributes helps to identify target populations for services.

4.3 The early years, children and young people section highlights the importance of evidence-based prevention, early identification and intervention at these formative stages of life. The section takes the reader on a journey from birth to 18 years of age and presents an array of innovative partnership work undertaken to improve both physical and mental health and wellbeing. Our aim is to make Scotland a place where children can flourish.

4.4 Screening programmes are designed to detect early signs of disease in the population and then to provide a reliable method of referral for diagnostic testing and further treatment. NHS Tayside operates local public health screening services as part of the national NHS screening programmes. Specialist public health involvement in screening focuses on making sure that the conditions required for successful screening are met in everyday operation of the programmes i.e. making sure participants have adequate information to make an informed choice whether or not to participate in screening and ensuring that the implementation of public health screening does not increase health inequalities in the eligible population.

4.5 Smoking remains a major influence on ill health; tobacco use is associated with excess mortality and morbidity and is a major influence in health inequalities and poverty. The Report gives a Tayside overview and details the preventative and protective actions undertaken to protect the population from the harms related to tobacco use, or exposure to second hand smoke. Tayside's refreshed cessation service model, delivered via community pharmacies, is discussed against the background of the increasing use of electronic-cigarettes.

4.6 Physical inactivity is a significant risk factor for ill health. The main focus is to get inactive people to be active and prevent people from reducing the amount of activity which they do already. Interventions are not aimed at those who are already physically active - efforts targeted on these people would result in wider health inequalities. The target is that 50% of adults aged over 16 and 80% of all children aged 16 and under will meet the minimum recommended levels of physical activity by 2022. This section also reports on the programmes embedded in our hospitals settings (for all site users) to encourage physical activity and active travel as required by the Chief Medical Officer Letter (2015) Health Promoting Health Service.

4.7 Therapeutic nutrition represents either part of the clinical treatment or the principle treatment of a large number of conditions or diseases. Therapeutic nutrition seeks to alleviate symptoms and/or manage the clinical condition; reduce reliance on medication; prevent future medical complications and improve quality of life and life expectancy. The Tayside Nutrition Managed Clinical Network (Tayside Nutrition) leads improvement in therapeutic nutrition by focusing on clinical populations and working in partnership with healthcare personnel, partner agencies and the public to co-produce improvements in nutritional care across clinical pathways. The Report provides updates on improvements to the nutritional care of those living with coeliac disease, renal disease and cow's milk allergy.

5.0 POLICY IMPLICATIONS

This report has been screened for any policy implications in respect of Equality Impact Assessment and Risk Management. There are no major issues.

6.0 CONSULTATIONS

A fundamental part of the ethos of the Directorate of Public Health is collaboration and partnership working with individuals and groups across the NHS, with our local authorities, with the third sector and with communities themselves. There is increasing evidence that patient experience is greatly improved through the adoption of a co-produced, asset-based approach; wherever possible this is the approach taken with all public health programmes. The Chief Finance Officer and Clerk were also consulted in the preparation of this report.

7.0 BACKGROUND PAPERS

None.

Drew Walker
Director of Public Health

DATE: 19 November 2016

NHS Tayside

Director of Public Health

2015/16 Annual Report

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Foreword

Welcome to my 25th Director of Public Health (DPH) Annual Report, and my 16th as DPH in Tayside. I hope you enjoy reading about the successes and continuing challenges we face with our partners in delivering the public health and health equity agenda in Tayside. As always, I would welcome any feedback on the style and content of my Report, and of course suggestions on ways in which we can improve the quality and reach of the specialist services which we provide.

You will see from the Report that in 2015/16, despite the resource and capacity challenges which we have faced, along with the rest of the public and third sector, significant progress has been made on a wide range of fronts. We can be confident that as a result the population of Tayside is, on average, a little healthier than it would have been otherwise. I am grateful to all of my staff, and a wide range of partner organisations and individuals, for working so well together to improve public health here, and in some cases across Scotland. While much remains to be achieved, many improvements have already taken place, and I know that these colleagues and partner organisations are committed to building on these successes over the next year and beyond. An indication of some of the achievements and continuing challenges can be found at the beginning of this Report, where we feedback on the outcome of recommendations which we have made previously.

This year I want to comment on two other reports which are of huge public health significance to Tayside - the Annual Report of Scotland's Chief Medical Officer (CMO) for 2014/15[1], and the Report of the Dundee Fairness Commission; 'A Fair Way To Go[2].

The CMO Annual Report - titled Realistic Medicine - presents an important critique of the way medicine is practised in Scotland, and poses important questions for all clinicians on how medicine should be practised into the future. Our CMO Dr Catherine Calderwood outlines evidence that in the NHS in Scotland we do not always share our decision-making as much as we could do with our patients and our populations, we do not always take as personalised an approach to care as we could do, we are insufficiently

focused on the reduction of harm and waste in the way we deliver care, there is still too much unnecessary variation in practice and outcomes in the care which is provided, we need to manage better the risks involved in delivering care and other services, and we need to focus more on improving services systematically and finding innovative ways of improving health and healthcare.

The changes which will need to be made by the medical profession and others in the NHS, and in partner organisations, are absolutely fundamental if we are to achieve Dr Calderwood's intended destination of a system which delivers Realistic Medicine. The status quo is simply not an option, as it is unrealistic and unsustainable and is not meeting the needs and expectations of people who use our services. She outlines a future model of care which has 'an empowered patient in a shared decision-making partnership with the clinician. There needs to be co-creation of care packages that include prevention and rapid access to services when required. The growth of supported self-management is a key priority, as this allows patients to regain control of their own health. Healthcare now needs to extend far beyond the classical settings of hospitals, General Practitioner (GP) practices and hospices and reach more effectively into a person's own home and community.' Although this is a very challenging agenda for the medical and other health professions, it is very encouraging that Dr Calderwood has received almost entirely positive feedback on the vision which she has set out – it is clear therefore that there is a real appetite for the changes which she proposes.

The other report on which I want to comment is A Fair Way To Go, which was published by the Dundee Partnership and is the result of a year of work by the Dundee Fairness Commission, of which I was privileged to be a member. From the start the Commission set out to consider the nature, extent and impact of poverty in Dundee, to identify and investigate the key causes and consequences of poverty along with the policy and practical measures to address these, to consider evidence of what has worked elsewhere to combat poverty and inequality, to assess the effectiveness of efforts locally to date, and to make recommendations on additional priorities for action to tackle and reduce poverty in the city. A crucial part of the process was the in-depth involvement and engagement of those in Dundee who are experiencing poverty firsthand. In his foreword to the report the Chair of the Commission - Councillor Jimmy Black - said: 'Why

are things so unfair? We can blame the austerity policies of the last few years or the failure to protect our industries from unfair competition. We can also point the finger at politicians, globalisation, or alcohol and drugs or idleness. All of these things have an effect. But I think the real answer is that prosperous people have stopped seeing others who live in poverty. In their daily lives they don't see families living in poorly maintained, hard to heat, overpriced privately rented homes. The benefit cuts which hit unemployed parents hard have no visible impact on people in well-paid jobs. Different schools located in different areas means some pupils get far more qualifications and a head start in life while others are left behind.'

In its recommendations the Commission calls on the Dundee Partnership to prepare an action plan relating to stigma; work and wages; closing the education gap; benefits advice and support; housing and communities; and food and fuel. I will report on progress in my next Annual Report.

The reason for my own involvement is perhaps obvious – the health inequalities which are a direct result of, and contributor to, poverty are the single biggest challenge to public health and to the sustainability of public services, including the NHS. Our Health Equity Strategy - Communities in Control[3] - has now passed its sixth birthday, and a recent audit has shown that, while some progress has been made in some areas, and there are excellent examples of equity-focused work taking place across Tayside, large parts of our services have been relatively untouched by the comprehensive changes proposed in the Strategy. As a result, we have established a Health Equity Governance Board, chaired by our Chief Executive Lesley McLay, to oversee wider and more comprehensive implementation of the Strategy. Again, I will report on progress with this in my next Report.

Finally, my thanks go to Lesley Marley, Public Health Directorate Manager who has commissioned and co-ordinated this Report on my behalf.

And now, read on ...

Dr Drew Walker
Director of Public Health
NHS Tayside
August 2016

1. Report of the Dundee Fairness Commission. A Fair Way To Go. Dundee: 2016. Available from: www.dundeepartnership.co.uk/sites/default/files/fairnessreport-screen_0.pdf

2. Scottish Government. Chief Medical Officer's Annual Report 2014-15. Realistic Medicine. Edinburgh: 2016. Available from: www.gov.scot/Resource/0049/00492520.pdf

3. NHS Tayside. Health Equity Strategy - Communities in Control. Dundee: 2010.

Recommendations from the 2014/15 Report - an update.

Below *(in italics)* is a summary of the work we undertook in 2015/16 to fulfil the recommendations in my last Report.

Food, Fluid and Nutritional Care

Malnutrition matters as both a cause and a consequence of disease, leading to worse health and clinical outcomes in all social and NHS care settings. NHS Tayside recognises that the provision of high quality food, fluid and nutritional care is an essential part of clinical care. To build further on its achievements NHS Tayside must:

Understand where we are in terms of implementation of NHS Healthcare Improvement Scotland's (HIS's) 'Food, Fluid and Nutritional Care' standards (2014) and what must be done to achieve compliance across the hospital and community settings.

The standards apply to the care of all patients and are wider than undernutrition. They recognise the implications of health and social care integration, albeit they apply specifically to the NHS. A scoping exercise was undertaken to determine NHS Tayside's position regarding the implementation of the standards. It was evident that NHS Tayside has mostly implemented the standards within the hospital setting, but further work is required to embed the standards. In the community setting work has commenced to review the 'Malnutrition Universal Screening Tool' ('MUST') management guidelines and to develop an oral nutritional supplement clinical pathway for hospital and community settings. There will also be a training needs analysis.

Continue to develop standard operating procedures and protocols for the food, fluid and nutritional care policy including assessment, screening and care planning for paediatric and maternity populations.

Work has continued to update and develop protocols and standard operating procedures for the food, fluid and nutritional care policy. A review of the 'MUST' management guidelines for hospital and community settings is underway and when this is complete the protocol will be updated. Following publication of the Action for Sick

Children Scotland: Food in Hospitals Survey (2014/15) a working group was established to take forward the recommendations. Work is due to commence on the development of a protocol for weighing and measuring children.

Review the maintenance and provision of weighing and measuring equipment and to determine the requirements of clinical areas to ensure all patients are weighed and measured on admission.

Work is underway to examine the maintenance of weighing and measuring equipment across NHS Tayside. Clinical areas completed a questionnaire to determine their specific requirements and a need for bed weighers was identified.

Determine if patients referred to the Nutrition and Dietetic Service are seen within agreed 72 hours of referral and identify any improvement work as a result of the findings to ensure all patients are seen within this timescale.

Between November 2015 and February 2016 97% of patients referred to the Nutrition and Dietetic Service in the hospital setting were seen within 72 hours. Performance continues to be monitored and actions identified if required.

Complete the nutritional analysis of therapeutic recipes and menus to achieve 100% compliance with the 'Food in Hospitals' by December 2015.

Nutritional analysis of renal and non-gluten containing recipes and menus has been undertaken. Some issues were identified with these recipes; 100% compliance will not be achieved until these are resolved. A caterer was identified to lead a Recipe Review Group to address any anomalies with recipes.

Explore other ways of capturing patient feedback to better manage the amount of information and identify recurring themes.

A standard operating procedure was developed to detail the different ways in which patient feedback can be gathered e.g. using volunteers

at the bedside, menu cards and the senior charge nurse Walkaround Tool. Annually, the Tayside Nutrition MCN and the Catering Department will send wards questionnaires containing the required questions from Health Facilities Scotland. Any actions required as a result of patient feedback continue to be captured within the service improvement plan.

Contribute to the development of the national Catering Production Strategy and determine the implications of the strategy for NHS Tayside in terms of future production and provision of meals, ensuring nutrition standards and patient experience and satisfaction are maintained and/or improved.

The strategy is yet to be published so the implications for NHS Tayside are not yet known. NHS Tayside staff continue to contribute to the development of the national strategy.

Ensure that Tayside Nutrition MCN and the Nutrition and Dietetic Service continue to contribute to the undergraduate medical education and seek new opportunities to deliver education to other personnel delivering on aspects of food, fluid and nutritional care.

Tayside Nutrition MCN and the Nutrition and Dietetic Service have provided lectures and facilitated workshops in the undergraduate medical curriculum. These include contributions to the cardiovascular, dermatology, endocrinology and gastroenterology systems and child health. Dementia training is currently being developed with input from other key personnel to meet the training needs of NHS staff. In addition, year-on-year targets have been agreed for completion of the MUST learnPro module with 95% of registered NHS staff working with adult in-patients to complete this by March 2018.

With the advent of health and social care integration, influence and advocate for early intervention on food, fluid and nutritional care beyond the hospital setting.

The Tayside Nutrition MCN is leading an integrated and population based approach to the prevention, early intervention and treatment of

adult undernutrition. It is using a whole systems approach which recognises the contribution of all partners in the delivery of high quality nutritional care. This approach overcomes restrictive service boundaries, puts the individual at the centre of service provision, takes account of capabilities and costs across health and social care and third sector and joins up relevant existing services, projects, activities and amenities.

Oral Health

As the main oral health problems are almost completely preventable priorities should be focused on prevention. Our priorities were:

To develop an oral health equity strategy.

A new oral health equity strategy was approved by the Tayside NHS Board in February 2016 after public consultation.

To maintain and develop the Childsmile Programme;

- Increasing delivery of Childsmile in independent dental practices.
- Improving the participation of children from deprived areas.
- Supporting Early Years Collaborative work.

Delivery of the Childsmile programme continues with its combination of targeted and universal delivery. Ways of improving targeting those from deprived areas are being tested and some improvements in delivery by independent contractors have been achieved.

To develop the prevention programmes currently provided to a range of adult priority groups (adults in care homes, older people, those experiencing homelessness and offenders).

- Link messages with other general health and wellbeing messages such as services for obesity, and smoking cessation services.
- Increase the focus of activities on those individuals from more deprived areas to reduce inequalities.

Work to link messages will progress in 2016/17. The mobile dental

services provided for the homeless at the Steeple in Dundee are firmly established. Dental screening in care homes is in place and increasing numbers of homes are achieving the Tayside Oral Health Award.

- Build local community capacity to promote oral health and lead oral health promotion efforts.
- Work with local communities to improve oral health literacy to help them protect and improve their own oral health.
- Build on formal links to public health initiatives, such as services for obesity, and smoking cessation services.
- Continue to improve the quality of dental care delivered in NHS Tayside.

Innovative pilot work on oral health improvement programmes for the homeless and prisoners has been taking place in conjunction with the Dental Health Services Research Unit at the University of Dundee. The proportion of the Tayside population registered with a dentist is at its highest level (88% children, 84% adults).

Welfare Reform

- Recognising that a long-term commitment to this agenda will be necessary, as well as the uncertain nature of future development, adopting phased project management timescales and a flexible approach to local service planning and provision in order to meet emerging need and challenges.

- Continued mapping and capturing of ongoing work, as well as new emerging initiatives, to ensure local action plan accurately reflects the breadth of activity (including partnership work) across Tayside which may potentially contribute towards national outcomes.

- Establishing links to Health and Social Care Integration Implementation Teams and seeking ways to influence Integration Scheme development and Integration Authority strategic planning, to ensure that the health impact of welfare reform and inequalities in health are given full consideration.

- Continued working with local authority partners to ensure that

action to mitigate the health impact of welfare reform is integral to Single Outcome Agreement planning and reporting mechanisms.

- Consideration of how local action might best be monitored and measured in order to establish an appropriate and robust evaluation framework, and exploring the potential use of national and local community profile and health indicator data, to evidence both short and longer term outcomes.

The continuing air of uncertainty around implementation of the programme of welfare reform at both UK Government and Scottish Government level has created ongoing challenges for efforts to mitigate the impact on the health of individuals and communities. NHS Tayside therefore continues to adopt a flexible approach to action planning and service delivery to meet those emerging challenges and needs.

Working in partnership with local authority and third sector colleagues is still recognised as an essential feature of working towards national recommended outcomes. Links to Community Planning and the local Health and Social Care Partnerships are now firmly established, with NHS Tayside represented on all relevant strategic planning groups. This, plus the key involvement of the Director of Public Health with the Integration Joint Boards in all three areas of Tayside, as well as Dundee Fairness Commission, will ensure that due consideration is given to the welfare reform and health agenda in all service planning and delivery.

Progress has also been made in relation to the proposed development of a monitoring and evaluation framework linked to our local Welfare Reform Action Plan. Outcome and process indicators have been identified and baseline data gathered in order to monitor and measure progress against local and national proposed outcomes and a timeline of changes to the benefits system.

The timescale for our continued commitment to this work is not yet clear. For example, although Universal Credit has now been rolled-out in Dundee, Angus and Perth and Kinross, the full effect of this has yet to be witnessed. The actions taken by the Scottish Government

using the new devolved powers following the May 2016 election is another unknown. However, we will continue our efforts as before so long as there is evidence of a negative impact on health as a result of welfare reform.

Mental Health and Wellbeing

Enhancement of awareness raising and training activities promoting mental wellbeing and suicide prevention.

Increased awareness-raising activity involving new partners has taken place across Tayside including Suicide Prevention Week 2015, the Perth and Kinross Wellbeing Festival in October, Breathing Space Day activities in libraries, cafes and workplaces in February, and Year of Listening 'Listening Posts' in shopping centres.

Training was identified as a key priority at a recent suicide prevention development event and provision has been reviewed. In Perth and Kinross a number of new Scotland's Mental Health First Aid (SMHFA) instructors have been trained and are now delivering courses. Training capacity in Angus and Dundee for both the adult and young people's courses remains a concern; resources have not yet been identified to address this. New formats and venues are being tried to make training more accessible for local people.

A follow-up evaluation of SMHFA training in Perth and Kinross gave very positive results and will be rolled-out across Dundee and Angus. 86% of respondents reported they had used the skills/knowledge learned, 98% said they felt very or fairly confident to use the skills, and 95% said they would recommend SMHFA training.

Plans are in place to provide capacity for Suicide Intervention and Prevention Programme training (which is currently delivered in Angus) to be delivered in Dundee and Perth and Kinross.

Reinforce the value of a co-ordinated collaborative approach towards improving mental health across the life course and tackling inequalities in mental health, seeking opportunities in the integration of health and social care.

New integrated Mental Health and Wellbeing Strategies for Dundee and Perth and Kinross are being developed by multi-agency steering groups which include community representatives. Examples of integrated working include Well Connected and Social Prescribing, linking with existing work in localities to enhance capacity for community development of wellbeing resources and connections.

Suicide Prevention Co-ordinators are currently in post in all three localities, working collaboratively within integrated structures. The Tayside Multi-Agency Suicide Review process has started to gather valuable intelligence to inform suicide prevention initiatives.

Improving the life circumstances of individuals and families through the work to mitigate the health impacts of Welfare Reform will contribute to reducing inequalities in mental health.

Healthy Working Lives (HWL)

As in the past Key Performance Indicators (KPIs) will be agreed between NHS Tayside and the Scottish Centre for HWL (SCHWL). Work will focus on Small to Medium Enterprises (SMEs); particularly concerning health and safety. Within larger organisations, including NHS Tayside and the three local authorities (Angus, Dundee and Perth and Kinross) and other larger workplaces, focus will continue to be on the harder to reach and lower paid employees.

Five KPIs were agreed between the SCHWL and NHS Tayside for 2015/16. All KPIs were exceeded. KPIs agreed were:

- *KPI 1: Numbers of employers accessing services.*
- *KPI 2: Numbers attending training.*
- *KPI 3: Numbers detecting health and safety issues.*
- *KPI 4: Numbers engaging with multiple services.*
- *KPI: 5 Numbers of workplaces developing policies.*

KPI 1(accessing): Target was 387 employers with 1106 being achieved.
KPI 2 (training): Target was 94 employers with 100 being achieved.
KPI 3 (health and safety issues): Target was 78 employers with 120 being achieved.

KPI 4 (multiple services): Target 115 employers with 171 being achieved.
KPI 5 (development of policies): Target 26 employers with 42 being achieved.

SME workplaces (employing less than 250 people)
Work within the HWL team has continued to focus on SME workplaces who are less likely to have policies and practices in place which support staff health, safety and wellbeing.

279 SME workplaces have accessed the services provided by the HWL team throughout 2015/16. This support has included site visits giving occupational health and safety advice, attendance at various training opportunities, assistance with development of policies and health promotion opportunities. Two pop-up health events were held for SMEs; access to health and safety information, health checks, physiotherapy support and money advice services were available at the pop-up events.

NHS Tayside/Local Authorities/Larger Organisations
Support to larger organisations and local authorities has continued as they progress through the HWL award programme, or maintained current award levels.

Work within NHS Tayside sites has focussed on Support Services, Community Hospitals and harder to reach staffing groups. Support to maintain or progress through award programme has also been provided.

Work will progress with the delivery of welfare reform in-work entitlements awareness sessions in partnership with Welfare Rights Departments within the three local authorities.

In-work entitlement awareness sessions and information stands were provided throughout 2015/16. They were provided in partnership with Welfare Rights Departments within the three local authorities. They were also provided at NHS sites throughout Tayside. An awareness session was also provided specifically for SMEs.

Recommendations from this year's Report.

Below are the recommendations from our topics in this year's Report. They feature in our 2016/17 work plans and progress will be updated in my next Report.

Early Years, Children and Young People

Evidence demonstrates the importance of prevention, early identification and intervention throughout the early years of life. We will:

Secure national support to progress Suite of Summaries (SOS) will be sought in 2016/17.

Develop further the work to support improving outcomes in young people's mental health and emotional wellbeing.

Develop further opportunities for young people participating in the A Stop Smoking in Schools Trial (ASSIST) programme to take forward health issues identified in their school and wider community.

Work with partners, including education and other local authority services and local communities to agree and embed the smoke free homes initiatives and awareness of the issue of second hand smoke into ongoing work. We will also develop further opportunities to support individuals and families to make their homes smoke free.

Identify further opportunities to develop cessation support for young people who have started smoking and want to stop.

Screening

Specialist public health involvement focuses on ensuring that the conditions required for successful screening are met operationally.

The national screening programmes will remain a priority for NHS Tayside in 2016/17.

Maintain and where possible improve the uptake of screening programmes, especially in our more deprived communities.

Smoking

Smoking remains a major influence on ill health. Tobacco-use is strongly associated with excess mortality and morbidity and is also a major influence on health inequalities and poverty. Reducing the harms created by tobacco-use also means changing public opinion and working to de-normalise its use. To achieve this it is recommended that:

We work with local authority partners to identify opportunities to protect children and young people from the harms of tobacco smoke.

We review our policies and practices to identify areas in which a harm-reduction approach can be used to minimise the health problems caused by tobacco.

We identify ways in which we can make tobacco less available and a less desirable choice. We will work with partners to reduce the number of opportunities that people have to smoke tobacco and we will strive to create opportunities for smokers to choose healthier options.

Physical Activity

We know that regular physical activity of at least moderate intensity provides general health benefits across a range of diseases and across all ages. We will:

Provide leadership for physical activity in health and social care integration.

Via Healthy Working Lives (HWL) and Health Promoting Health Service (HPHS), embed the benefits of physical activity/active travel in workforce development to create an active health and social care workplace.

Work to maximise the use of NHS/local authority green space for physical activity.

Therapeutic Nutrition

Therapeutic nutrition represents either part of the clinical treatment or the principle treatment of a large number of conditions or diseases.

There are many other areas of therapeutic nutrition with potential for improvement; these will be considered using the same Tayside Nutrition improvement approach e.g. diabetes and irritable bowel syndrome.

This year's Report focuses on coeliac disease, renal conditions and cow's milk allergy.

For coeliac disease:

The Scottish Government plans to develop a national Coeliac Disease Clinical Pathway. This work will be led by a member of Tayside Nutrition during 2016/17 as part of the Developing Out-patient Integration Together (DOIT) Programme (Scottish Government). A review of the local pathway is already underway which will feed into the national work. Once finalised, the national Coeliac Disease Clinical Pathway will be incorporated into the NHS Tayside local pathway.

For renal disease:

Consider and understand better the demographics of the renal population of Tayside and identify health inequalities.

Hold a stakeholder event to explore co-producing and developing nutritional care pathways for nutritional support (food first, oral supplements and enteral tube feeding); weight management; healthy eating; phosphate restriction; potassium restriction; sodium restriction; fluid management and diabetes.

Identify health inequalities in nutritional care and work with key stakeholders to use targeted approaches to reduce them.

Scope further self-care and secondary prevention and consider the

use of new emerging information technologies such as Smart Phone Apps, internet and webcasts to support patients and staff to improve nutritional care.

For cow's milk allergy:

Design an update session for health visiting staff in response to a follow-up survey which assessed the impact and changes in practice.
Apply improvement methodologies to understand and visualise the current referral pathway for children with cow's milk allergy from primary to secondary care and make recommendations.
Identify health inequalities relating to the management of cow's milk allergy and work with key stakeholders using targeted approaches to reduce them.

Population Profile

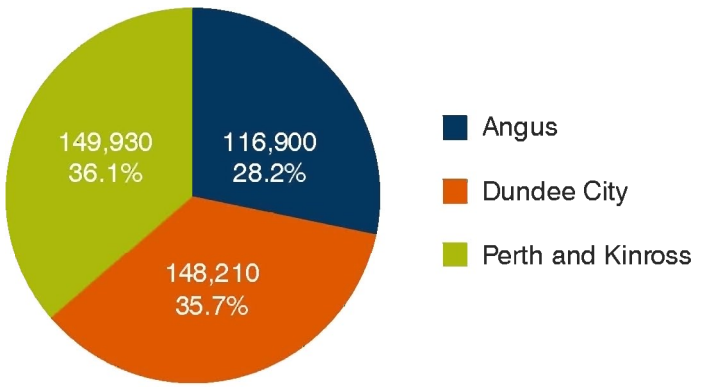
Population

Demographics

The demography of a population is an important factor in tackling health issues. Many illnesses, conditions and health related behaviours are associated with age, gender or other demographic characteristics. An awareness of population distributions and attributes helps to identify those likely to experience health inequalities.

The estimated population of Tayside on 30 June 2015 was 415,040, an increase of 1,240 (0.3%) from 2014. Similar to previous years, 48.6% of the population were males and 51.4% were females. Chart 1 shows the distribution of the population across Tayside's three local authority areas. For the second year in a row, Perth and Kinross held the highest proportion of the Tayside population.

Chart 1: Population of Tayside by local authority area as at 30 June 2015



Source: National Records of Scotland (NRS) 2015 Mid-year population estimates

Table 1 displays the age distribution of the population of Tayside and Scotland. The proportion of children across Tayside is broadly similar to Scotland as a whole. Within Tayside, Dundee City has a higher proportion of the population who are of working age and a lower proportion of older

people than the other two local authority areas. This is reflected in the median age of the population which varies from 37 years old in Dundee City to 45 years in the other two areas.

Table 1: Age structure of Tayside (compared to Scotland) as at 30 June 2015

Area	Median age	Children 0 - 15 years	Working age	Pensionable age
Scotland	41	17%	63%	20%
Tayside	**43**	**16%**	**62%**	**22%**
Angus	45	17%	59%	24%
Dundee City	37	16%	65%	19%
Perth and Kinross	45	16%	60%	24%

Notes: 1) Working age at 30 June 2015 is defined as men aged 16 to 64 and women aged 16 to approximately 62 years and 237 days. 2) Pensionable age at 30 June 2015 was 65 for men and approximately 62 years and 238 days for women

Source: NRS 2015 Mid-year population estimates

Minority Ethnic Population

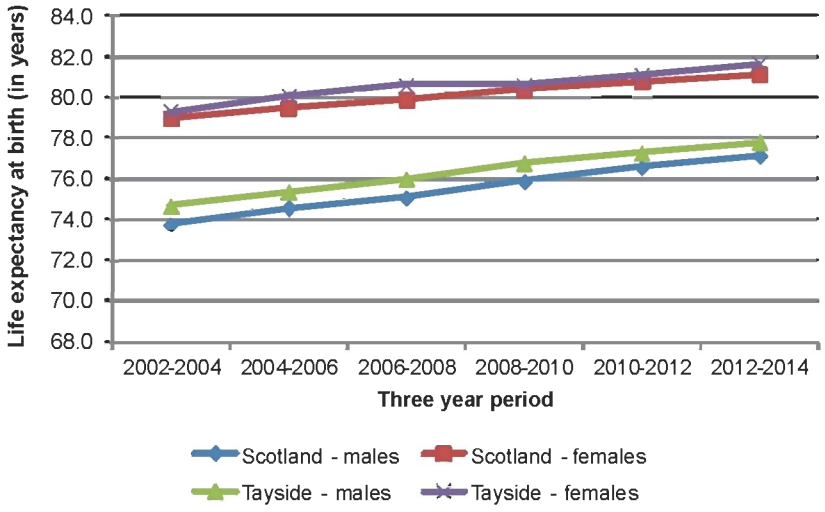
The 2011 Census reported that 3.2% (13,111 individuals) of the Tayside population were of non-white ethnicity. This varied across the region with the corresponding proportions in Angus, Dundee City and Perth and Kinross being 1.3%, 6.0% and 2.1% respectively.

Life Expectancy

Life expectancy at birth is the average number of years a newborn infant can expect to live if current mortality rates continue to apply.

Chart 2 shows the increase in life expectancy for Tayside and Scotland. While Tayside has a slightly higher life expectancy than that seen nationally, there is large variation within the region with Dundee City having the lowest expectancy in both genders and Perth and Kinross having the highest. In 2012-14, the expectation of life for males ranged from 75.3 years to 79.5 years, while the females ranged from 80.2 years to 83.0 years.

Chart 2: Life expectancy at birth (in years) in Tayside and Scotland 2002-2004 to 2012-2014



Source: NRS

Deprivation

Deprivation across Scotland is measured using the Scottish Index of Multiple Deprivation (SIMD). This is an area-based measure of deprivation, combining indicators across various domains to give a relative measure of deprivation for small geographies called datazones (areas containing approximately 500 to 1000 people) which are then ranked from most to least deprived. Data are often presented by quintiles. In a standard population, we would expect 20% of the population of each area to live within each quintile.

In 2014, 17.3% of the population in Tayside were living in the 20% most deprived areas of Scotland. However, there are large variations in deprivation across Tayside. Table 2 shows the proportion of the population living in each quintile (20%) of deprivation for each of the three local authority areas. The table shows that across Tayside, Dundee has by far the greatest proportion living in areas within the 20% most deprived in Scotland.

Table 2: Population of Tayside by SIMD quintile of deprivation 2014

SIMD 2012 Quintile	Angus	Dundee City	Perth and Kinross
1 most deprived	7%	37%	6%
2	17%	20%	12%
3	24%	13%	17%
4	38%	13%	43%
5 least deprived	14%	17%	22%

Source: NRS 2014 Mid-year population estimates and Scottish Government SIMD 2012

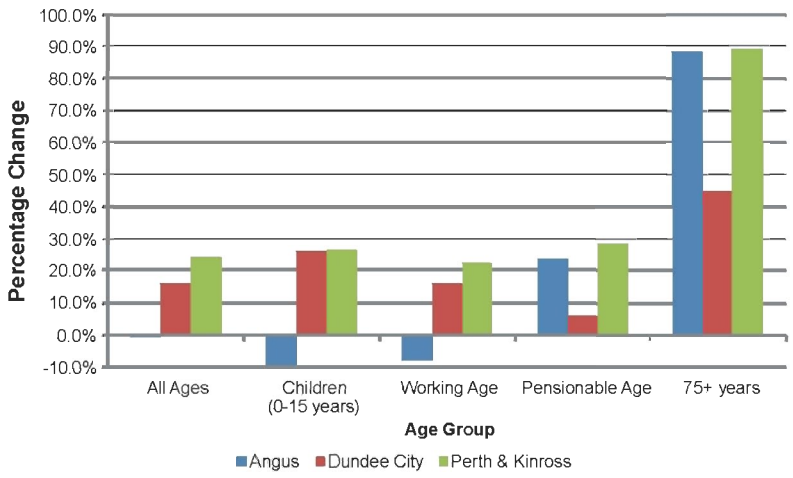
Population Projections

The Tayside population is expected to increase by 14.1% over the 25 years from 2012 to 2037 (based on the NRS 2012 population projections). This is higher than the expected increase of 8.8% for Scotland as a whole.

The predicted increase varies both within Tayside and when further examined by age and gender. Chart 3 compares the projected population for each of the three local authority areas by age group. In Angus, the overall population is projected to decrease by 0.8% in the period to 2037, with the largest increase being those of pensionable age (and particularly those aged 75+ years) being offset by a decrease in children and those of working age. The Dundee City population is projected to increase in each age group with the overall increase predicted to be 15.6%. Perth and Kinross is projected to grow by 24.2% with the proportion of pensionable age predicted to increase the most.

It should be noted that over the shorter term there have been considerable discrepancies between population projections and annual population estimates. Therefore, caution should be exercised in the use of population projections for planning purposes.

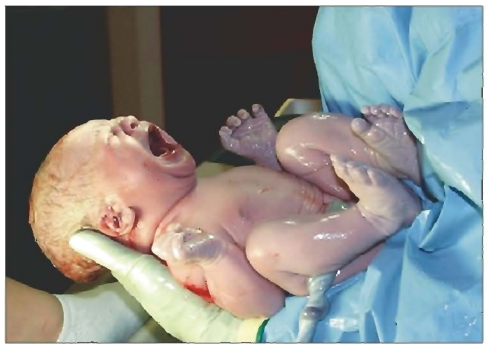
Chart 3: Projected population change in Tayside between 2012 and 2037 by age group



Source: NRS 2012-based population projections

Births

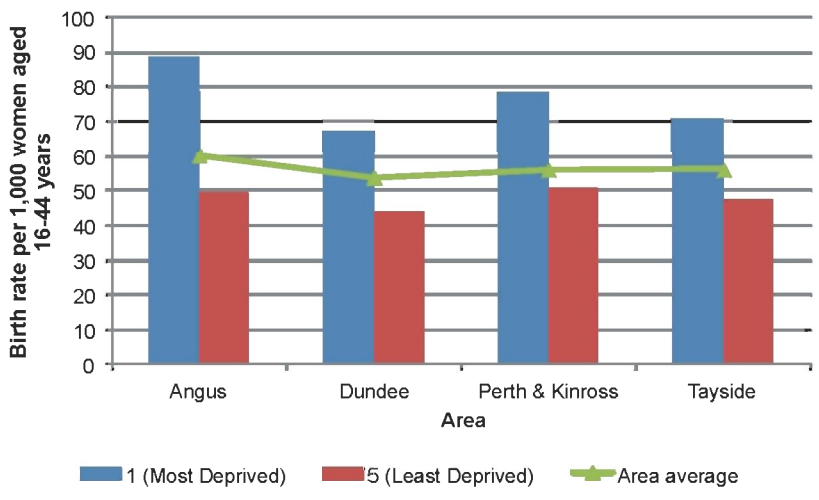
Since 2008 birth rates in Tayside and Scotland have been decreasing overall. However, in 2014 there were 4,218 live births to women living in Tayside, a rate of 54.6 births per 1,000 women aged 15-44 years and an increase of 4.9% from the previous year.



Rates varied across Tayside from 52.6 in Dundee City to 58.4 per 1,000 females aged 15-44 years in Angus. Although Dundee City had the lowest birth rate in 2014, it saw the biggest increase from the previous year (7.9%).

A quarter of births in Tayside in 2014 (1,090 babies) were born to mothers living in the most deprived quintile of deprivation. Chart 4 compares the birth rate (note this is per 1,000 women aged 16-44 years) in the most deprived areas with the least deprived and the average for each local authority area. In Dundee City 46.3% or 794 babies born in the area were born to mothers living in the most deprived areas of the City.

Chart 4: Live birth rate (per 1,000 women aged 16-44 years) across Tayside in 2014 by SIMD quintile



Source: NRS and Scottish Government SIMD 2012

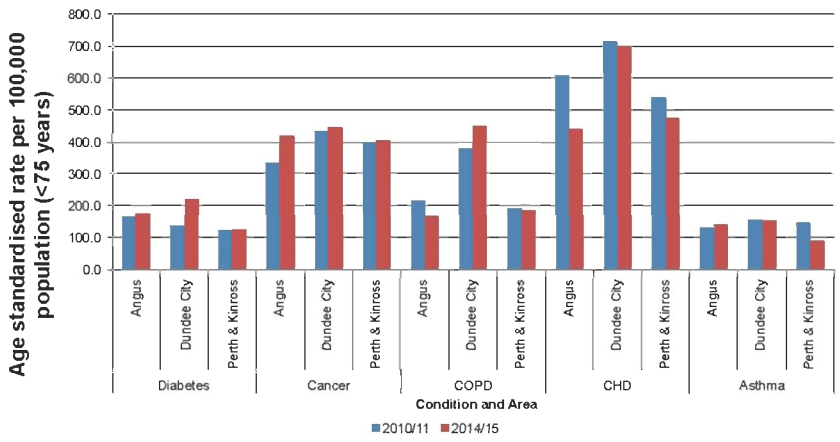
Ill Health

Many patterns of diseases and conditions demonstrate inequalities between genders, age groups or geographical areas. It is estimated that one in four adults (aged 16+ years) report some form of long term condition (LTC), health problem or disability and by the age of 65 nearly two thirds will have developed a LTC [1]. Examples of common LTC include diabetes mellitus, asthma and chronic obstructive pulmonary disease (COPD). As a result of their LTC some of these people will need to be hospitalised at some point, either as an emergency or elective admission.

Chart 5 compares the age standardised rates in 2010/11 and 2014/15 for those Tayside residents aged under 75 years who were discharged from hospital with a diagnosis of diabetes mellitus, COPD, coronary heart disease (CHD) and asthma. The chart also shows the rate of cancer registrations for the calendar years 2010 and 2014.

Dundee City has higher rates than either Angus or Perth and Kinross in all of the conditions examined. Although CHD hospital discharge rates are the highest of the conditions considered, they have decreased over time, while rates for diabetes, cancer registrations, COPD and asthma have predominantly increased.

Chart 5: Age standardised rates for those aged under 75 years for selected conditions across Tayside 2010/11 and 2014/15 (cancer registrations compare calendar years 2010 and 2014)

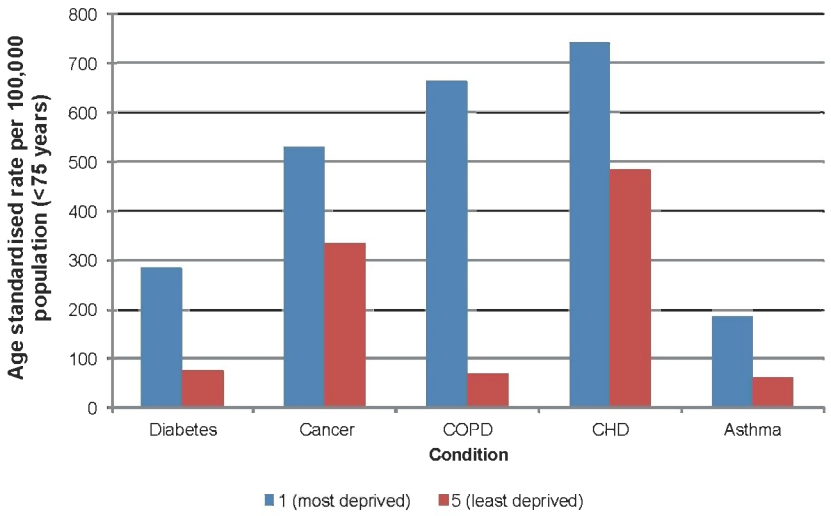


Notes: Diabetes mellitus defined by International Classification of Diseases (ICD)10 codes E10-E14. Cancer defined by ICD10 codes C00-C96 excl C44. COPD defined by ICD10 codes J40-J44. CHD defined by ICD10 codes I20-I25. Asthma defined by ICD10 codes J45-J46.

Source: Scottish Morbidity Report (SMR)01, SMR06 and NRS

Chart 6 shows the clear inequality gradient that exists when the hospital discharge rates for these selected conditions are examined by deprivation. This is particularly evident for COPD where rates in the most deprived areas are nine times higher than those in the least deprived. This is likely to be associated with the historical differences in smoking rates when most and least deprived areas are compared.

Chart 6: Comparison of age standardised rates for the most and least deprived areas in Tayside for selected conditions 2014/15 (2014 for cancer registrations)



Source: SMR01, SMR06, NRS and Scottish Government SIMD 2012

Health Risk Behaviours

A number of behavioural factors are known to influence the health of the population. These include the use of alcohol, drugs and tobacco; diet and nutrition, physical activity and sexual health. Some of these issues are explored in more detail later in this report.

Table 3 summarises the prevalence and rate of selected health risk behaviours and compares Tayside with the national average for the most recent data available. While Tayside shows favourable rates compared to Scotland as a whole, there are strong links with deprivation for these indicators with Dundee City having much higher rates than the rest of Tayside.

Table 3: Various health risk behaviours in Tayside and Scotland		
Health risk behaviour	**Tayside**	**Scotland**
Smoking prevalence (adults aged 16+ years)	20.8%	20.2%
Estimated smoking attributable deaths (per 100,000 popn)	329.2	366.8
Alcohol related hospital stays (per 100,000 popn)	508.9	671.7
Deaths from alcohol conditions (per 100,000 popn)	22.0	23.1
Drug related hospital stays (per 100,000 popn)	134.3	122.0
Drug related deaths (per 100,000 popn)	10.6	10.5
Active travel to work	19.0%	16.0%
Source: The Scottish Public Health Observatory (ScotPHO) Health and Wellbeing Profiles (Tayside)		

Mental Health

Over the last 10 years, age standardised rates of psychiatric hospitalisation have consistently been higher in Tayside than the national average. However, despite some fluctuations, the Tayside rates have decreased over time from 424 per 100,000 to 339 per 100,000 population.

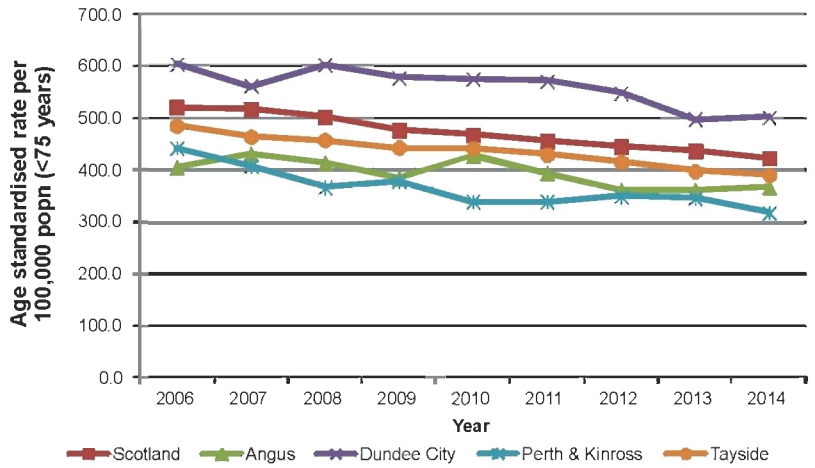
Rates of hospital discharge for those with a specific diagnosis of depression have also decreased over time. Prescribing data show that rates of prescribing of drugs for anxiety/depression/psychosis have risen over the last five years in Tayside from 14.7% of the population to 17.1%. This may mean that this condition is being managed in the community. These prescribing rates are slightly higher than the national average.

With some fluctuations, the number of suicides in Tayside has reduced over time. However, on average between 2009 and 2013, there were 52 deaths per year by intentional self harm, an age standardised rate of 13.1 per 100,000 population. Approximately three quarters of these deaths were males.

Mortality

Death rates vary across age groups and different geographical areas. Premature mortality rates (those dying under the age of 75 years) are far higher in Dundee City than the rest of Tayside and indeed Scotland (see Chart 7). Overall, premature mortality rates have decreased over time although there was a slight increase in rates in Angus and Dundee City in 2014.

Chart 7: Premature (<75 years) mortality in Tayside and Scotland 2006-2014



Source: NRS

Cancer and diseases of the circulatory system (includes CHD and stroke) and respiratory systems account for the majority (70.4%) of premature deaths across Scotland. Rates of these diseases have decreased over time and this pattern continued in 2014. Tayside rates are lower than the Scottish average for each of these diseases, but there is large variation within Tayside with Dundee City having above average rates for each of these causes.

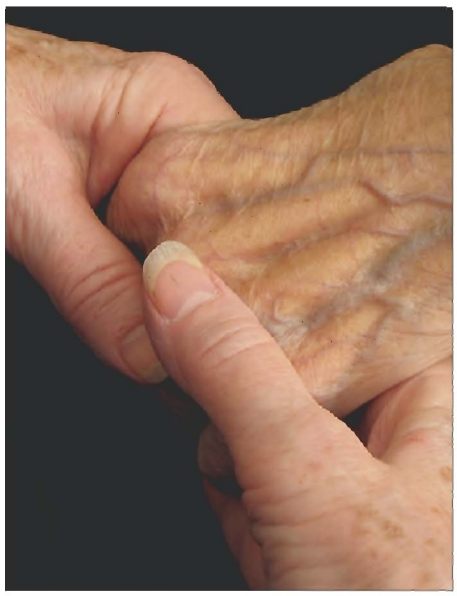
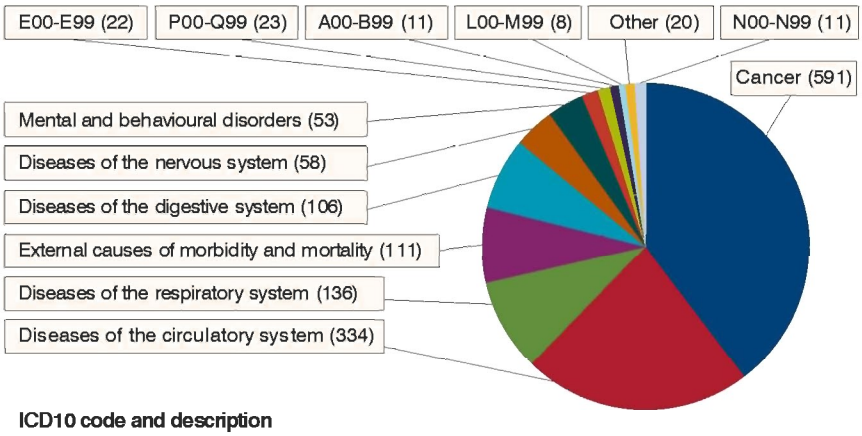


Chart 8 shows the 1,484 premature deaths in Tayside in 2014 by category of death.

Chart 8: Premature (<75 years) mortality by cause of death in Tayside 2014



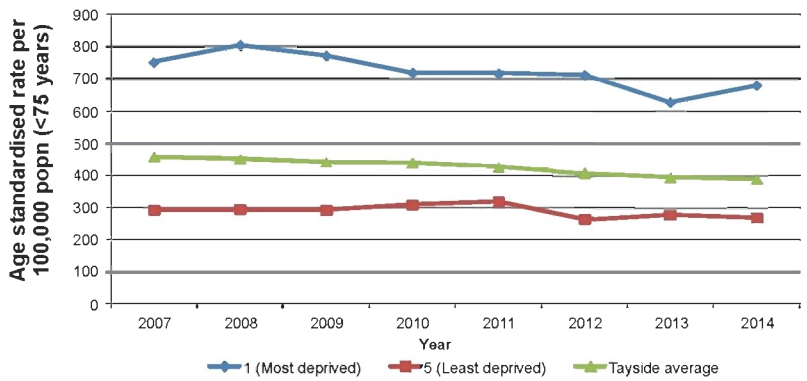
ICD10 code and description

A00-B99: Certain infectious & parasitic diseases, C00-C99: Cancer, E00-E99: Endocrine, nutritional & metabolic diseases, F00-F99: Mental & behavioural disorders, G00-G99: Diseases of the nervous system, I00-I99 Diseases of the circulatory system, J00-J99: Diseases of the respiratory system, K00-K93: Diseases of the digestive system, L00-M99: Diseases of the skin & subcutaneous tissue AND Diseases of the musculoskeletal system & connective tissue, N00-N99: Diseases of the genitourinary system, P00-Q99: Certain conditions originating in the perinatal period AND Congenital malformations, deformations & chromosomal abnormalities, V00-Y98: External causes of morbidity & mortality.

Source: NRS

Analysis of premature death by deprivation shows a clear inequality gradient. Chart 9 compares the rate of the most and least deprived communities in Tayside with the average rate. In 2014, there was a widening of the gap between the most and least deprived quintiles due to an increase in rates in the most deprived areas being accompanied by a reduction in the least deprived rate.

Chart 9: Premature (<75 years) mortality in Tayside by SIMD quintile 2007-2014



Source: NRS

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1. Improving the Health and Wellbeing of People with Long Term Conditions in Scotland: A National Action Plan. Available at: www.gov.scot/Publications/2009/12/03112054/0

Early Years, Children and Young People

Introduction

Evidence demonstrates the importance of prevention, early identification and intervention throughout the early years of life. NHS Tayside established a Children, Young People and Families Board (CYPFB) to focus on improving health and healthcare of all children and young people ensuring that they are given the best possible start in life.

Refreshed Child Health Programme

Chief Executive Letter (CEL) 13 (2013) advised NHS Boards to refocus the role of the health visitor on families with children under five years old. To support Boards in this work, a national refreshed Universal Health Visiting Pathway has been developed. Health visitors have a significant public health role to play in relation to individuals, families and communities by providing critical support to all children under five years.

The refreshed Health Visiting Pathway presents a core home visiting programme to be offered to all families by health visitors as a minimum standard. It consists of 11 home visits to all families, three of which include a formal review of the family and child's health by the health visitor (13-15 months, 27-30 months and prior to starting school). It covers the antenatal to pre-school period and provides an opportunity for health visitors, children and their parents to build a strong relationship, in which health visitors can support families appropriately, including acting as a gateway to other services. This early engagement will provide health

visitors with a sound foundation for their role as the Named Person for children under five years of age.

Further detail will be provided by the Scottish Government which is linked to the Child Health Review prior to starting school. This will build on the Health Visiting Pathway and work already in place, including liaison with both early learning and childcare sectors and schools and will acknowledge the transition of the Named Person role from health.

Universal 27-30 month Child Health Review

The universal 27-30 month child health review was implemented across Tayside in April 2013.

As reported by Information Services Division (ISD), across Scotland in 2014/15 71.6% of all reviews actively recorded that there were no concerns regarding the child's development. Children from deprived areas were more than twice as likely to have at least one developmental concern identified (27%) than those in the least deprived areas (12%). Boys (24%) were considerably more likely than girls (14%) to have at least one developmental concern identified. Speech, language and communication was the developmental domain where most concerns were identified. 11% of children reviewed in Scotland had a newly identified concern about their speech, language and communication and an additional 3% had a known concern in this domain prior to their review.

In 2014/15 the coverage in Tayside (90.8%) remained above the national average (86.7%). In Tayside 76.9% of children reviewed had no concerns identified. Of those in Tayside with developmental concerns identified, 70.2% were newly identified at the review. Of the developmental concerns identified (previously and new concerns combined) the most common were in speech, language and communication (16.6%), behavioural (4.7%) and social (3.6%) domains. In relation to speech, language and communication, 13.1% of children reviewed had a concern newly identified and an additional 3.5% of children had a known concern in this domain prior to review.

In Tayside, around 2% of those assessed had either a concern newly identified or a known concern prior to their review in one of the gross

motor, fine motor, vision and hearing domains. These findings for Tayside were broadly similar to Scotland with some local variation.

Tayside Suite of Summaries

There are a number of drivers for this work including; Health For All Children (Hall4), Children and Young People's Act (Scotland) 2014 and the eHealth Strategy, which highlight the need for systematic and effective data recording and efficient information sharing. In response to this, the Tayside Suite of Summaries (SOS) was developed.

The Tayside Maternal and Child Health Suite of Summaries (SOS) is a strategic integrated information infrastructure which brings together key relevant information identifying issues about the child extending beyond health and healthcare, his or her family and the child's wider circumstances in a chronological order. The SOS captures the mother-child journey through the recording and collating of the key relevant evidence-based data items relating to pre-birth, pre-school and school age enabling the professional to build up a more complete picture. It uses a systematic, structured approach which enables appropriate access to relevant information which is easy to navigate and succinct.

A multidisciplinary NHS Tayside eMaternal and Child Health Clinical Group was established to ensure clinical input into SOS. Local developmental work enabled the person-centred SOS to capture key issues during the mother-child journey and work was undertaken with community midwives in a deprived area to pilot the data items identified in the pre-birth SOS. As a result, the pre-birth SOS data items have been included in the specification for NHS Tayside's new maternity IT system.

In continuing to adopt a consistent and structured approach to information, further developmental work extended the Tayside SOS to include age-appropriate summary pages for the young, adult and older person. In this way, a person's journey is captured through the recording and collating of high level, key relevant evidence-based data items prospectively throughout the life course, thus enabling the clinician/professional to build up a more complete picture in real time.

Further pilot work has been undertaken with a number of frontline services

including: community nursing, allied health professions and community based services for vulnerable groups. The findings to date have demonstrated the ability of the Tayside SOS to:

- Profile information at an individual and population level.
- Identify potential vulnerability and health inequalities.
- Assist in providing succinct chronologies.
- Map need and resource use.
- Facilitate ongoing monitoring and evaluation outcomes.

The display of data items on a page/screen could be developed further to support clinicians using mechanisms such as including the Tayside SOS as an integral part of the Electronic Patient Record (EPR) within the clinical portal.

The SOS work was presented to the newly formed CYPFB in spring 2016 and agreement was given to consider implemention of the SOS in Tayside. Alternatively an approach could be made for support of pilot implementation nationally.

Recommendation

Securing national support to progress SOS will be sought in 2016/17.

Health Improvement

Health improvement work led by the Directorate of Public Health's Early Years and Young People Team (EYYPT) supports the development, design and delivery of, or in some situations enables others to deliver, a range of interventions that improves children and young people's opportunities.

Health improvement work with children and young people is influenced by a range of Scottish Government polices e.g. the Getting it right for every child (GIRFEC) principles[1], Safe, Healthy, Active, Nurtured, Achieving, Respected, Responsible and Included (SHANARRI)[2], Curriculum for Excellence[3] and national frameworks and strategies, including the Sexual Health and Blood Borne Virus Framework (SH and BBV Framework)[4], Tobacco Control Strategy for Scotland[5] and the Mental Health Strategy for Scotland[6]. Working closely with local authority partners, the setting for most activity is nursery, primary, secondary and off-site schools. A key priority is to enable a whole systems approach to make Scotland the best place for children in which to grow up.

Workforce development and training is an essential component of our integration work. Career-long professional learning offered to teachers, school health, community learning and development staff and others who work in this setting is the approach used to achieve long-term improvement and work towards responding to the health needs of children and young people in Tayside.

Other primary drivers which must be addressed to achieve desired outcomes include partnership working, direct contact work with children and young people, and resource development to improve young people's opportunities to make informed health choices and work towards closing the health inequalities gap.

Secondary drivers; day-to-day work delivered in partnership with the three local authorities is informed by evidence and demonstrates the interventions that we deliver have the most impact. Although individual pieces of work are linked directly to a specific primary driver, it should be acknowledged they also link to other areas of improvement.

Workforce Development and Training

We have worked to Improve and increase training and development opportunities that enhance the knowledge and skills of agencies working with children and young people.

Relationships, Sexual Health and Parenthood Education (RSHP)

The delivery of RSHP education within the Health and Wellbeing component of Curriculum for Excellence[3] is acknowledged within the SH and BBV Framework[4] as a right of all young people, including those not in school. Parents and carers also have an essential role to play in the provision of age appropriate RSHP and, as such, parents and carers should be supported by local authorities and NHS Boards to enable them to play a key role in discussing relationships and sexual health with their children.

Evidence shows that high quality RSHP education can lead to young people delaying sexual activity and reducing teenage pregnancy rates and sexually transmitted infections. Research also shows that effective RSHP should be initiated early, before patterns of sexual behaviour are established and should be a lifelong process, whereby young people develop their social skills and their understanding of how to maintain positive relationships.

To strengthen RSHP work being embedded in schools, a 3-18 RSHP Framework has been developed with Tayside's three local authorities. The framework, supported by Education Scotland, has built on existing good relationships between Angus, Dundee City, Perth and Kinross Councils and NHS Tayside and aims to promote and enhance existing and future partnership working. It has distilled the existing development work of the three local authorities to create an inter-authority collegiate approach to coherent and progressive planning. Children and young people can now develop a shared learning experience within RSHP that will support them between learning stages and at times of transition. Information leaflets have also been developed to give parents and carers an overview of children's learning at each age and stage. Speakeasy (see below) is promoted as a learning opportunity to increase parents' confidence around talking to their children about growing up.

In addition to the framework being rolled-out to schools, each local authority received funding from NHS Tayside's SH and BBV Managed Care Network to second a teacher to develop and deliver training to enhance RSHP education in schools. This has ensured a more consistent approach to delivering RSHP within, and across, the levels within Curriculum for Excellence[3]. It has also encouraged professional dialogue in schools around RSHP; including children and young people being able to contribute to the planning, delivery and review of their RSHP learning experience.

Parenthood Training

The Standard for Career-long Professional Learning (CLPL)[7] supports teachers to develop and enrich their practice, knowledge and skills. This allows teachers to embrace change and engage with new and emerging ideas, enabling them to enhance learning experiences. Parenthood work taking place in a Dundee secondary school has brought about the development of lessons and resources considered valuable tools to share with other teachers. CLPL sessions have been offered to secondary school teachers delivering parenthood training across Tayside, thus providing information and resources to assist in the delivery of the RSHP programme.

Speakeasy Training

Funded by NHS Tayside, Speakeasy is a preventative community-based programme for parents and carers of children of any age, and courses are delivered by trained professionals from various disciplines including public health. Speakeasy is an eight-week programme and supports communication with children and young people around the complex and often difficult topics of growing up,

relationships and sexual health. The programme works with groups of parents and carers to provide information, resources and support to enable them to take on the role of educators at home.

Speakeasy concentrates resources in areas of socio-economic need and where there are high rates of teenage pregnancy. Courses have also been delivered to foster carers, dads' groups and parents of young people with additional support needs.

Gone Training

There is growing evidence which indicates that individual risk-taking behaviours should not be assumed to be happening in isolation. Therefore, being aware of, and responding to, shared influences may have an impact on several behaviours, resulting in a more efficient and effective approach[4]. In Tayside training has been offered to guidance teachers enabling them to deliver Gone. Gone is an interactive, cross-curricular alcohol education programme providing opportunities for young people in Secondary 2 to explore and review their own knowledge, understanding and attitudes within the context of alcohol education. Developed by NHS Forth Valley, this active learning resource provides opportunities to reinforce skills and to investigate and understand resilience, empathy and risk. Links can also be made with other health improvement issues including relationships, sexual health and drug misuse issues.

Supporting Children's Mental Health and Emotional Wellbeing Training

The evidence-base tells us that work around promoting, enhancing and protecting positive mental health and emotional wellbeing should form the basis of any work with children and young people. Key Messages from Tackling Inequalities in the Early Years: 10 years of the Growing Up in Scotland Study[8] highlighted that at entry to primary school children in the lowest income group were almost twice as likely as those in the highest income group to exhibit borderline or abnormal social, emotional or behavioural health[9]. In collaboration with the three Tayside local authorities mental health and emotional wellbeing CLPL has been developed and delivered to enable early years practitioners to understand the importance of their role in supporting children to build resilience and develop good mental health and wellbeing.

Smoking Cessation Training

Around two-thirds of smokers in the UK started to smoke under the age of 18[5], and the earlier a young person starts to smoke the more likely they are to become an adult smoker, increasing the likelihood of illness and early death. Therefore, in addition to smoking prevention education and support for young people to stop smoking, it is also necessary to raise awareness of the links between tobacco-use and other risk-taking behaviours such as alcohol and cannabis-use.

Adult smoking cessation training has been adapted to enable multi-agency colleagues to increase their knowledge and skills to support young smokers if, and when, they want to stop smoking. This training is available on an ongoing basis.

Resources and Tools to Facilitate Improvement

Through joint working, we have developed and delivered age and stage appropriate materials to support children and young people's health.

Parenthood Resource

RSHP education forms a key part of health and wellbeing within Curriculum for Excellence[3] and includes topics such as, puberty, sexually transmitted infections, access to sexual health services, contraception and looking after a baby. Providing children and young people with opportunities to gain knowledge and skills in this area of the curriculum is intended to facilitate informed, responsible and healthy choices in all aspects of their lives, as well as enabling them to develop positive relationships as they mature[10].

curriculum for excellence

In partnership with a Dundee secondary school, lessons and accompanying resources have been developed to complement the parenthood strand of Curriculum for Excellence[3]. The lessons include

physical, emotional and nutritional care of a newborn baby, roles and responsibilities of being a parent and choices and options when feeding a newborn baby.

Development of Primary 5 Storytelling Resource

Literacy provides individuals with the skills to obtain, process, understand, appraise and apply information relating to their own health and behaviours. It also impacts an individual's ability to learn about disease prevention and health promotion and allows them to talk about health messages with others. Within a school setting all staff have the responsibility to develop, reinforce and extend learning in literacy, numeracy and health and wellbeing across all areas of learning. This requirement enables health to be woven into broader learning experiences within the class setting. In partnership with colleagues in education, using a Plan, Do, Study, Act (PDSA) approach, staff have worked with Primary 5 pupils and a storyteller to develop a storytelling project focused on the dangers of smoking and the impact it has on the environment. Primary 5 children shared their stories with peers in Primary 2 and parents, answering the younger children's questions about smoking. The process has been recorded and revisited with a second group of children to support further development of the work.

Partnership

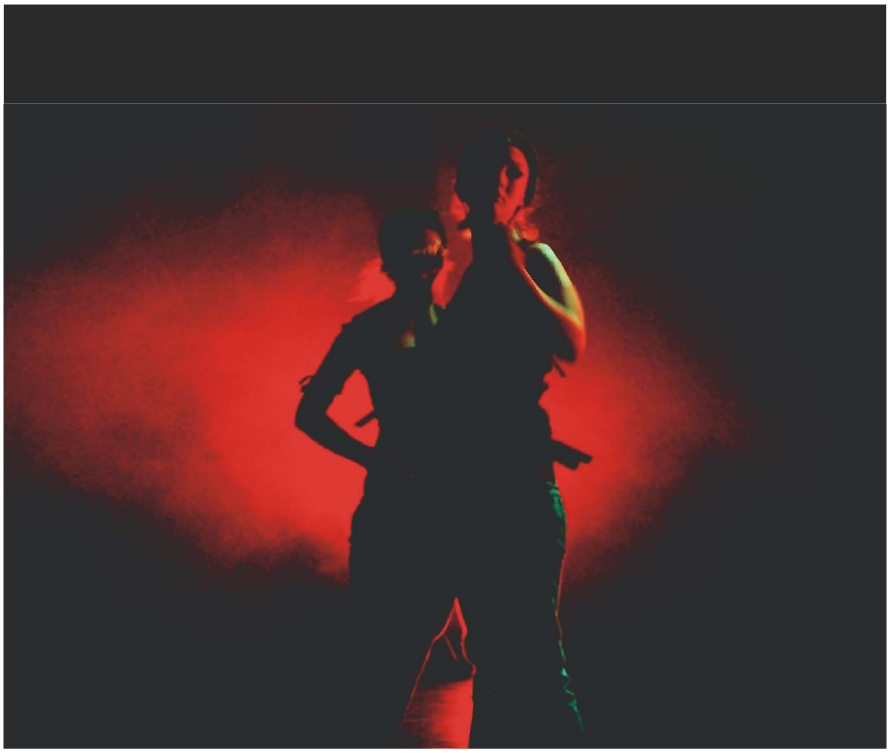
Working in partnership with multi-agency colleagues to enable children and young people to gain knowledge and understanding and promote wellbeing now and in the future.

Dance Tour - Dundee Secondary Schools

The Health Behaviour in School-Aged Children: WHO collaborative cross-national study (HBSC)[11] surveys young people in Scotland bi-annually. Responses cover a range of issues including family life, school environment, peer relations and wellbeing, providing an indication of how young people are coping at a time of significant change and growth. Within the most recent study, wellbeing and the proportion of young people who feel 'very happy' reduced steeply with age; from 59% of 11 year olds to 27% of 15 year olds. Boys were also found to 'always' feel

confident more than girls (21% versus 11%), and similarly boys (21%) were more likely than girls (13%) to report that they 'never' felt left out of things.

To address these challenges for young people, Dundee City Education Department provides funding to enable an annual dance tour. The EYYPT supports students attending The Scottish School of Contemporary Dance



at The Space, Dundee and Angus College, to develop and deliver a dance performance and workshops for all Dundee secondary schools. Exploring issues around mental, emotional, social and physical wellbeing, as well as the support available to young people, the sessions target Secondary 2 pupils (12-13 years) and around 1,200 young people participate in the experience each year.

Teachers support the sessions and there is an opportunity for pupils to write a diary. The diaries are confidential and pupils have an opportunity to seek help and support from either a guidance teacher or school health nurse. Schools are provided with a brief overview of the pupils' feedback and an indication of concerns raised by their young people.

Tayside Secondary 3 - Theatre Tour

The Scottish Adolescent Lifestyle and Substance Use Survey (SALSUS)[12] provides data on substance-use among young people aged 13 and 15 in Scotland. The 2013 survey indicated a reduction in alcohol, smoking and other drug-use in both age groups, with a significant (34%) reduction in alcohol consumed in the last week reported by 15 year olds since the last survey in 2010.

This SALSUS[12] data, the HBSC survey[11], Scottish teenage pregnancy statistics[13] and anecdotal feedback from guidance teachers, school health colleagues and young people is used as a basis to develop and deliver theatre performances and workshops focused around health issues and access to health services to Secondary 3 pupils (14-15 years) in Tayside's secondary schools.

The performances are created by young professional actors in collaboration with Dundee and Angus College and incorporate issues around sexual health and relationships, sexting, cyber-bullying, alcohol and drug misuse, mental wellbeing, sexuality, friendships and family relationships. Around 3,000 young people participate in the experience every year. Each session also enables local support service providers to meet young people and answer their questions about health related issues.

Health Promoting Schools

The Schools (Health Promotion and Nutrition) (Scotland) Act 2007[14] places health promotion at the heart of a school's activities and encourages work with partners to identify and meet the health needs of the whole school and its wider community. Through effective partnership working with pupils, teachers and other staff, parents and the wider community, the health promoting school promotes the mental, emotional, social and physical health and wellbeing of all children and young people.

Smoke Free Homes and Second hand Smoke

In response to the Scottish Government's target to reduce the proportion of children in Scotland exposed to second hand smoke in the home from

12% to 6% by 2020, one-day workshops were promoted in each local authority area in partnership with Action on Smoking and Health (ASH) Scotland. Targeting staff working with small children, the training increased participants' knowledge of second hand smoke and equipped them to encourage changes in parents' and carers' smoking behaviour.

Health Promotion Resources Service

Partners working within schools and community settings use the Directorate of Public Health's resources service to support the delivery of health and wellbeing within the curriculum, community-based work and one-to-one support. The service is promoted to schools and other multi-agency colleagues working with children and young people. Containing a specialised collection of materials, the service supports the population of Tayside to deliver health improvement. Resources include DVDs, teaching packs, models, games, leaflets and posters.

Work with Children and Young People

Establishing and responding to children and young people's health needs.

A Stop Smoking in Schools Trial (ASSIST)

One of the Scottish Government's commitments within Creating a Tobacco-free Generation: A Tobacco Control Strategy for Scotland[5] was to support a pilot of ASSIST[15] to consider its suitability for Scotland. The peer-led ASSIST programme, developed by Cardiff and Bristol Universities, has been evaluated as a useful smoking prevention initiative in Wales which could have a positive impact on inequalities. A total of 27 secondary schools are included in a Tayside-wide pilot to test the

intervention - the programme will be offered to each school three times between 2015-2017.

Aligned to Curriculum for Excellence[3], ASSIST encourages the dissemination of non-smoking norms by training influential students to work as peer supporters. Secondary 1 and 2 pupils are trained to have informal conversations with others in their year group about the risks of smoking and the benefits of remaining smoke free. The ASSIST programme is a licensed intervention with standardised training and evaluation to ensure consistency and quality. If implemented throughout the UK it is estimated that the programme would prevent 40,000 young people taking up smoking each year. As an ongoing commitment to achieving the government's aspiration to create a tobacco-free generation by 2034, the ASSIST programme is being delivered alongside a wider smoking prevention programme offered to schools.

Secondary Schools' Health Drop-ins

The SH and BBV Framework[4] recommends a targeted multi-agency approach to the provision of drop-in services for young people in, or close to, schools, particularly in areas of greatest need. The EYYPT liaises with multi-agency partners to support school nurses to deliver health drop-in services to young people in Dundee secondary schools. These cover a range of health issues throughout the school year, reflecting concerns highlighted both locally and nationally. Young people can also be signposted to community-based services for pregnancy testing, condoms or other specialist support.

Well Good Dance and Drama Workshops

The aspiration for a tobacco-free Scotland includes an overriding aim to create a generation of Scottish young people who do not want to smoke[5]. This challenge requires preventative approaches to tobacco-use being

introduced within primary schools. It is recognised that there is no single reason why a young person starts to smoke and levels of influence can be individual, societal and environmental.

Each academic year in collaboration with Shaper Caper (an organisation that provides dance classes), one-day dance and drama workshops are delivered to over 2,800 Primary 6 or 7 pupils in Angus, Dundee and Perth and Kinross. Workshops build on health promotion work carried out in schools and aim to promote the mental and emotional wellbeing of pupils and help remove any mystique or attraction to smoking tobacco. Each session encourages children to understand and demonstrate their knowledge of the negative effects and explore their awareness of the reasons for people starting and continuing to smoke. Through large and small group working activities, the workshops encourage exploration of feelings, body awareness and influences on choice. Pupils also learn about communication skills, confidence building, co-operation and healthy decision making.

Safe Taysiders / Safe Angus

In partnership with local authority colleagues and others working with children, the EYYPT contributes to a safety experiential learning programme through which children consider real life scenarios in small groups. Workshops include learning about fire, water, road, rail, home and internet safety, as well as smoking, alcohol and drug awareness. The smoking awareness workshop includes the health risks of smoking and awareness-raising of the consequences of second hand smoke.

Recomendations

In 2016/17 we will:

Develop further the work to support improving outcomes in young people's mental health and emotional wellbeing.

Develop further opportunities for young people participating in the ASSIST programme.

Work with partners, including education and other local authority services,

Scottish Fire and Rescue Service, health colleagues and local communities to agree and to embed the smoke free homes initiatives and awareness of the issue of second hand smoke into ongoing work. We will also develop further opportunities to support individuals and families make their homes smoke free.

Identify further opportunities to develop cessation support for young people who have started smoking and want to stop.

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Screening

National Pregnancy Screening Programmes

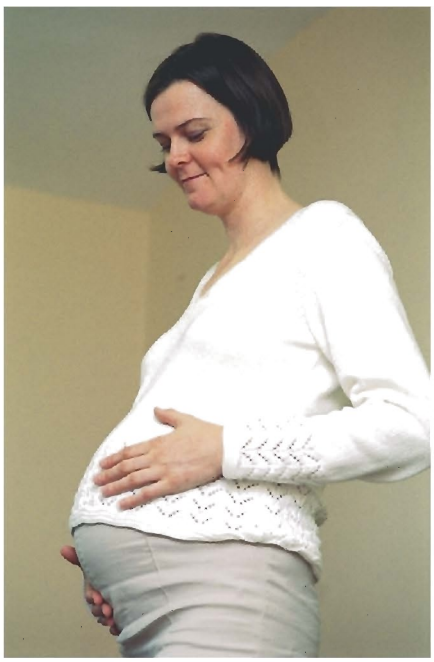
During 2015/16, NHS Tayside continued to offer the maternal and child screening programmes outlined below:

NHS Tayside offers screening for Down's Syndrome, fetal anomalies and antenatal haemoglobinopathies to pregnant women who book for antenatal care in Tayside.

Communicable disease screening for Human Immunodeficiency Virus (HIV), Rubella, Syphilis and Hepatitis B are also offered to all pregnant women. Rubella screening will cease from 1 June 2016.

The pregnancy screening programmes are well established in Tayside. In line with the other screening programmes, it is essential that all screen positive results receive timely attention within approved protocols.

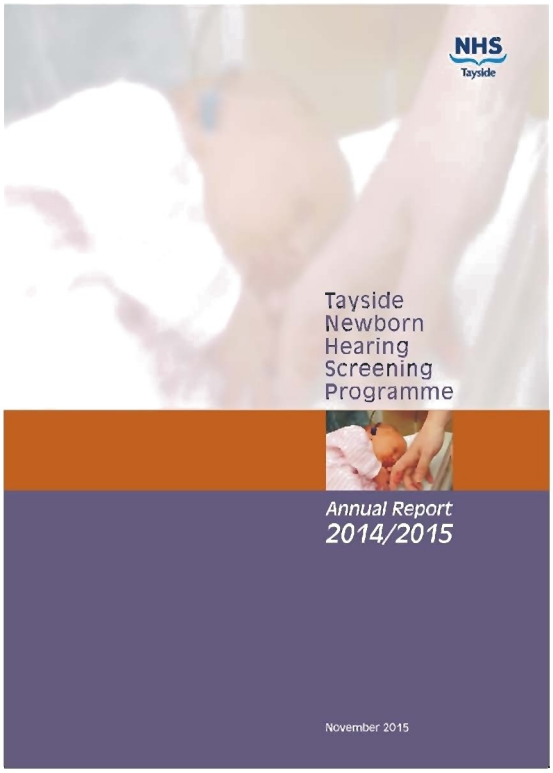
A local multi-disciplinary advisory group, the Tayside Pregnancy Screening Group, continues to oversee the monitoring and audit, and evaluation of these programmes.



Locally agreed protocols are subject to review following ongoing monitoring and evaluation. NHS Tayside works towards the national Key Performance Indicators for Pregnancy and Newborn Screening Quality Indicators (Health Improvement Scotland (HIS) 2013).

Universal Newborn Hearing Screening

The Universal Newborn Hearing Screening programme aims to detect early permanent congenital hearing impairment. In addition babies with mild and unilateral losses are also identified. Uptake of the Newborn Hearing Screen is excellent. Some 99% of eligible babies in Tayside complete the screening process each year. A small number of babies are identified with a bilateral permanent moderate severe or profound hearing loss each year.



The close working between screeners and other services including maternity, paediatric audiology and community child health department contributes towards the success of the newborn hearing screening programme.

Due to the often changing nature of hearing loss it is essential that there is ongoing review of all children identified with hearing loss from the screen, or being at risk of developing hearing loss.

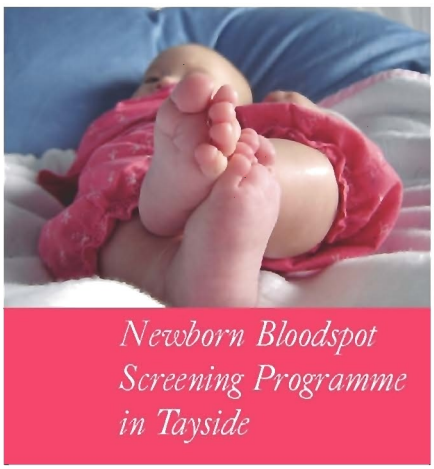
Families and professionals must be aware that babies who pass the screen may develop hearing loss later in childhood and therefore ongoing surveillance is required in order to identify this early and take appropriate action.

A local multi-professional group, the Tayside Newborn Hearing Screening Programme Group, oversees the monitoring, audit and evaluation of the programme. Local screening protocols have been revised in order to assist in the standardisation of national data collection. NHS Tayside works towards the national Key Performance Indicators for Pregnancy and Newborn Screening Quality Indicators (HIS 2013).

Newborn Bloodspot Screening Programme

NHS Tayside offers bloodspot screening to all babies who are resident in Tayside to identify those born with Congenital Hypothyroidism (CHT), Phenylketonuria (PKU), Cystic Fibrosis (CF), Sickle Cell Disease (SCD) and Medium Chain Acyl CoA Dehydrogenase Deficiency (MCADD), which can lead to problems with growth and development, to ensure early intervention.

The majority of babies are tested at home by community midwives. This includes the majority of repeat bloodspot tests. Some babies in the Neonatal Intensive Care Unit are tested in hospital, by neonatal staff. Written information is available to parents/carers prior to the newborn bloodspot screening test. Written consent is sought for each test.



All Tayside resident babies aged five days old, wherever possible, were offered a bloodspot screening test - coverage was 100% and uptake was 99.9%, which was excellent.

Of those who accepted the bloodspot screening test, a small number of babies in Tayside are referred with CHT, PKU, CF, SCD and MCADD each year. Some babies were also identified as healthy carriers.

The close working between all the services including maternity,

paediatrics and community child health department contributes towards the success of the newborn bloodspot screening programme.

A local multi-professional, multi-agency advisory group, the Tayside Newborn Bloodspot Screening Group, continues to oversee the monitoring and audit, and evaluation of this programme. Locally agreed protocols are subject to review following ongoing monitoring and evaluation. NHS Tayside works towards the national Key Performance Indicators for Pregnancy and Newborn Screening Quality Indicators (HIS 2013).

Scotland is planning to expand the bloodspot test to include four additional diseases including Maple Syrup Urine Disease, Isovaleric Acidaemia, Glutaric Aciduria Type 1 and Homocystinuria. The national Newborn Bloodspot Screening Programmes will continue to be a priority in 2016/17.

Pre-school Vision Screening Programme

The orthoptist led pre-school vision screening programme was established across Tayside in line with the Health For All Children (HALL 4) recommendation.

All pre-school children, usually between four and five years who are residents in Tayside are offered screening in nurseries. Some 93.9% of these children in Tayside were screened during 2014/15; the referral rate was 16.5%, similar to the previous year. Data are collected in the national Child Health Information System (Pre-school).

The close working between services including orthoptics, ophthalmology, pre-school nurseries, and the community child health department contributes towards the success of the pre-school vision screening programme. Locally agreed protocols are subject to review following ongoing monitoring and evaluation.

The pre-school vision screening programme will continue to be a priority during 2016/17.

Adult Screening

The NHS in Scotland has three well established cancer screening programmes for its general adult population, as well as a recently introduced Abdominal Aortic Aneurysm screening programme for men aged 65 years and over, and a Diabetic Retinopathy Screening Programme for all adult diabetics in Scotland. NHS Tayside operates local public health screening services as part of these national NHS screening programmes.

Specialist public health involvement in screening focuses mainly on making sure that the conditions required for successful screening are met in everyday operation of the screening programme. A key public health focus is ensuring participants have adequate information to make an informed choice whether or not to participate in screening, while also ensuring that the implementation of public health screening does not further increase health inequalities in the eligible population.

Public health screening programmes are designed to contact a specific population group in a particular region, e.g. men aged 65 years, women aged 50-74 years or all people with a diagnosis of diabetes. The characteristics of the group offered screening are determined on the basis of whether using the screening test in that particular group will be effective and affordable.

Although all people in the specific group are contacted, not all take up the invitation to take part in screening. In some instances this is because the person chooses not to take part in screening; there can be a number of reasons for this choice the screening programme aims to ensure that each potential participant has accurate and up to date and easily understandable information to help them make an informed choice. Informed choice in public health screening has to be achieved by offering an adequate written explanation of the screening test, its harms and benefits, to each potential screening participant; it is hoped that having read through the information provided together with a screening invitation the participant can then make an informed choice as to whether or not to take up the screening invitation. Information for the screening invitations is produced for Scotland as a whole, in a process led by NHS Health Scotland; NHS Tayside contributes actively

to the development process.

However, with many of the public health screening programmes, it appears that a lower uptake of screening programmes is associated with increasing levels of deprivation. It is believed that the reasons behind this pattern are more complex than a simple exercise of choice on the part of screening participants.

Cancer Screening

Breast Cancer

Over the last five years the uptake of breast cancer screening, in the eligible population group, has consistently fallen in Tayside, so that the most recent uptake is 76.3%, (Table 1).

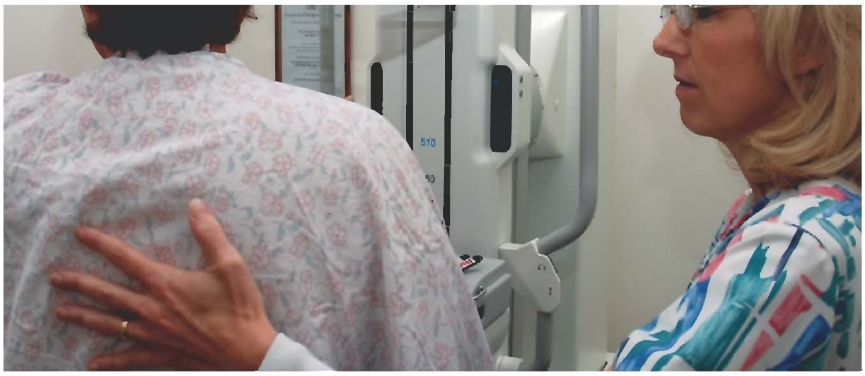
Table 1: Uptake[1] by NHS Board of Residence: Scotland, 1st April 2006 to 31st March 2015[2] Percentage uptake (three year rolling periods[3]), females aged 50-70 years[4]

	Three year rolling period						
NHS Board of Residence	2006/09	2007/10	2008/11	2009/12	2010/13	2011/14	2012/15
Tayside	79.3	79.2	78.4	77.3	76.9	76.6	76.3
Scotland	74.9	74.9	74.9	74.5	73.5	72.9	72.5

This means that approximately one in every four women in Tayside, who is invited for breast cancer screening, is not taking up the opportunity. It is unlikely that there are specific local reasons for this decline in uptake,

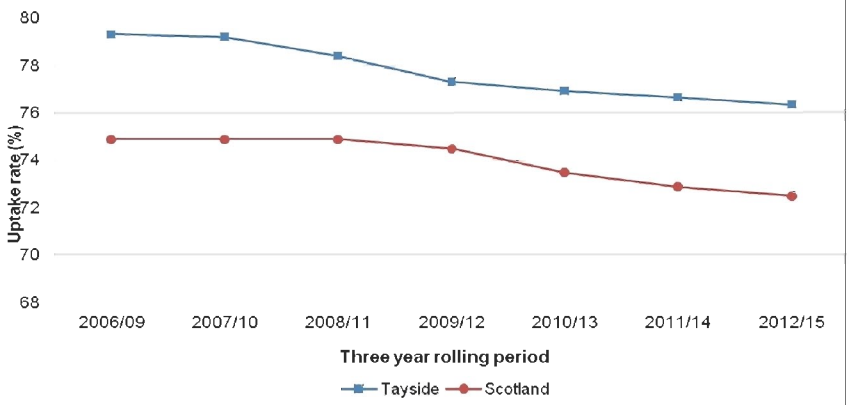
1. Based on adjusted Community Health Index (CHI) population denominator: 20-59 years (excluding medically ineligible women) for years 1995-1996 and 20-60 years (excluding medically ineligible women) for years 1997-1998 to 2006-2007. Based on SCCRS population denominator (excluding medically ineligible women) for 2007-2008
2. Excludes Lothian NHS Board for 2000-2001 to 2006-2007 (data calculated on a different basis calendar year).
3. Cervical screening year runs from 1st April to 31st March.

Source: ISD (D) 4 Legacy applications for 1995 to 2006-07 data
Source: ISD (D) 4 SCCRS for 2007-08 data onwards



as breast screening in Tayside uptake mirrors national trends, although it remains several percentage points higher than the national average in the last five years, (Chart 1).

Chart 1: Breast screening uptake rate in Tayside and Scotland by three year rolling period 2006-2015

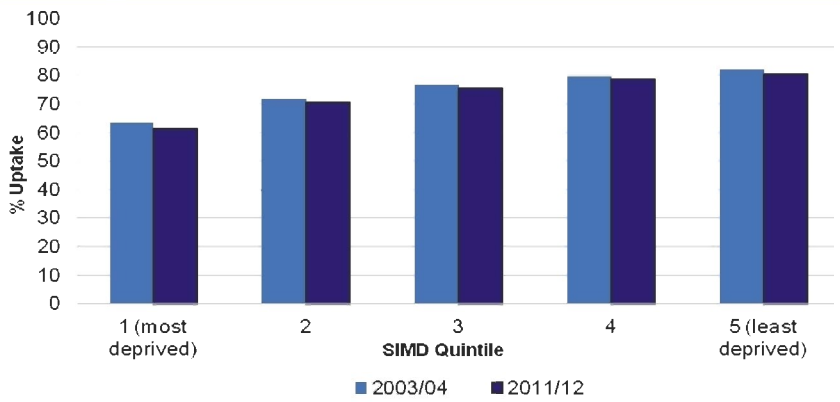


[1] Only routine appointments are included in the above figures. Self /GP referral and early recall appointments are excluded.
[2] Breast Screening year runs from 1st April to 31st March.
[3] Women are invited to attend screening once every three years and NHS Boards are not necessarily screened evenly throughout the three year period.
[4] During 2003-04, a phased extension of the age range for routine invitation (from 50-64 to 50-70 years) began. To reflect the expansion of the age range, three year rolling figures are reported from 2004.

Source: Scottish Breast Screening Programme (SBSP) Information System - KC62 Returns

Inequalities in breast cancer screening uptake have been reviewed for Scotland as a whole, Chart 2 (see below). From this information it is clear that there are inequalities in screening uptake, in that increasing deprivation is associated with lower screening uptake levels. Although screening uptake has declined in all groups, the decline in uptake over the past five years has been most pronounced in the more deprived groups, Chart 3 (see below).

Chart 2: Breast screening uptake by deprivation category (%): Scotland, 2003/04 to 2011/12



[1] Only routine appointments are included in the above figures. Self/GP referral and early recall appointments are not included.
[2] Scottish Index of Multiple Deprivation (Quintiles), most appropriate version of SIMD applied to single years i.e. SIMD2004 applied to 2003/04 and SIMD2012 2011/12
[3] Women are invited to attend screening once every three years and NHS Boards are not necessarily screened evenly throughout the three year period.
[4] All years run from 1 April to 31 March.
[5] During 2003/04, a phased extension of the age range for routine invitation (from 50-64 to 50-70 years) began.
[6] For a small proportion of cases deprivation category could not be obtained due to invalid postcode information.

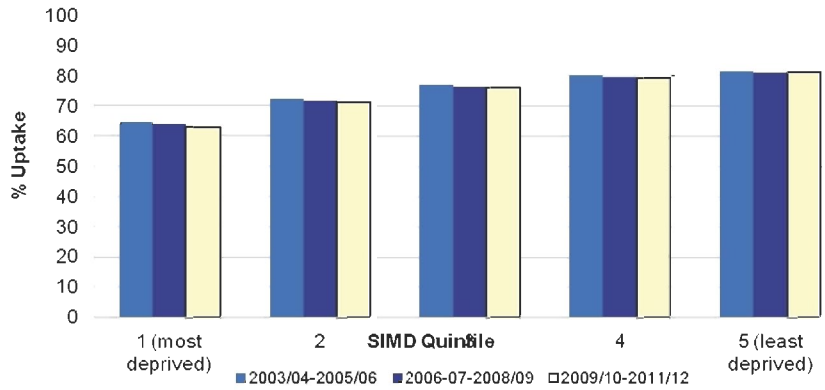
Source: Scottish Breast Screening Programme (SBSP) Information System

Note

The technique used to calculate uptake by deprivation has changed since these figures were last Published in 2010. Previously Scottish Index of Multiple Deprivation (SIMD) 2004 was applied to All years (2003-2009). After consulting with the ISD Geography Analysis Support (GAS) team it was Deemed more appropriate to apply the SIMD version in place for each individual year (e.g. SIMD2006 is applied to years 2004-05, 2005-06 and 2006-07). This means that any future update will not require historic years to be re-run.

This change in method has had a small impact on uptake percentages between 2003-04 and 2007-08 with no more than +/- 0.5% change within each deprivation category. There is a slightlylarger change in the 2008-09 percentages of up to 2.4% due to SIMD2009 now being applied to 2008-09 data, rather than SIMD 2004.

Chart 3: Breast screening uptake (3 years combined) by deprivation category (%): Scotland, 2003 to 2012



[1] Only routine appointments are included in the above figures. Self/GP referral and early recall appointments are not included.
[2] Scottish Index of Multiple Deprivation (Quintiles), most appropriate version of SIMD applied to 3 year periods i.e. SIMD2006 applied to 2003-06, SIMD2009 applied to 2006-09 and SIMD2012 applied to 2009-12.
[3] Women are invited to attend screening once every three years and NHS Boards are not necessarily screened evenly throughout the three year period.
[4] All years run from 1 April to 31 March.
[5] During 2003/04, a phased extension of the age range for routine invitation (from 50-64 to 50-70 years) began.
[6] For a small proportion of cases deprivation category could not be obtained due to invalid postcode information.

Source: Scottish Breast Screening Programme (SBSP) Information System

Note

The technique used to calculate uptake by deprivation has changed since these figures were last published in 2010. Previously Scottish Index of Multiple Deprivation (SIMD) 2004 was applied to all year (2003-2009). After consulting with the ISD Geography Analysis (GAS) team it was deemed more appropriate to apply the latest SIMD in place for each 3 year period (e.g. SIMD2006 is applied to the 3 year period 2003/04 2005/06. This means that any future update will not require historic years to be re-run.

This change in method has had a small impact on 2003/04-2005/06 and 2006/07-2008/09 uptake percentages by up to +/- 0.9% within each deprivation category.

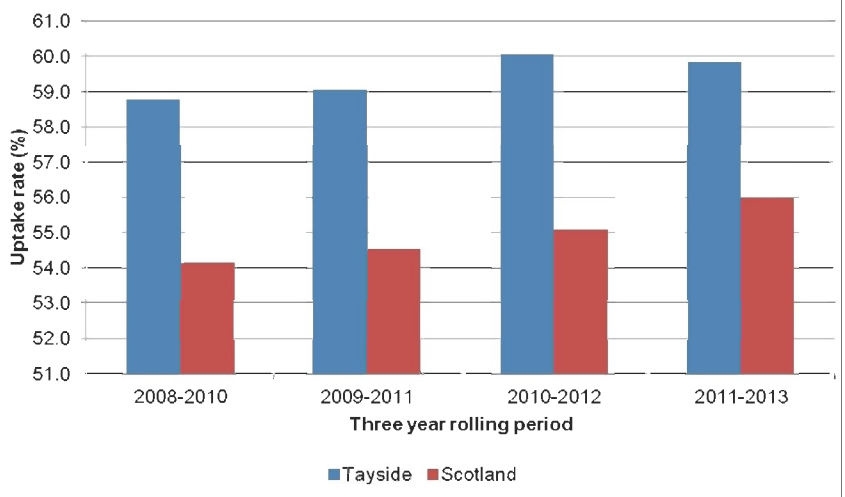
Bowel Cancer

The uptake of bowel screening is lower than that of other cancer screening programmes, (Table 2); however the uptake of bowel cancer screening has gradually been increasing over the last five years, both in Tayside and Scotland as a whole, (Chart 4). A major challenge in bowel cancer screening is addressing the consistently lower uptake of bowel screening in men, Chart 5 (see following page).

Table 2: Bowel screening uptake rate (%) for all eligible men and women invited (aged 50-74) by 3 year rolling period, Tayside and Scotland

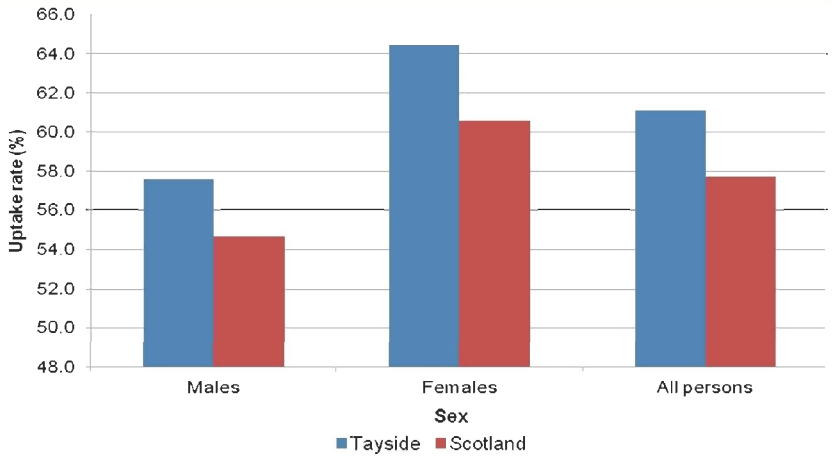
	Tayside	Scotland
2008-2010	58.8	54.1
2009-2011	59.1	54.5
2010-2012	60.1	55.1
2011-2013	59.8	56.0

Chart 4: Bowel screening uptake rate (%) for all eligible men and women invited (aged 50-74) by 3 year rolling period, Tayside and Scotland



Source: ScotPHO Health & Wellbeing Profiles

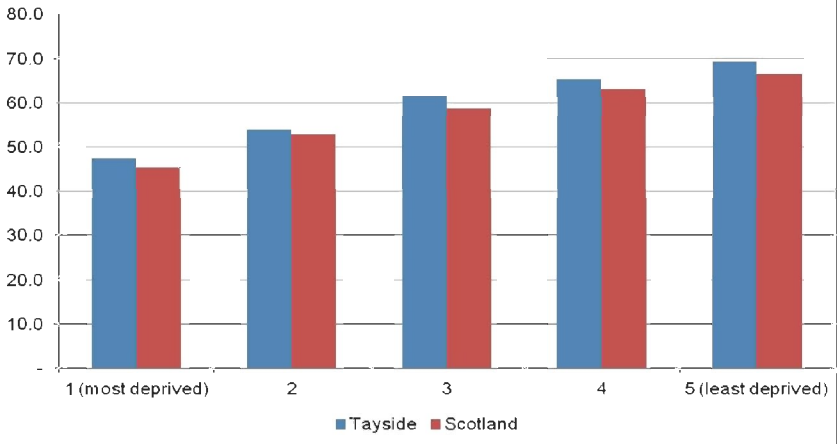
Chart 5: Overall uptake of bowel screening, by NHS Board and sex



Source: Scottish Bowel Screening Programme Key Performance Indicators Report (data submitted to Information Services Division (ISD) November 2015 submission)

While gender differences in bowel cancer screening remain challenging, there is also a lower uptake in this screening programme associated with increasing deprivation, (Chart 6). Tayside's screening uptake of bowel screening is consistently higher than the national average; but uptake in the most deprived of Tayside's men and women is well below the national average for the programme as a whole.

Chart 6: Overall uptake (%) of bowel screening (all persons) by deprivation in Tayside and Scotland (those invited to be screened between 1st May and 30th April 2015)



Source: Scottish Bowel Screening Programme Key Performance Indicators Report (data submitted to Information Services Division (ISD) November 2015 submission)

Cervical Cancer

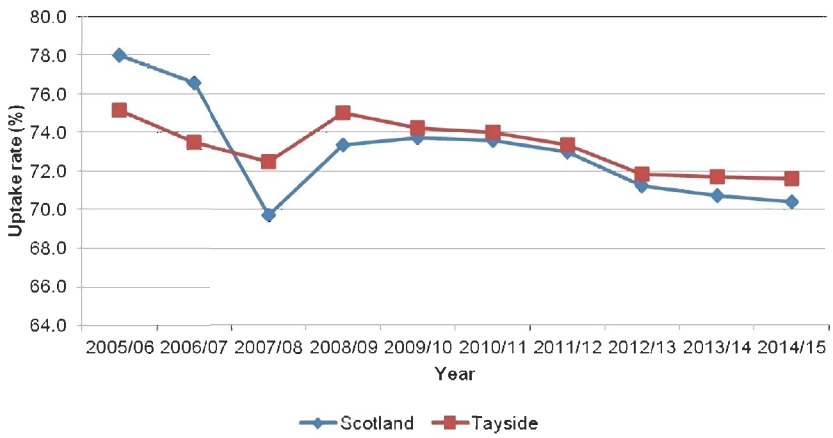
In 2008/09 Tayside had a relatively high uptake of cervical screening of 75%; however in the subsequent five years, the uptake has fallen (Table 3). As with the other cancer screening programmes, Tayside has a consistently higher uptake of screening than Scotland as a whole (Chart 7), which may also be explained by the variations in the proportion of the Tayside population experiencing deprivation, compared with other board areas in Scotland.

Table 3: Uptake for Cervical Screening by Health Board: Scotland, 1 April 2005 to 31 March 2015.

Percentage uptake of females aged 20-60[1] who had a record of a previous screening test taken within the last 3.5 years

	2005/06	2006/07	2007/08	2008/9	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Scotland[2]	78.0	76.5	69.7	73.4	73.7	73.6	73.0	71.2	70.7	70.4
Tayside	75.1	73.5	72.5	75.0	74.2	74.0	73.3	71.8	71.7	71.6

Chart 7: Cervical screening uptake rate (%) within 3.5 years in Tayside and Scotland, 2005/06 - 2014/15



People with Diabetes - Diabetic Retinopathy Screening

The Diabetic Retinopathy Screening Programme differs from the cancer screening programmes in that screening is not offered to all people in a specified age group, but rather to all adults and young people who have diabetes. The number of people in Tayside who have Diabetes is increasing year-on-year and each person with

Diabetes is offered screening every year; the statistics in this report relate to a population of approximately 20,000 people. The statistics relating to Diabetic Retinopathy Screening are complex; in general we aim for an uptake in excess of 80%, and this has been achieved in Tayside in the years reported, (Tables 4, 5).

Table 4: Number and percentage of people with diabetes of appropriate age (>12 years) who were either recorded as having had diabetic retinopathy screening within the previous 15 months, were attending specialist ophthalmology clinics or were appropriately suspended from screening as a proportion of the total number of patients who had a record of date of birth and were over 12 years of age; by diabetes type, Tayside and Scotland 2012-2014

		Type 1 diabetes		Type 2 diabetes		All (type 1 & 2)		Not recorded
		Number	%	Number	%	Number	%	
Tayside	2012	1,527	83.6	16,195	86.1	17,722	85.9	2,909
	2013	1,622	86.3	17,146	88.8	18,768	88.5	2,430
	2014	1,660	86.0	17,454	88.0	19,114	87.8	2,648
Scotland	2012	22,789	82.0	197,273	86.6	220,062	86.1	36,955
	2013	23,354	82.8	206,237	87.2	229,601	86.7	35,094
	2014	23,781	82.8	211,915	86.9	235,696	86.4	35,577

Source: Scottish Diabetes Survey 2012-2014

Table 5: Number of patients eligible for screening and percentages of those who were actually screened (type 1 and type 2 combined), Tayside and Scotland 2012-2014

		Number eligible for screening	Those screened	
			Number	%
Tayside	2012	17,684	14,775	83.6
	2013	18,272	15,842	86.7
	2014	18,776	16,128	85.9
Scotland	2012	233,017	197,440	84.7
	2013	241,731	206,637	85.5
	2014	249,852	212,897	85.2

Source: Scottish Diabetes Survey 2012-2014

Abdominal Aortic Aneurysm Screening

A population screening programme for Abdominal Aortic Aneurysm has just recently been introduced. Screening is offered to men in their 65th year. Because of the early stage of the programme implementation, few formal statistics on performance are published. However, within NHS Tayside we have experienced a strong response to the screening

invitation, with almost nine out of every ten men taking up their screening invitation, (Table 6). The comparison with Scotland as a whole is difficult to interpret at this stage, because of the process of implementation of the screening programme across Scotland.

Table 6: Invite and uptake rates for initial AAA screening in Tayside and Scotland; men eligible for screening to 31 March 2014

	Number of men eligible	Offered screening		Attended screening (uptake)	
		N	%	N	%
Tayside	17,684	14,775	83.6	14,775	83.6
Scotland	18,272	15,842	86.7	15,842	86.7

Source: Scottish AAA Call Recall System at 1 December 2015

Recommendations

The national screening programmes will remain a priority for NHS Tayside in 2016/17.

Maintain and where possible improve the uptake of screening programmes especially in our more deprived communities.

Smoking

Introduction

Smoking remains a major influence on ill health. Tobacco use is strongly associated with excess mortality and morbidity and is also a major influence on health inequalities and poverty. The greatest numbers of Scotland's smokers are identified within the least affluent sectors of our communities. Approximately 60% of smokers die from the effects of their tobacco use. Smoking tobacco causes around 85% of the 40,000 deaths from lung cancer in the UK each year, and contributes to the development of other cancers. Smoking tobacco accounts for 85% of the 23,000 deaths from chronic obstructive pulmonary disease (COPD) each year in the UK and 25,000 of 200,000 deaths from cardiovascular disease (CVD).

National Overview

We know that over the last decade the Scottish Government has invested in tobacco control within Health Boards, chiefly to promote smoking cessation services, but also to support smoking prevention programmes. In 2004, A Breath of Fresh Air for Scotland[1] allocated funding to establish smoking cessation services in territorial Boards. Creating a Tobacco-Free Generation: A Tobacco Control Strategy for Scotland (2013)[2] has the ambition to make Scotland smoke free by 2034; worldwide, countries are mirroring this aspiration. To deliver this policy ambition, creative and innovative measures need to be adopted. The previous strategy where universal, free, smoking cessation support was available is now unlikely to deliver the smoke free Scotland required; as many smokers have now adopted e-cigarettes to manage their nicotine addiction. We recognise that cessation support is still required and we continue to provide this through our network of community pharmacies.

Harm-reduction and electronic-cigarettes

Harm-reduction approaches are now essential to speed up progress towards the Scottish Government's 2034 target of 5% smoking prevalence. It is necessary to increase the rate of change for all social groups if this target is to be met. The options for harm-reduction in tobacco control include reducing the number of cigarettes smoked; the use of smokeless tobacco products, nicotine replacement therapies (NRT) or other pharmacological aids and e-cigarettes[3]. Action on Smoking and Health (ASH) has estimated that currently 2.1 million people in the United Kingdom use e-cigarettes and around 18% of smokers regularly use e-cigarettes[4].

Public Health England has recently published an update on the evidence-base around e-cigarette use[5]. This review asserts that a harm-reduction approach is the most appropriate future strategy and that 'the option of switching to e-cigarettes as an alternative and much safer source of nicotine, as a personal lifestyle choice rather than medical service, has enormous potential to reach smokers currently refractory to existing approaches'.

In light of the emerging evidence NHS Tayside has amended its smoking policy to allow the use of e-cigarettes in its grounds. Our health promotion approach is to highlight the harm-reduction role of e-cigarettes for smokers who are not ready to stop using nicotine completely. Our smoking cessation services encourage the use of e-cigarettes as a pathway to cessation, even if they cannot explicitly recommend them in the same way as licensed products.

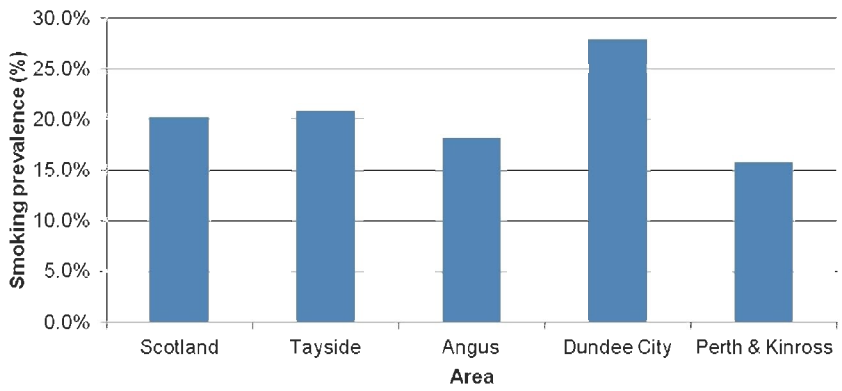
Tayside Overview

Smoking prevalence rates have varied over time in Tayside but have decreased from 26% in 2005/06 to a low of 20.8% in 2014. This reduction is seen in all age groups and in both males and females. Over the whole time period, smoking prevalence was higher in men compared with women, and in working age adults compared with older adults (aged 65+ years).

Chart 1 compares the Tayside smoking prevalence in 2014 with Scotland

as a whole and the three Tayside council local authority areas. Although Angus and Perth and Kinross show lower rates than the Scottish average, Dundee City has a higher prevalence at 27.9% of the population.

Chart 1: Smoking prevalence in Tayside and Scotland, 2014



Source: Scottish Government (2013), Scotland's People Annual Report: Results from 2014 Scottish Household Survey

Note

[1]Scottish Public Health Observatory 2013: tobacco profile tool online
[2]ScotPHO Tobacco control profile (2013): NRS, Total number of deaths from causes wholly or partially attributed to smoking in persons aged 35 or over 2013-14 combined
[3]ISD (2016) Trends in mortality: Age-sex standardised mortality rate per 100,000 population (using ESP 2013)
[4]ScotPHO Tobacco control profile (2016): NRS, Lung Cancer deaths, 3 year average age-sex standardised rate per 100,000 population aged 16+
[5]ScotPHO Tobacco control profile (2016): NRS, Deaths from COPD, 3 year average age-sex standardised rate per 100,000 population aged 16+

In the two year period 2013-14, a total of 788 people died from smoking-related illness in Tayside. Lung cancer, COPD and coronary heart disease (CHD) are strongly associated with a history of smoking. In recent years however, mortality rates from these diseases have reduced:

- Premature (<75 years) CHD mortality rates reduced from 89.5 in 2004 to 50.4 in 2014 (per 100,000 population). Despite

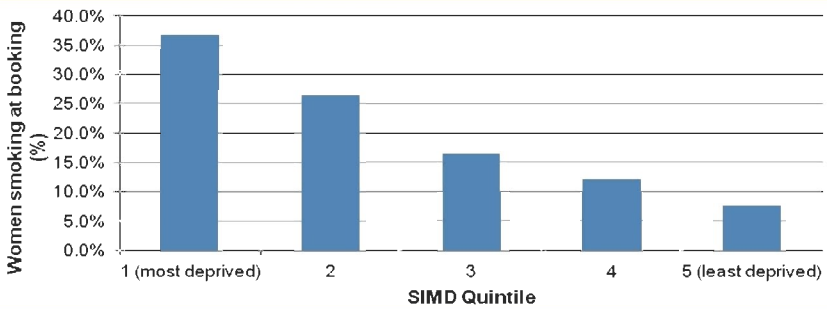
some fluctuations, the Tayside rates have been similar to Scotland over time.

- Mortality rates from lung cancer have fallen from 107.8 in the three year period 2004-06 to 88.1 in 2012-14. Tayside rates were consistently lower than the Scottish average over this period.
- Mortality rates from COPD have varied over time but have decreased from 82.9 in 2004-06 to 73.2 in 2012-14 and again the rates in Tayside were lower than Scotland as a whole.

However, as with smoking prevalence, the mortality rates for these diseases vary within Tayside with Dundee City having considerably higher rates than the rest of Tayside and indeed the national average for smoking attributable deaths including deaths from lung cancer and COPD.
One of the four themes of the Scottish Government's Tobacco Control Strategy (2013)[2] is to address inequalities by reducing smoking prevalence in the most deprived areas. Adults in the 15% most deprived areas of Scotland are considerably more likely than those in the rest of Scotland to say that they are current smokers (37% and 20% respectively). However, this gap continues to narrow year-on-year.

A clear inequality gradient is also shown when examining the percentage of women smoking during pregnancy. In Tayside, those living in the most deprived areas are approximately five times more likely to smoke during pregnancy than those in the least deprived areas (Chart 2).

Chart 2: Percentage of women smoking at booking by Scottish Index of Multiple Deprivation (SIMD) quintile (3 year aggregated period 2012/13-2014/15), Tayside



Source: SMR02, ISD Scotland & SG SIMD2012

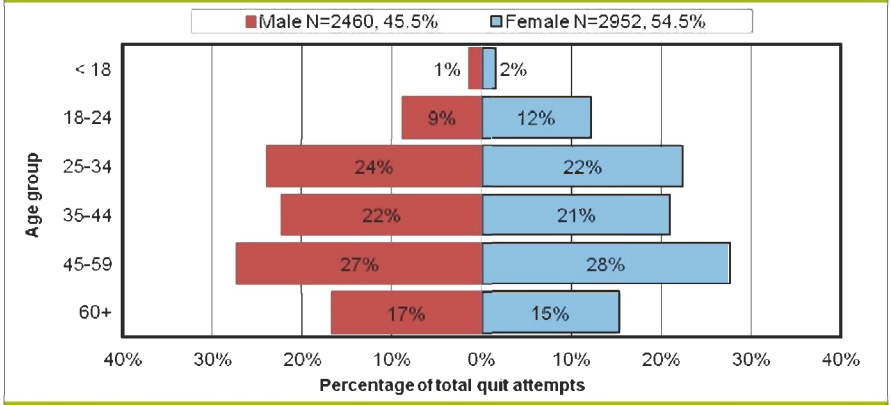
In 2014, NHS Tayside helped 5,412 people to stop smoking with 621 (11.5%) individuals self reporting that they were still not smoking after three months. Quit

rates at one, three and 12-month follow-up within Tayside's three local authority areas are considerably lower than the national average.

The majority of people quitting in Tayside were in the 45-59 years age group with 27% of male and 28% of female quitters being in this age group (Chart 3).

Examining quit attempts made by SIMD quintile shows that the largest number of quits (n=421) were by those living in the most deprived areas of Tayside. However, it should be noted that the highest number of smokers live in these deprived areas and therefore as a proportion of the total number of smokers living in these areas, the quit rate was 25%. The highest proportion of smokers who quit in 2014 were actually living in the least deprived areas (n=132, 30.4%).

Chart 3: Distribution of quitters, by gender and age group, Tayside 2014



Source: NHS Smoking Cessation Service Statistics 2014 (Scotland)

Note

[1]Scottish Government (2013), Scotland's People Annual Report: Results from 2012 Scottish Household Survey

Our Response to the Challenges

Prevention

Investment has been realinged to smoking prevention, away from cessation. NHS Tayside is working in with young people to deliver of a series of prevention programmes such as A Stop Smoking in Schools Trial (ASSIST). In addition, we work with vulnerable groups, including looked after children (LAC) and young offenders, to ensure that they receive help to avoid the harms of tobacco. By working to prevent young

people from taking up smoking in the first place, we aim to reduce more effectively the number of people who suffer from tobacco's ill effects (our prevention work is highlighted in the Early years, children and young people section of this Report).

Protection

Reducing the harm created by tobacco requires a change in public opinion and work to de-normalise tobacco use. We are working with local authority partners to identify opportunities to protect children and young people from the harms of tobacco smoke. We are also reviewing our policies and practices to identify areas in which a harm-reduction approach can be used to minimise the health problems caused by tobacco. We continue to work to identify ways to make tobacco less available and a less desirable choice. We are doing this by restricting the opportunities to smoke tobacco and by creating opportunities to choose healthier options.

Smoking Cessation Services

The Local Delivery Plan (LDP) for 2015/16 provided a strong challenge with its focus on three-month quit rates within disadvantaged communities. Smoking cessation services in Tayside have experienced greatly reduced engagement from smokers, in common with other services across Scotland and the United Kingdom. Therefore, we have concentrated our cessation efforts with community pharmacy providers. We have increased smoking-team support and training for community pharmacy staff and have undertaken street work within communities to encourage recruitment and participation. In doing this we have achieved our LDP target, but continue to look at innovative approaches to increase engagement with services.

Our smoking cessation incentive schemes have been in operation since 2008 and have recruited over 10,000 smokers drawn from areas of social

disadvantage. We review continually and adapt our services to meet the needs of smokers and are currently working to modify services in the light of e-cigarettes and to better engage with smokers in disadvantaged areas.

NHS Tayside has successfully initiated a new smoke free policy for premises and grounds and put in place clinical pathways to support in-patients. The policy is in line with the The National Institute for Health and Care Excellence (NICE) guidance and encompasses all the actions required. These include providing leadership and effective communication of the policy, providing information for patients, visitors and staff and ensuring availability of pharmacotherapy and referral to cessation services.

We have developed a planning group to work towards mental health services becoming smoke free by Autumn 2017; we have undertaken consultation with staff and patient groups.

Health Promoting Health Service

To deliver on the Chief Medical Officer (CMO) (2015)19 Health Promoting Health Service (HPHS): action in secondary care settings[6]. We have:

- Developed clinical pathways for in-patients.
- Continued to review the NHS Tayside smoking policy and its enforcement.
- Increased the number of patients using Nicotine Replacement Therapy (NRT) to abstain from smoking while in hospital.
- Provided training to staff around the smoking policy and the delivery of very brief interventions.

Smoking Cessation Services - Pregnant Women

Smoking while pregnant poses significant risks to the health of the mother and the unborn baby. The risks include complications in both pregnancy and labour e.g. ectopic pregnancy and plasenta damage, premature delivery, low birth weight, miscarriage and sudden infant death syndrome (SIDS). Smoking in pregnancy is the largest preventable cause of fetal

and infant ill health and death and accounts for one third of all perinatal deaths[7]. All midwives are tasked to improve and reduce health inequalities by providing a safe, high-quality care experience for all pregnant women and babies in Scotland. All pregnant women are offered carbon monoxide (CO) testing when they book for antenatal care. The target is to refer to cessation services 90% of women who have a raised CO level, or who smoke. In addition, a tailored package of care is available to all women who continue to smoke during pregnancy. To facilitate the process we have offered training to all midwives in Tayside and have developed referral and clinical pathways.

Partnership Working

To progress 'Creating A Tobacco-Free Generation: A Tobacco Control Strategy for Scotland[2]. We have:

- Developed a Tayside Tobacco Plan with community planning partners. The Plan details the local authority actions around illicit tobacco, smoking prohibition and age-restricted sales. It also lists actions for young people's tobacco use while in the criminal justice system.
- The local Tobacco Alliances have been set up to monitor and develop the actions within the Plan.

Recommendations

Reducing the harms created by tobacco use also means changing public opinion and working to de-normalise its use. To achieve this it is recommended that:

- We work with local authority partners to identify opportunities to protect children and young people from the harms of tobacco smoke.
- We review our policies and practices to identify areas in which a harm-reduction approach can be used to minimise the health problems caused by tobacco.
- We identify ways in which we can make tobacco less available and a less desirable choice. We will work with partners to reduce the number of opportunities that people have to smoke tobacco and we will strive to create opportunities for smokers to choose healthier options.

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1. Scottish Government (2004) Tobacco Control Action Plan: A Breath of Fresh Air for Scotland. Available from: www.gov.scot/Publications/2004/01/18736/31541

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3. NICE (2013) Tobacco: harm reduction approaches to smoking PH45, www.nice.org.uk/guidance/ph45 (accessed 24/08/2015)

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5. Public Health England (2015) E-cigarettes: an evidence update. Public Health England www.gov.uk/government/uploads/system/uploads/attachment_data/file/457102/Ecigarettes_an_evidence_update_A_report_commissioned_by_Public_Health_England_FINAL.pdf (accessed 11/07/2016)

6. The Scottish Government. SGHD/CMO (2015)19. Health Promoting Health Service: Action in Secondary Care Settings

7. NHS Health Scotland and Action on Smoking and Health Scotland (2010): A Guide To Smoking Cessation In Scotland. Planning and providing specialist smoking cessation services. NHS Health Scotland: Edinburgh.

Physical Activity

Introduction

Physical activity is described as movement of the body that uses energy. It includes exercise, sport, play, dance and active living such as walking, doing housework and gardening.

There is strong evidence that the greatest health benefits occur when the least active people become moderately active. Physical activity reduces the risk of:

- All-cause mortality by 30%.
- Developing type 2 diabetes by 40%.
- Cardiovascular disease by 35%.
- Falls, depression and dementia by 30%.
- Cancers (colon and breast) by 20%.
- Joint and back pain by 25 %[1].

We know that regular physical activity of at least moderate intensity provides general health benefits across a range of diseases and across all ages. Physically active employees have fewer sick leave days. [2]

This section provides

- A current overview of what we know about physical activity.
- An update on activities and achievements.
- A look forward to future priorities.

What We Know about Physical Activity

Recommended levels

- Physical activity should be encouraged from birth.
- Children capable of walking should be physically active for at least 180 minutes each day; activity should be spread throughout the day.
- Daily, children and young people should accumulate at least an hour

and up to several hours of moderate intensity activity. Vigorous intensity activities, including those that strengthen muscle and bone, should be undertaken at least three days per week.

- Adults (including older adults) should aim to be active daily and over a week moderate intensity activity should add up to at least 150 minutes. Comparable benefits can be achieved through 75 minutes of vigorous intensity activity. Combinations of vigorous and moderate intensity activity are also beneficial. All adults should also undertake muscle strengthening activity on at least two days per week. Older adults at risk of falls should incorporate balance and co-ordination exercise on at least two days per week.

Moderate intensity activity raises the heartbeat and breathing becomes harder, however, a person should still be able to carry on a conversation. Vigorous intensity activity means that it is harder to carry on a conversation. The importance of minimising time spent being sedentary is also highlighted for all age groups[1]. This information has been summarised in the following two Chief Medical Officers' (CMO) information graphics[3,4].

People at Risk

Physical inactivity is a significant risk factor for ill health as detailed above. Emerging evidence suggests that sedentary behaviour (periods spent sitting or lying with very low energy expenditure) increases the risk of some health outcomes independently of physical activity levels:

- There is a positive association between sedentary time and markers for metabolic risk in young people.
- Sedentary behaviour in adults is associated with all cause and cardiovascular mortality, diabetes, some types of cancer and metabolic dysfunction[5].

The Cost of Inactivity

- Physical inactivity cost the NHS in Scotland £94.1million in 2010/11[6].
- This is an average cost of £18.30 per Scottish resident per year[6]. When this figure is attributed to the Tayside population this equates to a cost of £757,000 per annum (Note 1).
- In Scotland two consultations per General Practitioner (GP), per day, are related to physical inactivity disease-related conditions[6].
- In Scotland there were just fewer than 16,000 deaths per year in physical inactivity disease categories, with physical inactivity contributing to 2,565 deaths per annum[6].

The Size of the Problem

The Scottish Household Survey identified that in 2014 63% of adults took part in the recommended 150 minutes of moderate activity each week and just over three quarters (76%) of children met the guidelines of 60 minutes of activity each day (including school-based activities). The proportion of adults and children meeting physical activity levels has been consistent in recent years. 22% of adults and 9% of children were identified as being inactive.

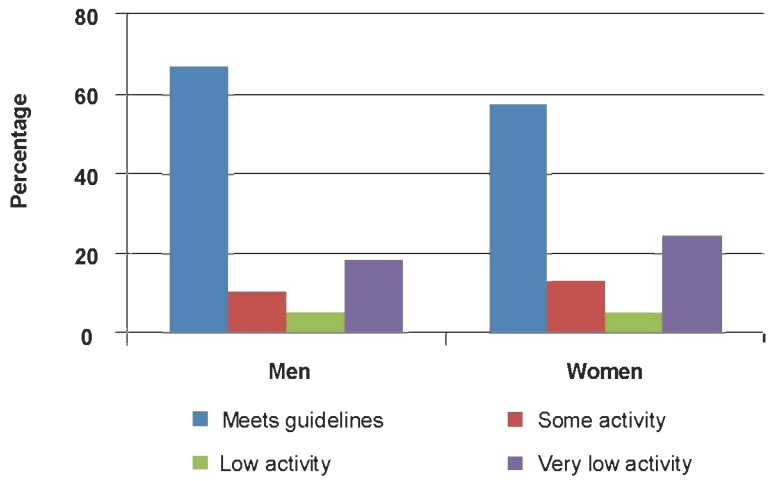
Figures relating to physical activity levels in Tayside are:

- 62% of Tayside adults met the physical activity guidelines in 2012-2014. This was similar to the Scottish average of 63 %[7]. There are variations between men and women (Chart 1).
- 98-100% of schools across Tayside met the targets for physical education in schools of at least 120 minutes per week in primary schools and at least 100 minutes per week in secondary school time tabled periods[8].
- In 2012-2014 21% of adults in Tayside reported very low levels of activity (i.e. less than 30 minutes of moderate or 15 minutes of vigorous

Note 1 - based on population of 413,800 2014 NRS midyear population estimate for NHS Tayside board area.

activity or equivalent combination of both) per week. Again this is comparable to the national average of 22%. Figures for children in Tayside are not available.

Chart 1: Adherence to physical activity guidelines (adults aged 16+) by gender, Tayside 2012/2013/2014 combined [10]



Meets moderate/vigorous physical activity (MVPA) guidelines: at least 150 minutes of moderately intensive physical activity or 75 minutes vigorous activity per week or an equivalent combination of both.
Some activity: 60-149 minutes of moderate activity or 30-74 minutes of vigorous activity or an equivalent combination of these.
Low activity: 30-59 minutes of moderate activity or 15-29 minutes of vigorous activity or an equivalent combination of these.
Very low activity: Less than 30 minutes of moderate activity or less than 15 minutes of vigorous activity or an equivalent combination of these.

Inequalities

As with social outcomes across Scotland and globally, the evidence points to inequality of opportunities and outcomes for all groups with protected characteristics. Key at-risk groups include the elderly, those with limiting conditions or disabilities, those with lower socioeconomic status, teenage girls and women of Asian origin. Walking is an important leveller of inequalities but differences still exist[9]. The Scottish Household Survey 2014 indicated a gap of 16% between the most and least deprived areas in terms of those meeting physical activity guidelines (54% in most and 70% in least) and a gap of 17% in those reporting very low activity (32% in most and 15%

in least)[10]. Figures are not available at a Tayside level.

The Directorate of Public Health has supported Tayside partners to address inequalities. Lower cost/free access to leisure facilities is available for those of lower socioeconomic status, including access to walking groups. Exercise Referral is signposted as an opportunity for those who are inactive; and there are innovative programmes such Video Active and the Perth and Kinross Care Home Initiative (more detail follows in this Report).

National Standards

- The Active Scotland Outcomes Framework describes Scotland's ambitions for sport and physical activity over the next 10 years and associated outcomes[11].

Active Scotland Outcomes		
We encourage and enable the inactive to be more active	We encourage and enable the active to stay active throughout life	We develop physical confidence and competence from the earliest age
We improve our active infrastructure - people and places	We support wellbeing and resilience in communities through physical activity and sport	We improve opportunities to participate, progress and achieve in sport
Equality: Our commitment to equality underpins everything we do		

- Let's Get Scotland Walking - the National Walking Strategy creates a culture of walking and improved walking environments to enable independent mobility for all[12].

- In NHS Scotland Improvement Priorities for 2015/16, physical activity is highlighted as one of the health inequalities and prevention priorities and is included in NHS Tayside's Local Delivery Plan.

- CMO (2015)19 Health Promoting Health Service (HPHS): action in secondary care settings[13], has a focus on the promotion of staff health and wellbeing and the Healthy Working Lives (HWL) Award programme and encourages physical activity and active travel. In 2015/16 much of the Directorate of Public Health's work around physical activity and active travel focussed on the HPHS themes that contribute to the Active Scotland Outcomes as follows.

Activities and Achievements

Outcome: we encourage and enable the inactive to be more active
and
Outcome: we encourage and enable the active to stay active throughout life

Surgical Pre-assessment Services

NHS Tayside patients are screened for physical activity status based on the Scottish Physical Activity Screening Questionnaire. Staff provide brief advice to support physical activity levels as appropriate and are supported with training and information updates from the Directorate of Public Health. In 2015/16 self-audits the pre-assessment services recorded 88-100% of patients being screened and brief advice provided as appropriate.

Mental Health Services

This work has been led by physiotherapists working in the mental health services across Tayside. The physical activity pathway has been used with in-patients and staff now run activities to ensure that patients have the opportunity to be physically active for a minimum of 150 minutes per week. Tai Chi, seated exercise, walking and walking football are examples of the opportunities available.

Exercise Referral Programmes

Exercise Referral programmes received Health Improvement Fund (HIF) support in 2015/16 in the three local authority areas. Referral criteria are kept under review e.g. Angus has widened its criteria to include older people who are new to exercise. Supervised physical activity opportunities are available through local leisure centres. The Macmillan Move More programme is now offered through Leisure and Culture Dundee. People living with cancer can be referred into the Move More programme and are assessed by a cancer rehabilitation specialist before taking part in the physical activity sessions that have been designed for them. In 2016 there will be an expansion of the led walking programme and development of a new gardening programme.

Health Walk Programmes

Partners in the three local authority areas have continued to provide health walking programmes.

The health walks are short in length, risk-assessed, accessible and low level. They are led by trained volunteers and are aimed primarily at people who would otherwise be inactive. They have evaluated very positively with all participants.

Outcome: we improve our active infrastructure - people and places

Ninewells Arboretum and Community Garden

With a vision to promote physical activity and good health in an environment where horticulture supports wellbeing, prevention of illness, recovery and rehabilitation, the green space at Ninewells is developing and expanding. Volunteers provide four gardening sessions each week including sessions with pupils and staff from Kingspark School, supported sessions taking referrals from Employment Support and Tayside Substance Misuse Service, weekly drop-in sessions which have reached volunteers from diverse backgrounds, a long-standing summer kids' club, an open day, workshops for a wide range of participants, and a co-design workshop for volunteers to plan future activities. Staff workshops in herbal remedies, yoga, nutrition, art, mindfulness and garden craft have all successfully contributed to the delivery of our 'natural health service'.

Video Active

Colleagues in Angus have developed an IT infrastructure enabling people to participate in seated exercise groups via video conferencing technology while in their own homes or community settings. There has been close working with local care home management teams and staff to accommodate client needs to enable their participation. Training has been delivered to a variety of staff to support people undertaking this type of activity remotely. Bespoke IT training is under development to enable staff to operate the equipment and systems involved.

Perth and Kinross Care Home Initiative

Colleagues in Perth and Kinross attained an award for their innovative programme run in partnership to improve physical mobility of care home residents.

Paediatric Overweight Service in Tayside (POST)

POST is a specialist weight management service for children and young people in Tayside which aims to support children and young people, as well as their families, to manage their weight and adopt healthier lifestyles. In 2016 they spread the Fun, Fit Tayside message to secondary school pupils through the Active Schools Secondary Dance Festival.

Active Travel

In 2015 a travel survey of NHS Tayside staff was undertaken to provide baseline information on staff travel habits. Follow-up actions were taken forward in a Travel Smarter campaign in partnership with the Tayside and Central Scotland Transport Partnership (tactran), Perth and Kinross Council

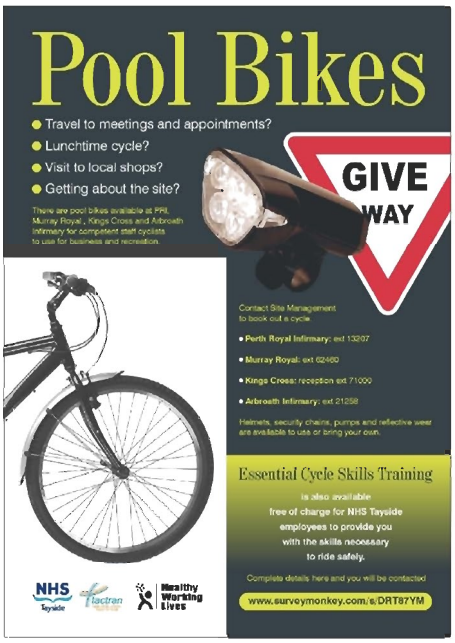
and Angus Council transport departments. Staffed displays provided information and resources for patients, visitors and staff at community hospital sites. Running in parallel to this was a travel challenge for staff in support of European Car Free Day in September 2015. 1,362 staff took part in the travel survey and over 140 benefited from the travel promotions. Cycling as a main mode of transport was reported by Cycling Scotland as highest in Dundee (4.2%) along with Edinburgh, also 4.2 %[14].

Ramblers Scotland - Medal Route Walking Hubs

DHLI Hilltown Walkers launch medal route walks at Ninewells

Hubs were created at Ninewells and Royal Victoria Hospitals to provide mapped walking routes lasting 15, 30 and 60 minutes around the hospital sites for the benefit of patients, visitors and staff. The routes were launched in 2015 with a led staff walk facilitated by the NHS Tayside HWL team and the Dundee Healthy Living Initiative Hilltown Walk Group. Plans are in place to develop and launch a further hub at Perth Royal Infirmary in 2016/17.

Pool Bikes



Bikes are now available for staff at key sites for business and recreational use. Cycle skills training was provided by a volunteer member of staff in 2015.

Dr Bike Events

In 2015/16 there have been three events facilitated in conjunction with partners at the University of Dundee and the Bike Station, Perth. Further events are planned in 2016/17.

Cycling Scotland Cycle Friendly Employer Award

In February 2016 Murray Royal Hospital joined Ninewells Hospital in achieving this award for its support and facilities to enable cycling.

Cycle to Work Scheme

This initiative is led annually by the supplies department at NHS Tayside. This scheme has been in operation for several years; 2015 saw the largest uptake to date with 208 staff taking part.

Outcome: we support wellbeing and resilience in communities through physical activity and sport

Active Staff

Staff health and wellbeing are important to NHS Tayside and this has been evidenced by the adoption of the Health and Wellbeing Strategy 2013-16 which is currently under review. The HWL award programme has provided a focus for staff health and wellbeing initiatives in 2015/16 including the following:

Maryfield summmer walk and picnic 2015

- Annual Step Count Challenge - since the inception of the annual challenge,numbers participating have increased. 217 staff registered to take part in 2016.
- Summer walks and healthy picnics were held at a number of sites promoting the use of local green spaces and walking lunch breaks. Since the inception of the summer walks and picnics the interest in taking part has increased with around 129 staff taking part in 2015.

- Team Tayside Festive Challenge which was led by the NHS Tayside Executive Team.

- Fitness Classes - staff have organised fitness classes including Zumba, yoga and Urban Fitness; they are available weekly at a number of sites.

Increasing Knowledge and Skills

Creating a more active workforce

- The benefits of being physically active are highlighted to staff through the HWL programme of health information and activities.
- Promotion of e-learning opportunities from NHS Health Scotland.
- Promotion of the Sit Less, Get Active is a massive open online course created by a collaboration of leading experts in the physical activity research field.
- Partners engaging in staff and volunteer training to build capacity.

Local authority partnership working

The Directorate of Public Health has provided significant input to the development of Physical Activity Strategy for Dundee for 2016 onwards. The Active Living Framework Group is led by the Senior Health Improvement Practitioner. There has also been input to the review of the Perth and Kinross and Angus physical activity and sport strategies.

Sharing good practice

NHS Tayside participated in the work of NHS Health Scotland's Physical Activity Special Interest Group by sharing good practice and experiences from with other Boards. We have disseminated information to clinical staff about the resources that are available to support the delivery of the physical activity agenda e.g. the National Physical Activity Pathway, e-learning, information leaflets, disease specific information leaflets and evaluation tools. A HPHS Physical Activity Special Interest Group learning exchange event was also supported. In 2015 the range of physical activity initiatives and support available for staff was presented as a case study at the Scottish Cancer Prevention Network Conference. A case study of the NHS Tayside staff walking initiatives has also been used by tactran.

Recommendations

Our vision is to work in partnership to enable the population of Tayside to be more active, more often. This is crucial to our personal, community and national wellbeing.

The Active Scotland Outcomes Framework sets out the six key outcomes contributing to the delivery of this vision. The commitment to equality underpins everything we do. Our contribution is to four of the national outcomes:

- Early years - our children have the best start in life and are ready to succeed.
- Young people - our young people are successful learners, confident individuals, effective contributors and responsible citizens.
- Healthier lives - we live longer, healthier lives.
- Stronger communities - we have strong, resilient and supportive communities where people take responsibility for their own actions and how they affect others.

The primary contribution to delivering these outcomes will come from the provision of services by a range of partners including local authorities, leisure trusts, community planning partnerships and the voluntary, community and private sectors. The integration of health and social care is an opportunity to embed physical activity for health improvement and disease prevention firmly in the forefront of public sector decision making via the National Physical Activity Implementation Plan. There is strong evidence that physical activity will contribute to achieving the Scottish Government's National Outcome; 'people are able to look after and improve their own health and wellbeing and live in good health for longer'.

Priority actions

- Getting children and their families active is important; play is now a key element of the Early Years Collaborative and support will be provided to partners to promote active play.
- UK research has identified a positive correlation between fitness levels and academic attainment in children and young people. The intensity and duration of exercise are both linked to improved academic

performance. Therefore, work with partners in education will be important to support the Raising Attainment For All programmes.

- Working with Transport Scotland and environment colleagues to scale up and roll-out behaviour change models including Smarter Choices - Smarter Places to promote active travel.
- There are interdependencies and opportunities to deliver joint work programmes, particularly in relation to mental health and obesity. The evidence is clear that we can improve mental health outcomes through physical activity interventions.

Focus for 2016/17

We will:

- Provide leadership for physical activity in health and social care integration.
- Via HWL and HPHS embed the benefits of physical activity and active travel in workforce development creating an active health and social care workplace.
- Work to maximise the use of NHS/local authority green space for physical activity.

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Therapeutic Nutrition

Introduction

Therapeutic nutrition represents either part of the clinical treatment or the principle treatment of a large number of conditions or diseases including coeliac disease and other food intolerances or allergies, various renal conditions and metabolic disorders, diabetes, irritable bowel syndrome, gastrointestinal diseases and cardiovascular disease. In these examples therapeutic nutrition aims to address one or more of the following:

- Alleviate symptoms and/or manage the clinical condition.
- Reduce reliance on medication.
- Prevent future medical complications.
- Improve quality of life and life expectancy.

The Tayside Nutrition Managed Clinical Network (Tayside Nutrition) leads improvement in therapeutic nutrition by focusing on clinical populations and working in partnership with healthcare personnel and those from partner agencies such as local authorities, the third sector and the public to co-produce improvements in nutritional care across clinical pathways. Current health inequalities within these populations are identified and strategies to reduce them are co-designed with partners. As a result of this way of working we consider information support for patients, training for staff, new technology enabled care, clinical standards and delivering services with volunteers.

This section provides:

Updates on improvements to the nutritional care of those living with the following conditions where therapeutic nutrition features significantly:

- Coeliac disease.
- Renal conditions.
- Cow's milk allergy.

Coeliac Disease

Coeliac disease is a lifelong autoimmune disease caused by intolerance to gluten, a protein found in wheat, barley and rye. Prevalence may be as high as 1 in 100 of the population yet only a quarter of people living with coeliac disease have a confirmed diagnosis. Dermatitis herpetiformis is the skin manifestation of coeliac disease and affects around 1 in 3,300 people.[1]

What is the problem?

The treatment for coeliac disease and/or dermatitis herpetiformis is a lifelong gluten-free diet. It is important that diagnosis is confirmed promptly and that a gluten-free diet is introduced and maintained as the potential long term complications associated with non compliance or untreated coeliac disease can include osteoporosis, malnutrition, small bowel cancer, unexplained infertility problems and lactose intolerance.[2]

Gluten is found in many staple foods such as bread, breakfast cereals, pasta and ready-made meals. Food manufacturers produce a large range of gluten-free substitute products to replace these routine foods and help provide variety and ensure palatability of the gluten-free diet. Gluten-free products are generally around one third more expensive than conventional gluten-containing products. Whilst some gluten-free items can be purchased over-the-counter, others are available on prescription to individuals with a confirmed diagnosis of coeliac disease and/or dermatitis herpetiformis. Access to prescribed gluten-free foods is considered important, otherwise the additional cost could adversely affect adherence and potentially increase health inequalities. Coeliac UK has published prescribing guidance for gluten-free foods[3] and recommends a minimum monthly

prescription calculated on the basis that approximately 15% of energy intake is expected to be derived from prescribed gluten-free products.[1]

What are we doing to help those living with coeliac disease and reduce inequalities?

The established model for gluten-free prescribing required repeat prescriptions to be obtained from a general practitioner (GP) and gluten-free foods were dispensed at a community pharmacy. Local research indicated that this approach was both inefficient and unpopular with patients, GPs and community pharmacists. Furthermore, GPs were unable to implement the gluten-free food prescribing guidelines as they lacked the necessary in-depth knowledge of the products. As a result some patients were provided with insufficient or too many gluten-free products and the cost of gluten-free prescribing increased each year. A new and improved gluten-free food prescribing service was required.

In 2010 a new Gluten-free Food Scheme for gluten-free food prescribing was developed and tested in Tayside based on successful schemes in England. In the re-design, patients worked alongside healthcare staff from general practice, dietetics, gastroenterology services and community pharmacy. In the new model, individuals order gluten-free products directly from community pharmacy rather than going via the GP for a gluten-free food prescription.

An online version of the Gluten-Free Food Scheme was developed to address health literacy issues. The paper version is lengthy and requires good literacy and numeracy skills to complete, whereas the online adaptation uses pictures of gluten-free foods and ensures the individual's gluten-free needs are met. The order form which is created via the online system may be emailed to the chosen community pharmacy (if the community pharmacy offers this service) and is particularly useful for housebound patients.

For all adults with coeliac disease, the annual health checks that occur 24 months after diagnosis are now offered in community pharmacy; previously many patients were not being offered the necessary review. More complex patients remain with the nutrition and dietetic and/or gastroenterology services. This shift in review from gastroenterology to community pharmacy was to ensure that all patients were offered access to a standardised annual review. In addition, this may also reduce health inequalities since evidence suggests that community pharmacies are ideally placed in the heart of the community to access hard to reach groups. Community pharmacists are often the only healthcare professionals situated in areas of deprivation, so are well-placed to target individuals from low income and deprived communities. By moving both the prescription and annual adult coeliac health check into community pharmacies it is anticipated there will be a greater uptake of the health check by people in deprived communities. Community pharmacists have indicated that they are seeing more individuals from these communities, but this needs further investigation at a national level.

What impact has the Tayside Gluten-Free Scheme had in Scotland?

As the Tayside model was shown to be cost effective, efficient and well-liked by patients, GPs and community pharmacists, the Gluten-Free Food Scheme was adapted for use across Scotland in 2014 and became the Scottish Gluten-Free Food Service. After testing and positive review it was made a permanent service in 2015.

As part of the evaluation in 2015 the Scottish Government surveyed GPs, community pharmacists and people living with coeliac disease to consider their experiences with the Scottish Gluten-Free Food Service[4]. There was a good response from across the country and strong support from each group with the vast majority liking the service and supporting its continuation. Both patients and community pharmacists noted that gluten-free food orders had altered more frequently and there was a strong association between the ease and frequency that patients changed their orders. The evaluation also showed wide variation across NHS Boards in the number of gluten-free products that could be prescribed and a closer alignment of these lists was recommended in the review.

The prescribing data indicated that the number of prescribed gluten-free foods increased by almost 32%, but costs increased only marginally (less than 5%). The increase in the amount of prescribed gluten-free food occurred across all food categories, suggesting that individuals were ordering a wider variety of items compared to when they were using the GP prescribing model. The prescribing cost per item decreased overall by 20% and patient care records were created in 87% of community pharmacies.

The Scottish Gluten-Free Food Service is considered a success as it supports individuals living with coeliac disease and/or dermatitis herpetiformis to:

- Gain direct access to pharmaceutical care.
- Actively manage their own condition.
- Have a better experience when obtaining prescribed gluten-free food by reducing the need for visits to general practice.
- Access appropriate gluten-free staple foods using a convenient service that is customised to their needs.
- Access clinical monitoring and support (including dietetics) via the annual

community pharmacy health check.
- Experience more systematic and nationally consistent management.

The service also benefits NHS Scotland by:

- Being cost effective.
- Optimising the use of multi-disciplinary clinical skills.
- Assisting, through collaborative working, better management of the demand on the time of all members of the primary care team involved in providing this service.
- Removing the need for a GP to be involved in issuing multiple gluten-free prescriptions once the dietitian has determined the unit allocation and the individual has registered with a community pharmacy.
- Reducing the incidence of out-of-pocket expenses incurred as a consequence of community pharmacy dispensing of individual prescriptions for gluten-free food.

The recommendations resulting from the national review are to:

- Continue and embed the Gluten-Free Food Service into NHS clinical services.
- Align further NHS Board gluten-free food formulary choices, while still accounting for variations in local population need.
- Establish regular updates to the National NHS Gluten-Free Food Prescribable List to support NHS Boards in local formulary development and minimise resource duplication.
- Complete the development and roll out of electronic prescribing forms for community pharmacies.
- Improve the ease of ordering for individuals and roll-out the online Gluten-Free Food Ordering Scheme.
- Monitor and evaluate further the annual community pharmacy coeliac health checks.

Recommedation

The Scottish Government plans to develop a national Coeliac Disease Clinical Pathway. This work will be led by a member of Tayside Nutrition during 2016/17 as part of the Developing Out-patient Integration Together (DOIT) Programme (Scottish Government).

A review of the local pathway is already underway which will feed into the national work. Once finalised, the national Coeliac Disease Clinical Pathway will be incorporated into the NHS Tayside local pathway.

Renal Conditions

Renal replacement therapy replaces the normal blood filtering function of the kidneys. It is used when the kidneys are not working well (renal failure) and includes acute kidney injury and chronic kidney disease. Renal replacement therapy includes dialysis (haemodialysis or peritoneal dialysis) which diverts blood into a machine, cleans it, and then returns it to the body. Renal replacement therapy also includes transplantation when a kidney is replaced by a donor kidney.

What is the problem?

For many renal conditions appropriate therapeutic nutrition is crucial for maintaining or improving physical health and quality of life. Diet therapy is complex and must be tailored to the individual in response to changing blood biochemistry and kidney function, the presence of co-morbidities, the overarching treatment plan and personal food preferences. Diets can be multifaceted with many individuals requiring multiple diet therapies. Clinical outcomes often depend on the individual's ability to adhere to these diets, concordance with medication and support from the multi-disciplinary team and good self-help tools can be useful in ensuring adherence. Better adherence to diet can also lessen the need for medication which benefits the individual and the NHS e.g. better adherence to a low phosphate diet is related to reductions in spending on phosphate binder medication.

The Scottish Renal Registry Report[5] shows that in Tayside on, or before, 31 December 2014, 412 individuals were receiving renal replacement therapy as follows:

- 175 - haemodialysis.
- 23 - peritoneal dialysis.
- 214 - renal transplant.

The report also showed the average age of a patient receiving renal replacement therapy was 60 years. The proportion of renal replacement patients living with diabetes had increased steadily from 0% in 1960 to 25%.

Furthermore, it was notable that nationally more people from deprived areas were receiving renal replacement therapies compared to affluent areas[6]. Although we do not have local data on health inequalities within Tayside's renal population we would expect to find this same inequality.

What are we doing to help those living with renal disease and reduce inequalities?

The improvement work in renal nutrition has concentrated on identifying and understanding the population experiencing renal problems and their nutritional challenges, assessing the extent of health inequalities and co-assessing current nutritional care pathways with key stakeholders. The next step is to co-design improved nutritional care pathways for the renal population.

Over the past year the nutrition and dietetic service's renal team has:

- Led the development of an explicit service improvement plan for renal nutrition.
- Convened a steering group with representation from patients, the Tayside Kidney Association and Patient Liaison Committee to progress service improvements.
- Collated data from the dietetic out-patient service which led to a major service redesign addressing the needs of people from less affluent areas.
- Led the delivery of bespoke diet cook training to improve renal diet provision within NHS Tayside's hospitals.
- Provided training to nursing staff on the use of the 'Malnutrition Universal Screening Tool' ('MUST') on the renal ward.
- Altered dietetic practices to ensure more efficient use of time.
- Facilitated a one-day training programme on renal nutrition to registered dietitians from across the UK on behalf of the British Dietetic Association's Centre for Education.
- Raised awareness of nutrition by promoting No Added Salt for the management of hypertension to mark World Kidney Day (10 March

2016). There were information stands within each of the haemodialysis units in Tayside and one on the main concourse of Ninewells Hospital in Dundee for the general public. A 'Salt Savvy' quiz tested general knowledge and helped people to learn some key facts e.g. over 75% of the salt we eat is already present in processed food. There were also posters which revealed the hidden salt content in everyday foods, information on label-reading and, no added salt recipes using flavourings such as lemon and garlic.

Recommendations

- Consider and understand better the demographics of the renal population of Tayside and identify health inequalities.

- Hold a stakeholder event to explore co-producing and developing nutritional care pathways for:

  - Nutritional support (food first, oral supplements and enteral tube feeding).
  - Weight management.
  - Healthy eating.
  - Phosphate restriction.
  - Potassium restriction.
  - Sodium restriction.
  - Fluid management.
  - Diabetes.

- Identify health inequalities in nutritional care and work with key stakeholders to use targeted approaches to reduce them.

- Scope further self-care and secondary prevention and consider the use of new emerging information technologies such as Smart Phone Apps, internet and webcasts to support patients and staff to improve nutritional care.

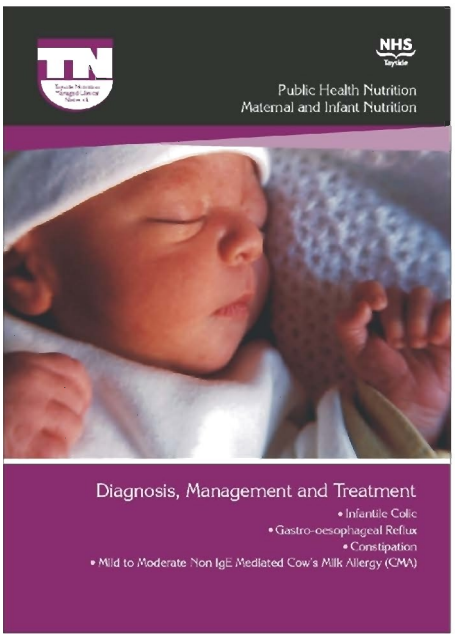
Cow's Milk Allergy

Cow's milk allergy is an adverse reaction to cow's milk protein with a reported incidence of 2-7.5% of infants with up to 15% showing symptoms suggestive of it.[8] Cow's milk allergy can develop in exclusively or partially breast-fed infants when cow's milk is introduced into the feeding regime. Incidence is lower in exclusively breast-fed infants, compared to formula-fed or mixed-fed infants. Clinical reactions in the breast-fed group are mostly mild to moderate. This might be related to lower levels of cow's milk protein in breast milk compared to formula milk. Immunomodulators in breast milk and differences in gut flora between breast-fed and formula-fed infants may also play a role.

What is the problem?

Early identification and proactive management of infant feeding challenges is problematic. A survey carried out by NHS Tayside's Infant Formula Information Group in 2013 ascertained the information needs of healthcare professionals working with new parents. All infants who are breast-fed or formula-fed may potentially encounter feeding difficulties such as colic, gastro-oesophageal reflux or constipation which can also be symptoms of cow's milk allergy. The survey results identified a need to improve how healthcare staff worked with, and provided information to, parents who experience feeding difficulties with their children.

What are we doing to help those living with cow's milk allergy and reduce inequalities?

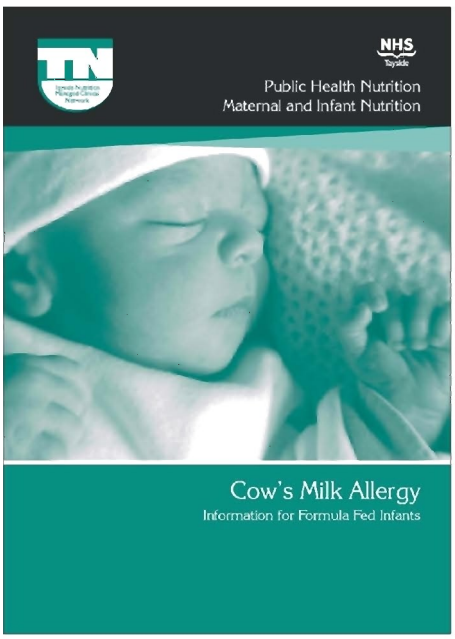


A multidisciplinary event was held to map current practice, identify challenges and agree a way forward to improve outcomes for infants and families. Significant variation in practice was identified across all professional groups in the management of these conditions and there were no clear diagnostic and management guidelines. In order to enable healthcare professionals to diagnose and manage these conditions effectively, evidence-based pathways were needed. A working group was established comprising health visitors, family nurse practitioners, paediatric dietitians and maternal and infant nutrition leads.

- The evidence-base for the diagnosis and management of the associated conditions was reviewed.
- A structured clinical pathway was developed which details support as either first or second line management, with time lines for each stage in the pathway.
- Infant feeding and symptom assessment tools were produced to

support staff to look at the infant holistically, rather than just treating the presenting symptom.

- At each stage of the development paediatricians and GPs were consulted.
- A printed evidence-based pathway for diagnosis, management and treatment of infantile colic, gastro-oesophageal reflux, constipation and mild to moderate non Immunoglobulin-E (non IgE) mediated cow's milk allergy was developed.



- A lack of written resources for families was identified as an issue. Therefore, information was developed to ensure parents and families receive consistent advice.
- Two assessment tools were developed to help staff identify cow's milk allergy earlier and thereby reduce the anxiety and distress experienced by parents.
- Training for staff was developed, piloted, delivered and evaluated during 2015 and was accessed by the vast majority of health visitors and family nurse practitioners.
- A briefing paper for GPs and community pharmacists was prepared with online links to the pathway and all the related resources embedded within.

What difference did it make?

This activity was a collaboration between clinicians and other partners. It involved local people and NHS staff working together and demonstrated how professionals listened to the views of local families and aimed to improve their experiences. The feedback and quotes from local families prior to the development of the pathway identified a clear need to improve outcomes for them.

Parents have welcomed the structured approach, recognising the caring and compassionate manner in which their child's symptoms have been managed. The intervention also contributes significantly to continuity of care and effective communication by implementation of, and use of, the pathway. A quality service is provided to all families and the experience women have in the early months of infant feeding has improved using this proactive and consistent approach by all staff.

Recommendations

- Design an update session for health visiting staff in response to a follow-up survey which assessed the impact and changes in practice.
- Apply improvement methodologies to understand and visualise the current referral pathway for children with cow's milk allergy from primary to secondary care and make recommendations.
- Identify health inequalities relating to the management of cow's milk allergy and work with key stakeholders using targeted approaches to reduce them.

Recommendations in Therapeutic Nutrition

There are many other areas of therapeutic nutrition with potential for improvement; these will be considered using the same Tayside Nutrition improvement approach e.g. diabetes and irritable bowel syndrome.

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