Public Health Devon

Devon County Council

Long Term Conditions: Health Needs Assessment

Northern, Eastern and Western Devon Clinical Commissioning Group and South Devon and Torbay Clinical Commissioning Group Geographical Area

PLYMOUTH CITY COUNCIL

TORBAY COUNCIL

Acknowledgements

The data produced for this Health Needs Assessment has been led by Devon Public Health Intelligence Team with contributions from Plymouth and Torbay Public Health Intelligence Teams.

Contents

Foreword

Long term conditions are considered by the Department of Health to be health conditions that cannot be cured but which can be controlled by medication and/or other therapies. In England, 15.4 million people (over a quarter of the population) have a long term condition and an increasing number of these have multiple conditions. While the number of people with one long term condition is projected to be relatively stable over the next ten years those with multiple long term conditions is set to rise considerably.

People who have long term conditions use a significant amount of health and care services and their care accounts for 70% of hospital and primary care budgets in England. Long term conditions are not just a health issue as they can have impact on a person's ability to work and live a full life. People from more socio-economically deprived areas suffer disproportionately from LTCs and better management can help to reduce health inequalities.

This health needs assessment considers the population of the North East and West Devon Clinical Commissioning Group and the South Devon and Torbay Clinical Commissioning Group who have one or more long term conditions. Data are presented for adults for a specific set of long term conditions for which data are consistently available across all geographical areas.

It should be considered in conjunction with other health needs assessments in particular end of life care, dementia, mental health and work around cancer diagnosis. It also relates closely to work undertaken by public health, local authorities and the Clinical Commissioning Groups around "commissioning for prevention" for adults and the integration of health and social care.

The current picture of need for those with long term conditions is examined across the life span and the future implications of prevalence and the implications of multiple-morbidity and an ageing population are looked at. A series of observations are made regarding the future development of services that will serve this population, with the aim of helping to improve the health and wellbeing of those living with long term conditions.

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Glossary

AAACM	All-Age All-Cause Mortality
ASHN	Academic Science Health Network
CCG	Clinical Commissioning Group
CHD	Coronary Heart Disease
CKD	Chronic Kidney Disease
COPD	Chronic Obstructive Pulmonary Disorder
HF	Heart Failure
HNA	Health Needs Assessment
IMD	Indicies of Multiple Deprivation
LSOA	Lower Super Output Area
LTC	Long Term Condition
NEW Devon CCG	Northern, Eastern and Western Devon Clinical Commissioning Group
PenCHORD	Penninsular Collaboration for Health Operational Reseach and Development
QOF	Quality & Outcomes Framework
SD&T CCG	South Devon & Torbay Clinical Commissioning Group
SMI	Serious Mental Illness
TIA	Transchemic Ischemic Attack

Health Needs Assessment
People with Long Term Conditions in Devon, Plymouth and Torbay

1. Executive Summary

Introduction

1.1 The Department of Health defines Long Term Conditions (LTC) as "those conditions that cannot, at present, be cured but which can be controlled by medication and other therapies".

1.2 In England, 15.4 million people (over a quarter of the population) have a long term condition and an increasing number of these have multiple conditions. The number with three or more is expected to increase from 1.9 million in 2008 to 2.9 million in 2018.

1.3 People with long term conditions use a significant proportion of health care services (50% of all GP appointments and 70% of days spent in hospital beds) and their care absorbs 70% of hospital and primary care budgets in England.

1.4 Nationally, the NHS has a focus on long term condition identification, disease management and prevention of complications and costly care through the NHS Five Year Forward Plan. Domain 2 of NHS England's Outcomes Framework focuses on enhancing quality of life for people with long-term conditions.

1.5 Many areas of work within the clinical commissioning groups, local authority and public health will impact on how services for long term conditions are configured in the future. Locally, the NHS in Devon, Plymouth and Torbay are working to develop a framework for delivering care for people with long term conditions in the community.

1.6 In order to commission services that are fit for and serve the population who have long term conditions and which can respond to the economic pressures of the health community, commissioners require an understanding of the population need.

Context

1.7 This Long Term Conditions Health Needs Assessment has been undertaken within the context of work within public health, local authority and the Clinical Commissioning Group around commissioning for prevention for adults and the integration of health, wellbeing and care.

1.8 The aim of this prevention work is for:

- an upstream shift to preventive action to reduce health inequalities and reduce premature morbidity and mortality
- preventive work streams align and form a cohesive whole

1.9 Papers related to this work have been produced by Public Health Devon and include a discussion paper on commissioning for prevention[1] and a mid-life approach to promoting healthy ageing and independence[2] as well as a rapid review of the evidence for prevention in mid and later life[3]. These discuss both individuals with no identified long term condition and those with one or more.

1.10 The rapid review updates the evidence base for the seven original interventions in the Devon Prevention Strategy 2011-13 (Lang, 2010). It also includes evidence for a broader range of interventions and the evidence for wider prevention in clinical and community settings prior to diagnosis and at first diagnosis. They will inform the development of a new Devon Prevention Strategy in the near future.

1.11 The South West Academic Health Service Network is set to extend the cover of the Symphony Project in Somerset to Devon in due course. The Symphony Project joins up health and social care data so usage and cost of services across the whole system can be analysed. Some analysis of Devon data has been included in this Health Needs Assessment by applying the patterns seen by sex, age and social characteristics in Somerset to our local populations to estimate what we might expect to see in Devon.

Aims

1.12 The aim of this Health Needs Assessment is to provide an assessment of the needs of the population of NEW Devon Clinical Commissioning Group and South Devon & Torbay Clinical Commissioning Group in relation to long term conditions.

1.13 It is just the first step in a process of ongoing work and development which will require looking at the demand and provision of future services and is linked to the work being undertaken around commissioning for prevention.

Objectives

1.14 The objectives for this Health Needs Assessment are:

- to describe the current picture in relation to long term conditions in Devon health community
- to examine the prevalence and impact of co-morbidity of long term conditions
- to look at the population in relation to the lifestyle risk factors contributing to development of long term conditions
- to illustrate the impact of deprivation on prevalence and future prevalence of long term conditions on the Devon health community

[1] http://www.devonhealthandwellbeing.org.uk/wp-content/uploads/2015/05/Commissioning-for-Prevention-FINAL.pdf
[2] http://www.devonhealthandwellbeing.org.uk/wp-content/uploads/2015/05/Prevention-overview-covering-paper-v2.pdf
[3] http://www.devonhealthandwellbeing.org.uk/wp-content/uploads/2015/05/Mid-Life-and-Later-Life-Prevention-evidence-review-FINAL-MAY-2015.pdf

- To illustrate/demonstrate the possible impact of long term conditions on the health economy in Devon

Scope

1.15 This Health Needs Assessment is not intended to be a complete compendium on long term conditions in Devon. It is to look at painting a picture of long term conditions in Devon, Plymouth and Torbay. Parameters have been set to make the task and document manageable and useable.

1.16 We have used the Department of Health definition of long term conditions as "*those conditions that cannot, at present, be cured but which can be controlled by medication and other therapies*".

1.17 The following were considered in deciding which conditions to include in the detailed analysis:

- the availability of data
- previous work undertaken on the condition within public health
- prevalence
- tightness of a definition/inclusion criteria for condition

1.18 Cancer and mental health were not included in the detailed analysis as a primary long term conditions diagnosis but were considered in the analysis as a co-morbidity.

1.19 **Included for detailed analysis are**:

Vascular:
- Coronary Heart Disease (CHD)
- Stroke
- Transchemic Ischemic Attack (TIA)
- Heart Failure (HF)
- Diabetes
- Chronic Kidney Disease (CKD)

Chronic Respiratory:
- Chronic Obstructive Pulmonary Disorder (COPD)
- Asthma

Other:
- Epilepsy

1.20 **Excluded for detailed analysis are:**

- Hypertension: prevalence is too high and a common co-morbidity
- Mental Health: separate HNA already completed (DCC 2013)[4], considered here as a co-morbidity
- Dementia: separate HNA carried out in Devon (DCC 2014)[1]
- Cancer: explored through other work streams within the CCGs & Public Health, considered as a co-morbidity

[4] http://www.devonhealthandwellbeing.org.uk/library/needs-assessments/

- End of Life: not as long term conditions in own right; an End of Life Health Needs Assessment published (DCC 2012)[1]
- Chronic Pain: criteria not defined
- Bone Health: criteria not defined

1.21 **Multiple Morbidity/Co-morbidities**

For the purpose of this Health Needs Assessment, multiple or co-morbidity of long term conditions will be classified as:

- Two or more long term conditions as defined above.

- A co-morbidity or multiple morbidity can include cancer or mental health despite being these excluded from the detailed analysis as primary long term conditions.

Conclusions

1.22 Five elements stand out from this needs assessment regarding the prevalence and management of long term conditions. They are:

- the impact of deprivation on the prevalence and onset of disease
- the impact of age on the prevalence and onset of disease
- the impact of co-morbidity on the management of disease
- the importance of disease registers and service design in the successful delivery of appropriate services and management of long term conditions

2. Introduction

2.1 Introduction

The aim of this document is to carry out an assessment of the health needs of the population in NEW Devon and South Devon & Torbay Clinical Commissioning Groups who suffer from Long Term Conditions (LTC). It will also look at this population need in relation to the lifestyle factors that contribute to these disease areas. It will not map the current service provision or the future provision of services.

Health Needs Assessment

2.2 A Health Needs Assessment is a 'systematic method for reviewing the health issues facing a population, leading to agreed priorities and resource allocation that will improve health and reduce inequalities' (Cavanagh and Chadwick NICE 2005).

Why Focus on Long Term Conditions?

2.3 In England, 15.4 million people (over a quarter of the population) have a Long Term Condition and an increasing number of these have multiple conditions (the number with three or more is expected to increase from 1.9 million in 2008 to 2.9 million in 2018). People with long term conditions use a significant proportion of health care services (50% of all GP appointments and 70% of days spent in hospital beds), and their care absorbs 70% of hospital and primary care budgets in England.[5]

Context: National Drivers

2.4 The current NHS Outcomes Framework within the NHS Five Year Plan notes that LTC are now a central task of the NHS. Caring for these needs requires a partnership with patients over the longer term rather than providing single, unconnected "episodes of care". Three 'service components' or hand books have been published to provide practical support for good LTC management and they cover:

- case finding and risk stratification and next steps for risk stratification in the NHS
- personalised care and support planning
- multi-disciplinary team (MDT) working

2.5 Much of the previous work around LTCs has been summarised in the 'Long Term Conditions Compendium of Information' produced by the Department of Health (2012) and Department of Health Quality, Innovation Productivity and Prevention (QIPP) Long Term Conditions Workstream Model of Care initiative[6].

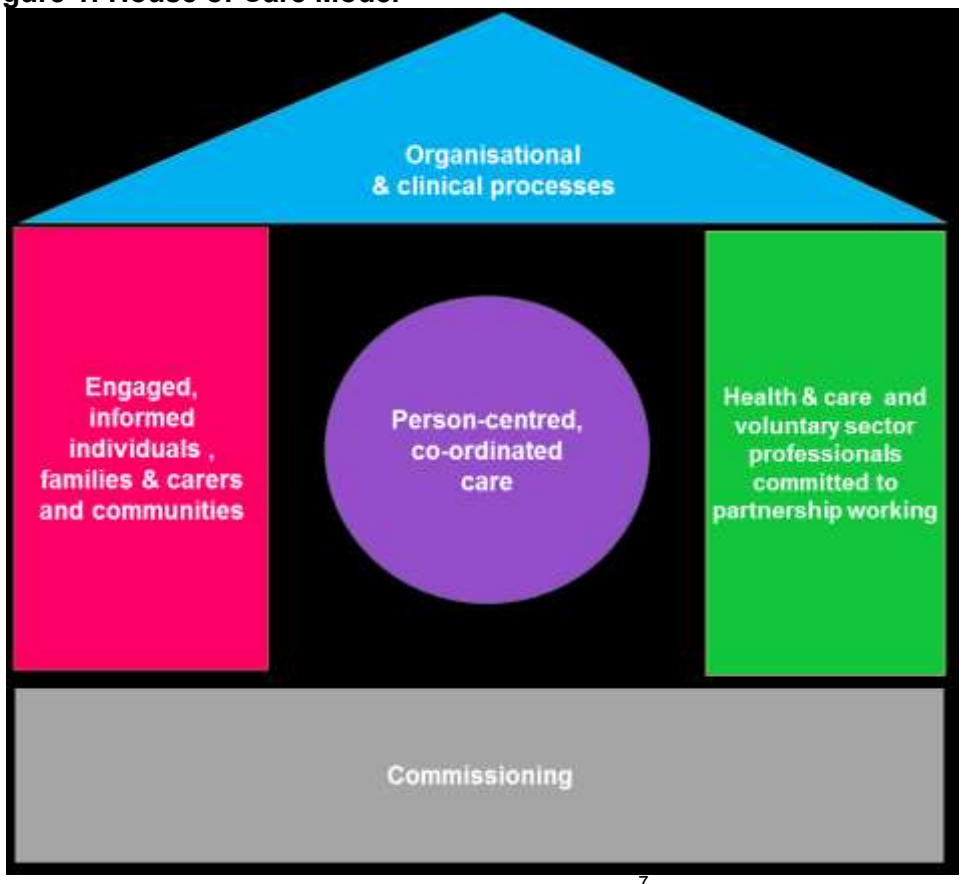
[5] (http://www.england.nhs.uk/resources/resources-for-ccgs/out-frwrk/dom-2/ accessed 07/04/2015)

[6] Implementing the LTC Workstream Model of Care Achievements so far December 2012 https://www.networks.nhs.uk/nhs-networks/commissioning-for-long-term-conditions/resources-from-the-ignition-phase/legacy-documents

2.6 These documents provided context around the importance for long term conditions of multiple morbidities; their impact on unscheduled care; the complexity of co-morbidity with mental health problems; the impact on health inequalities; impact of individual disease based clinical guidelines on treatment of co-morbidities and the impact on end of life care and hospital mortality. These are all issues still trying to be resolved in the successful management of long term conditions and which are looked at in this Health Needs Assessment.

2.7 The QIPP workstream introduced the 'House of Care Model' (see below); a systemised approach to put the patient at the centre and wrapping integrated care and support around the person. The patient at the centre plays an active role in developing their one care and support plan. It mainstreams shared decision-making, providing a way to develop systemised supported self-care. It identifies and lets us think about the processes and infrastructure we need to do this through commissioning (e.g. Information Technology i.e. patient held records/technology/telehealth). It challenges the commissioning model requiring the removal of distinctiveness in the system and changes to the fiscal model for it to work.

Figure 1: House of Care Model



Source: NHS England website[7]

[7] http://www.england.nhs.uk/resources/resources-for-ccgs/out-frwrk/dom-2/house-of-care/house-care-mod/ [accessed 12/05/2015]

Local Drivers

2.8 How the management of long term conditions are configured in the future will be impacted on by many areas of work. Not just within the physical and mental health and social care arena but also the wider community and voluntary sector.

2.9 Current work programmes around the Better Care Fund (BCF), integration of health and social care and the Transforming Community Services within New Devon CCG and integration and Pioneer work in Torbay are locally developed initiatives driven by national policy decisions. The table below gives a picture of the drivers within the footprint of the two Devon CCG's that will impact on the delivery and future design of services.

Figure 2: Drivers for prevention and integration within the CCG footprints (excluding Corporate and Strategic Plans)

FOOTPRINT			
DRIVERS (Excluding Corporate and Strategic Plans)	**Plymouth CC**	**Devon CC**	**Torbay C**
	JSNA & JHWBS	JSNA & JHWBS	JSNA & JHWBS
	Public Health grant and responsibilities	Public Health grant and responsibilities	Public Health grant and responsibilities
	Better Care Fund & Integration	BCF and I-plan Integrated Care in Exeter project	Better Care Fund & Integration
	Care Act	Care Act	Care Act
	NHS 5 year forward view		
	Transforming Community Services		Integration & Pioneer
	NHS Futures		
	NEW Devon CCG		**SDTCCG**
FOOTPRINT			

Prevention Work

2.10 Both nationally and locally, the recent focus has been on the integration of health and social care and on prevention. The Care Act has introduced a wider duty to consider physical, mental and emotional wellbeing of individuals needing care and a duty to provide preventive services to prevent reduce and delay needs. The Better Care Fund allows further pooling of health and social care funding and the ability to integrate services further. The NHS and Public Health England publication 'A Call to Action: Commissioning for Prevention' was launched in 2013 and provides a case for prevention and a framework for local action. The aim of this prevention work is for:

- an upstream shift to preventive action to reduce health inequalities and reduce premature morbidity and mortality
- preventive work streams align and form a cohesive whole

2.11 Work around prevention and the integration of health and social care will involve the work of Public Health departments, local authority and the Clinical Commissioning Groups, acute NHS Trusts, mental health trusts and voluntary and community sector organisations.

2.12 Any prevention approach will need to consider the life-course following the principles of starting well, **living well** and **ageing well**. To impact on prevention, programmes need to support successful ageing from middle age onwards rather than simply aiming to support elderly people to prevent worsening of chronic conditions. Successful ageing enables people to have the knowledge to develop the behaviours and acquire the skills as they grow older to avoid the development of disease and stay active and positively healthy until a short time before death. Successful ageing will include; survival to an advanced age whilst maintaining physical and cognitive function, maintaining functional independence and living a full and active life. It means that morbidity and disability are compressed into a relatively short period before death in line with the **"compression of morbidity"** theory.[8]

2.13 Public Health Devon has produced a number of papers to support this work 'Commissioning for Prevention in Adults in Devon – An information paper' (DCC 2014), 'Commissioning for Prevention – a mid-life approach to promoting healthy ageing and independence' (DCC 2015a) alongside 'A Rapid Review of the Evidence for Prevention in Mid and Later Life' (DCC 2015b).

Strategic Priorities

Devon County Council: Better Together

2.14 'Better Together'[9] sets out a vision for 2020 and beyond for the County Council detailing how the Council will work with partners to help people and communities control their own future. The aims of the vision are built around five themes:

Resilient – supporting people and communities to become resilient by supporting voluntary and community groups, and creating opportunities for people to contribute.

Healthy – enabling people to lead healthy lives in Devon's environment, supporting people to live in their own home as part of a supportive community, and focus on reducing inequalities in health.

Prosperous – supporting Devon's resourceful small enterprises, innovative high value businesses, agriculture and tourism and encouraging economic growth.

Connected – helping people to connect to one another in order to form supportive and inclusive communities through good digital and transport connections.

[8] Fries JF. National death and the Compression of Morbidity. N Eng J Med.1980; 303: 130-5
[9] https://new.devon.gov.uk/bettertogether/

Safe – working to ensure that everyone has the security, confidence and respect to live their life to the full, and where risks are present carefully targeted support can address the root causes of problems and offer protection from harm.

2.15 Underlying this vision is the need for **collaboration** (working with the public and other organisations to achieve the best outcomes), being **enterprising** (achieving good value and working efficiently and effectively), and being **innovative** (working in new and flexible ways).

Figure 3: The Vision for Devon

Torbay Council

2.16 Torbay Council corporate plan for 2013-15 has identified three themes through which it aims to ensure that services are targeted in securing a healthy prosperous and happy Torbay.

Investing in the future:

- develop a successful economy and improve job prospects
- ensure that every child has access to a good school and target support to ensure all young people reach their potential
- invest to improve quality of life and reduce long term costs to the community

Protecting the vulnerable:

- invest in early intervention and prevention to reduce the number of children and families experiencing complex problems
- continue to protect the most vulnerable people from avoidable harm or abuse
- through adult social care, offer greater personalisation for service users and support residents to live healthy and independent lives

Spending less money to greater effect:

- target resources on our priorities
- increase efficiencies
- make tough choices through disinvestment in low priority areas

2.17 Torbay's Joint Prevention approach with South Devon and Torbay CCG focuses on the influences on the five behaviours (smoking, diet, physical inactivity and excess alcohol consumption) that lead to the conditions and diseases that cause 75% of premature mortality. A Joint Commissioning for Prevention Strategy is being developed across Devon, Torbay and both CCG's covering the Devon population.

Plymouth City Council

2.17 Plymouth City Council's corporate plan has the underlying co-operative value of 'one team servicing our city' with the objective of 'creating a fairer Plymouth where everyone does their bit'. Priorities include: improving health and wellbeing overall, reducing inequalities and working with partners to make Plymouth a fairer place to live. This is to be achieved by developing an integrated population health system that enables positive choices for better health in a growing city. It strives to support the development of healthy and happy communities in Plymouth by using social networks, increasing investment in public health and putting health and wellbeing at the heart of everything we and our partners do.

2.18 Central to this is 'Thrive Plymouth' a ten year programme to improve health and wellbeing and reduce health inequalities in Plymouth. It is based on the local 4-4-54 construct, ie that poor diet, lack of exercise, tobacco use and excess alcohol consumption are risk factors for coronary heart disease, stroke, cancers and respiratory problems, which together contribute to 54% of deaths in Plymouth (ie 4-4-54). Changing these four behaviours would help prevent four diseases and reduce the number of deaths due to these chronic diseases. By focusing on prevention (encouraging positive lifestyle choices as well as influencing the context within which those choices are made) Thrive Plymouth aims to reduce health inequalities across the city.

Northern Eastern and Western Devon Clinical Commissioning Group Local NHS Futures – Transforming Care in Devon and Plymouth

2.19 The Northern, Eastern and Western Devon CCG vision[10] agreed by the governing body in 2013 is 'healthy people, living healthy lives, in healthy communities'.

2.20 This vision is to be achieved through the commissioning of high quality sustainable services promoting wellbeing and caring for people when they are unwell, by focusing on working in partnership, making the best use of available resources and emphasising the prevention of ill health and the promotion of wellbeing, alongside helping people with long-term conditions to live well. The CCGs objectives are to:

- commission services with partners to reduce health inequalities and improve people's lives
- listen to people and take action on what they say about services
- commission safe services and reduce avoidable harm
- support people to make healthy lifestyle choices and understand the care, treatment and services available to them
- develop people, and those who support them, to value strengths and personal qualities in all that they do
- innovate to increase productivity and reduce waste

South Devon and Torbay Clinical Commissioning Group Strategic Plan

2.21 The South Devon and Torbay CCG vision as documented in the 2014 Strategic Plan[11] is for 'excellent, joined up care for everyone'.

2.22 The CCG highlights their responsibilities as reducing inequalities, achieving national requirements and achieving a sustainable financial balance. This is supported by three intentions which are an excellent experience of care and effective outcomes, a focus on collaborative working with communities, and a proud, motivated and skill work. The priorities for the CCG are:

- promoting self-care, prevention and personal responsibility
- developing joined up community hubs closer to home, for all
- leading a sustainable health and care system encompassing workforce, estates and Information Technology

[10] http://www.newdevonccg.nhs.uk/who-we-are/vision-mission-strategies--objectives/100271

[11] http://www.southdevonandtorbayccg.nhs.uk/about-us/our-plans/Pages/integrated-strategic-plan.aspx

3. Demography

3.1 Age is a key factor in the prevalence of long term conditions with a greater proportion found in more elderly populations than younger populations.

3.2 As the population pyramids below illustrate, NEW Devon and South Devon & Torbay CCGs serve a population that differs quite significantly from the England average. The CCG areas have a higher proportion of people in the older age categories than England as a whole. In particular, it has a higher than average proportion of the population in the 70+ age bands. Whilst this is not so pronounced in the population pyramids below, the population pyramids for the sub localities in Appendix 1 illustrate this more clearly (see WEB and Wakley and Torbay).

3.3 This higher proportion of population being over 70 is not balanced out by a similarly higher proportion in the younger working age population: this can be seen below against the England average (black line) in both NEW Devon CCG and South Devon & Torbay CCG.

Figure 4: Population Pyramid for NEW Devon CCG

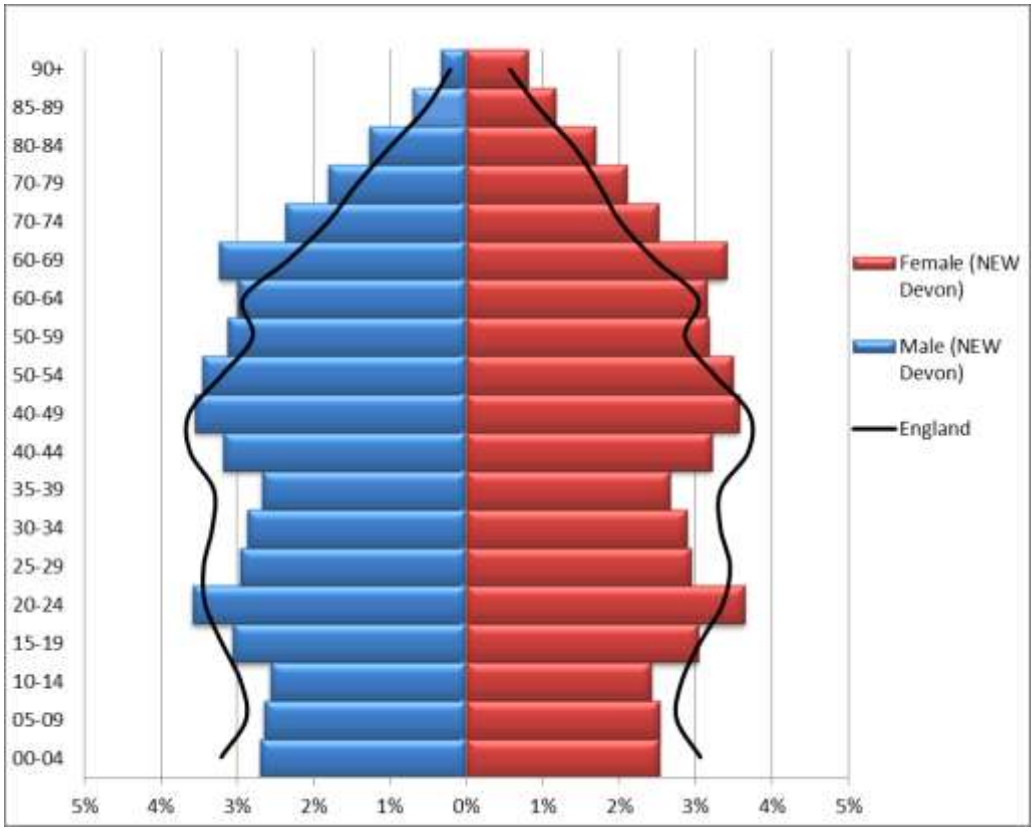
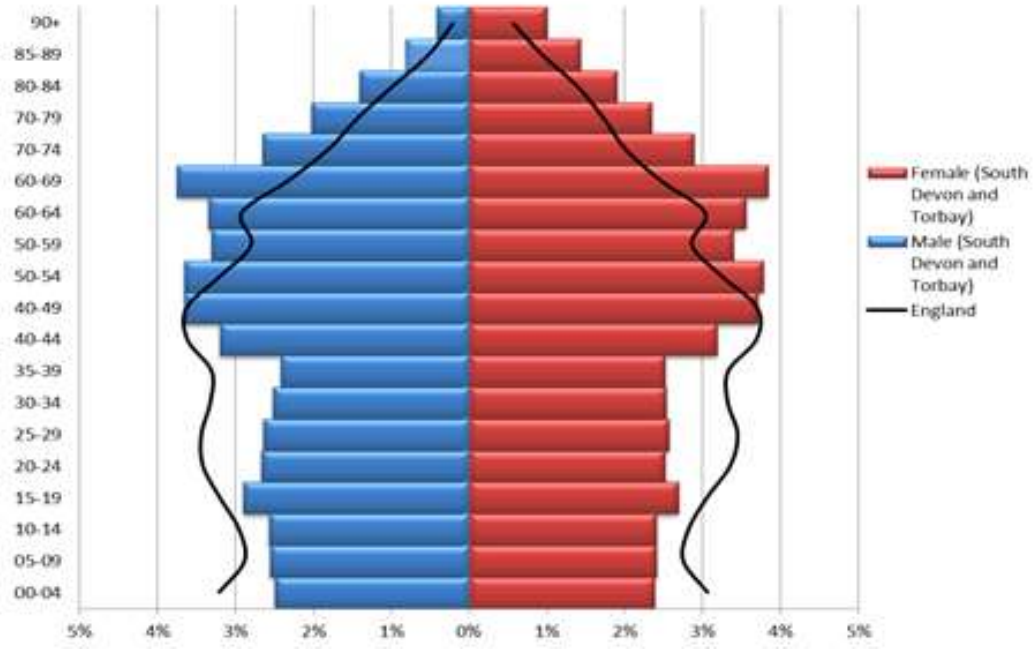


Figure 5: Population pyramid for residents in South Devon and Torbay Clinical Commissioning Group Area



Figures for localities can be seen in Appendix 1.

Population Projections

3.4 The number of older people in Devon (60-59 and 75+) is growing at a much faster rate than the numbers in 0-59 age groups. Future projections for the population that the two Clinical Commissioning Groups serve illustrate that, whilst the younger age bands remain constant, the older age band, 75+ in particular and the 60-74 age band to a lesser extent, are projected to rise at a much higher rate. The numbers of people in the 75+ population category are likely to double by 2037 whilst those in the 0-14 and 15-59 remain fairly constant.

Figure 6: The projected demographic change in the population structure of NEW Devon CCG 2012-2037

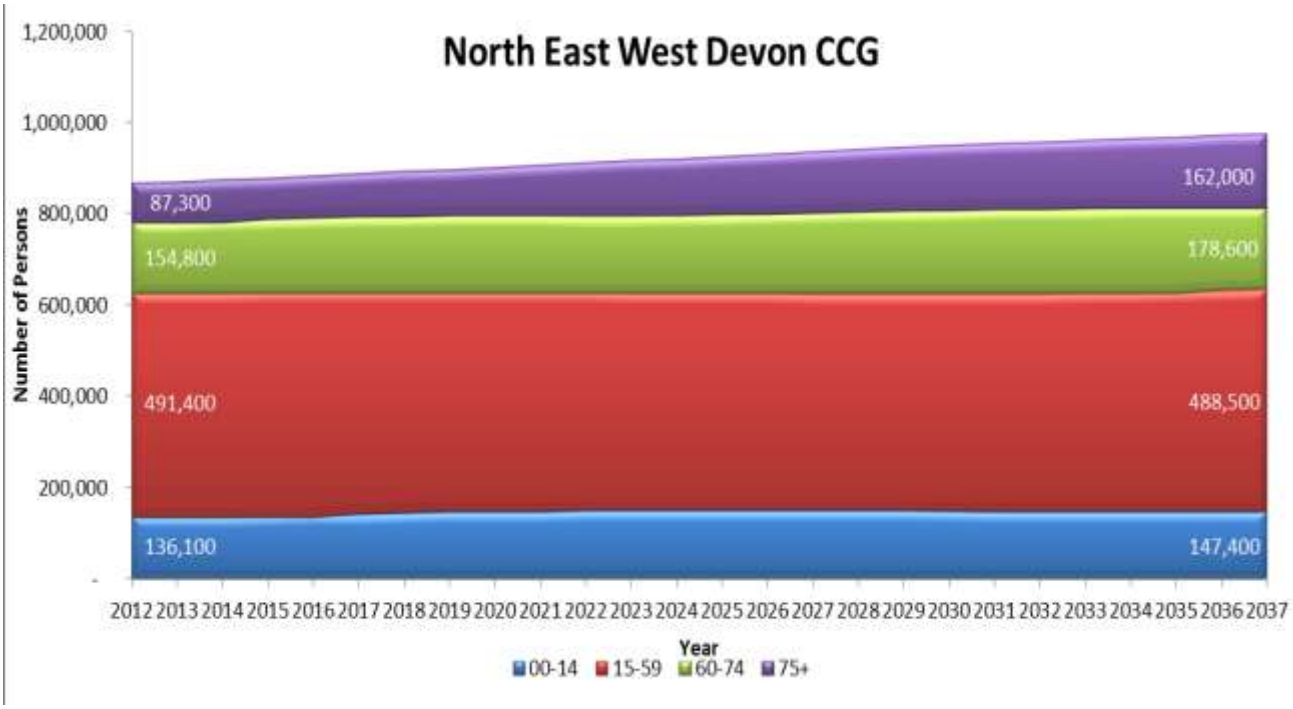
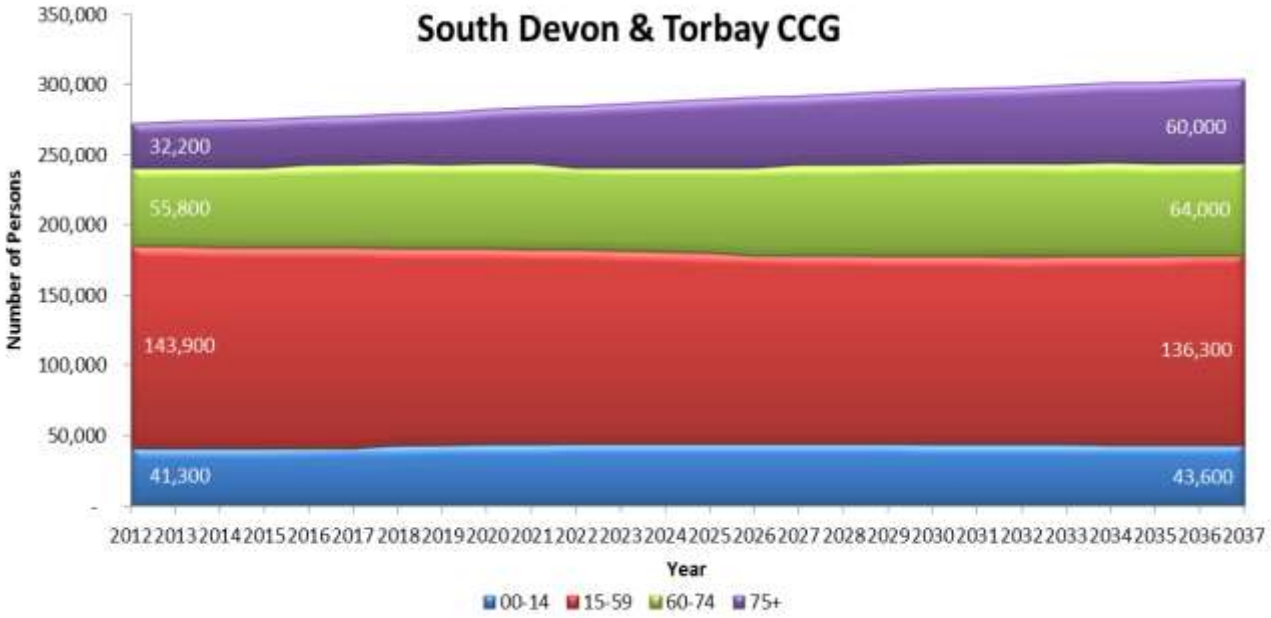
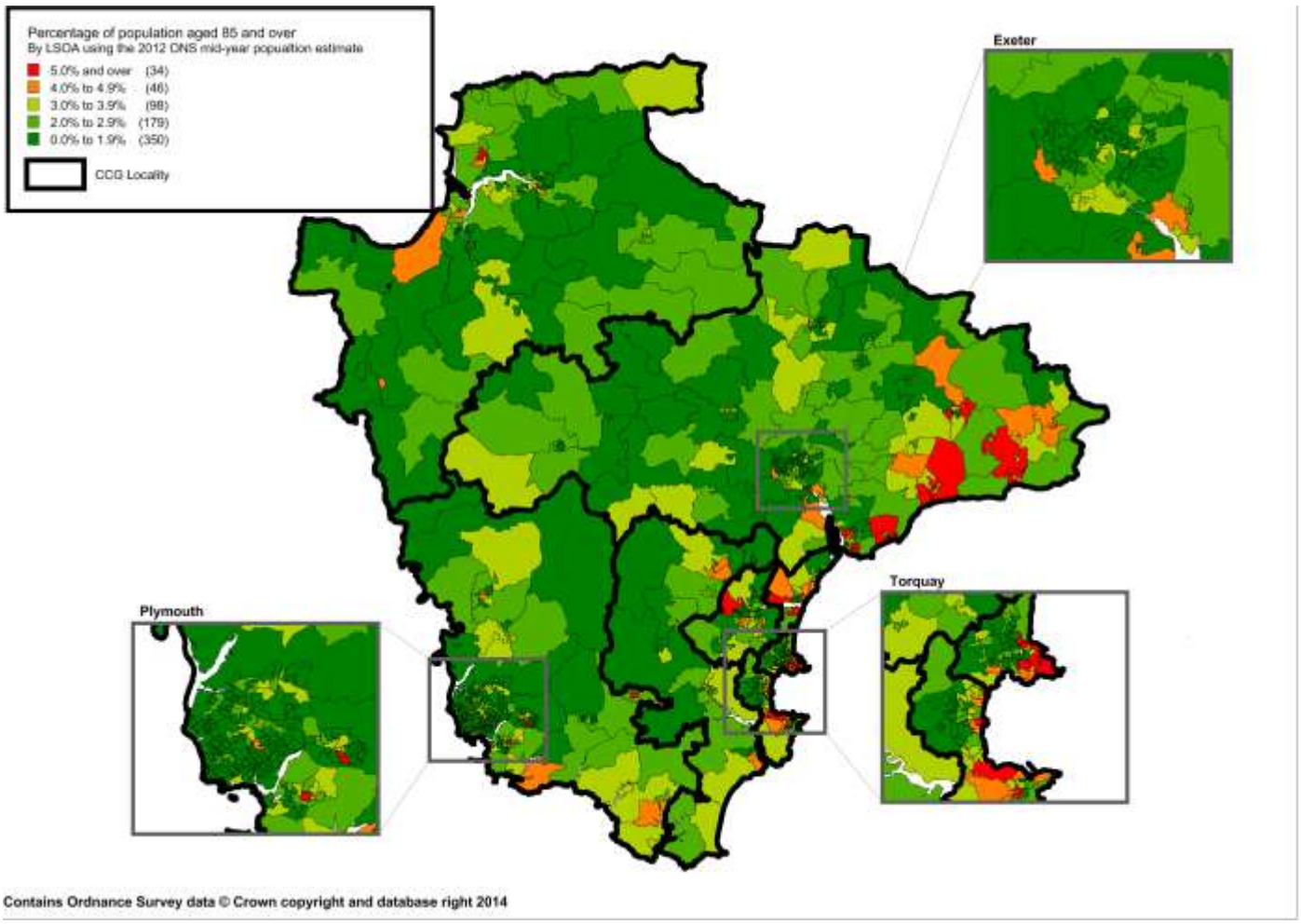


Figure 7: The projected demographic change in the population structure of South Devon and Torbay CCG 2012-2037



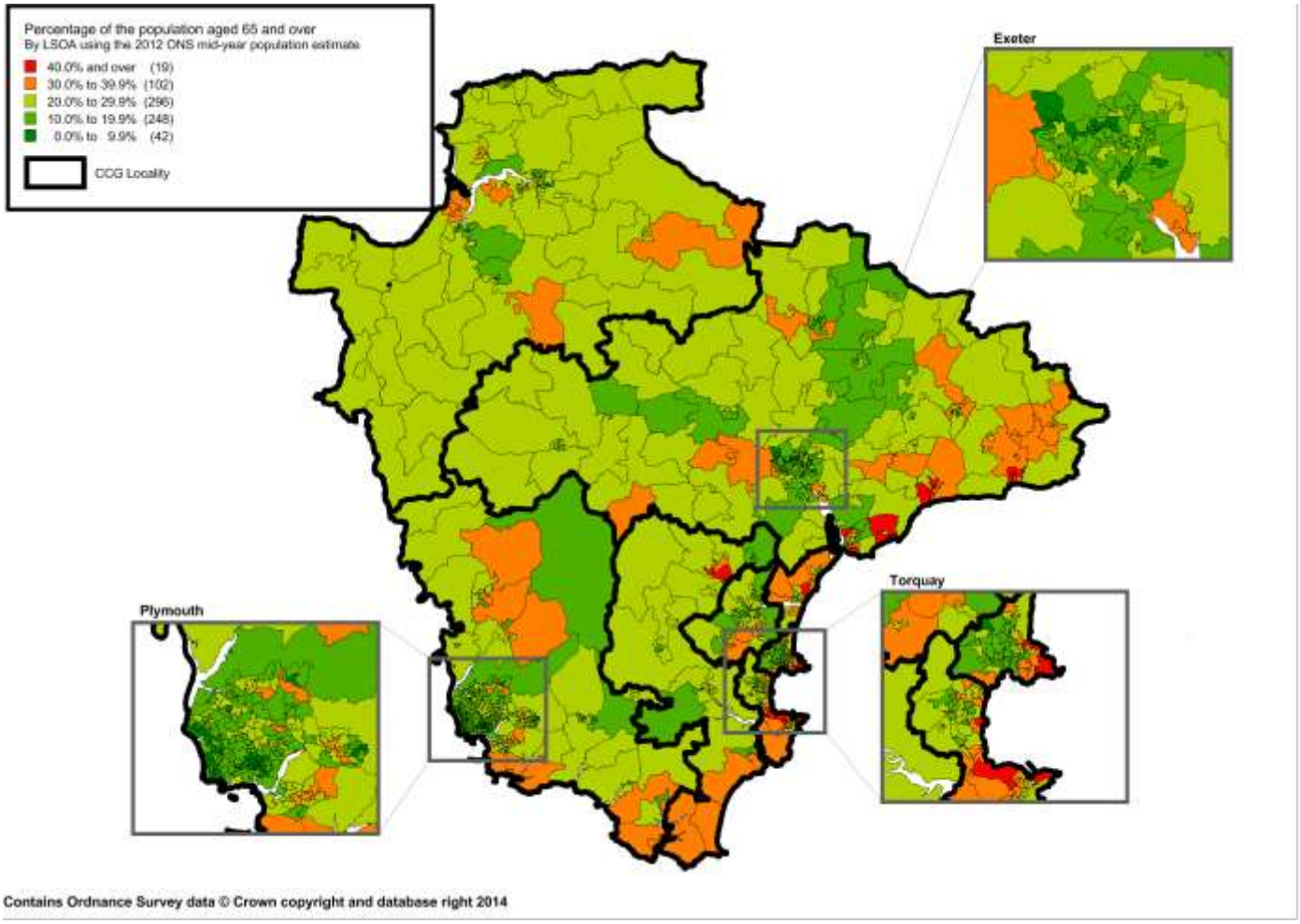
3.5 The map below illustrates that the spread of this 85+ population is concentrated in certain geographical areas of the two clinical commissioning areas. These are predominantly areas of the sub localities of WEB and Wakley in Eastern Devon, areas of the sub-localities of Brixham and Paignton, Torquay, Newton Abbot and Coastal in South Devon and Torbay. This is slightly different for the 85+ population compared to the 65+ population.

Figure 8: Map of Population 85+



3.6 As the map illustrates below, the 65+ population is spread across the geographical area of Devon but more densely populating certain areas. These areas are more geographically spread out than for the 85+ population.

Figure 9: Map of 65+ Population



Indices of Multiple Deprivation

3.7 The Index of Multiple Deprivation (IMD) is a national data set that enables important statistics to be analysed and compared. The IMD takes into account seven forms of deprivation based on income, employment, health and disability, education, skills and training, barriers to housing and services and living environment and crime to produce a composite indicator reflecting these factors. To compare these adequately across the country, England and Wales are divided into small geographical areas of similar population size known as 'Super Output Areas'.

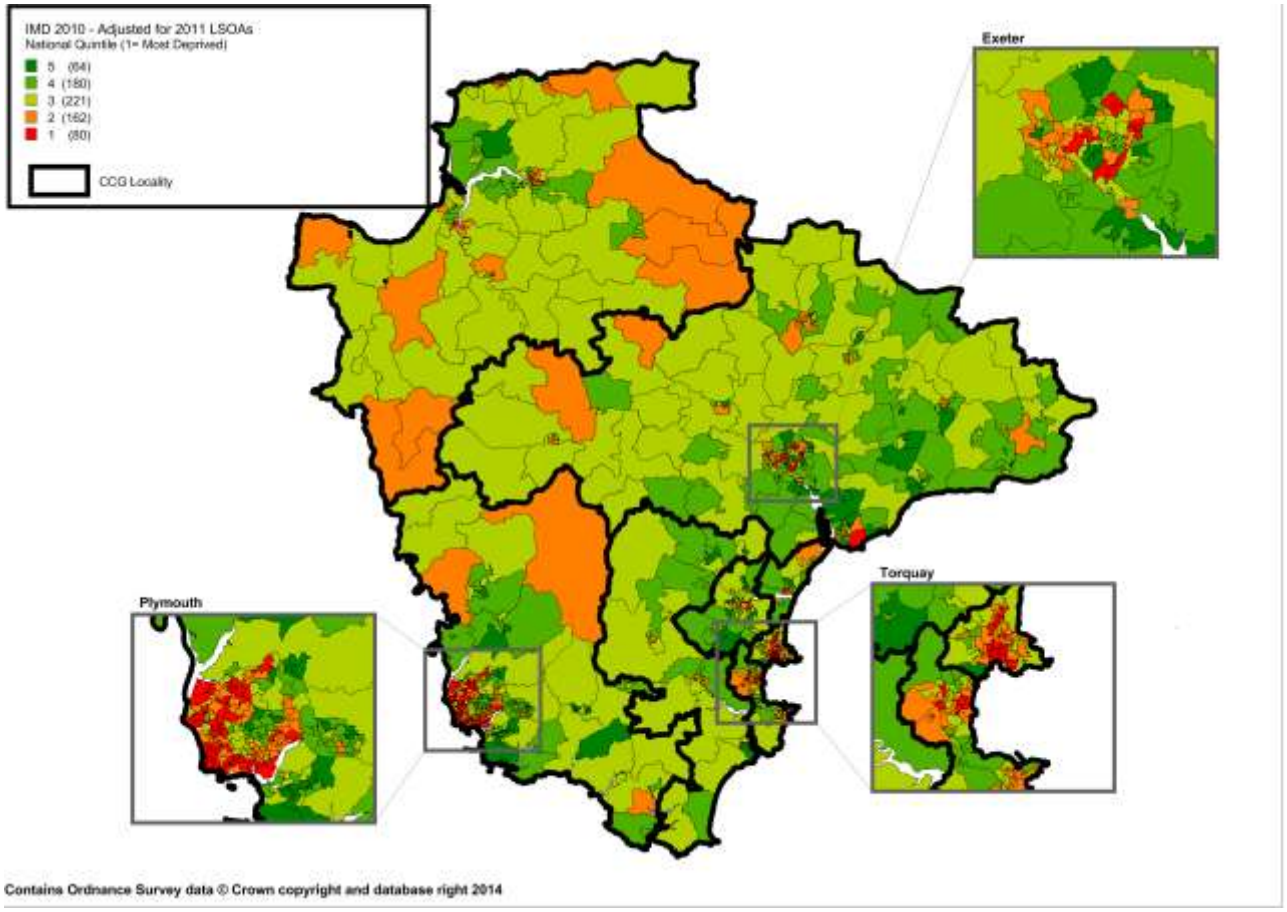
3.8 Devon is a relatively affluent county but has pockets of deprivation with some Lower Super Output Areas (LSOAs) registering in the most deprived quintile nationally, mainly centred in Exeter and North Devon but also include Exmouth, Teignmouth and Dartmouth. Plymouth and Torbay have a higher percentage of areas that fall into the most deprived quintiles nationally as the map below illustrates (Figure 10).

3.9 Material deprivation, both individual and area, is associated with higher incidences of more aggressive diseases such as cancer as well as later presentation (Marmot 2010, Acheson 1998).

3.10 Heyderman et al. (2004) suggest that, although the main determinant of differences in disease mortality by area deprivation is risk of disease incidence, there may be an additional component due to socio-cultural differences in disease presentation and/or early management.

3.11 People living in areas of higher deprivation have poorer health outcomes, shorter life expectancy and often acquire life limiting conditions at an earlier age compared to those in the least deprived areas. The following map illustrates the geographical areas of NEW Devon and South Devon & Torbay Clinical Commissioning Groups in relation to this composite measure of deprivation.

Figure 10: Map of Devon, Plymouth and Torbay Lower Super Output Areas classified by Indices of Multiple Deprivation (2010)



3.12 The following figures provide contextual information relating to the population of the two clinical commissioning group areas. They are measures which may indicate presence of long term conditions at a population level. They are taken from census data and self-reporting population surveys. The information they provide at a population level may be useful with the planning and designing the delivery of services for people with long term conditions.

3.13 Whilst any one piece of information may not seem informative on its own, the layering of this information will indicate the geographical areas and population groups who may be most at risk of having an LTC, who may be most in need of services or most respondent to self-care or interventions.

Census Population Data

Figure 11: Percentage of the population that consider themselves in bad health

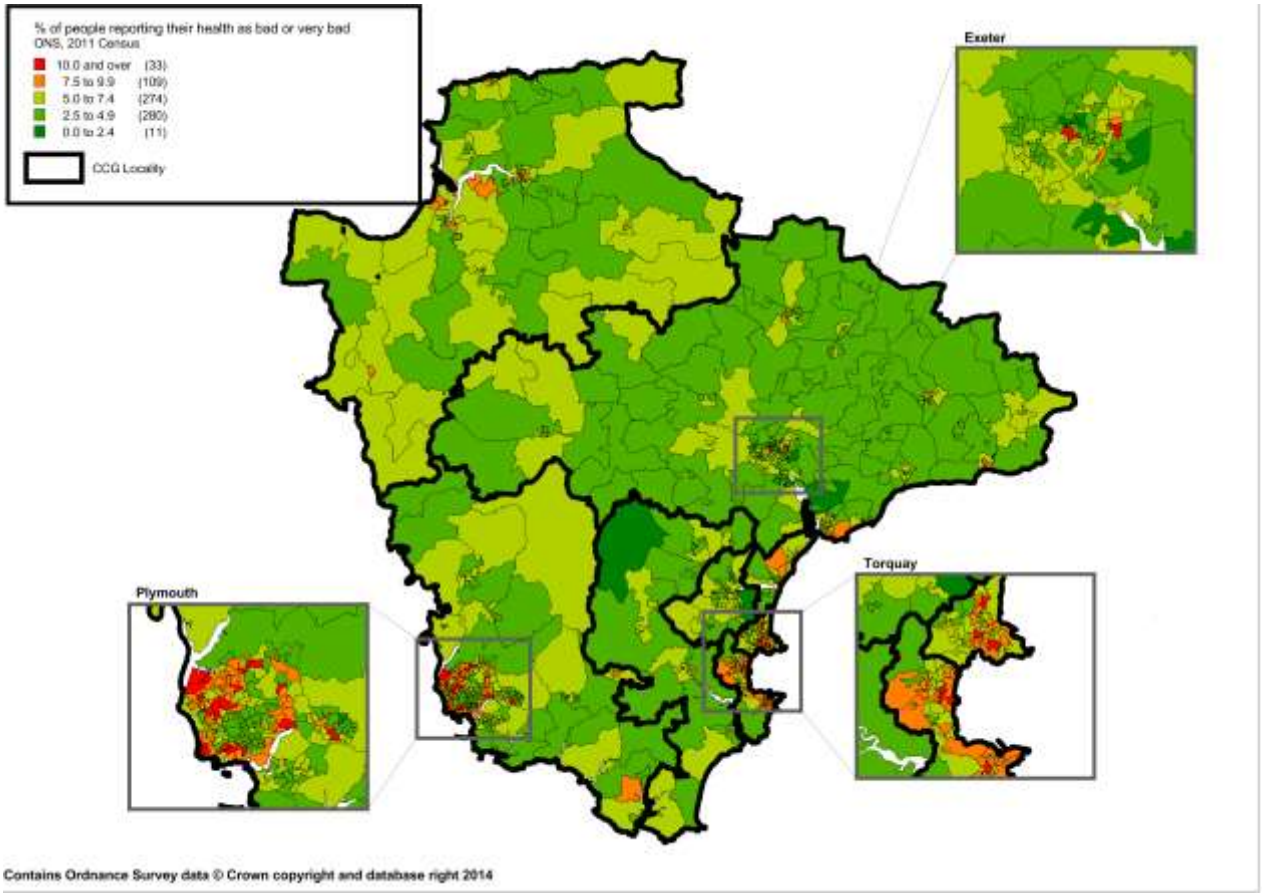


Figure 12: Percentage of 16-65yrs who report day-to-day activity is limited

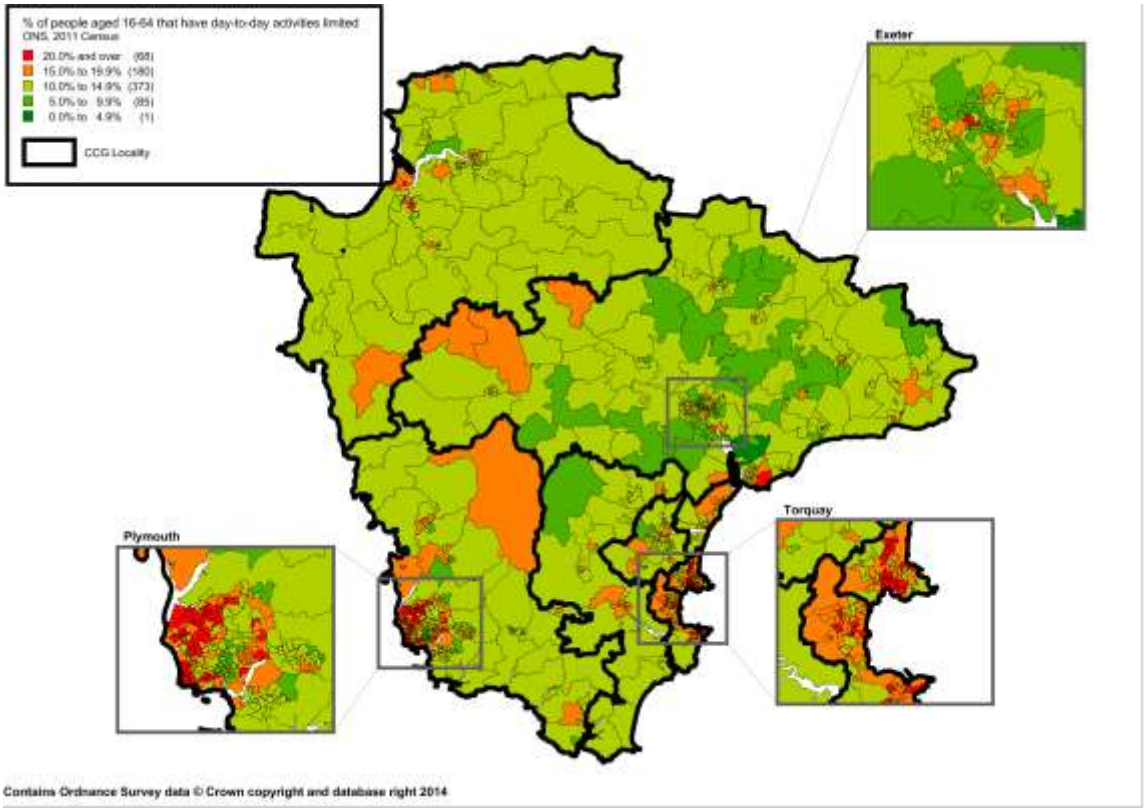


Figure 13: Percentage of 16-65yrs who report day-to-day activity limited a lot

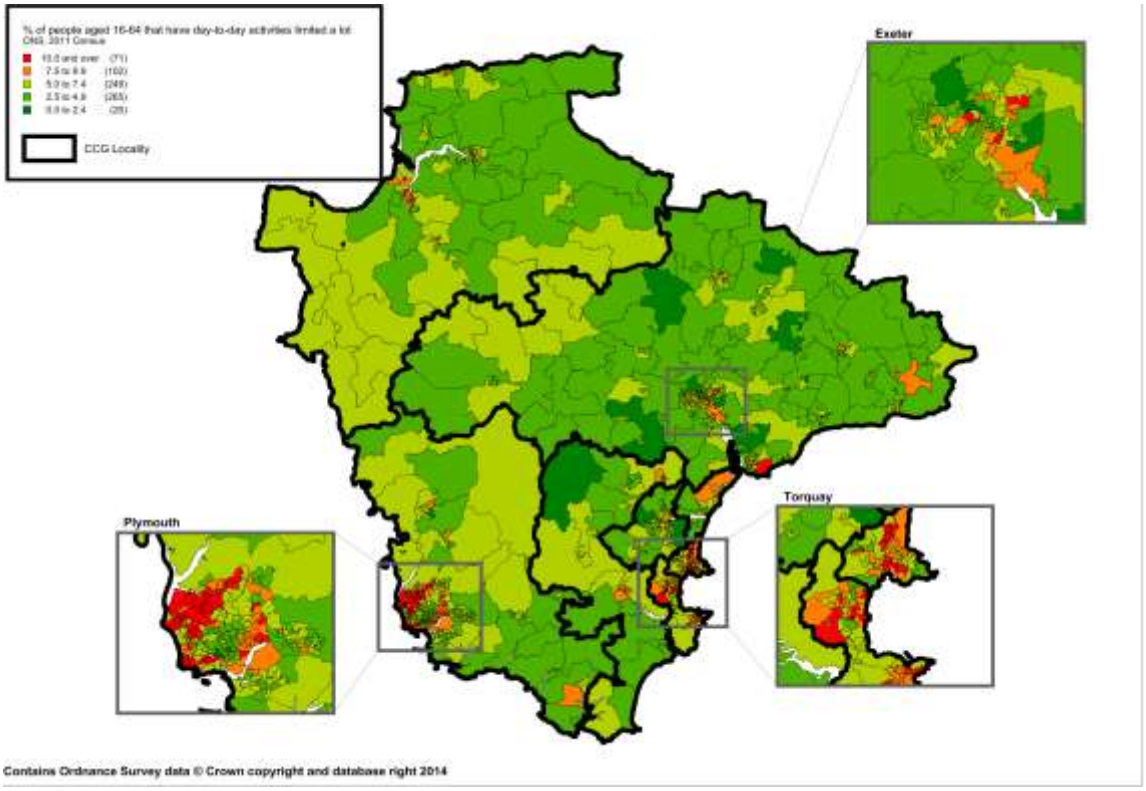


Figure 14: Percentage of people providing unpaid care

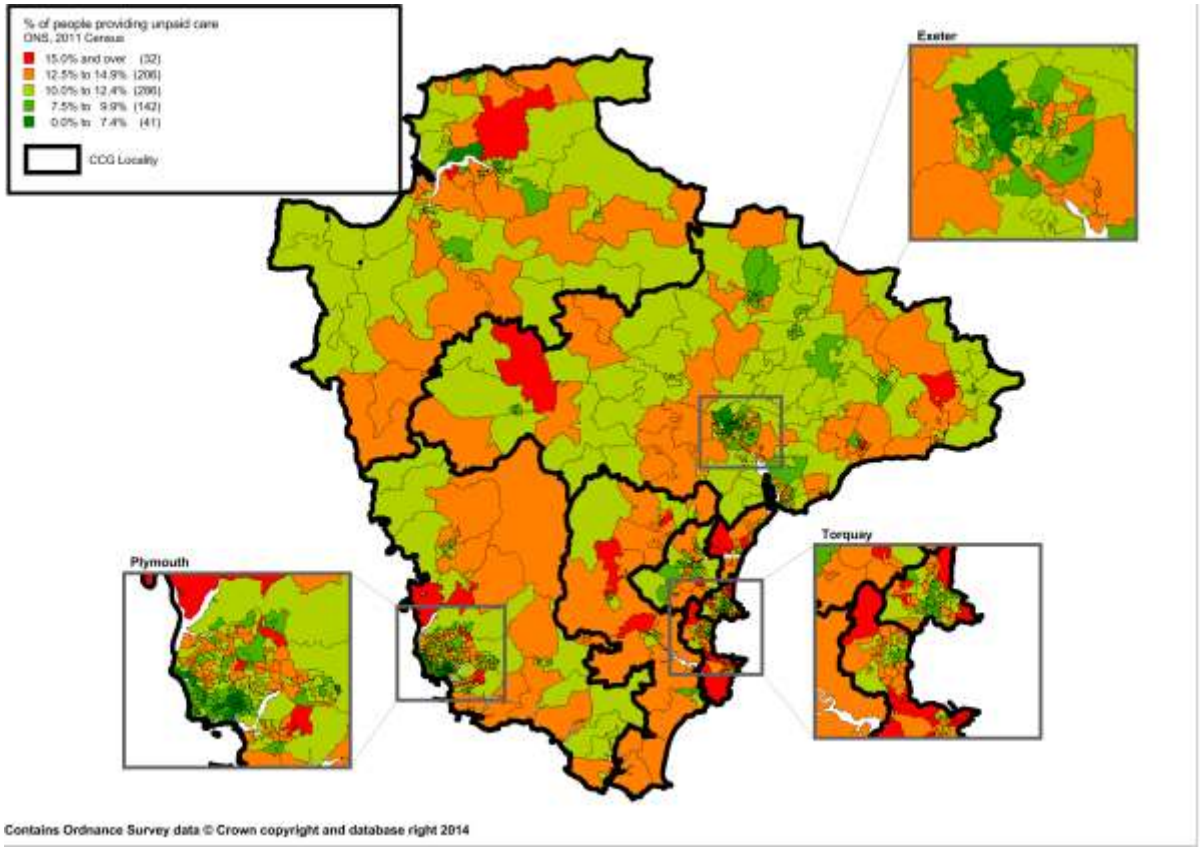
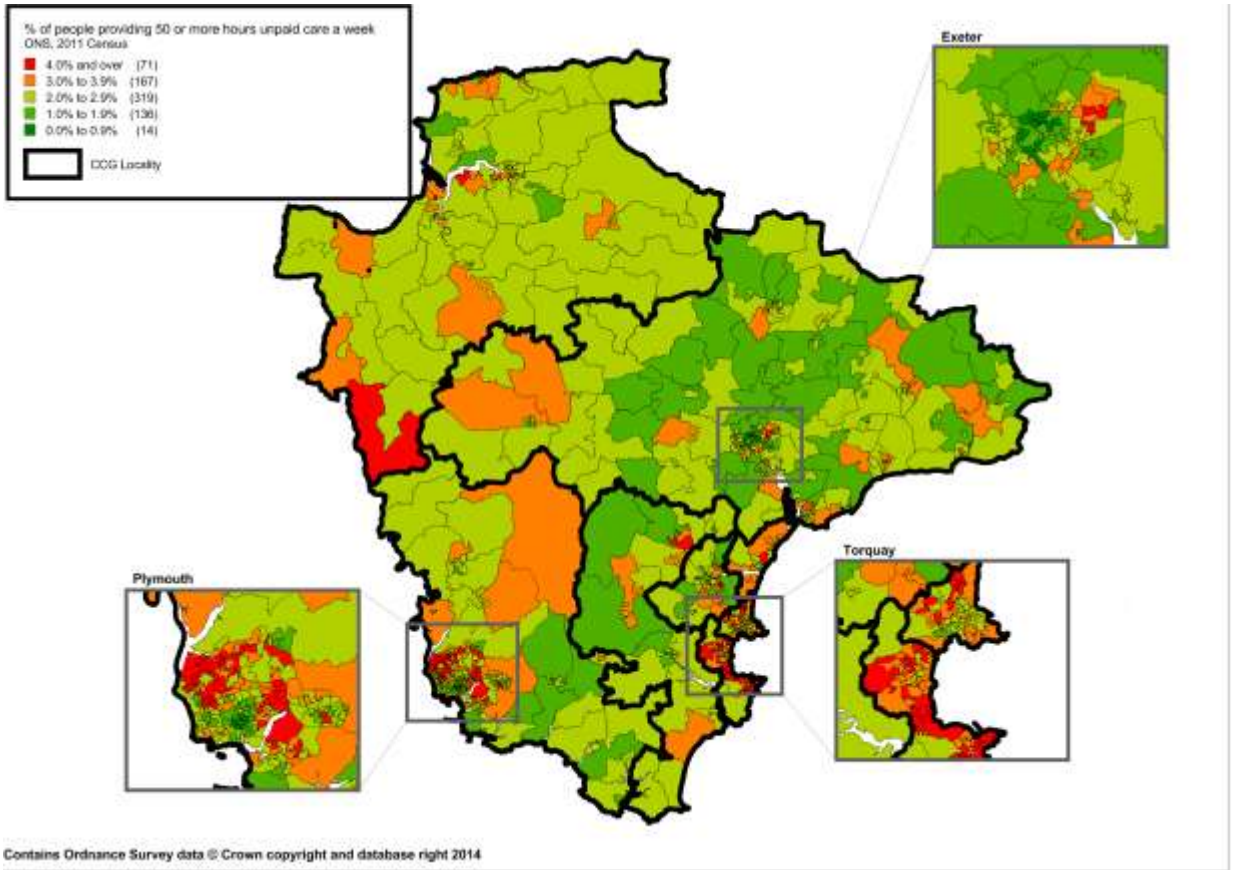


Figure 15: Percentage of people providing 50 or more hours of unpaid care a week



General Household Survey

3.14 The General Household Survey is a large scale cross sectional self-reporting survey carried out every two years by the office for national statistics on a range of topics from people living in private households in Great Britain. The main objective is to analyse trends in social inequalities.

3.15 The number of people with the effects of physical or mental health conditions lasting for 12 months or more could be seen as a proxy indicator for long term conditions although it will of course include many conditions not considered to be long term conditions.

Figure 16: Number people with the effects of physical or mental health conditions lasting for 12 months or more: NEW Devon Clinical Commissioning Group

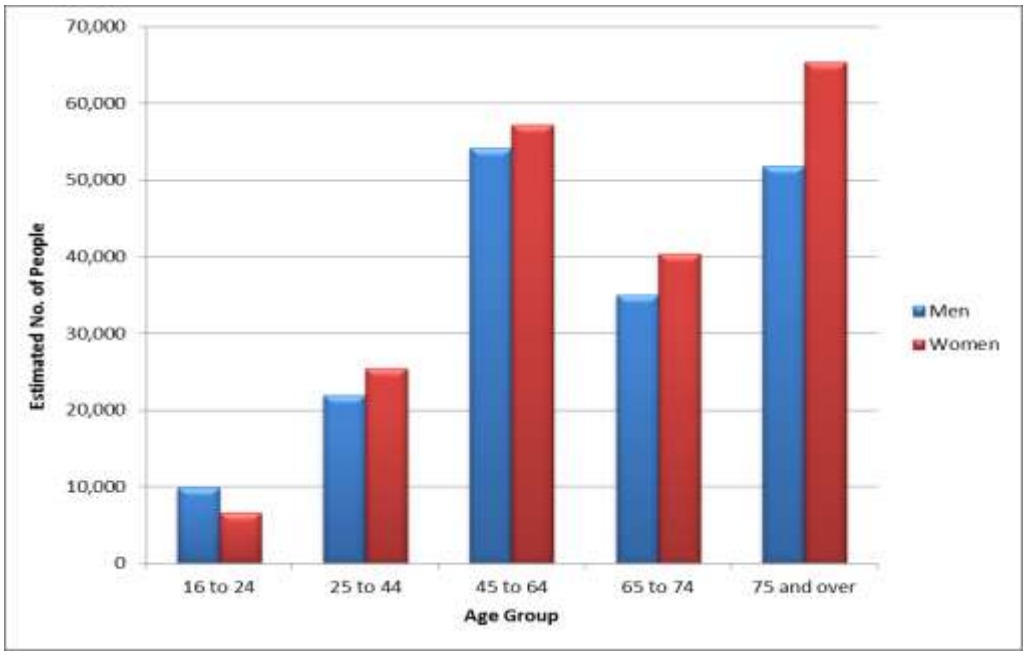
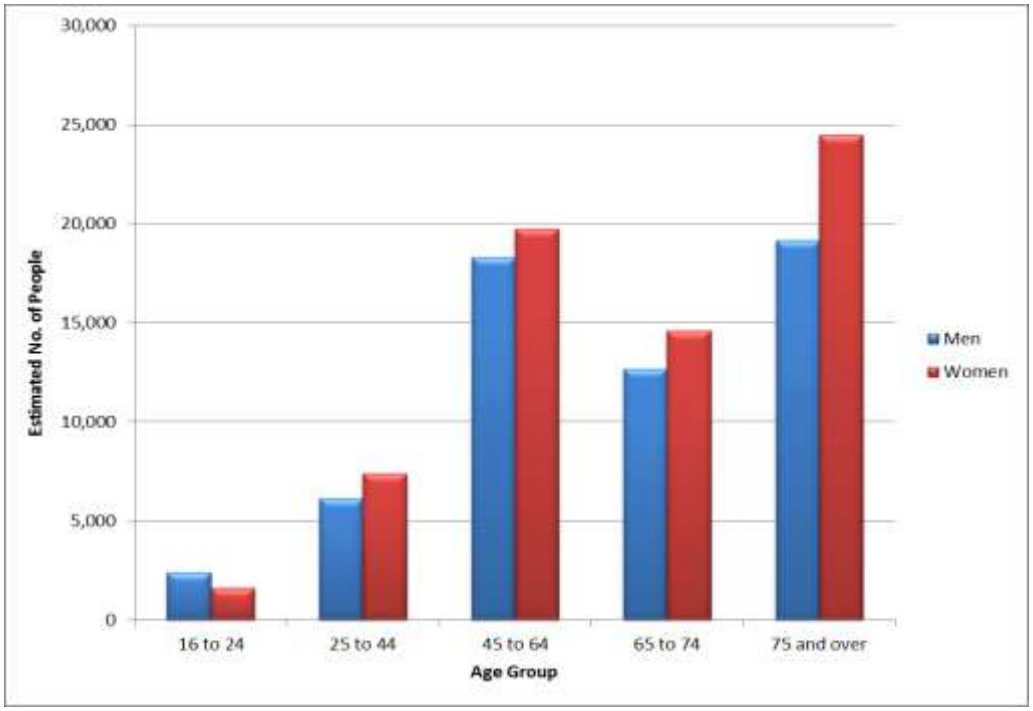


Figure 17: Number people with the effects of physical or mental health conditions lasting for 12 months or more: South Devon and Torbay CCG



3.16 In both NEW Devon and South Devon & Torbay Clinical Commissioning area it is of note that the two age groups with the highest estimated number of people living with the effects of a physical or mental condition for more than 12 months fall in the 45-64 age group as well as the 75 and over. These figures are similar for both age groups.

Employment

3.17 People with long term conditions have an increased likelihood of not working particularly those with a limiting LTC who are half as likely to have a job as those with a non-limiting long term conditions or no long term condition at all (Department of Health, 2012).

3.18 Over half of people with a long term condition say that their health is a barrier to the type or amount of work they can do, rising to over 80% when someone has three or more conditions (Labour Force Survey, 2009). Being out of work can be detrimental to health. Supporting people with long term condition to be able to work can support their ability to manage their own condition.

Table 1: PHOF 1.08i Gap in employment rate between LTC and overall employment rate

Area	2013-14
England	7.10
South West	5.40
Devon	4.90
Plymouth	8.70
Torbay	10.00

3.19 The gap in employment rate reports on the difference between the percentage of respondents in the Labour Force Survey who have a long-term condition who are classified as employed (aged 16-64) and the percentage of all respondents in the Labour Force Survey classed as employed (aged 16-64).

3.20 The percentage point difference in the Devon Local Authority area for 2013-14 is lower than the England and South West figure whilst for the Plymouth and Torbay local authority areas the percentage point difference is higher than the England and South West figure. This means people with long term conditions in Plymouth and Torbay are less likely to be in employment than people with long term conditions in Devon.

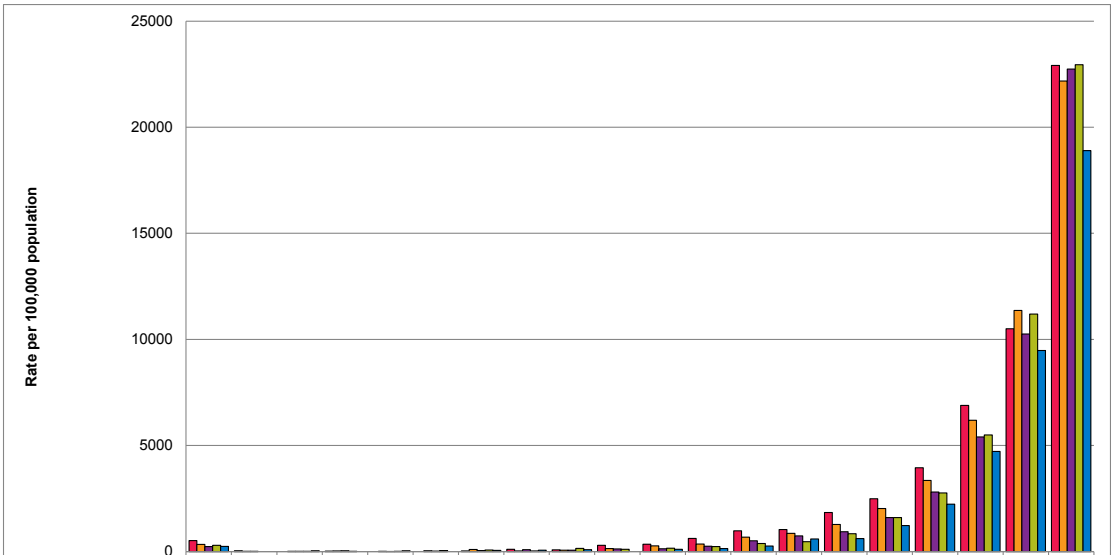
4. Mortality

All-Age, All-Cause Mortality

4.1 All age all cause mortality rates will include deaths from some of the long term conditions considered in this health needs assessment along with a number of other causes of deaths. The following graphical displays illustrate that the all age, all cause mortality rates are consistently highest in the most deprived areas compared to the least deprived throughout the age bands. This is until you reach the 85+ group where there are no significant differences around deprivation.

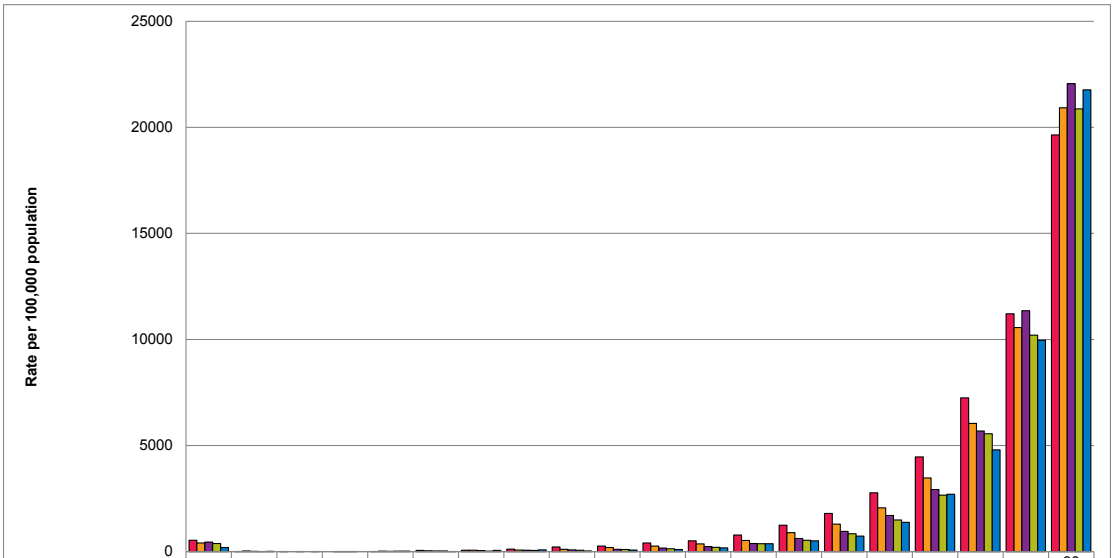
4.2 The life expectancy of those living in the more deprived areas is lower compared to those living in the most affluent areas. People in more deprived areas will often have lived with conditions damaging to their health for longer having acquired them at an earlier age point than those in more affluent areas, typically 10 years earlier.

Figure 18: All Age All Cause Mortality Rates by Age and deprivation group per 100,000 population, NEW Devon CCG, 2012 to 2014



	00 to 00	01 to 04	05 to 09	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and over
Q1 - Most Deprived	514	42	0	22	0	0	30	106	83	298	344	624	979	1042	1842	2488	3953	6888	10504	22917
Q2 - Above Average	335	10	9	27	16	43	97	27	67	139	272	355	682	860	1277	2032	3357	6186	11367	22178
Q3 - Average	238	9	14	40	6	24	48	92	67	128	130	253	509	740	937	1601	2807	5406	10255	22741
Q4 - Below Average	294	0	12	11	10	43	73	28	148	105	158	238	383	469	837	1599	2767	5494	11193	22946
Q5 - Least Deprived	242	0	42	0	39	0	60	60	94	0	109	137	258	590	609	1222	2235	4717	9476	18899

Figure 19, All Age All Cause Mortality by Deprivation Group, Direct Age Standardised Rate per 100,000 population, South Devon and Torbay CCG, 2012 to 2014



	00 to 00	01 to 04	05 to 09	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and over
Q1 - Most Deprived	531	6	6	0	5	52	60	117	216	263	406	505	781	1240	1802	2776	4467	7248	11215	19645
Q2 - Above Average	409	30	0	4	20	38	65	74	110	195	260	360	525	891	1297	2065	3470	6041	10562	20925
Q3 - Average	448	12	5	7	10	27	50	61	82	105	166	236	382	618	954	1700	2922	5681	11353	22056
Q4 - Below Average	383	7	0	6	25	33	18	53	67	95	133	201	374	538	844	1494	2658	5559	10202	20871
Q5 - Least Deprived	189	11	8	0	21	8	56	81	34	75	96	175	368	506	726	1376	2699	4793	9965	21766

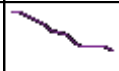
Long Term Conditions: Mortality Rates

4.3 The eight long term conditions looked at in this HNA at are not likely to be the primary cause of death for most people with the condition but will be contributory factor. For this reason, illustrating individual directly age standardised mortality rates for the eight long term conditions considered does not tell us very much other than there are not many deaths attributable to the condition itself. However, as the tables below show, there are certain conditions, mainly those grouped under circulatory diseases, which show a distinct downward trend overtime in their mortality rate from 2001-14.

4.4 A reduction in mortality rates would seem to indicate better prevention, identification, care and management of these diseases over time. Perhaps because the conditions are more amenable to interventions and prevention measures, technological and medical advances in that time frame, becoming easier to diagnose and /or being able to intervene earlier in the disease progression.

4.5 For the NEW Devon Clinical Commissioning Group area deaths from Coronary Heart Disease shows a drop in percentage of deaths of over half from 21% in 2001 to 12% in 2014. Heart failure shows a drop in the percentage of deaths from 1.96% in 2001 to 1.03% in 2014. Stroke show a drop from 12% in 2001 to 8% in 2014. The other condition areas remain fairly constant in their trend over this time period.

Table 2: Deaths from Selected Long-Term Conditions, NEW Devon CCG, 2001 to 2014

Year	Asthma	CHD	CKD#	COPD	Diabetes	Epilepsy	Heart Failure	Stroke	All
Trend Line									
2001	20 (0.21%)	1947 (20.87%)	26 (0.28%)	339 (3.63%)	92 (0.99%)	16 (0.17%)	183 (1.96%)	1115 (11.95%)	9329 -
2002	24 (0.26%)	1909 (20.53%)	17 (0.18%)	342 (3.68%)	86 (0.92%)	12 (0.13%)	184 (1.98%)	1097 (11.8%)	9298 -
2003	15 (0.16%)	1848 (19.59%)	28 (0.3%)	384 (4.07%)	84 (0.89%)	15 (0.16%)	192 (2.04%)	1085 (11.5%)	9433 -
2004	17 (0.19%)	1736 (19.17%)	19 (0.21%)	335 (3.7%)	90 (0.99%)	18 (0.2%)	168 (1.86%)	1033 (11.41%)	9056 -
2005	26 (0.29%)	1642 (18.19%)	28 (0.31%)	333 (3.69%)	85 (0.94%)	8 (0.09%)	144 (1.59%)	971 (10.75%)	9029 -
2006	18 (0.2%)	1494 (16.99%)	20 (0.23%)	364 (4.14%)	90 (1.02%)	19 (0.22%)	135 (1.54%)	914 (10.39%)	8794 -
2007	19 (0.22%)	1444 (16.37%)	34 (0.39%)	318 (3.61%)	93 (1.05%)	13 (0.15%)	168 (1.9%)	911 (10.33%)	8819 -
2008	13 (0.14%)	1430 (15.95%)	37 (0.41%)	333 (3.71%)	102 (1.14%)	12 (0.13%)	187 (2.09%)	945 (10.54%)	8967 -
2009	15 (0.17%)	1242 (14.01%)	34 (0.38%)	331 (3.73%)	96 (1.08%)	15 (0.17%)	151 (1.7%)	834 (9.41%)	8867 -
2010	10 (0.11%)	1119 (12.84%)	26 (0.3%)	367 (4.21%)	85 (0.98%)	15 (0.17%)	159 (1.82%)	906 (10.39%)	8716 -
2011	14 (0.16%)	1150 (13.17%)	26 (0.3%)	376 (4.31%)	85 (0.97%)	14 (0.16%)	98 (1.12%)	700 (8.02%)	8733 -
2012	15 (0.16%)	1154 (12.46%)	23 (0.25%)	390 (4.21%)	78 (0.84%)	17 (0.18%)	113 (1.22%)	753 (8.13%)	9262 -
2013	16 (0.18%)	1144 (12.75%)	13 (0.14%)	402 (4.48%)	89 (0.99%)	9 (0.1%)	108 (1.2%)	694 (7.73%)	8973 -
2014	14 (0.16%)	1060 (11.88%)	31 (0.35%)	311 (3.49%)	78 (0.87%)	11 (0.12%)	92 (1.03%)	710 (7.96%)	8923 -

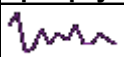
Deaths from renal failure

4.6 In the South Devon & Torbay CCG area, deaths from Coronary Heart Disease show a decrease from almost 19% in 2001 to almost 12% in 2014.

4.7 Heart failure shows a decrease from 2.37% in 2001 to 1.27% in 2014.

4.8 Stroke show a decrease from almost 13% in 2001 to 8% in 20014 and Diabetes show a decrease from 1.45%in 2001 to only 0.68% in 20014. This is against the deaths attributable to the other long term conditions remaining relatively constant over the same time period.

Table 3, Deaths from Selected Long-Term Conditions, South Devon and Torbay CCG, 2001 to 2014

Year	Asthma	CHD	CKD#	COPD	Diabetes	Epilepsy	Heart Failure	Stroke	All
Trend Line									
2001	8 (0.22%)	695 (18.95%)	12 (0.33%)	122 (3.33%)	53 (1.45%)	9 (0.25%)	87 (2.37%)	461 (12.57%)	3667 -
2002	* (0.14%)	616 (16.92%)	10 (0.27%)	120 (3.3%)	52 (1.43%)	12 (0.33%)	97 (2.66%)	464 (12.74%)	3641 -
2003	9 (0.24%)	676 (18.08%)	5 (0.13%)	136 (3.64%)	45 (1.2%)	3 (0.08%)	87 (2.33%)	474 (12.68%)	3739 -
2004	7 (0.2%)	593 (16.95%)	6 (0.17%)	123 (3.52%)	39 (1.11%)	4 (0.11%)	81 (2.31%)	399 (11.4%)	3499 -
2005	10 (0.29%)	586 (17%)	9 (0.26%)	137 (3.97%)	32 (0.93%)	8 (0.23%)	69 (2%)	399 (11.58%)	3447 -
2006	8 (0.24%)	510 (15.47%)	6 (0.18%)	117 (3.55%)	27 (0.82%)	* (0.15%)	66 (2%)	338 (10.25%)	3296 -
2007	5 (0.14%)	510 (14.58%)	10 (0.29%)	139 (3.97%)	42 (1.2%)	7 (0.2%)	64 (1.83%)	359 (10.26%)	3499 -
2008	8 (0.23%)	548 (15.94%)	11 (0.32%)	125 (3.64%)	35 (1.02%)	6 (0.17%)	59 (1.72%)	329 (9.57%)	3438 -
2009	10 (0.29%)	495 (14.44%)	12 (0.35%)	125 (3.65%)	31 (0.9%)	9 (0.26%)	62 (1.81%)	332 (9.68%)	3428 -
2010	5 (0.15%)	471 (13.73%)	12 (0.35%)	128 (3.73%)	46 (1.34%)	* (0.15%)	53 (1.55%)	342 (9.97%)	3430 -
2011	10 (0.31%)	426 (13%)	8 (0.24%)	148 (4.52%)	34 (1.04%)	* (0.15%)	46 (1.4%)	285 (8.7%)	3277 -
2012	9 (0.26%)	404 (11.7%)	6 (0.17%)	166 (4.81%)	32 (0.93%)	7 (0.2%)	49 (1.42%)	287 (8.31%)	3454 -
2013	* (0.14%)	423 (12.19%)	6 (0.17%)	178 (5.13%)	26 (0.75%)	6 (0.17%)	45 (1.3%)	290 (8.35%)	3471 -
2014	* (0.15%)	392 (11.54%)	11 (0.32%)	149 (4.38%)	23 (0.68%)	* (0.15%)	43 (1.27%)	272 (8%)	3398 -

Deaths from renal failure, * five or less deaths

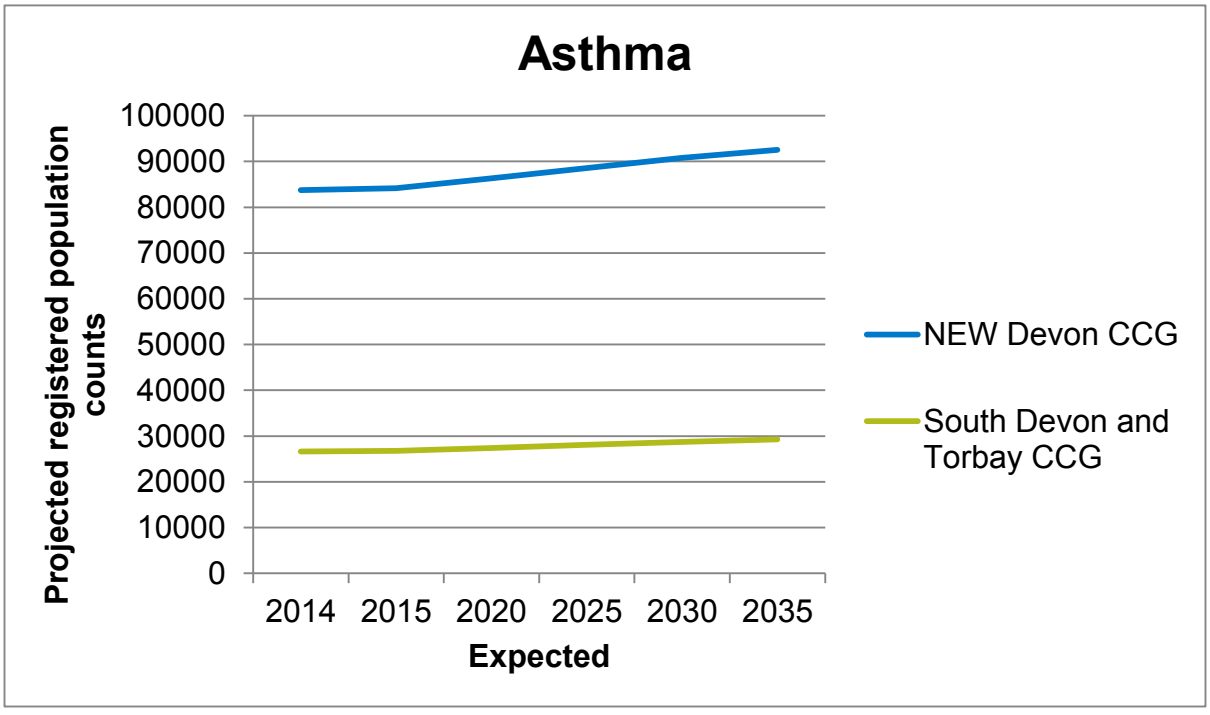
5. The Size and Nature of Health Need/Prevalence of Long Term Conditions

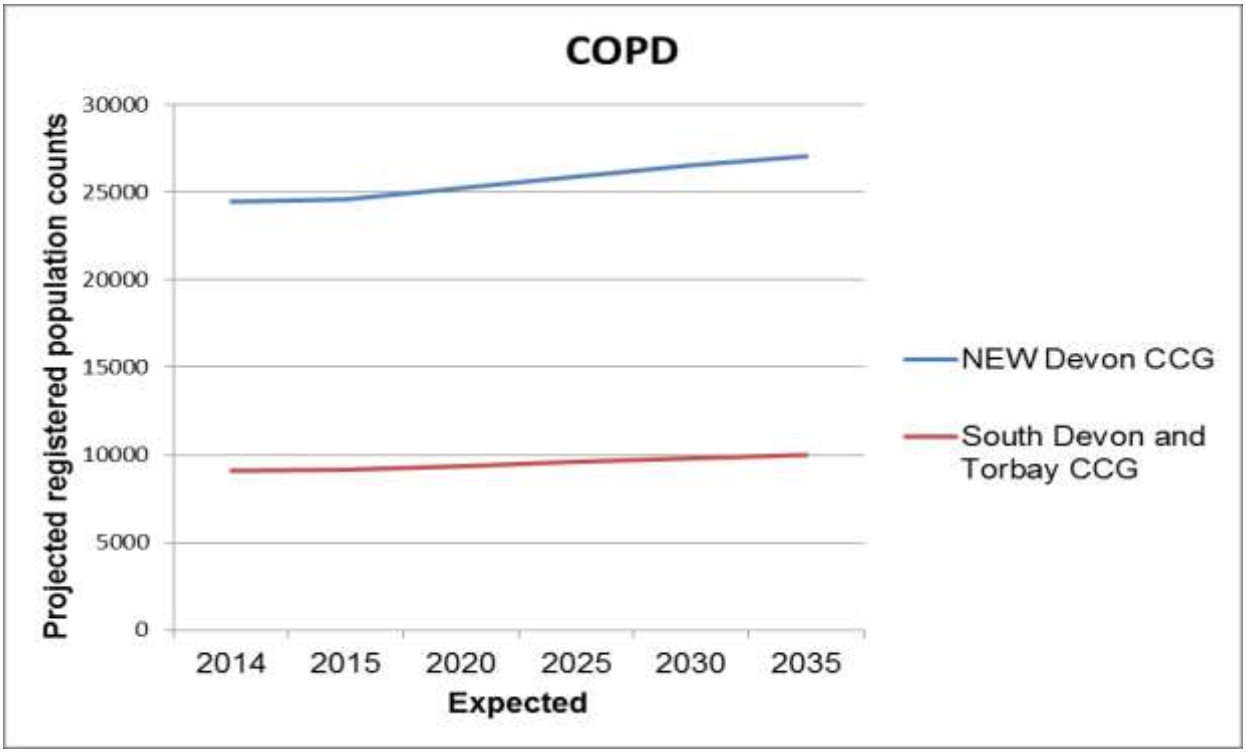
Prevalence: Current and Projected

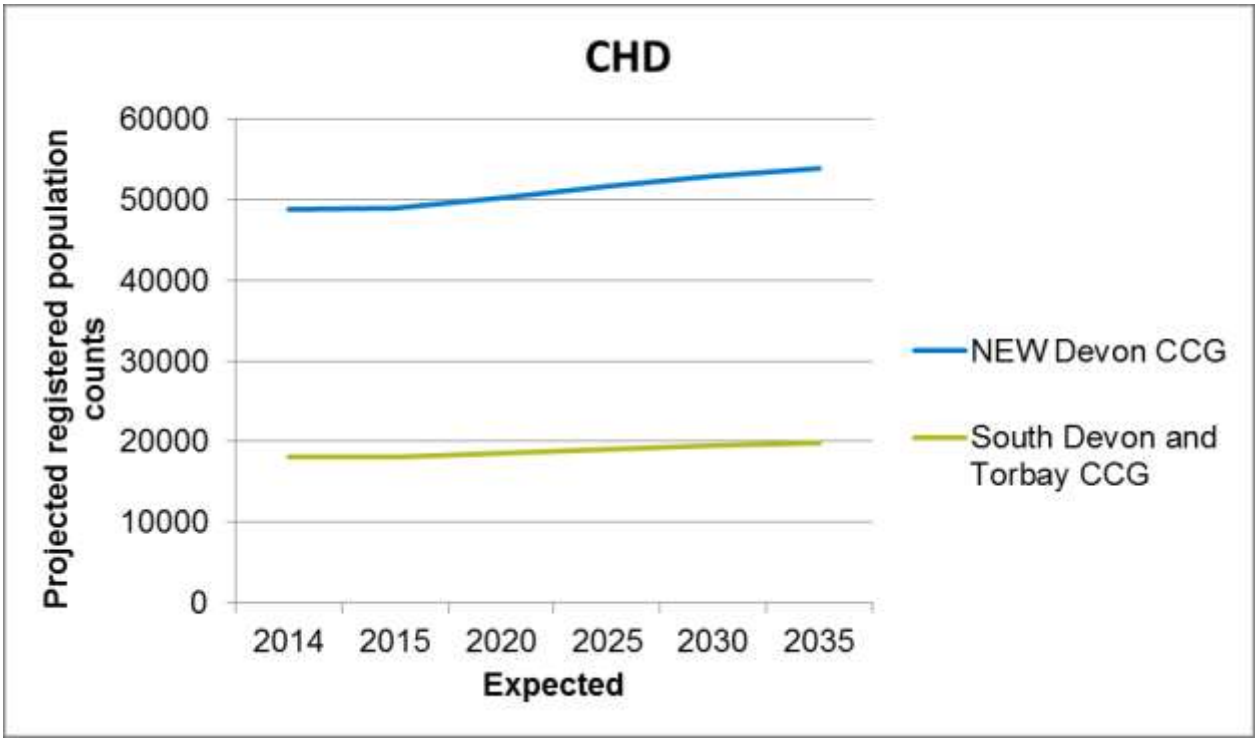
5.1 In 2008 the Department of Health reported the number of people with one long term condition was projected to be relatively stable over the next 10 years, whilst those with multiple long term conditions was projected to rise by one million to 2.9 million by 2018.

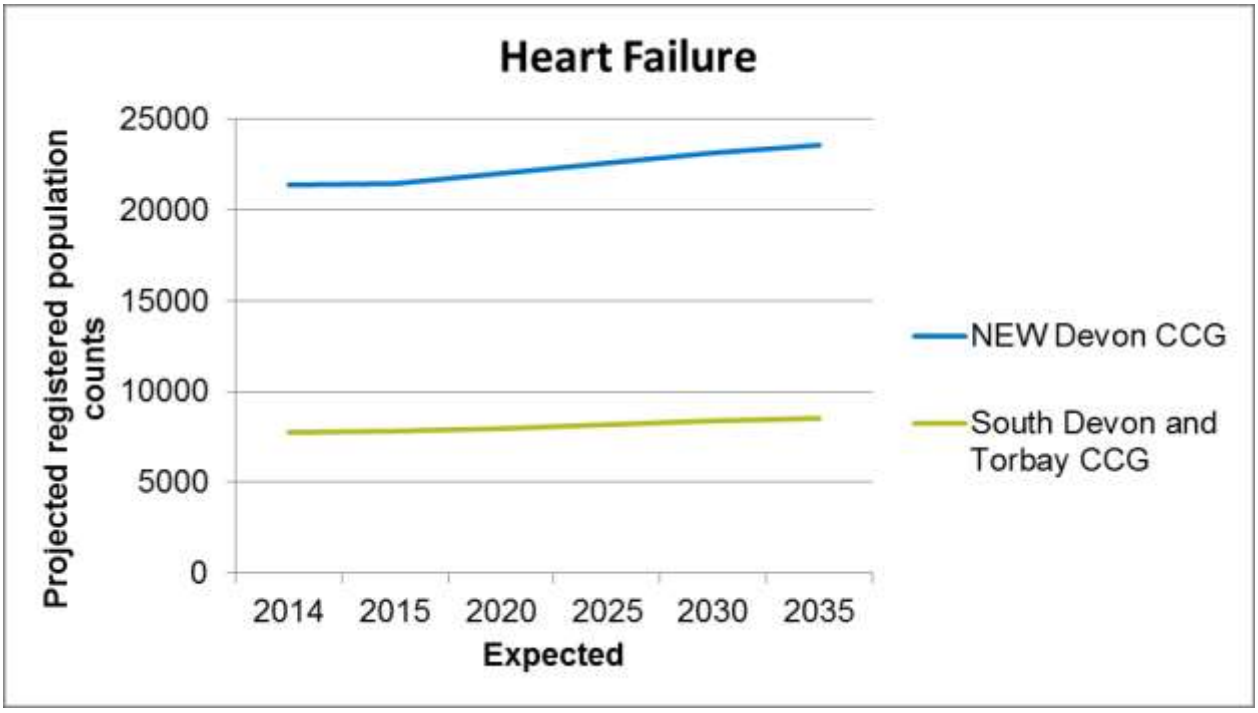
5.2 The following charts illustrate the current and projected prevalence of indiviual disease areas for the Quality & Outcomes Framework (QOF) register expected numbers. They start with the 2013-14 actual figures for quality & outcomes framework expected and applies liniar growth to the % of the population with the disease that is expected on the quality & outcomes framework register over time.

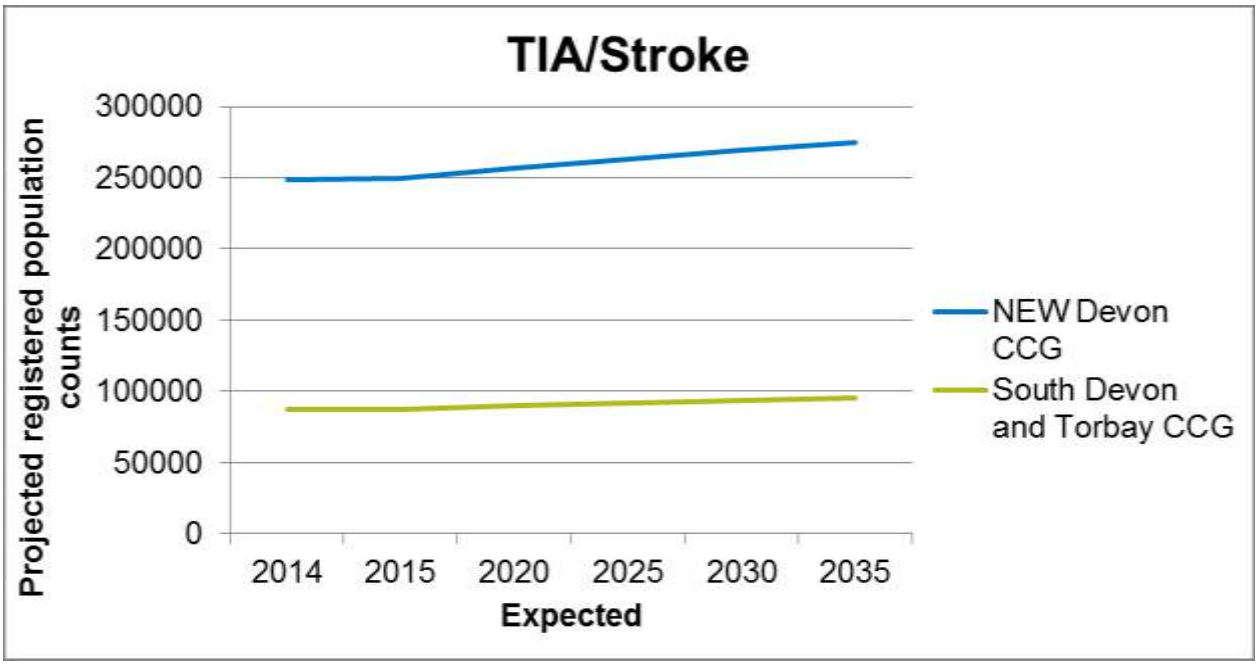
Chart series 1: Current and projected prevalence of disease areas (Quality and Outcome Framework)

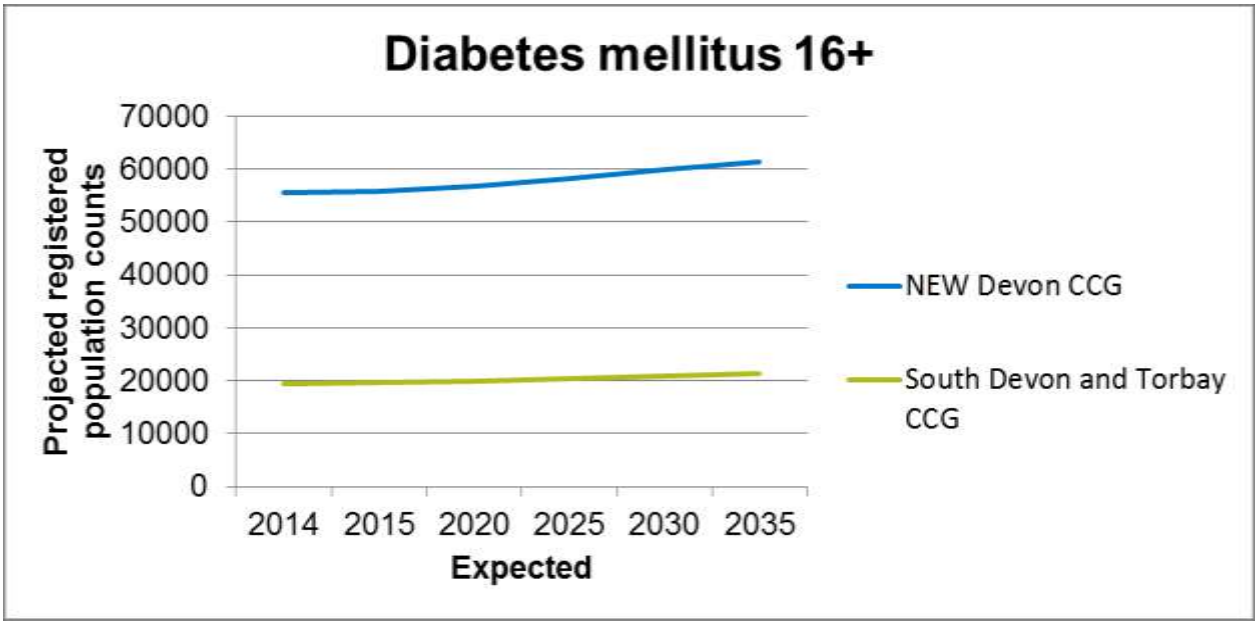


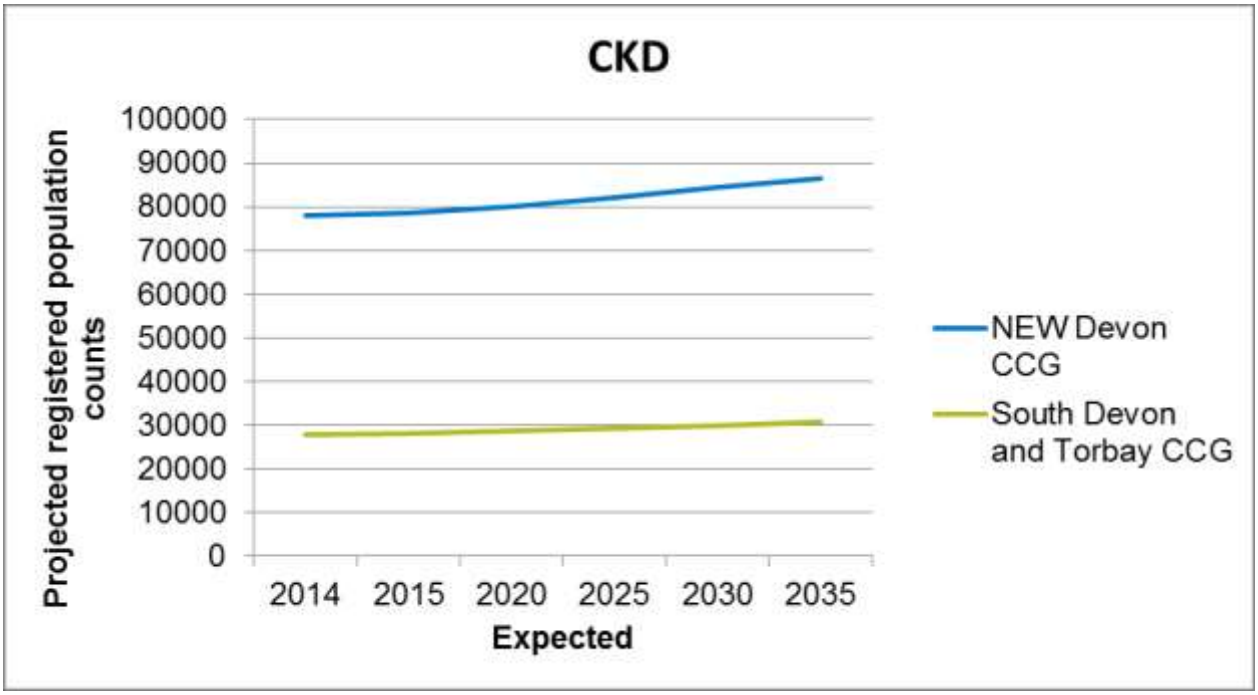

COPD
Projected registered population counts
30000
25000
20000
15000
10000
5000
0
2014
2015
2020
2025
2030
2035
Expected
NEW Devon CCG
South Devon and Torbay CCG

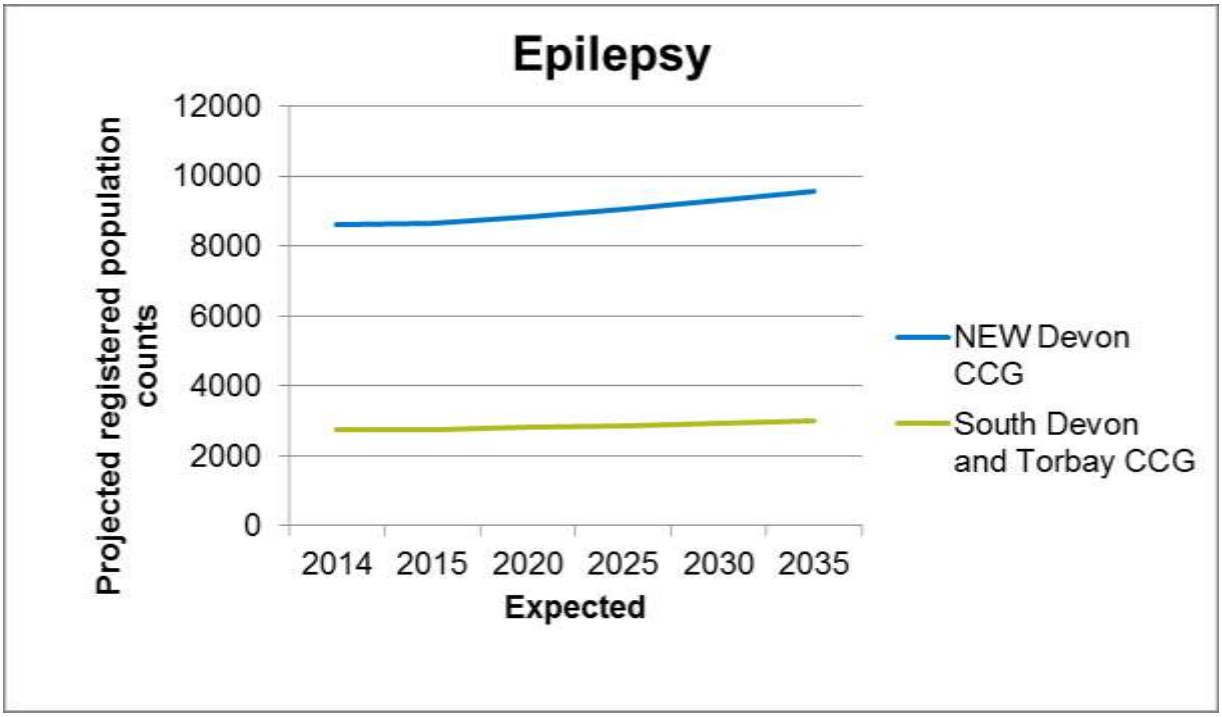

CHD
Projected registered population counts
60000
50000
40000
30000
20000
10000
0
2014
2015
2020
2025
2030
2035
Expected
NEW Devon CCG
South Devon and Torbay CCG


Heart Failure
Projected registered population counts
25000
20000
15000
10000
5000
0
2014
2015
2020
2025
2030
2035
Expected
NEW Devon CCG
South Devon and Torbay CCG


TIA/Stroke
Projected registered population counts
300000
250000
200000
150000
100000
50000
0
2014
2015
2020
2025
2030
2035
Expected
NEW Devon CCG
South Devon and Torbay CCG


Diabetes mellitus 16+
Projected registered population counts
70000
60000
50000
40000
30000
20000
10000
0
2014
2015
2020
2025
2030
2035
Expected
NEW Devon CCG
South Devon and Torbay CCG


CKD
Projected registered population counts
100000
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
2014
2015
2020
2025
2030
2035
Expected
NEW Devon CCG
South Devon and Torbay CCG



5.3 The 2013-14 actual prevalence figures from QOF registers are applied to the clinical commissioning group resident population projections. Many factors will influence how this growth actually occurs over time and these will include those risk factors we have listed in Section 9 (Lifestyle Factors) which could have an effect.

5.4 **Summary**: We need to start to look at scenarios locally for projected prevalence models using the clinical commissioning group core offer, Public Health Teams, primary care information teams, The Peninsular Collaboration for Health Operational Research and Development (PenCHORD), Academic Science Health Network (ASHN) to start exploring the impact of different risk factors on projected prevalence of particular disease areas.

Quality and Outcome Framework (QOF) Disease Registers

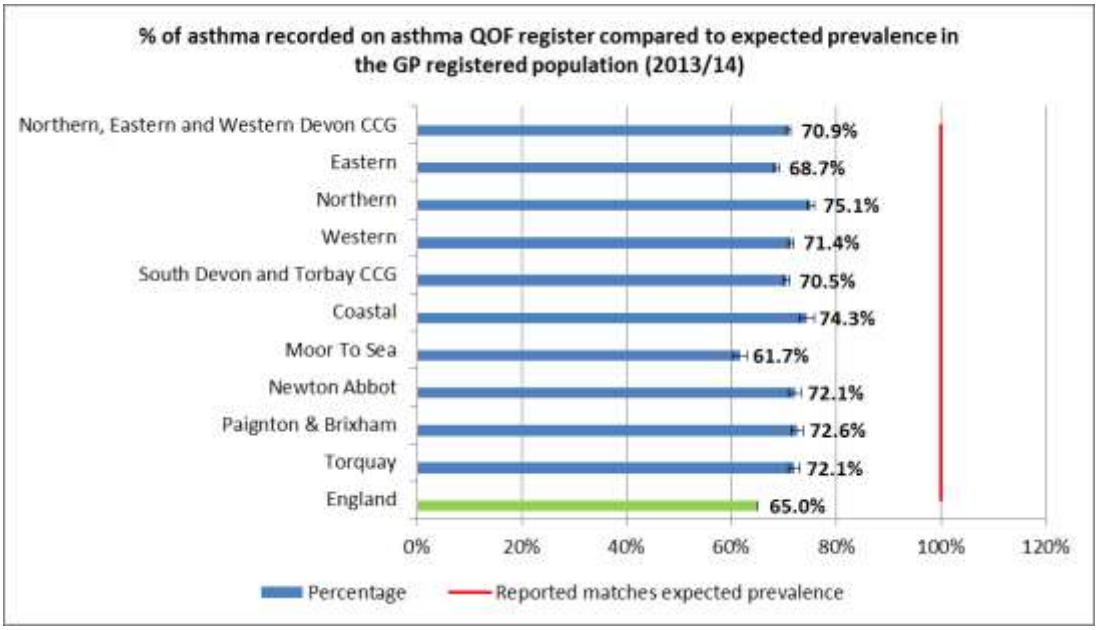
5.5 The following graphical display illustrates the ratio of expected prevalence in the GP population for the disease area against the actual recorded numbers of patients on the disease register.

5.6 The aspiration would be for all the expected population with the disease to be registered and receiving treatment/a care management plan for the disease. The possibility of this will vary depending on the disease area, the ease of diagnosis, likelihood of diagnosis with early symptoms and whether the patient is on the disease register or not.

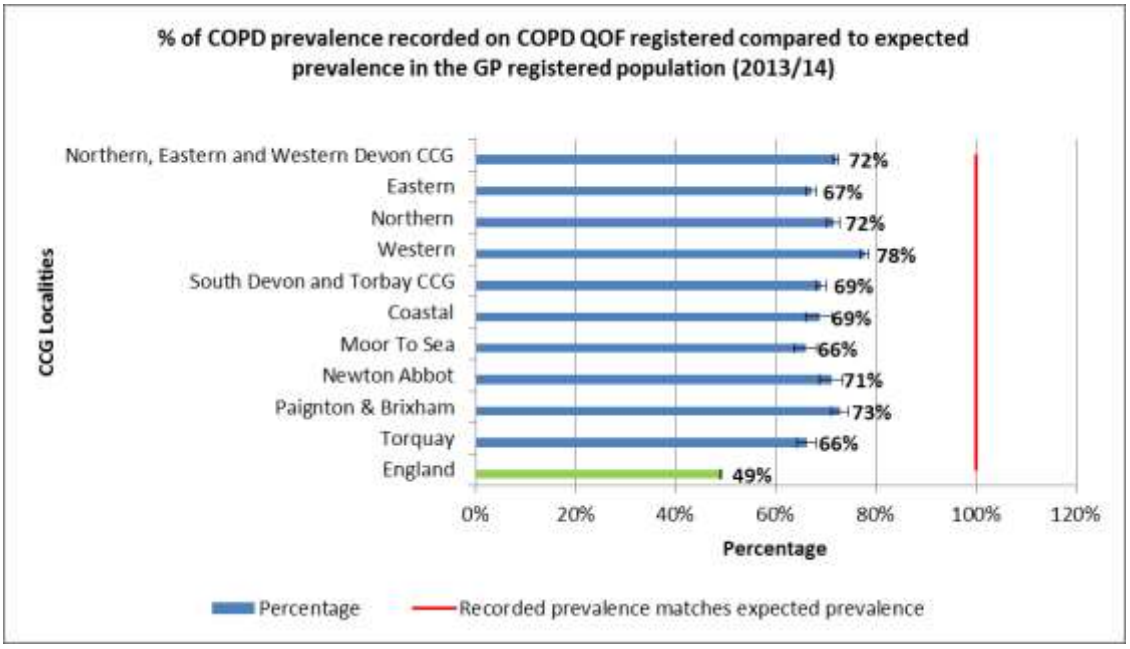
5.7 For most of the disease areas below the ratios for the clinical commissioning group populations are constantly above the England average, with some clinical commissioning group sub-locality areas achieving nearer a ratio of one than others.

Chart Series 2: Quality & Outcomes Framework recorded prevalence compared to expected in GP registered population

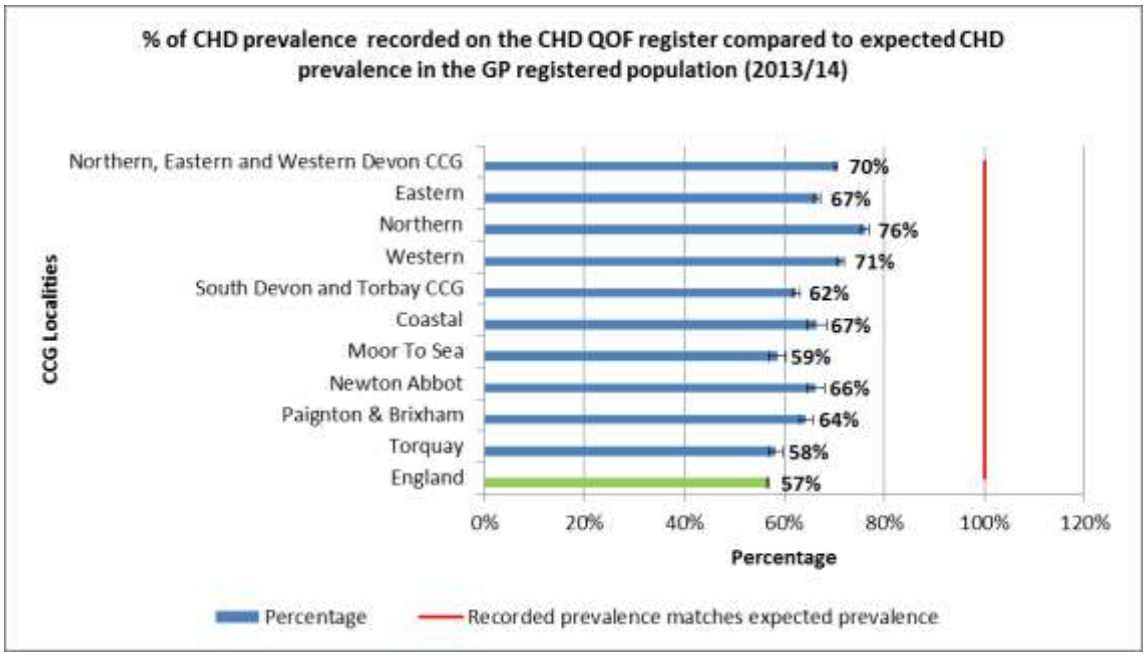
Asthma



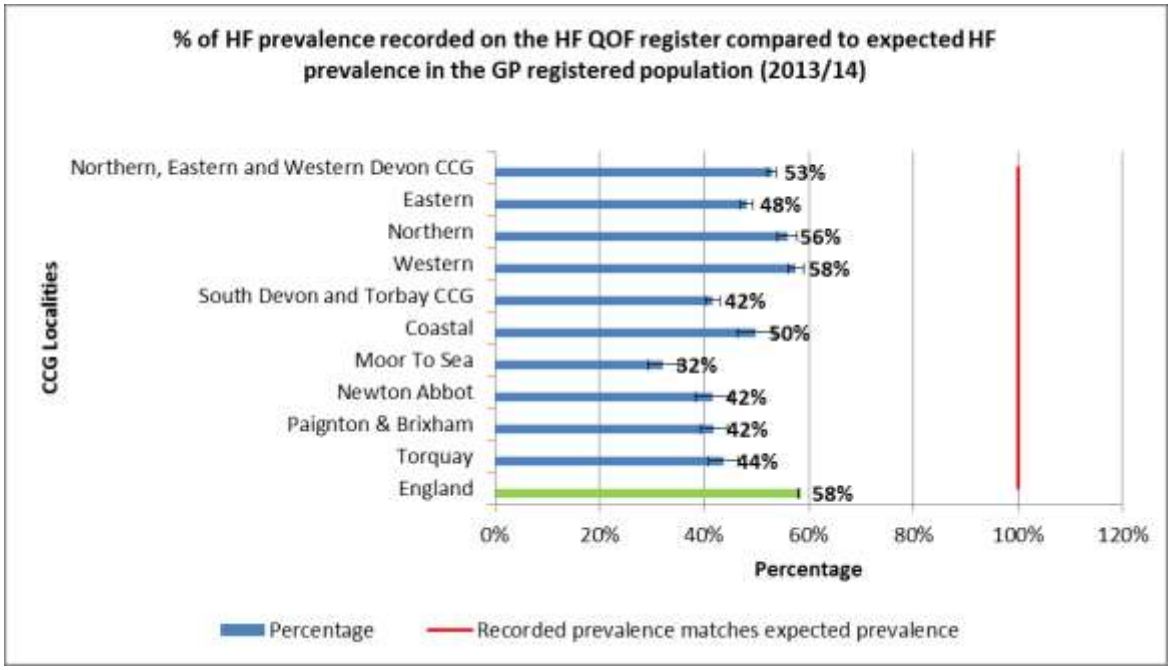
Chronic Obstructive Pulmonary Disorder



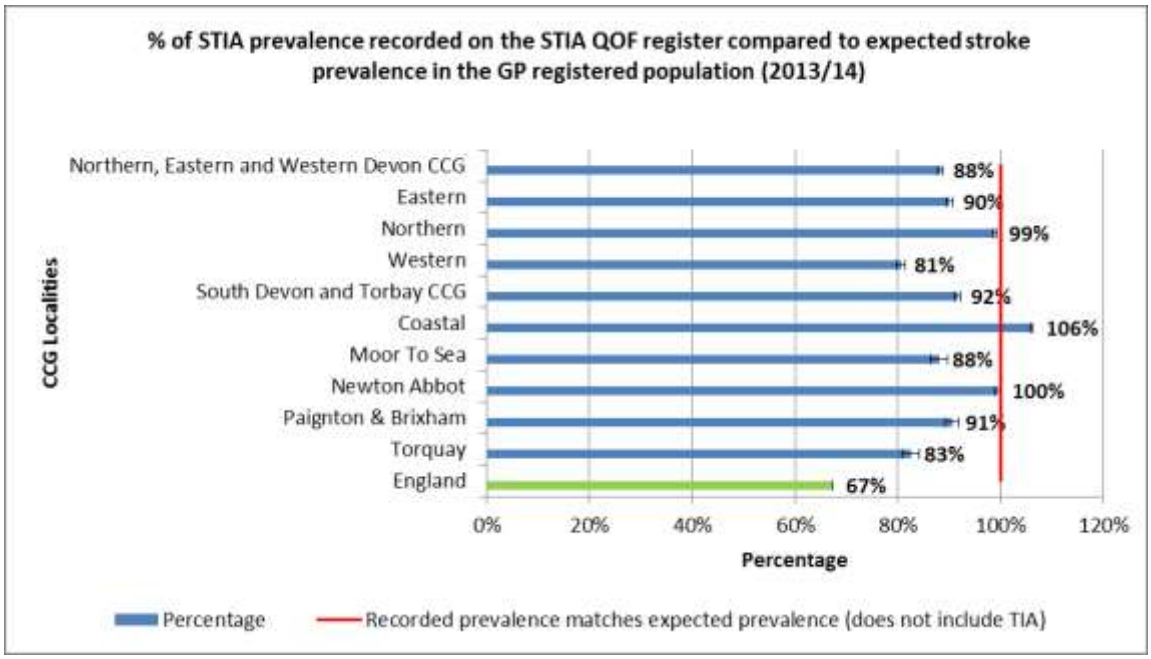
Coronary Heart Disease



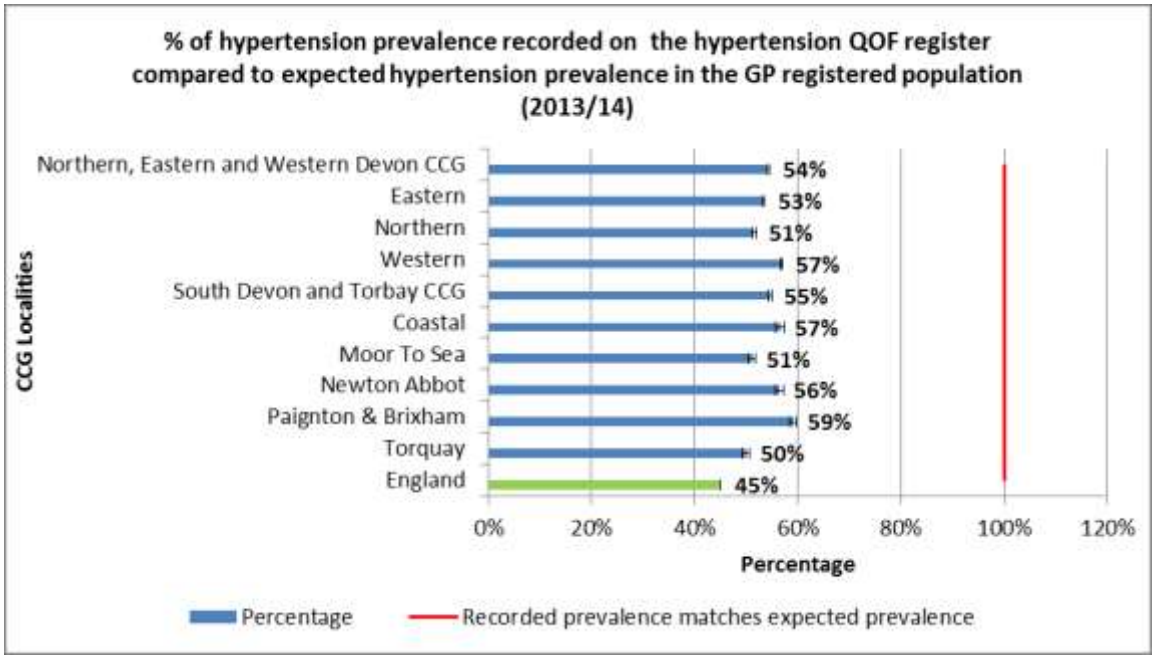
Heart Failure



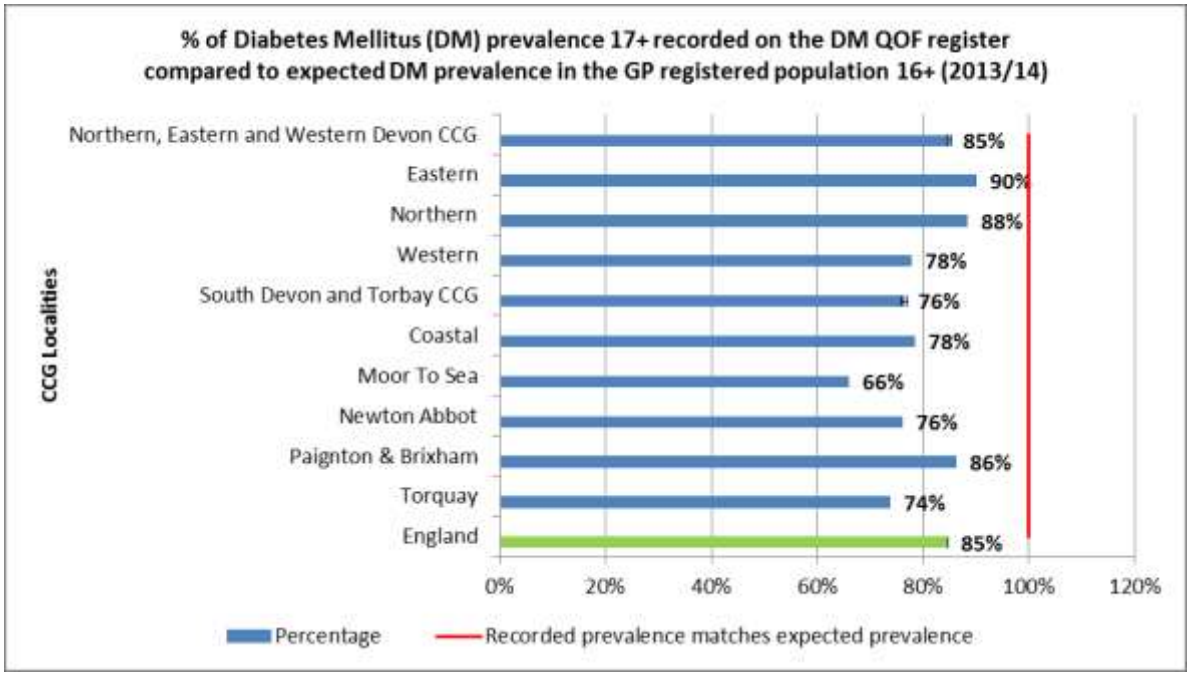
Stroke/TIA



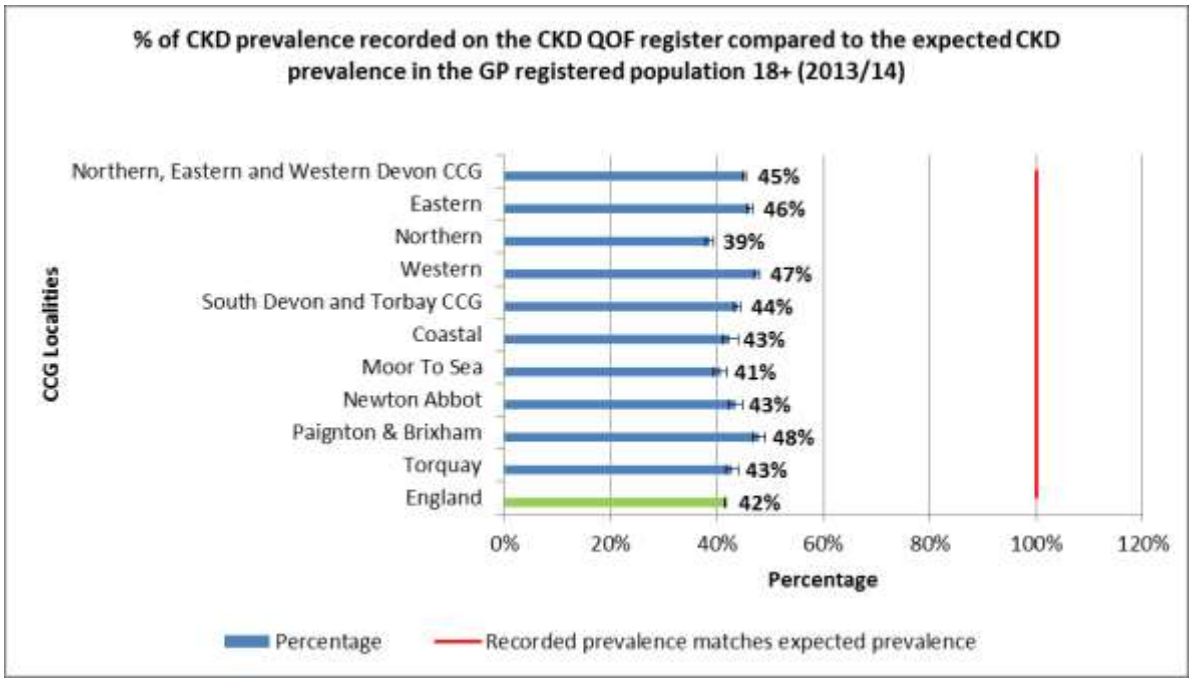
Hypertension



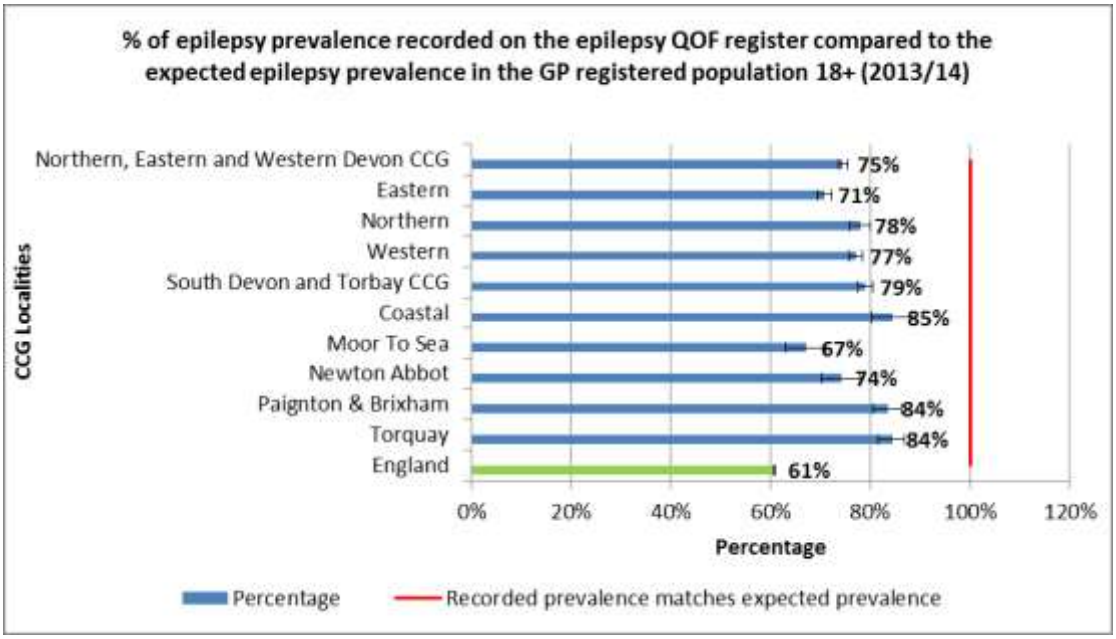
Diabetes



Chronic Kidney Disease



Epilepsy



5.9 Much work nationally has been undertaken around promoting the making every contact counts approach of ensuring patients with long term conditions are entered on the appropriate disease registers. If they are on a register they will have a care / management plan for the condition and will be reviewed yearly. It is not possible to actively manage a condition if the patient is not diagnosed or placed on a primary care disease register.

5.10 Brighton and Hove recently undertook a preventing premature mortality audit in 2014[12]. Through retrospective major event analysis technique they identified those deaths that were potentially avoidable to see what could be done in future to prevent further 'premature deaths'. They looked at deaths under 75 years related to CVD, stroke, COPD or Diabetes because they can for many people be prevented or averted. Electronic data was used to link primary care records, secondary care records to routine public health mortality files. They looked at:

- Whether people who died from CVD Stroke or with COPD/ Diabtetes were on relevant electronic primary care disease registers? If not could they have been? This can drive strategies to be more complete.
- If patients were not on the register were they exempted? If so for what reasons?
- What secondary prevention had people who died from/ with these conditions received? Was it adequate?
- This information can then be used to support interventions to improve management of patients with these long term conditions (CVD/Stroke/COPD/Diabetes).

[12] http://www.brightonandhoveccg.nhs.uk/sites/default/files/resources/preventing_premature_mortality_audit_briefing_for_website.pdf [accessed 12/05/2015]

Estimated Numbers Treated for Long Term Conditions in Devon, Torbay and Plymouth

5.11 The South West Academic Health Service Network launched the Symphony project in Somerset, which joins up health and social care data so usage and cost of services across the whole system can be analysed. The project is set to be extended to cover Devon in due course, but the existing Somerset data can still deliver some useful insights for our local population.

5.12 The following table provides estimated numbers treated for long term conditions in the NEW Devon and South Devon and Torbay clinical commissioning area. The figures are modelled using the Somerset Symphony data and applying it to the NEW Devon and South Devon & Torbay Clinical Commissioning Group resident population. It allows us to look at the trends in distribution for each condition in age, gender and deprivation which will have an impact on how best to deliver services and plan for future provision.

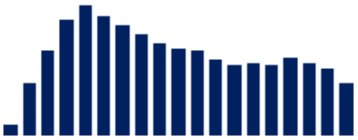
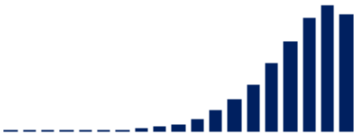
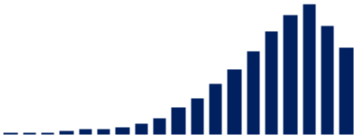
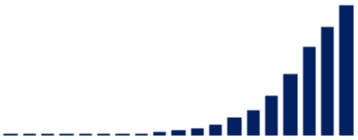
5.13 **Deprivation:** Deprivation has the biggest impact on estimated numbers treated for COPD, CKD, Epilepsy and diabetes with all demonstrating rates 70+% higher in most deprived quintiles compared to the least deprived. CHD, HF and Stroke show rates 44-57% higher for the most deprived areas compared to the least deprived.

5.14 **Age:** The peak age for CHD, CKD, COPD, Diabetes HF and Stroke are all 85+. This is what we would expect for these long term conditions. However it is worth noting that for many of these conditions the curve starts to rise exponentially from aged 50/60+. This is particularly pertinent for services aimed at preventing deterioration of contributory conditions (such as high blood pressure, cholesterol etc.) and looking at lifestyle factors that will contribute to development of the condition earlier in life. Asthma and epilepsy are more evenly spread throughout the age bands with peak age groups at 25-30 years.

5.15 **Gender:** A gender split in the estimated numbers with the different conditions appears to exist with males exhibiting much higher rates than females. Conditions such as CHD indicate rates at 86% higher in males whilst rates are around 50% higher for males in CKD & HF, 44% higher for diabetes and around 25-30% higher for Stroke and COPD.

5.16 Asthma is the only condition to show higher rates for females over males at around 10%.

Table 4: Estimated number treated for selected long-term conditions in Devon, with summary breakdowns by age, sex and deprivation, 2013-14 (Somerset Symphony data applied to NEW Devon and SD&T CCG resident population)

Condition	Estimated Treated Prevalence	Sex Persons / Male / Female	Age Younger ---------- Older	Deprivation Most Deprived ----- Least Deprived
Asthma	NEW Devon = 92,000 SD&T CCG = 28,500 Devon CC = 77,600 Plymouth = 28,800 Torbay = 14,100	 Female rates 10% higher	 Peak age group is 20 to 24	 Most deprived areas 15% higher
CHD	NEW Devon = 35,300 SD&T CCG = 13,000 Devon CC = 32,500 Plymouth = 9,300 Torbay = 6,600	 Male rates 86% higher	 Peak age group is 85 to 89	 Most deprived areas 50% higher
CKD	NEW Devon = 3,900 SD&T CCG = 1,500 Devon CC = 3,600 Plymouth = 1,000 Torbay = 800	 Male rates 52% higher	 Peak age group is 90 and over	 Most deprived areas 74% higher
COPD	NEW Devon = 16,300 SD&T CCG = 6,200 Devon CC = 14,500 Plymouth = 4,600 Torbay = 3,300	 Male rates 30% higher	 Peak age group is 80 to 84	 Most deprived areas 134% higher
Diabetes	NEW Devon = 43,000 SD&T CCG = 15,800 Devon CC = 38,500 Plymouth = 12,000 Torbay = 8,200	 Male rates 44% higher	 Peak age group is 80 to 84	 Most deprived areas 78% higher
Epilepsy	NEW Devon = 11,200 SD&T CCG = 3,700 Devon CC = 9,300 Plymouth = 3,600 Torbay = 2,000	 Male rates 14% higher	 Peak age group is 35 to 39	 Most deprived areas 81% higher
Heart Failure	NEW Devon = 7,100 SD&T CCG = 2,700 Devon CC = 6,600 Plymouth = 1,800 Torbay = 1,300	 Male rates 51% higher	 Peak age group is 90 and over	 Most deprived areas 44% higher
Stroke	NEW Devon = 20,500 SD&T CCG = 7,600 Devon CC = 18,900 Plymouth = 5,300 Torbay = 3,900	 Male rates 26% higher	 Peak age group is 90 and over	 Most deprived areas 47% higher

Source: South West Academic Health Science Network, Symphony Project Data for Somerset modelled by age, sex and deprivation for the Devon population, 2014
CHD = Coronary Heart Disease, CKD = Chronic Kidney Disease, COPD = Chronic Obstructive Pulmonary Disease

6. Admissions to Hospital for Long Term Conditions

6.1 The following table illustrates the trends in hospital admissions for each LTC by age sex and deprivation for the population covered by the two CCG's. The largest volume of admissions activity for all conditions except CKD is in emergency rather than elective admissions. For CKD, the largest volume of activity is for elective admissions rather than emergency. This pattern of activity is consistent when broken down to a CCG locality level and Local Authority level. The largest number of admissions by condition is for CHD, then CKD, then Stroke.

Table 5: Number of hospital admission for selected long-term conditions (primary diagnosis only), for CCGs, NEW Devon localities and upper tier/unitary local authorities in Devon, Plymouth and Torbay, 2013-14

Condition	Admission Type	South Devon & Torbay CCG	NEW Devon CCG	Eastern Locality	Northern Locality	Western Locality	Devon County Council	Plymouth City Council	Torbay Council
Asthma	Elective	14	183	6	167	10	184	7	*
	Emergency	302	783	347	181	255	702	208	172
	Other	*	*	*	*	*	6	*	*
CHD	Elective	451	1994	797	544	653	1770	465	201
	Emergency	773	2309	902	505	902	1983	666	426
	Other	41	245	56	165	24	248	15	24
CKD	Elective	118	323	172	55	96	301	71	62
	Emergency	28	96	32	17	47	76	28	17
	Other	*	7	*	*	*	11	*	*
COPD	Elective	36	214	72	23	119	129	104	16
	Emergency	627	1693	679	325	689	1413	572	340
	Other	78	68	23	25	20	112	6	28
Diabetes	Elective	15	65	27	13	25	56	18	6
	Emergency	217	615	229	74	312	446	279	112
	Other	13	25	*	15	*	30	*	*
Epilepsy	Elective	31	144	33	27	84	106	58	9
	Emergency	202	605	183	135	287	468	217	115
	Other	20	13	*	*	*	21	*	10
Heart Failure	Elective	23	120	63	34	23	115	14	14
	Emergency	400	841	316	179	346	785	258	194
	Other	74	82	35	30	17	108	8	42
Stroke	Elective	44	112	47	18	47	100	32	23
	Emergency	626	1621	665	403	553	1531	404	306
	Other	252	486	191	150	145	519	106	103

Source: Secondary Uses Services, Commissioning Dataset, Inpatient Table, 2015
CHD = Coronary Heart Disease, CKD = Chronic Kidney Disease, COPD = Chronic Obstructive Pulmonary Disease
Other includes transfers; * indicates less than six admissions

6.2 Figure 20 provides a breakdown of the age standardised rates admissions for the selected long term conditions by age, sex and deprivation. The highest rate of admissions is for a primary diagnosis of CHD at 325.4/100,000 population followed by COPD (143.0/100,0000 then Stroke (141.6/100,000).

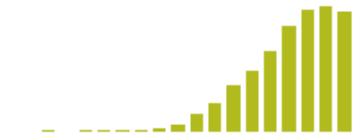
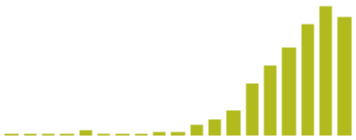
6.3 Females are more at risk of admission than males for Asthma only. All the other LTC show a far higher rate of admissions for males compared to females. In the case of CHD male rates of admission are 181% higher.

6.4 The peak age range for admissions is around 80-85+ for most of the LTC listed. Asthma and epilepsy show a much younger age peak at 1-4 years and 0-4years respectively. Admissions for some conditions are more evenly spread through the age bands such as for diabetes, asthma, epilepsy whilst CHD, CKD and COPD demonstrate a steady increase in admissions from age 50 with Heart Failure and Stroke showing an increase starting later at 70+.

6.5 Deprivation is also an indicator for higher admission rates with those in most deprived areas consistently demonstrating rates over 50% higher compared to those in least deprived areas across all condition areas. This gradient is as much as 299% higher in most deprived areas for COPD, 222% in most deprived areas for diabetes and 150% higher in most deprived areas for CKD.

6.6 Admissions to hospital are more costly and more resource intensive compared to primary care interventions. Some admissions are of course unavoidable but a proportion for LTCs could be avoided through better care planning and self-management in primary care. Simply by being diagnosed with the condition, put on a primary care register and receiving a personalised care plan with some element of self-management might help reduce the frequency of admissions for individuals.

Figure 20: Direct age standardised rate per 100,000 of all hospital admissions (primary diagnosis only) for selected long-term conditions in Devon, Plymouth and Torbay, with summary breakdowns by age, sex and deprivation, 2011-12 to 2013-14

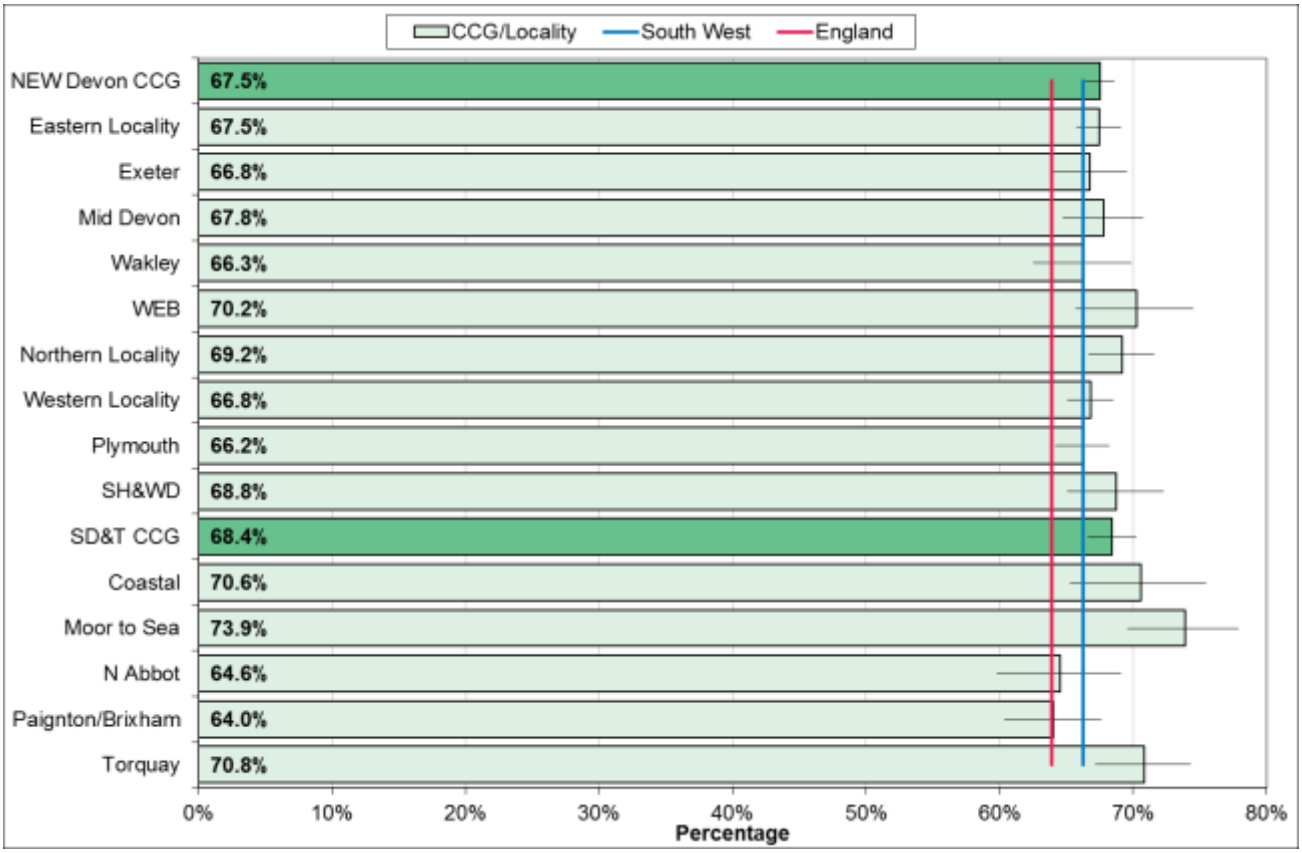
Condition	Direct Age Standardised Rate per 100,000	Sex Persons / Male / Female	Age Younger ---------- Older	Deprivation Most Deprived ----- Least Deprived
Asthma	All Persons = 126.5 Males = 102.0 Females = 149.6 Most Deprived = 159.6 Least Deprived = 91.1	 Female rates 47% higher	 Peak age group is 01 to 04	 Most deprived areas 75% higher
CHD	All Persons = 325.4 Males = 492.0 Females = 175.0 Most Deprived = 440.0 Least Deprived = 265.9	 Male rates 181% higher	 Peak age group is 80 to 84	 Most deprived areas 65% higher
CKD	All Persons = 37.9 Males = 49.9 Females = 28.1 Most Deprived = 50.3 Least Deprived = 20.1	 Male rates 78% higher	 Peak age group is 85 and over	 Most deprived areas 150% higher
COPD	All Persons = 143.0 Males = 154.1 Females = 134.9 Most Deprived = 322.4 Least Deprived = 81.1	 Male rates 14% higher	 Peak age group is 80 to 84	 Most deprived areas 299% higher
Diabetes	All Persons = 74.5 Males = 76.8 Females = 73.9 Most Deprived = 147.3 Least Deprived = 45.7	 Male rates 4% higher	 Peak age group is 80 to 84	 Most deprived areas 222% higher
Epilepsy	All Persons = 85.2 Males = 89.8 Females = 80.9 Most Deprived = 128.2 Least Deprived = 80.4	 Male rates 11% higher	 Peak age group is 00 to 00	 Most deprived areas 59% higher
Heart Failure	All Persons = 61.7 Males = 81.0 Females = 45.8 Most Deprived = 94.6 Least Deprived = 48.7	 Male rates 77% higher	 Peak age group is 85 and over	 Most deprived areas 94% higher
Stroke	All Persons = 141.6 Males = 165.1 Females = 120.2 Most Deprived = 183.1 Least Deprived = 113.9	 Male rates 37% higher	 Peak age group is 85 and over	 Most deprived areas 61% higher

Source: Secondary Uses Services, Commissioning Dataset, Inpatient Table, 2015
CHD = Coronary Heart Disease, CKD = Chronic Kidney Disease,
COPD = Chronic Obstructive Pulmonary Disease

7. Patient Perspective

7.1 The NHS Outcomes framework includes a domain looking to enhance the quality of life for people with long-term conditions. From this comes the NHS Outcomes Framework measure 2.1: Percentage of people who feel supported to manage their own condition.

Figure 21: Percentage of people who feel supported to manage their own condition



7.2 Both NEW Devon and South Devon & Torbay Clinical Commissioning Group areas have percentages of people who feel supported to manage their own condition above 65% and above the England average. For the Clinical Commissioning Group locality breakdowns the percentages are all above the England average. These results are supported by the survey undertaken with Devon LTC patients by Health Watch Devon.

Long Term Conditions: Health Watch Devon Survey Findings

7.3 Health Watch Devon (2014) published results of a survey created to gather the views of people living with long term conditions. This survey looked at the services they currently received and what changes they would like to see to make their care more patient-centred. Whilst 63% of respondents considered the care and support they received as good or excellent, nearly one in five considered the care and support they receive as poor or very poor.

7.4 Comments from patients included:

- "A good combination of day-to-day care from GP practice, with well-defined routed to more specialist care as and when I need it."
- "..regular check-ups and assessments, with consequent revisions to treatment if necessary. These at the instigation of our local GP surgery mean that I am "looked after".
- "the condition is under control and my GP practice nurse keeps in touch."

7.5 Only half of Heathwatch Devon respondents felt supported to manage their condition or felt they knew where to go for help when they needed it.

- "I felt supported with how to manage my condition": 192 respondents felt this about GP; 140 about specialist (consultant/specialist nurse); 95 about community health care worker 37 social care worker.

Joined up Care Planning

7.6 Where concerns were raised they were most often regarding the continuity of care beyond the initial diagnosis and care planning. Comments from patients included:

- "more continuity needed between GP and specialist"
- "could be better, lacks continuity"
- "more continuity would be good"

7.7 These patients also expressed concerns about services working in isolation and not addressing the patient as a whole person or the impact of the condition on their life:

- "Each doctor only looks at their own bit and I am a whole person with multiple problems. My GP doesn't have time to go into detail in the rare times I can get an appointment to see him. Usually it is a telephone conversation."
- " .. consultants are very focused on the joint disease but not the impact it has on my life."
- "….agencies do not seem to liaise with each other over my varying health problems, or keeping my family informed."

7.8 Better communication between GPs and consultants was also expressed by patients in the LINKS Access to Neurological services patient survey (2013). A number of patients felt there was a lack of communication at worse and lack of joined up thinking at best between the general practitioner and the specialist. Many of the patients in the survey believe that the marrying of the two perspectives of GP holistic view and consultant specialist knowledge coupled with their views, as patients, would result in better health care. This reflects earlier national patient consultation results (Our Health, Our Care, Our Say, 2006) which stated patients with LTC want joined up, seamless services and that they want to be treated as a whole person and for the NHS to act as one team.

7.9 The Healthwatch Devon LTC patient survey also highlighted people may have more than one long term condition; that one condition may well impact on the other; and that services need to be better at joining these up. One focus group pointed out the issue that mental health units are experts in mental health but not necessarily physical health whilst another said physical health care services are not good with mental health issues.

7.10 The LINKS Access to Neurological services (2013) patient survey reported that patients had expectations of the health services to provide them with a diagnosis for their condition and a care plan to manage the disease. However patients with long- term neurological conditions are able to significantly input alongside the clinical input into the way in which they cope with their condition. They are better read and through technology, are better able to research their own conditions.

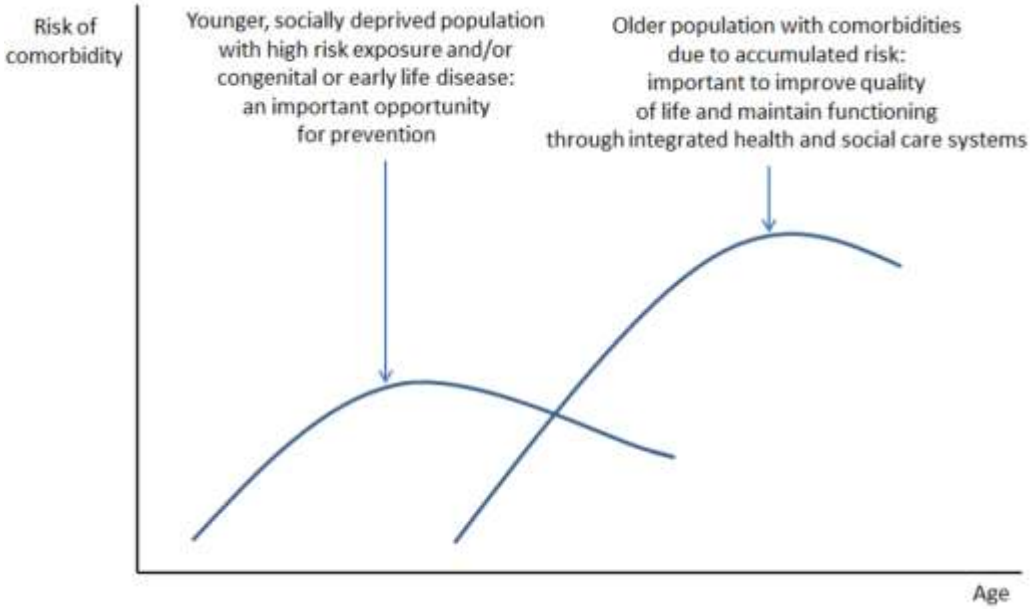
7.11 The report stated that patients are capable of understanding and dealing with their conditions and want this to be recognised by the health service. Although there is a move in this direction by many clinical staff, what is needed is a clear cultural policy shift by hospital trusts and GP practices to move into a coproduction process with patients.

7.12 The Healthwatch Devon long term conditions survey would suggest this is being achieved to an extent with some long term conditions patients. It reported 70% of respondents said they played an active role all or most of the time in managing their long term condition. Whilst 62% of respondents said they felt fairly or very confident that they could take care of their own health.

7.13 From a patient perspective the most important issues seem to be communication between those treating their condition and the ability of these practitioners to look at the whole person, perhaps with multiple conditions, and the impact of the condition(s) on their lives. Coproduction of long term management plans for patients with practitioners was also raised in several surveys.

8. Co-Morbidities/Multiple Morbidity

Figure 22: An Illustrative diagram of two key populations at risk of comorbidities across the life course



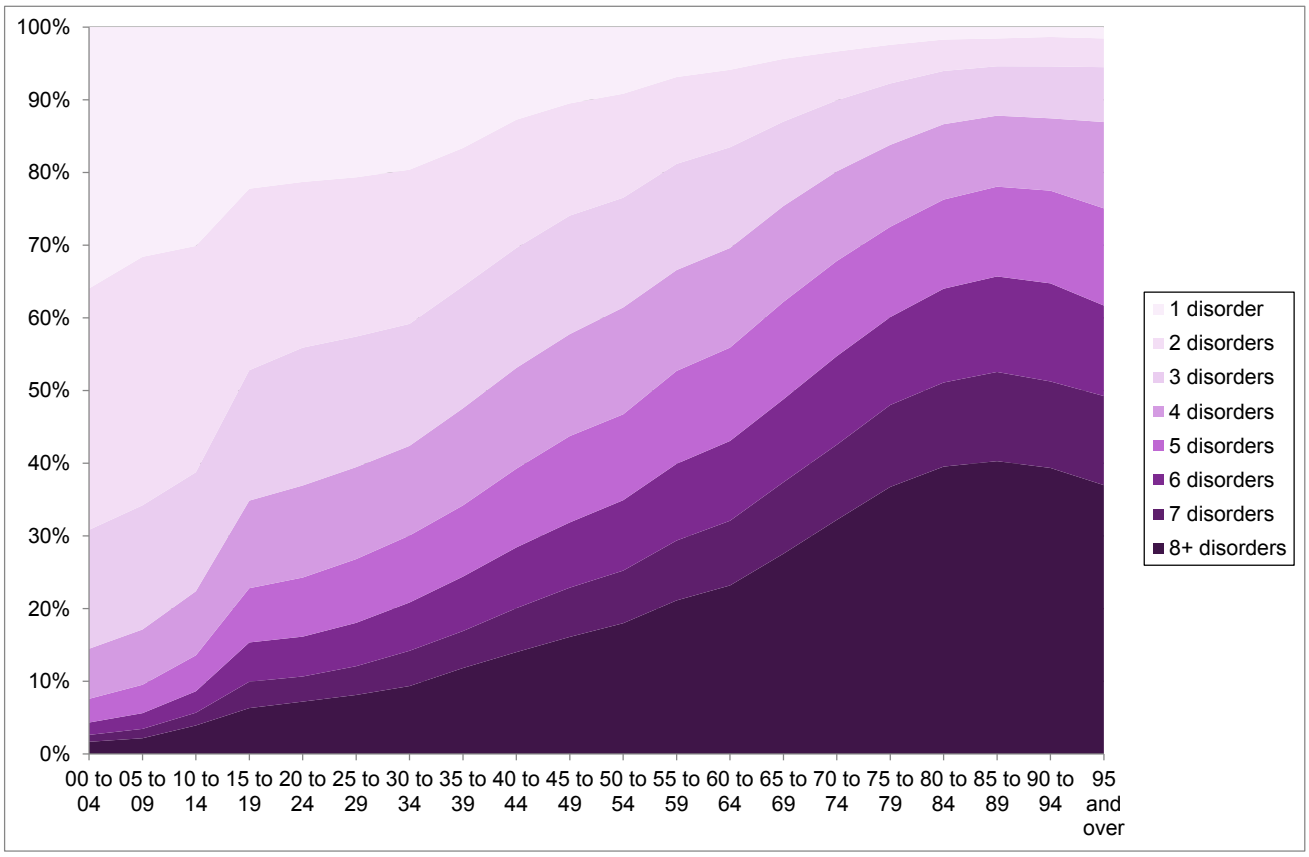
Source: Living Well for Longer. National Support for Local Action to Reduce Premature Avoidable Mortality. Department of Health. April 2014.

The Impact of Multi Morbidity on Emergency Admissions in Devon, Plymouth and Torbay

8.1 With increasing age some individuals may have increasing co-morbidities, which will impact on emergency admissions. The percentage of emergency admissions accounted for by each multiple of disorders rises with age. At 15-19 there is a peak when perhaps conditions first start to be diagnosed for people as adults as many disease registers do not start until aged 16/17 years (eg diabetes, epilepsy, CKD). This peak is not so pronounced when just Devon data is included suggesting this is a possible 'young, urban, deprivation' effect that emulates the national pattern in Figure 22.

8.2 There is then a steady rise until a final peak at age 80-85 when the percentage of admissions represented by each multiple of disorders reduces. By aged 85 over 80% of all emergency admissions are by people presenting with at least three disorders and up to 70 % by people presenting with four disorders. Fifty percent of emergency admissions have four disorders in the 40 + age group; by the 70+ age band that has risen to six disorders.

Figure 23: Emergency Admissions by age and number of comorbidities, Devon, Plymouth and Torbay, 2011-12 to 2013-14



Somerset Symphony Data[13] and Multiple Morbidities

8.3 The Somerset symphony project reported 7,605 unique combinations of chronic conditions among the South Somerset population. Whilst impractical to report each combination they did indicate how many with one condition also had another chronic condition e.g. 72% of those with hypertension also have another chronic condition. It was able to demonstrate that that almost 50% of those with asthma had no other condition. In contrast, about 10% of those who had suffered a stroke or who had COPD had only that condition, while more than 50% of those people were recorded as having more than three conditions.

8.4 The combination of multiple morbidities was also found to influence the associated cost. Some such as dementia had a greater impact on cost perhaps because the way in which that condition then has to be managed is much more resource intensive.

Relative Risk Ratios of Multi Morbidities

8.5 The Devon modelled Symphony data in Figure 24 highlights the increased likelihood of having other long term conditions when someone has a selected long term condition.

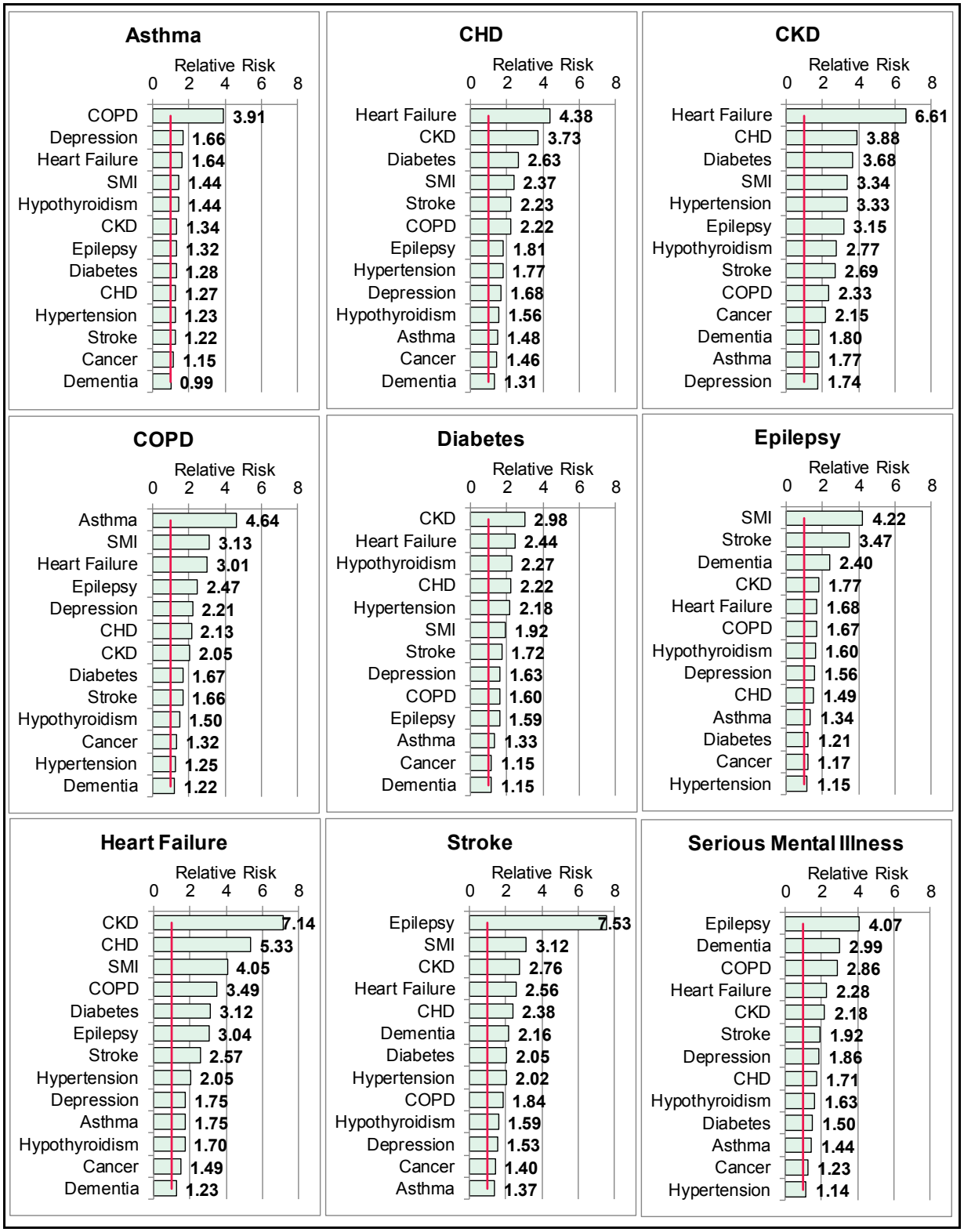
8.6 For each long term condition area the relative risk ratio indicates how many times more likely you are to have another long term condition compared to the reference group (those without the long term condition). It also highlights the relationship between physical and mental health, with the likelihood of serious mental illness (SMI) and depression also increasing when long-term conditions are present.

8.7 So, for example, with Asthma you are almost four times more likely to have COPD than if you didn't have asthma and 1.6 times more likely to have depression. Whilst some of the co-morbidities illustrated here are unsurprising others are less well known or expected.

8.8 Some clusters of multiple long term conditions are more likely than others. For example, someone with Heart Failure is seven times more likely to have chronic kidney disease, five times more likely to have CHD, and four times more likely to have a serious mental illness than someone who doesn't have heart failure. Equally someone with Chronic Kidney Disease is almost seven times more likely to have heart failure but also almost 4 times more likely to have CHD, over 3.5 times more likely to have diabetes and 3.3 times more likely to have a serious mental illness and hypertension compared to someone who does not have CKD. Someone with diabetes is almost three times more likely to have CKD, 2.4 times more likely to have heart failure and 2.3 times more likely to have hyperthyroidism than someone without diabetes.

[13] http://www.york.ac.uk/media/che/documents/papers/researchpapers/CHERP96_multimorbidity_utilisation_costs_health_social%20care.pdf

Figure 24: Relative risk ratios showing the increased likelihood of being treated for other conditions for persons with select long-term conditions or serious mental illness, 2013-14 (Somerset Symphony data applied to Devon population), red line shows relative risk of 1 (same likelihood)



Source: South West Academic Health Science Network, Symphony Project Data for Somerset modelled by age, sex and deprivation for the Devon population, 2014
CHD = Coronary Heart Disease, CKD = Chronic Kidney Disease, COPD = Chronic Obstructive Pulmonary Disease, SMI = Serious Mental Illness

Frailty

Table 6: Older people Frail Estimates: Northern, Eastern and Western Devon Clinical Commissioning Group 2013

Age group (Years)	Reported frailty rate	Reported Pre-Frailty Rate	Population	Estimated Frailty	Estimated Pre-Frailty
65 and over	-	41.6%	190,811	19,741	79,377
65 to 69	4.0%	-	59,505	2,380	-
70 to 74	7.0%	-	42,775	2,994	-
75 to 79	9.0%	-	34,832	3,135	-
80 to 84	15.7%	-	26,767	4,202	-
85 and over	26.1%	-	26,932	7,029	-

Table 7: Older People Frail Estimates: South Devon and Torbay Clinical Commissioning Group, 2013

Age Group (years)	Reported Frailty Rate	Reported Pre-Frailty Rate	Population	Estimated Frailty	Estimated Pre-Frailty
65 and over	-	41.6%	69,783	7,337	29,030
65 to 69	4.0%	-	21,676	867	-
70 to 74	7.0%	-	15,447	1,081	-
75 to 79	9.0%	-	12,472	1,122	-
80 to 84	15.7%	-	9,646	1,514	-
85 and over	26.1%	-	10,542	2,751	-

8.9 Frailty is not an inevitable consequence of ageing. It refers to the increased vulnerability an individual experiences an acceleration of the normal gradual age related decline in multiple body systems. This results in limited functional reserve so that even a relatively minor illness can have a substantial impact on health. Although frailty increases with age, co-morbidity and disability, it can be present in individuals without any of these three factors.

8.10 The NHS England pathway published in Jan 2014[14] contained nine stages each containing evidence based examples. Of particular relevance for frailty as a co-morbidity with long term conditions in older people are:

1. Healthy active ageing and supporting independence
2. Living well with simple or stable long term conditions
3. Living well with complex co-morbidities dementia and frailty.

8.11 Healthy active ageing and supporting independence:
Healthy ageing is associated with being physically active, not smoking, eating healthily, maintaining a healthy weight and drinking alcohol sensibly therefore

[14] NHS England (2014). *Safe, compassionate care for frail older people using an integrated care pathway: Practical guidance for commissioners, providers and nursing, medical and allied health professional leaders.*

changing these common behavioural risk factors during adult life (as outlined in the next Section 9) not only reduces the risk on non-communicable disease (LTC such as heart disease or stroke) but also helps prevent dementia disability and frailty.

8.12 Psychosocial risk factors such as social isolation, loneliness and social exclusion are associated with cognitive decline and dementia. They also reduce resilience to disease onset and progression, increasing morbidity and mortality.

8.13 Living well with simple or stable long term conditions:
The principles of effective management of long-term conditions apply equally to people of all ages. Older people should receive the same care and support as younger people with the same long term condition. Decision making should be shared with older people and personalised care plans developed.

8.14 Living well with complex co-morbidities, dementia and frailty: care focused on individual long-term conditions can be chaotic, inefficient and ineffective (eg polypharmacy). Co-ordination of care around all of the needs of a frail older person should be facilitated by improving relational continuity of care with an identified key worker who can case manage and coordinate care across the system. Outcomes are improved in frail older people who are encouraged to be more active, therefore opportunities to participate in physical activity should be provided.

8.15 These pathways and evidence based examples are discussed in greater detail in a paper produced by Public Health for the Devon health and Wellbeing Board: Frail Older People (Sept 2014)[15].

Mental Health

8.16 The risk ratio charts in Figure 24 highlight the relationship between physical and mental health, demonstrating the likelihood of serious mental illness (SMI) and depression increases when long-term conditions are present. Evidence consistently demonstrates people with a long term condition are two to three times more likely to experience mental health problems than the general population. This particularly relates to depression and anxiety (Kings Fund 2012).

8.17 The strongest evidence is for a close association with cardiovascular disease, diabetes, chronic obstructive pulmonary disease and musculoskeletal disorders. Evidence also indicates a higher than usual level of mental illness among people with conditions including asthma, arthritis, cancer and HIV/AIDS (Chapman et al 2005, Sederer et al 2006).

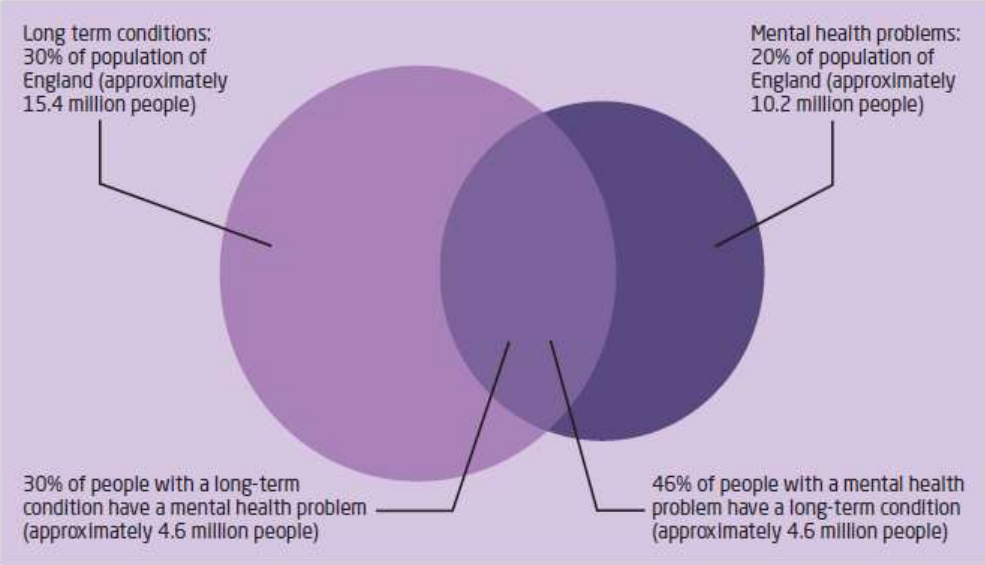
8.18 Long term conditions such as CVD and diabetes are also risk factors for the development of mild cognitive impairment as well as Alzheimer's disease and vascular dementia (Biessels et al 2006). The risk of developing dementia is even higher in those with a co-morbidity of depression and diabetes (Katon et al 2011).

8.19 Evidence indicates poorer clinical outcomes for those with co-morbid mental health problems even when taking age and severity into account. Significant

[15] DCC 2014 Frail older people (p18)
http://www.devon.gov.uk/loadtrimdocument?url=&filename=PH/14/15.CMR&rn=14/WD356&dg=Public

part of the explanation for this comes from the fact that mental health problems can reduce and individual's ability to actively manage their own physical condition. Medication non-compliance is higher among patients with depression (DiMatteo et al 2000). Mental health problems are often associated with unhealthy behaviours such as smoking and being overweight which are contributory factors to developing long term conditions (Kings Fund 2012).

Figure 25: The overlap between long-term conditions and mental health problems



[Source: Kings Fund (2012)]

8.20 This raises the importance of detecting co-morbid mental health problems in those with long term conditions and the effective integration of treatment for mental health symptoms into the management of long term conditions alongside the physical health element. Integrating treatment for physical and mental health in the management of long term conditions will get more significant results that just adding onto existing treatment protocols (Kings Fund, 2012).

8.21 Cognitive Behavioural Therapy and anti-depressants can be effective for mild anxiety and depression symptoms identified and also lead to reduced use of other services such as emergency department (de Lusignan et al. 2011).

8.22 Integrating treatments can exploit the synergies between mental and physical health care and avoid the tensions between different treatments which can sometimes worsen the outcome for the other eg some psychotropic medications can lead to significant weight gain which exacerbates physical symptoms (Kings Fund, 2012). This is supported by comments within the patient perspective section above in particular those from the Healthwatch Devon survey of people living with long term conditions.

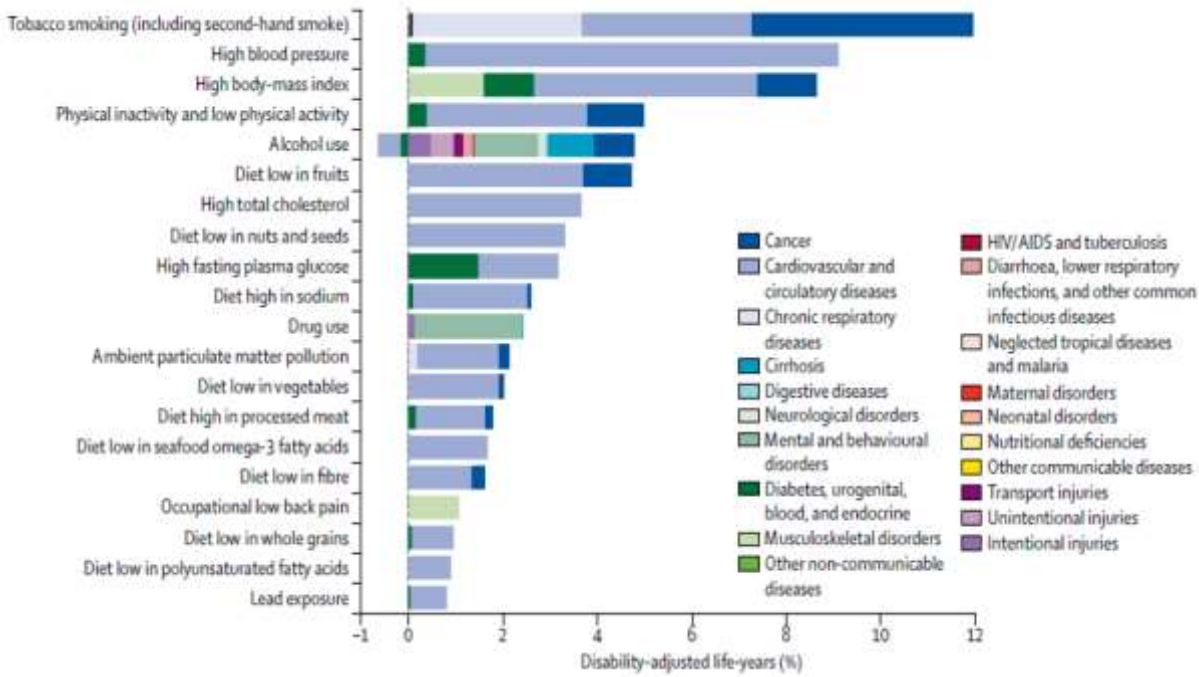
9. Lifestyle Factors

Burden of Disease

9.1 People with long term conditions are likely to also exhibit risky health behaviours: they are more likely than those without long term condition to have high blood pressure and be obese though it is unclear the direction of causation (Department of Health, 2012).

9.2 The graph below illustrates the contribution of the leading risk factors such as smoking, excess alcohol, diet, high blood pressure, being overweight and physically inactive to deaths from the major disease areas. These include the long term condition areas of cardiovascular and circulatory disease, chronic respiratory disease and diabetes. It demonstrates that the greatest risk factors are largely preventable.

Figure 26: Burden of disease attributable to 20 leading risk factors for both sexes in 2010, Expressed as a percentage of UK disability-adjusted life years

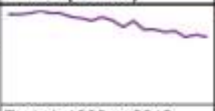
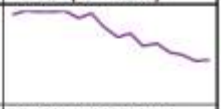
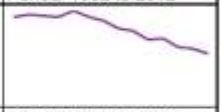
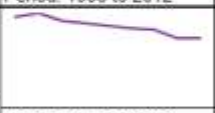
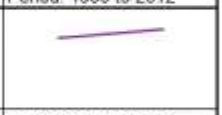
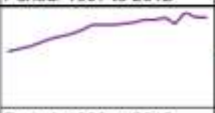
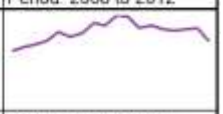


[Source: Living Well for Longer. National Support for Local Action to Reduce Premature Avoidable Mortality. Department of Health. April 2014.]

Lifestyle Factors Amenable to Prevention

9.3 Life style factors amenable to prevention that are contributory risk factors for long term conditions are smoking; excess alcohol, physical inactivity and obesity. The following maps indicate the areas of Devon, Plymouth and Torbay were prevalence rates of these lifestyle factors are highest. Many of these are the same areas which have the highest deprivation scores on the indices of multiple deprivation. Opportunities to support behaviour change should be maximised using the principle 'every contact counts' and 'every visit counts'. People from socio-economically deprived areas will need different behaviour change approaches.

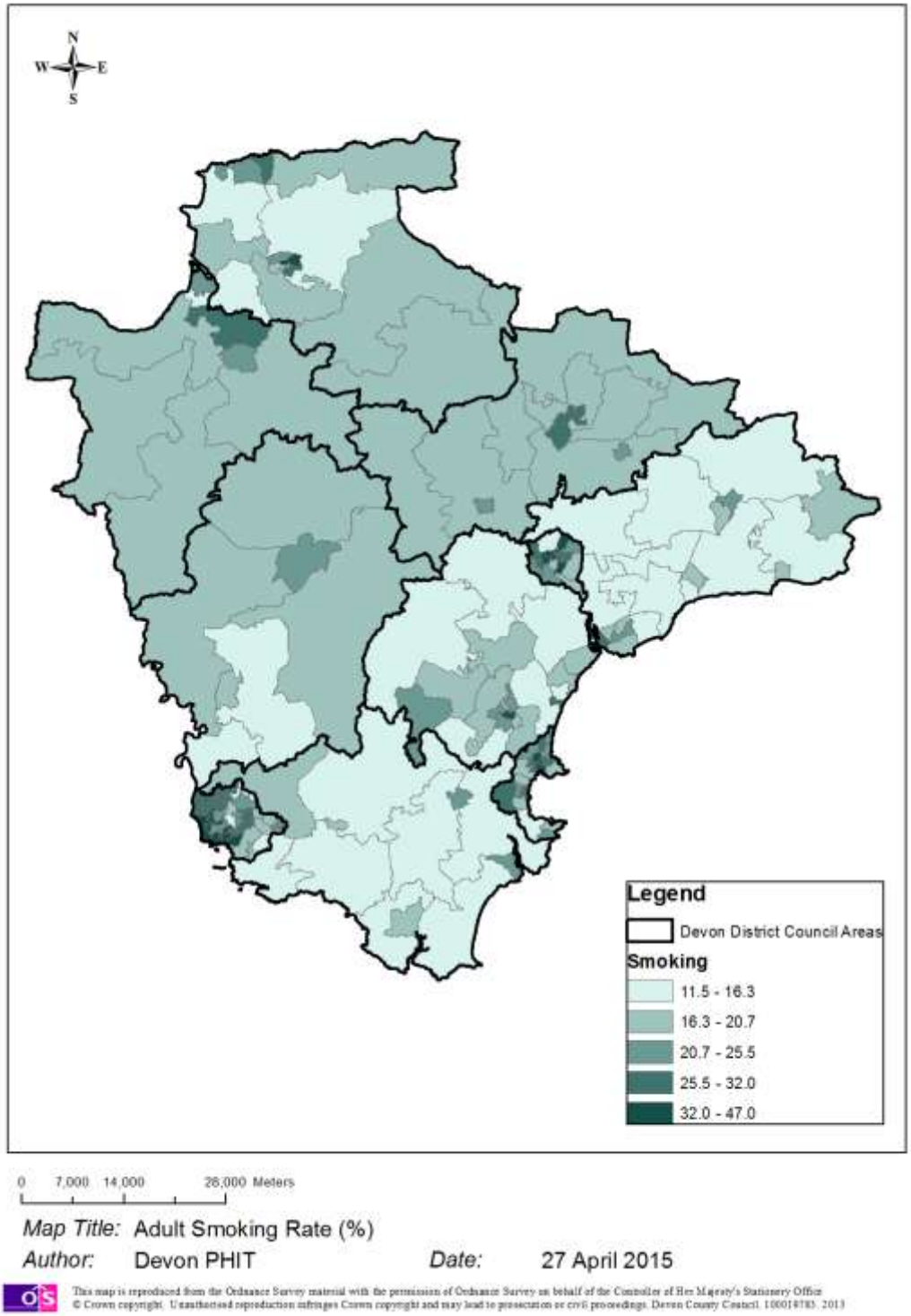
Figure 27: Profile and Trends in Main Premature Mortality Risk factors: Devon Plymouth and Torbay

Risk Factor	Age Profile (16+)	At Risk Populations	Inequalities	Trend (adults)	Trend (children)
Smoking 16.4% Devon 24.5% Plymouth 17.5% Torbay 19.5% England	 Highest: 25-34 (23.8%)	- Routine/manual - Deprived areas - Living with smokers - Prisoners - Male rates higher	Smoking rates 2.3 times higher in routine & manual groups vs professionals. Gap persisting over time.	 Period: 1993 to 2012	 Period: 1982 to 2012
Excess Alcohol use 17.1% Devon 19.9% Plymouth 19.5% Torbay 20.1% England	 Highest: 55-64 (16 units)	- Professional - City/town centres - Mental health - Victims of DV - Male rates higher	Whilst excess drinking is more common in less deprived areas, outcomes are worse in more deprived areas.	 Period: 1998 to 2012	 Period: 1999 to 2012
Physical inactivity 39.1% Devon 50.5% Plymouth 48.6% Torbay 44.4% England	 Highest: 75+ (78.6%)	- Routine/manual and intermediate groups - Deprived areas - Long-term illness - Female rate higher	Levels of physical activity 15-20% lower in more deprived areas. Gap persisting over time.	 Period: 1997 to 2012	 Period: 2008 to 2012
Obesity 21.6% Devon 24.7% Plymouth 24.0% Torbay 23.0% England	 Highest: 55-64 (32.3%)	- Deprived areas - Male rates higher overall, females for morbid obesity	Obesity rates up to twice as high in most deprived areas vs least deprived. Gap persisting over time.	 Period: 1993 to 2012	 Period: 1995 to 2012

Smoking

9.4 Whilst overall smoking rates in Devon are below the England and South West average at 16.4% in 2013, there are much higher rates in geographical areas (19.9 % in North Devon, 18.2 in Mid Devon) and specific groups such as routine and manual workers. Areas of higher deprivation have higher rates as the darker green areas on the map below illustrate. These are often the same areas which experience higher prevalence of long term conditions and are at greater risk of admission to hospital. Smoking cessation is recognised as being one of the most cost-effective Public Health interventions reducing premature and preventable deaths.

Figure 28:

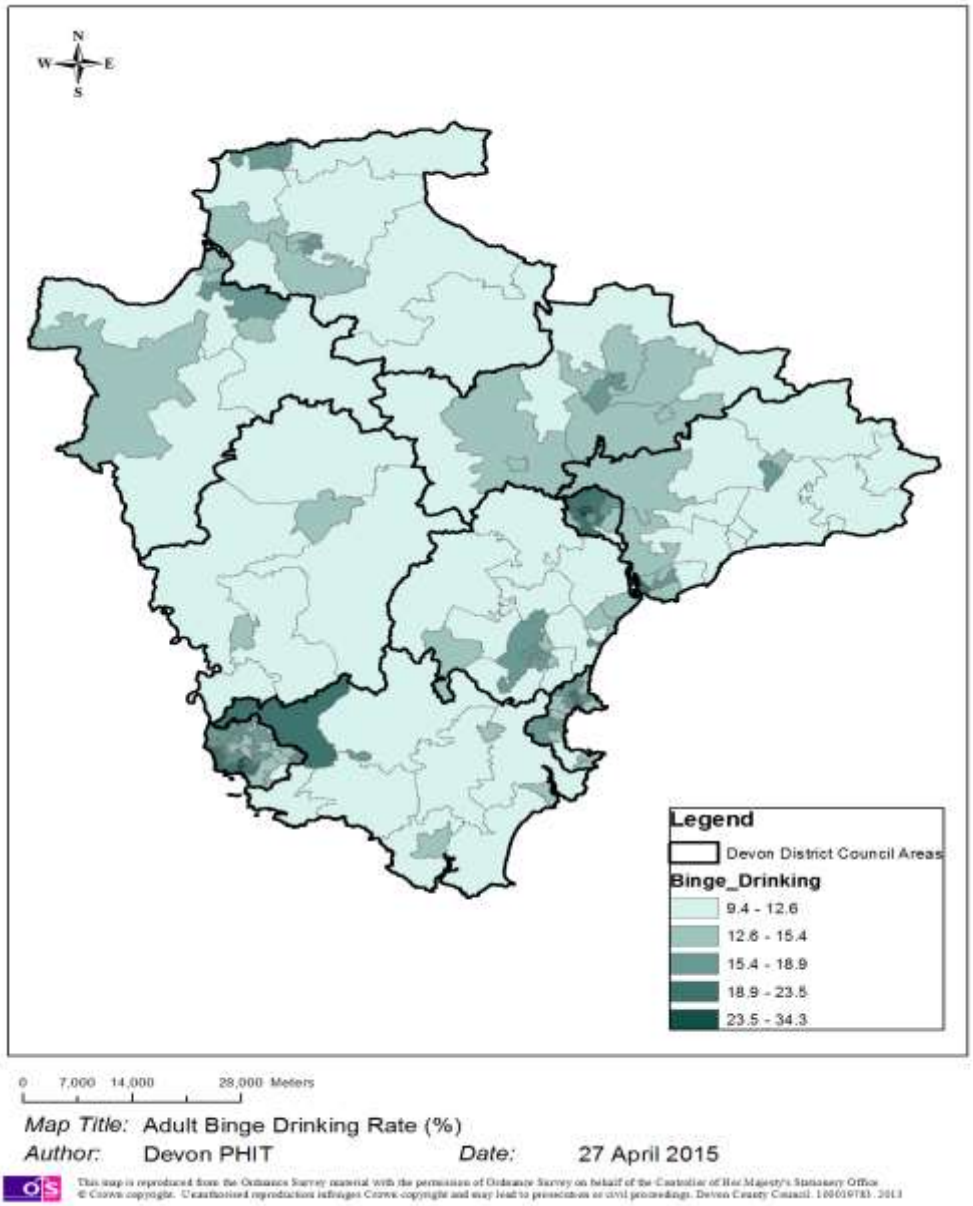


Excess Alcohol Consumption

9.5 The risk and type of alcohol-related harm varies according to the quantity of alcohol consumed and the pattern of drinking, with the risk of harm increasing with the more alcohol that is consumed. Approximately, 21% of adults in Devon engage in increasing risk drinking (regularly exceeding recommended levels) and 7% in higher risk drinking (regularly drinking more than either eight units of alcohol per day or 50 units per week for men or more than either six units per day or 35 units per week for women). Harmful alcohol consumption can cause acute and chronic mental and physical health problems, ranging from poisoning to cancer, as well as social consequences, such as trouble at work, money problems or family and relationship breakdown.

9.6 NICE Public Health guidelines indicate diagnosis; assessment and management of harmful drinking and alcohol dependence provide a strong evidence base and cost effectiveness for brief interventions (DCC 2015b).

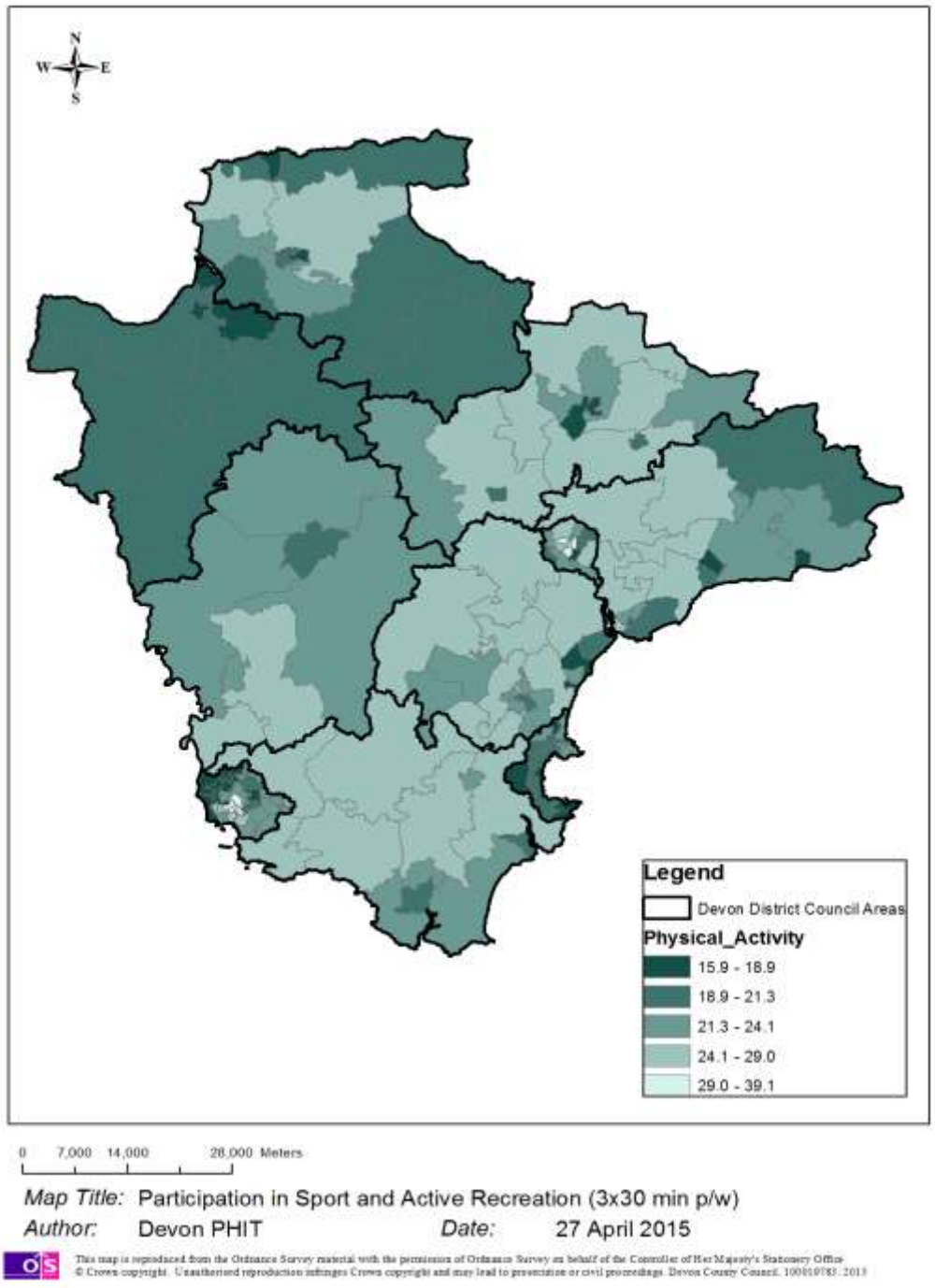
Figure 29:



Physical Inactivity

9.7 Physical inactivity and sedentary behaviour is a public health priority. Nationally more than 40% of women and 35% of men sit still for more than six hours a day and in Devon nearly 40% of adults were not active for 150 minutes a week as recommended by the Chief Medical Officer's Guidelines to receive physical and mental health benefits. Areas of lowest physical activity participation correlate with the areas of higher deprivation as the darker areas on the map below illustrate.

Figure 30:



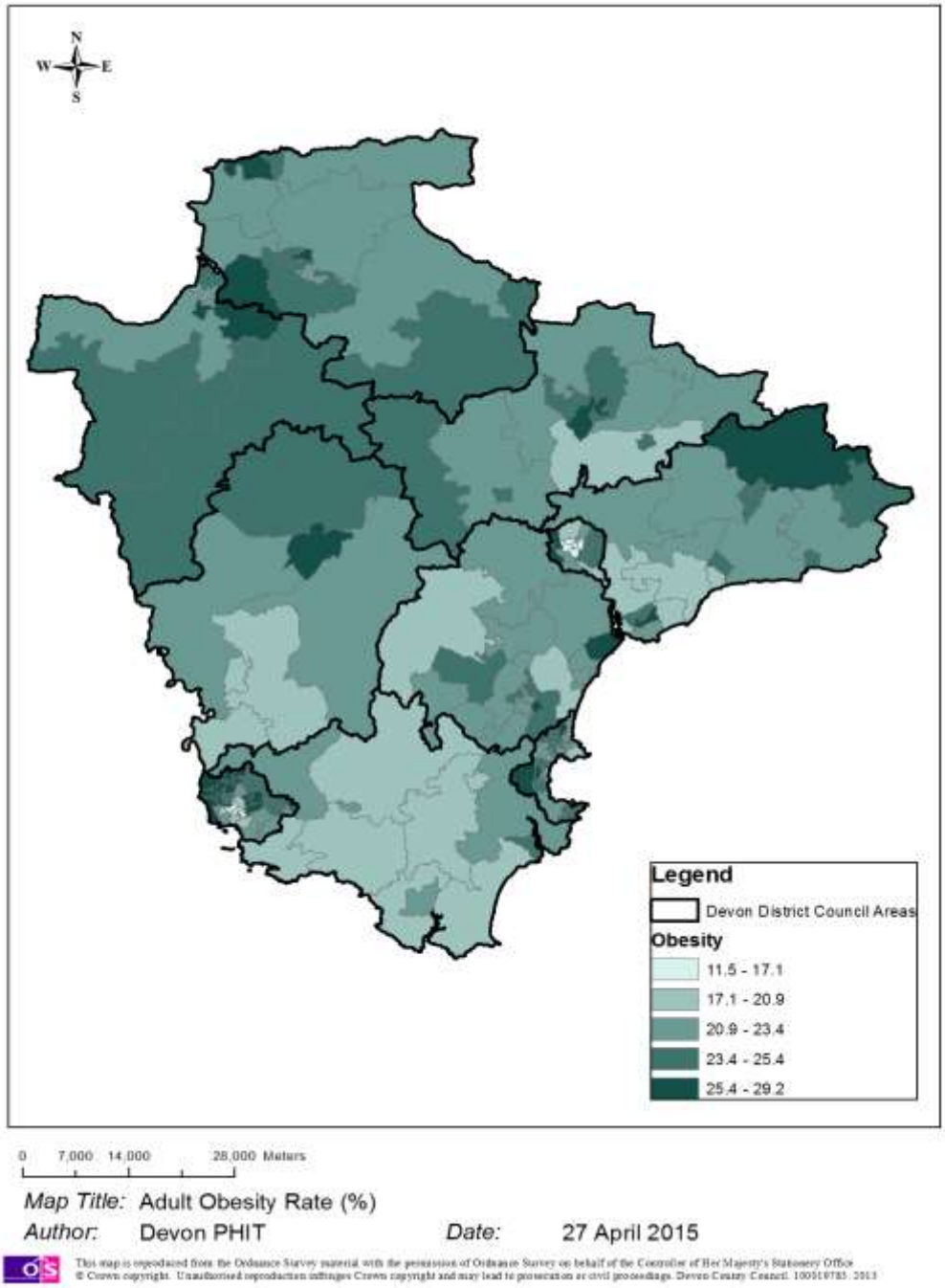
Obesity

9.8 Obesity is associated with a range of health problems including type 2 diabetes, cardiovascular disease and cancer. Heart disease, strokes, kidney disease, blindness, dementia poor mobility can come as a consequence of these. The resulting annual NHS costs attributable to overweight and obesity in Devon are currently estimated at £211 million (Department of Health, 2008) and nationally projected to reach £9.7 billion by 2050 (Foresight 2007). These factors combine to make the prevention of obesity a major public health challenge. The prevalence of overweight and obesity among adults has increased sharply during the 1990s and early 2000s. In Devon approximately 6 out of 10 adults (60.6%) are thought to be either overweight or obese.

9.9 Obesity is strongly related to socio-economic status in children and this result remains across a range of different socioeconomic status indicators. For adults, the trends are less clear cut. Overall, for women, obesity prevalence increases with increasing levels of deprivation, regardless of the measure used. For men, only occupation-based and qualification-based measures show differences in obesity rates by levels of deprivation.

9.10 NICE guidance on obesity prevention (NICE, 2015) emphasises encouragement to increase physical activity, avoid excess energy and alcohol intake and tailoring communications to encourage maintenance of a healthy weight. For those already struggling with obesity, NICE guidance (NICE, 2006 and 2014) recommends the referral of overweight and obese adults by health and social care professionals to multi-component weight management programmes, addressing dietary intake, physical activity levels and behaviour change.

Figure 31:


N
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Devon District Council Areas
Obesity
11.5 - 17.1
17.1 - 20.9
20.9 - 23.4
23.4 - 25.4
25.4 - 29.2
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Map Title: Adult Obesity Rate (%)
Author: Devon PHIT
Date: 27 April 2015
This map is reproduced from the Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office
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10. Inequalities

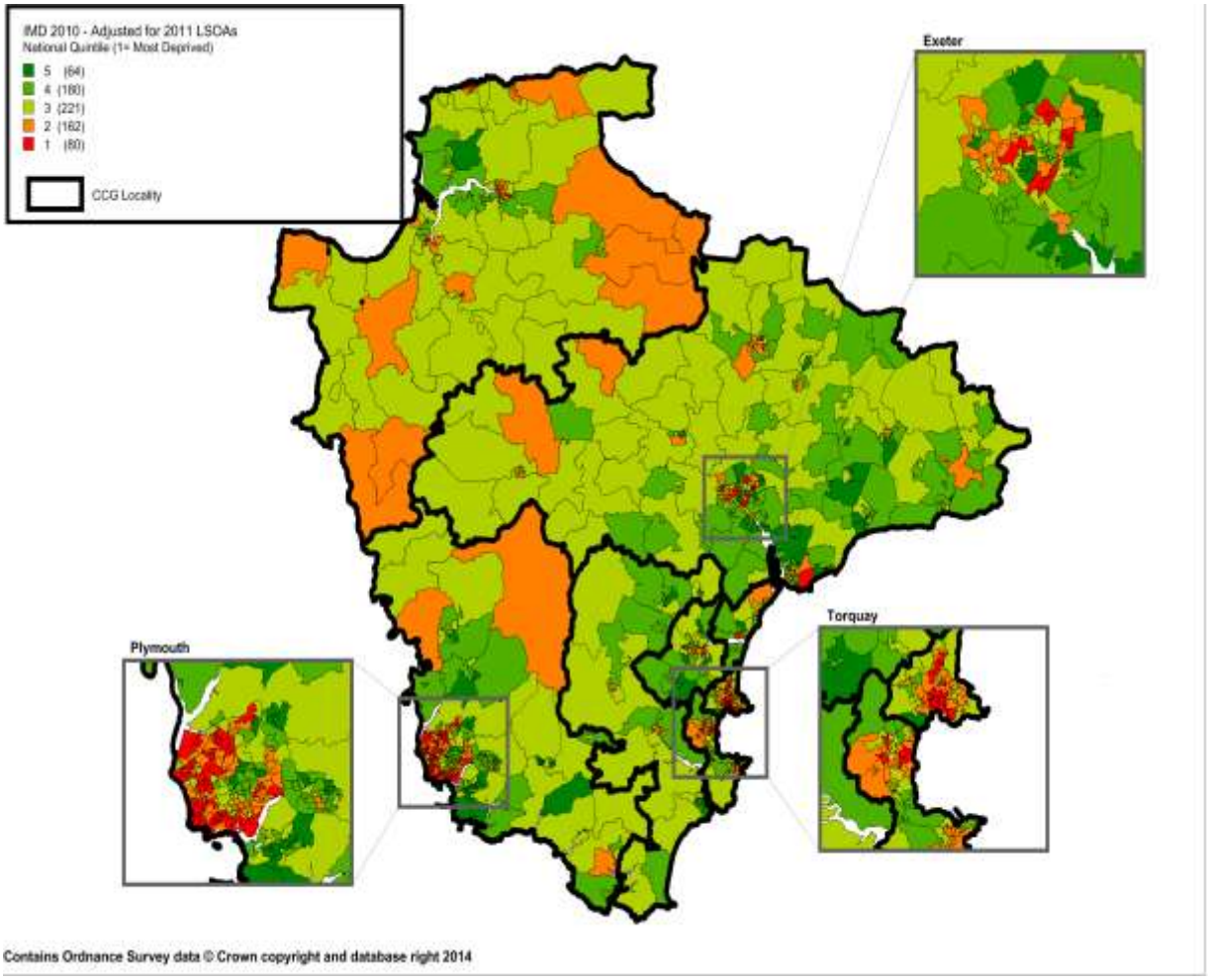
Areas of Highest Deprivation in Devon, Torbay and Plymouth

Indices of Multiple Deprivation

10.1 The Index of Multiple Deprivation (IMD) is a national data set that enables important statistics to be analysed and compared. The IMD takes into account seven forms of deprivation based on income, employment, health and disability, education, skills and training, barriers to housing and services and living environment and crime to produce a composite indicator reflecting these factors. To compare these adequately across the country, England and Wales are divided into small geographical areas of similar population size known as 'Super Output Areas'.

10.2 The following map illustrates the geographical areas of New Devon and South Devon and Torbay Clinical Commissioning Group in relation to this composite measure of Deprivation.

Figure 32: Map of Devon, Plymouth and Torbay Lower Super Output Areas classified by National Quintiles of Indices of Multiple Deprivation (2010)



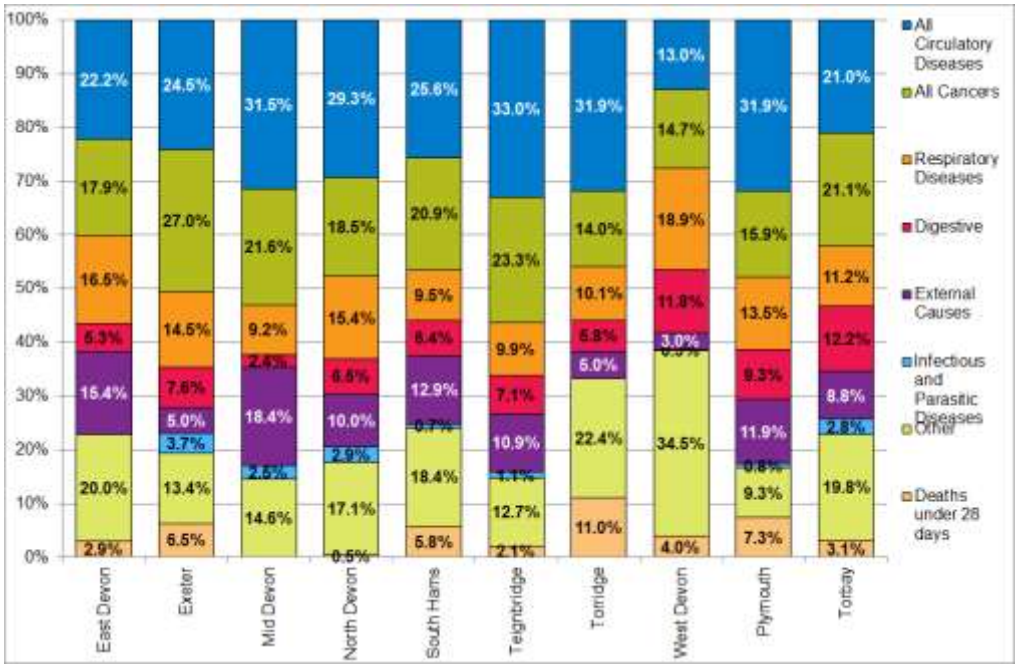
Impact on Life Expectancy/Disability Free Years

10.3 The Scottish Government (2010) stated the most deprived people spend twice as many years in poor health before they die than do the most affluent (10.3 years v's 5.5 years for men; 14.4 years v's 6.0 years for women).

10.4 The Scottish Government (2014) reported expected years in 'not good' health area greater in more deprived areas (males 21.3 years compared to 12.1 in least deprived; females 24.9 years in 'not good' health compared to 11.6 years in least deprived) 9.2 years males; 13.3 years.

Life Expectancy Gap

Figure 33: Scarf chart for Local Authority areas covering the NEW Devon and South Devon and Torbay Clinical Commissioning group population



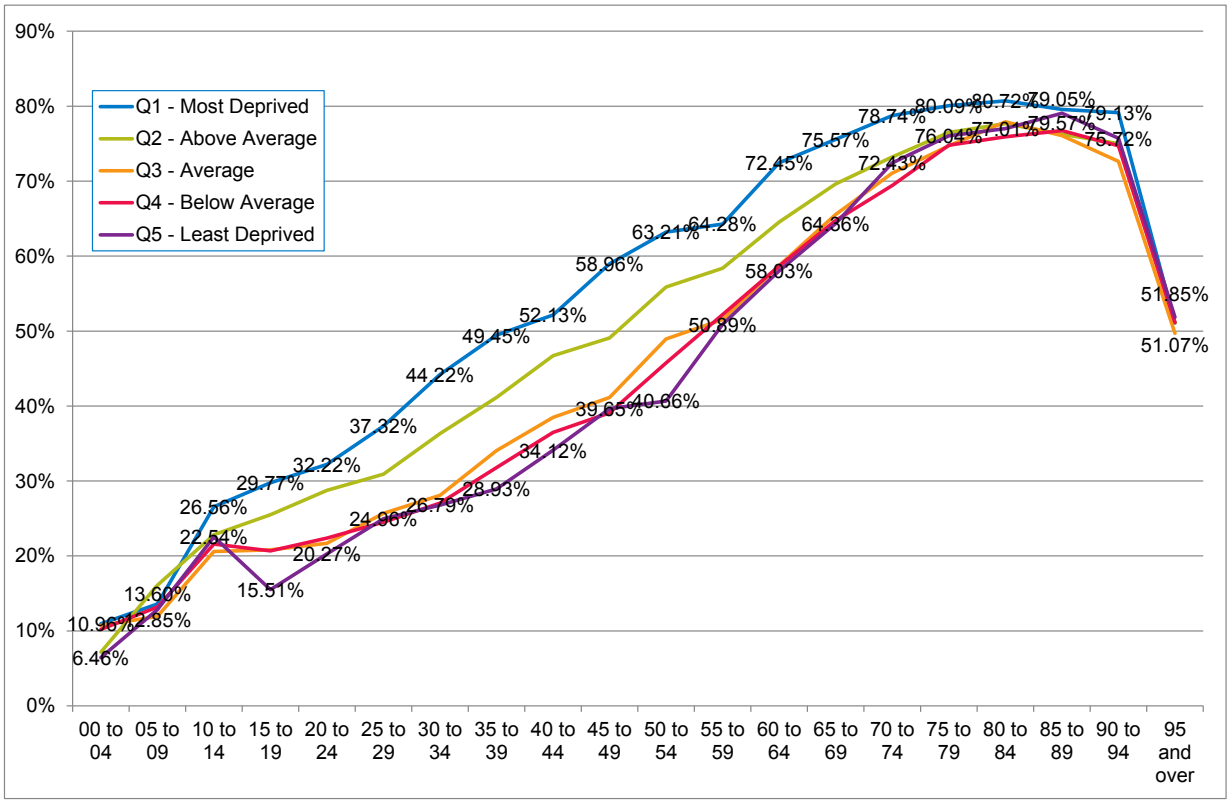
Impact of Deprivation on Co-morbidities

10.5 Individuals living in the most deprived areas are typically around 10 years 'older' in terms of the state of their health and this is even wider for certain age groups (for example, 52.13% had five or more comorbidities in the 40-44 age group in the most deprived areas, which is actually higher than the 50.39% for the 55-59 age group in the least deprived areas). See Figure 35 below.

10.6 The divergence begins in the 15-19 age brackets when independence is gained and life style behaviours are being established. When you look at 85+ age groups, the percentage with five or more comorbidities actually drops more steeply in the more deprived areas and the deprivation difference converge. There are two possible reasons; firstly in a very elderly group some comorbidities may be ignored or overlooked as health professionals look at the 'clear and present danger', secondly those surviving to a very old

age may actually be likely to have less long term conditions, it is probably a mix of the two.

Figure 34: % Emergency admissions with 5 or more comorbidities by age and deprivation Devon, Plymouth and Torbay, 2011-12 to 2013-14

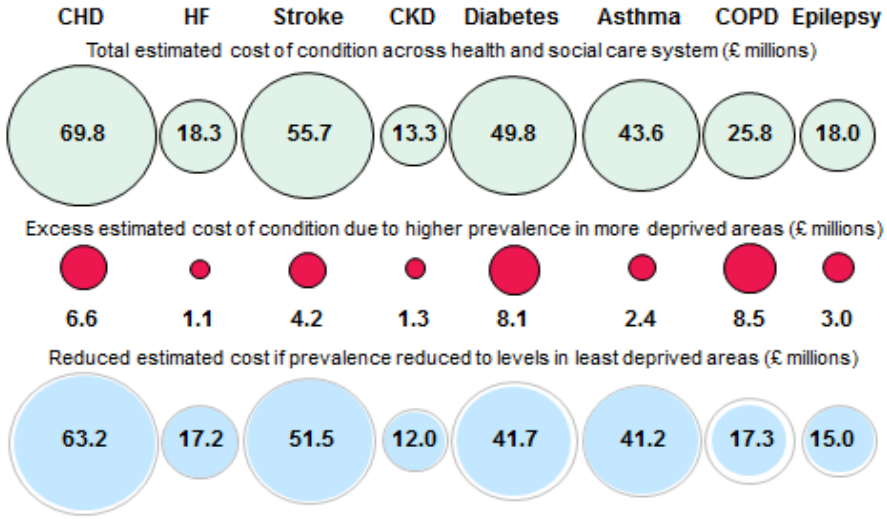


Deprivation and Cost of Long Term Conditions

10.7 The diagrams below illustrate the estimated cost of each selected long term condition (green circles) across the health and social care system in NEW Devon and South Devon & Torbay Clinical Commissioning areas. It also models the estimated monetary value attributable to the higher prevalence of the conditions in the more deprived areas (red circles). This is fairly considerable particularly for conditions such as Stroke (£1.9 million); CHD (£3 million); COPD (£3.8 million) and Diabetes (£3.9 million).

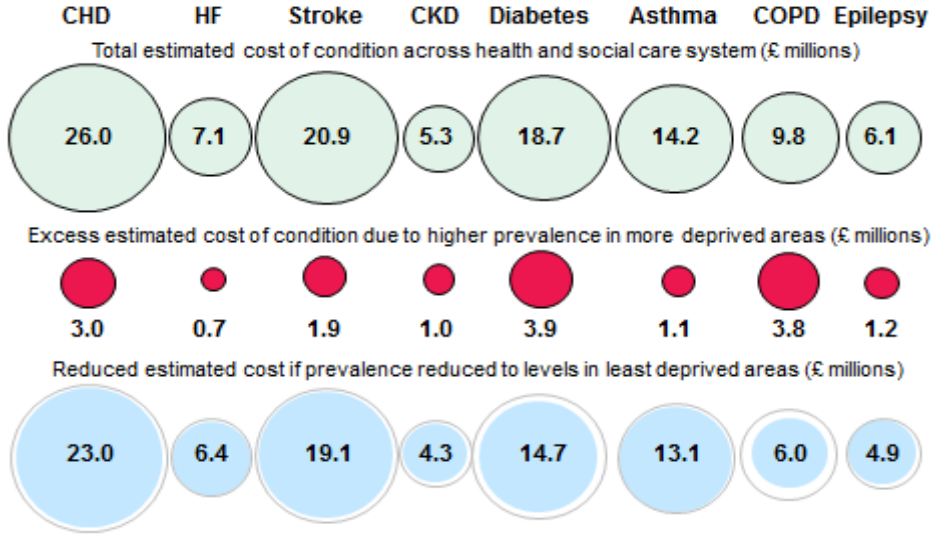
10.8 Of particular interest is the estimated amount of money that could be saved if prevalence in the four more deprived quintiles together could be reduced to levels seen in the least deprived quintile (blue circles). This helps us quantify the cost of health inequalities, and also highlight the conditions with the greatest variation and potential for reduction through a focus on prevention. Whilst these estimated costs do not account for the costs of co-morbidity which may exacerbate costs in some situations, they are still represent some substantial sums; CHD £23 million, Stroke £19.1 million, Diabetes £14.7 million and Asthma £13.1 million. This provides a strong case for delivery of preventive services such as pre diabetes support, smoking cessation, measures to reduce high blood pressure and cholesterol specifically in more deprived areas and tailoring the delivery to engage this often termed 'hard to reach' group.

Figure 35: Long Term Condition Costs and Opportunities NEW Devon Clinical Commissioning Group



Source: South West Academic Health Science Network, Symphony Project Data for Somerset modelled for Devon with further analysis by the Devon Public Health Intelligence Team, 2015

Figure 36: Long Term Condition Costs and Opportunities South Devon and Torbay Clinical Commissioning Group



Source: South West Academic Health Science Network, Symphony Project Data for Somerset modelled for Devon with further analysis by the Devon Public Health Intelligence Team, 2015

10.9 The following tables describe how the costs of services would change if all other quintiles/areas together had the same age-specific prevalence rates in disease areas as the least deprived quintile/areas. The numbers represent the estimated IMD excess cost: how much area deprivation has 'added' to overall cost.

Table 8: Estimated excess health and social care costs due to health inequalities (deprivation) of people treated for selected long-term conditions in NEW Devon CCG, 2013-14

(Somerset Symphony data applied to NEW Devon Clinical Commissioning Group resident population)

Services	Asthma	CHD	CKD	COPD	Diabetes	Epilepsy	HF*	Stroke
GP	£22k	£32k	£7k	£51k	£70k	£12k	£9k	£16k
Prescribing	£19k	£29k	£4k	£47k	£60k	£9k	£7k	£13k
Acute Admitted	£1,060k	£4,404k	£781k	£4,584k	£2,845k	£924k	£251k	£1,779k
Acute Non-Admitted	£343k	£594k	£202k	£783k	£1,020k	£180k	£122k	£318k
Acute ED	£68k	£123k	£13k	£155k	£122k	£63k	£17k	£60k
Mental Health	£160k	£93k	£5k	£246k	£332k	£103k	£14k	£51k
Community Admitted	£105k	£155k	£69k	£313k	£268k	£60k	£77k	£481k
Community Non-Admitted	£26k	£27k	£14k	£44k	£58k	£7k	£5k	£20k
Community ED	£58k	£51k	£4k	£63k	£78k	£30k	£9k	£20k
Community Services	£101k	£216k	£107k	£408k	£688k	£78k	£81k	£319k
Social Services	£305k	£371k	£69k	£1,106k	£1,936k	£792k	£359k	£706k
Continuing Health Care	£158k	£543k	£26k	£666k	£629k	£692k	£156k	£405k
Total	£2,426k	£6,639k	£1,301k	£8,466k	£8,109k	£2,951k	£1,106k	£4,187k

Source: South West Academic Health Science Network, Symphony Project Data for Somerset modelled by age, sex and deprivation for the Devon population, 2014
CHD = Coronary Heart Disease, CKD = Chronic Kidney Disease
COPD = Chronic Obstructive Pulmonary Disease

Table 9, Estimated excess health and social care costs* due to health inequalities (deprivation) of people treated for selected long-term conditions in South Devon and Torbay CCG, 2013-14

(Somerset Symphony data applied to South Devon and Torbay CCG resident population)

Services	Asthma	CHD	CKD	COPD	Diabetes	Epilepsy	HF*	Stroke
GP	£10k	£15k	£5k	£24k	£33k	£5k	£4k	£8k
Prescribing	£9k	£13k	£3k	£22k	£28k	£4k	£3k	£6k
Acute Admitted	£503k	£1,979k	£583k	£2,081k	£1,345k	£407k	£220k	£796k
Acute Non-Admitted	£166k	£267k	£121k	£364k	£474k	£83k	£50k	£145k
Acute ED	£34k	£56k	£12k	£71k	£55k	£26k	£7k	£28k
Mental Health	£73k	£43k	£4k	£118k	£151k	£40k	£9k	£34k
Community Admitted	£35k	£67k	£103k	£136k	£150k	£31k	£59k	£205k
Community Non-Admitted	£12k	£13k	£8k	£21k	£27k	£3k	£2k	£9k
Community ED	£29k	£22k	£3k	£29k	£34k	£13k	£4k	£9k
Community Services	£44k	£94k	£72k	£182k	£340k	£33k	£44k	£145k
Social Services	£127k	£182k	£70k	£479k	£948k	£306k	£191k	£287k
Continuing Health Care	£75k	£248k	£14k	£293k	£333k	£218k	£68k	£182k
Total	£1,118k	£2,998k	£998k	£3,819k	£3,918k	£1,169k	£662k	£1,853k

Source: South West Academic Health Science Network, Symphony Project Data for Somerset modelled by age, sex and deprivation for the Devon population, 2014
CHD = Coronary Heart Disease, CKD = Chronic Kidney Disease
COPD = Chronic Obstructive Pulmonary Disease

11. Evidence of Effectiveness

11.1 A review of evidence based approaches to treating and reducing long term conditions was beyond the scope of this Health Needs Assessment. The following section points to summaries of evidence published around these areas.

Avoiding Hospital Admissions

11.2 The Kings Fund 2010 publication 'Avoiding hospital admissions'[16] reviewed the evidence to try and understand which interventions work in avoiding emergency or unplanned admissions. Among the conclusions were:

- that integrating health and social care may be effective in reducing admissions
- hospital at home produces similar outcomes to inpatient care at a similar cost
- patient self-management seems to be beneficial
- integrating primary and secondary care can be effective in reducing admissions
- in primary care, higher continuity of care with a GP is associated with lower risks of admission

To prevent re-admissions

- developing a personalised health care programme for people seen in medical outpatients and frequently admitted can reduce re-admissions
- structured discharge planning is effective in reducing future re-admissions.

11.3 Roland and Abel (2012) suggested that whilst a popular target to drive improvement and quality of care initiatives to reduce hospital admissions are often focused on people at high risk. However evidence of effectiveness is lacking and common misconceptions may lead to unrealistic expectations of what can be achieved. The suggestion is made to look beyond the 1-2% at highest risk of admission if we want to impact on admissions. Intensive work of case management in this group is not a cost efficient way of reducing admissions. These may just be those who do need to be admitted. We need to look for the supported self-care of the 5-20% of the population with the disease to really impact on avoidable admissions.

Evidence Reviews

11.4 Public Health Devon has published a number of related documents that discuss the evidence base behind behaviour change and opportunities for wider prevention in clinical and community settings prior to diagnosis and at first diagnosis (DDC 2015a & 2015b).

[16] http://www.kingsfund.org.uk/sites/files/kf/Avoiding-Hospital-Admissions-Sarah-Purdy-December2010_0.pdf [accessed 12/05/2015]

11.5 ‘A Rapid Review of the Evidence for Prevention in Mid and Later Life’ (DCC 2015b) reviews the evidence base for interventions for individuals with no identified long term condition as well as the secondary and tertiary prevention for those with one or more long term conditions. It provides a summary of the strength of evidence and cost as well as the likelihood of benefit associated with each of the interventions described. Social interventions are considered alongside clinical interventions to promote independence and wellbeing across a number of different spheres of support (individual, family, friends and community) which determine the health and wellbeing of people living in Devon.

11.6 The interventions reviewed in the evidence paper include the seven originally looked at in the Devon prevention strategy (Lang 2010): community mentoring, social care reablement, falls prevention, intermediate care, telecare, volunteering, extracare housing. In addition it looks at eight other social interventions: social prescribing, self-care, social media and social networks, community engagement, family group conferencing, parenting programmes, Social isolation and housing. The evidence for wider prevention in clinical and community settings prior to diagnosis and at first diagnosis includes: individual with no identified health condition, lifestyle factors, diabetes and pre-diabetes, hypertension, cholesterol management, secondary prevention for cardiovascular disease, COPD, dementia, treatment of anxiety disorders.

11.7 This paper updates the evidence review within original Devon Prevention Strategy (Lang 2010) and will be used to inform the development of a new Devon Prevention Strategy in the near future.

12. Conclusions and Observations

12.1 Five elements stand out from this needs assessment regarding the prevalence and management of long term conditions. They are the impact of deprivation and age on the prevalence and onset of disease; the impact of comorbidity on the management of disease and the importance of disease registers and service design in the successful delivery of appropriate services and management of long term conditions.

Deprivation

12.2 Any commissioning plans or frameworks developed around the treatment of long term conditions will need to reduce rather than exacerbate inequalities in health.

12.3 It is established that those from more deprived backgrounds develop long term conditions about 10 years earlier than those from wealthier backgrounds. They are more likely to be admitted to hospital, have multiple co-morbidities at an earlier age and live with morbidity and disability for a longer period of their life compared to those in the least deprived areas. This significantly increases the cost of treatment for those in the more deprived areas.

12.4 There is a need for more deprived populations to be accessing prevention and early disease detection initiatives in order for those individuals to ‘age

successfully'. Services need to be designed and delivered to engage with this group as a priority.

12.5 Good practice from surgeries serving the most deprived areas needs to be shared. The Wonford Green Surgery Needs Assessment (NHS Devon 2010) demonstrated examples of good practice in deprived areas where the QOF registered population was almost as high as QOF expected prevalence on disease registers. It demonstrated that such results are attainable in deprived areas. Lessons can be learned from the implementation of services in these areas which clearly are being used by the target population and providing positive results.

Age

12.6 The analysis or long term conditions in this needs assessment taking into account comorbidities, admissions to hospital and deprivation indicate the importance of three different age points with significance for the diagnosis and treatment of long term conditions. This is different to the primary focus to date on the prevention of worsening conditions in the elderly population and admissions to hospital for this age group. The three age points are:

- 15-20 when lifestyle behaviours are set up which will contribute to the development of and increased likelihood of developing LTCs
- 45-55 mid-life when diagnosis of first LTC is most likely to happen, and other comorbidities may also be developing already
- 75+ frailty/dementia/social isolation are compounding factors co-morbidities rise with age significantly in this age group

12.7 A successful approach would include action directed at all three age points to successfully reduce treatment costs and reduce prevalence.

12.8 The requirements of the different age groups will be different and the role of deprivation will mean those in more deprived areas will be looking at developing multiple comorbidities at an earlier age – the separation happens as early as 15. In the most deprived areas 52% had 5+ comorbidities in the 40-44 age group higher than in the 55-59 age group in the least deprived areas (50%).

12.9 This brings considerable cost savings if prevalence in the more deprived areas can be lowered to levels similar to those in the least deprived areas. This could be done through preventing risky lifestyle behaviours being established early in life and supporting the successful aging of populations with long term conditions.

Co-morbidity

12.10 As discussed above the number of comorbidities of long term conditions increases with age but also with deprivation. Those in more deprived areas develop comorbidities earlier and so live with multiple long term conditions for a greater proportion of their life and therefore with disability.

12.11 Co-morbidities make a difference to the outcome of interventions and increase the likelihood of costly hospital admissions.

12.12 Both the number of co-morbidities and the combination of co-morbidities make a difference to outcomes and cost (Somerset Symphony Project, 2014[17]).

12.13 Treatment models need to be able to look at the management of the full range of conditions an individual is diagnosed with as a whole rather than individually. Different combinations of co-morbidities will require different treatment and management plans.

Disease Registers

12.14 Whilst the Quality and Outcome Framework is not a perfect method the importance of disease registers cannot be under stated. Individuals need to be known to primary care as diagnosed with a particular long term condition or combination of conditions in order for regular simple monitoring and disease management plans to be established.

12.15 The ratio of QOF recorded to expected prevalence should be as near as 1 as possible to allow successful treatment of long term conditions. Exception rates should be as low as possible. There are some good examples of this at practice level within the two CCG areas, even in those serving some of the most deprived areas.

12.16 Avoidable premature mortality audit work as outlined in the example from Brighton and Hove is one way of looking at where the gaps are in registering patients on disease registers, primary and secondary prevention work and interventions in management of patients with long term conditions.

Service Design

12.17 Evidence from the patient perspective section and from literature all indicates that services need to be person centred not disease specific.

12.18 Some elements of management and care are generic for a number of long term conditions others will be specific to the individual disease but need to be managed in the whole for the individual.

12.19 Integration of physical and mental health elements of disease management came across strongly in the patient perspective section. The high prevalence of mental health in particular depression and anxiety as comorbidities indicates the importance of recognising the need for care plans to deliver an element to address this aspect as well as the physical health aspect.

12.20 Services need to be attractive and useable for those in more deprived areas e.g. easy to access (time, place and information available). Generic universal services have not always engaged this 'hard to reach group' in the same proportion as those from more affluent areas who are more health literate.

12.21 There are examples of good practice from primary care within the CCG areas such Wonford Green Surgery (NHS Devon 2010) that should be explored and shared.

[17] http://www.york.ac.uk/media/che/documents/papers/researchpapers/CHERP96_multimorbidity_utilisation_costs_health_social%20care.pdf [accessed 12 May 2015]

Devon Prevention Work

12.22 The prevention work in Devon has proposed a mid and later life approach to promoting healthy ageing and independence which has particular relevance for the management of long term conditions:

- focus on the five main lifestyle behaviours contributing to ill health such as obesity, inactivity, smoking, alcohol consumption and mental health through a starting well, living well and ageing well approach

- increase focus of action where the evidence base is strong; smoking cessation, preventing alcohol misuse and inactivity, improved diet and mental health and emotional wellbeing

- intervene early and take action on first diagnosis and ensure every contact and visit counts

- reverse the effects of the inverse care law

These fit with and reflect the areas discussed in detail above.

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PUBLIC HEALTH DEVON
June 2015

13. References

Acheson (1998) *Independent inquiry into Inequalities in Health Report.* London: The Stationery office [online] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/265503/ih.pdf [accessed 12 May 2015]

Biessels GJ, Staekenborg S, Brunner E, Brayne C, Scheltens P (2006). Risk of dementia in diabetes mellitus: a systematic review. *The Lancet Neurology*, vol 5, no 1, pp 64–74.

Cavanagh and Chadwick (2005). *Health needs assessment. A practical guide.* National Institute for Health and Clinical Excellence

Chapman DP, Perry GS, Strine TW (2005). The vital link between chronic disease and depressive disorders. *Preventing Chronic Disease*, vol 3, no 2, pp 1–3.

Clegg et al (2013). Frailty in elderly people. *Lancet*; 381:pp752-62.

DCC (2014) *Commissioning for Prevention in Adults in Devon: An information paper* [on line] http://www.devonhealthandwellbeing.org.uk/wp-content/uploads/2015/05/Commissioning-for-Prevention-FINAL.pdf

DCC (2015a) *Commissioning for Prevention – a mid-life approach to promoting healthy ageing and independence* [on line] http://www.devonhealthandwellbeing.org.uk/wp-content/uploads/2015/05/Prevention-overview-covering-paper-v2.pdf

DCC (2015b) *A Rapid Review of the Evidence for Prevention in Mid and Later Life* [on line] http://www.devonhealthandwellbeing.org.uk/wp-content/uploads/2015/05/Mid-Life-and-Later-Life-Prevention-evidence-review-FINAL-MAY-2015.pdf

Department of Health (2006) *Our Health, Our Care, Our Say: a new direction for community services*. HM Government: London [on line] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/272238/6737.pdf [accessed 12 May 2015]

Department of Health (2012) *Long Term Conditions Compendium of Information*. London: Department of Health [online] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/272238/6737.pdf [accessed 12 May 2015]

de Lusignan S, Chan T, Parry G, Dent-Brown K, Kendrick T (2011). Referral to a new psychological therapy service is associated with reduced utilisation of healthcare and sickness absence by people with common mental health problems: a before and after comparison. *Journal of Epidemiology and Community Health* [online] doi 10.1136/ jech.2011.139873 (accessed on 24 January 2011)

DiMatteo, M.R., Lepper, H.S. and Croghan, T.W. (2000) Depression is a risk factor for noncomplicance with medical treatment: meta-analysis of the effects of anxiety and depression on patient adherence. *Archives of international medicine*, Vol 160 (14): 2101-7

Foresight (2007) *Tackling Obesities: Future Choices- Project Report. London: HM Government* [online] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/287937/07-1184x-tackling-obesities-future-choices-report.pdf [accessed 12 May 2015]

Helathwatch Devon (2014) *People Living with Long Term Conditions* [on line] http://www.healthwatchdevon.co.uk/wp-content/uploads/2015/02/LTC-Report.pdf

Heyderman RS, Ben-Shlomo Y, Brennan CA et al. (2004) The incidence and mortality for meningococcal disease associated with area deprivation: an ecological study of hospital episode statistics. *Archives of Disease of Childhood* 89: 1064–68.

Lang I (2010). *Devon Prevention and Wellbeing Joint Strategic Commissioning Strategy. Part One: Review of Evidence*. NHS Devon.

LINk Devon (2013) *Access to Neurological Services Patient Survey Report of survey responses collated by LINk Devon* [on line] http://www.healthwatchdevon.co.uk/wp-content/uploads/2015/01/LINk-Neuroreportfinal0601213.pdf

Marmot (2010) *Fair Society, Healthy Lives: The Marmot Review 2010* http://www.instituteofhealthequity.org/projects/fair-society-healthy-lives-the-marmot-review [Accessed 12 May 2015]

Katon W, Lyles CR, Parker MM, Karter AJ, Huang ES, Whitmer RA (2011). Association of depression with increased risk of dementia in patients with type 2 diabetes. The diabetes and aging study. *Archives of General Psychiatry* [online] doi:10.1001/ archgenpsychiatry.2011.154.

Kings Fund (2010) *Avoiding hospital admissions: What does the research evidence say?* [online] http://www.kingsfund.org.uk/sites/files/kf/Avoiding-Hospital-Admissions-Sarah-Purdy-December2010_0.pdf [accessed 12 May 2015]

Kings Fund (2012) *Long-term conditions and mental health: the cost of co-morbidities* [online] http://www.kingsfund.org.uk/sites/files/kf/field/field_publication_file/long-term-conditions-mental-health-cost-comorbidities-naylor-feb12.pdf [accessed 12 May 2015]

NHS Devon (2010) The Wonford Green Surgery Needs Assessment

NICE NG43 (2006) *Obesity: Guidance on the prevention of overweight and obesity in adults and children.* London: NICE. Available from: http://www.nice.org.uk/guidance/cg43 [accessed 12/05/2015]

NICE PH53 (2014) *Managing overweight and obesity in adults – lifestyle weight management services.* London: NICE Available from http://www.nice.org.uk/guidance/ph53 [Accessed 12 May 2015]

NICE NG7 (2015) *Maintaining a healthy weight and preventing excess weight gain among adults and children [*[online]. London: NICE. Available from: https://www.nice.org.uk/guidance/ng7 [Accessed 12 May 2015].

Roland, M. and Abel, G. (2012) Reducing emergency admissions: are we on the right track? *British Medical Journal* 345:e6017

Sederer LI, Silver L, McVeigh KH, Levy J (2006). Integrating care for medical and mental illnesses. *Preventing Chronic Disease*, vol 3, no 2, pp 1–3.

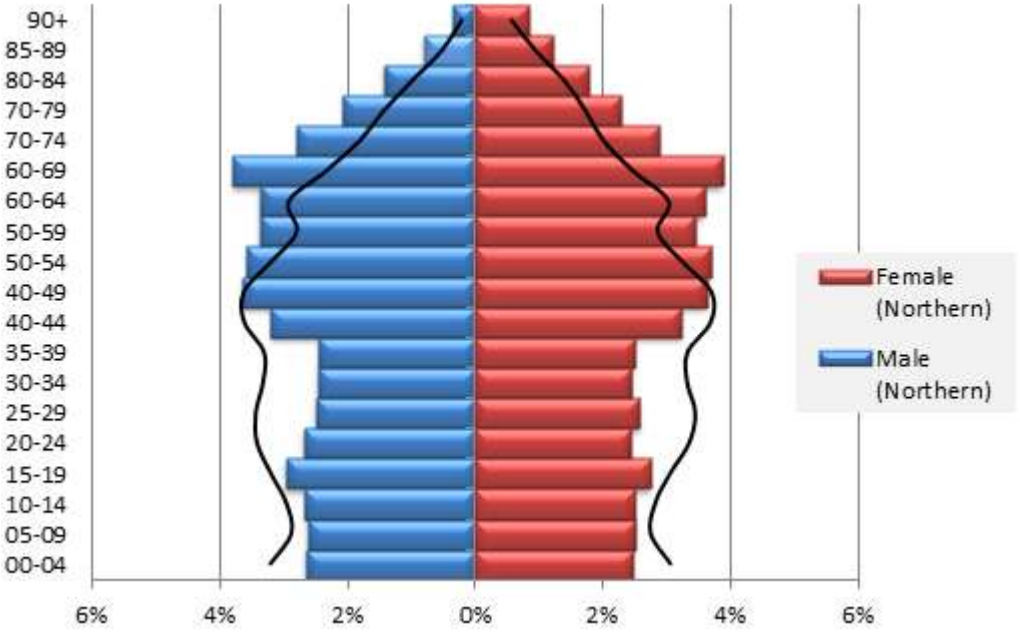
The Scottish Government (2010) *Long term monitoring of health inequalities*. Edinburgh: The Scottish Government

CCG Locality and Sub Locality Data Breakdowns

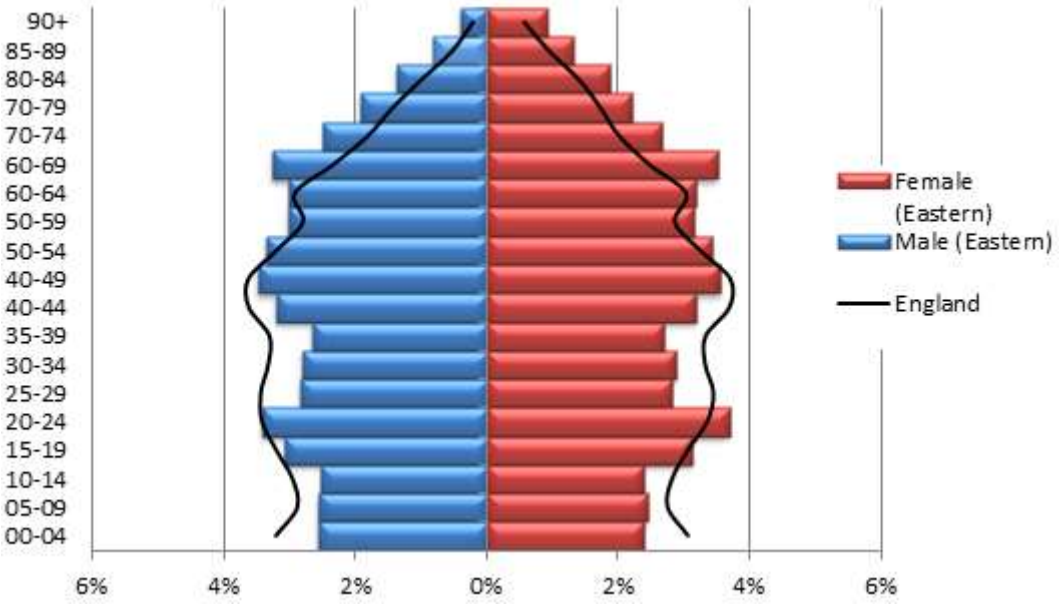
1.1 These are further breakdowns collected as part of the long term conditions health needs assessment by locality and sub locality. In some cases, data in the main text presentation may be available to a lower level but was not analysed within this needs assessment.

Population Pyramids

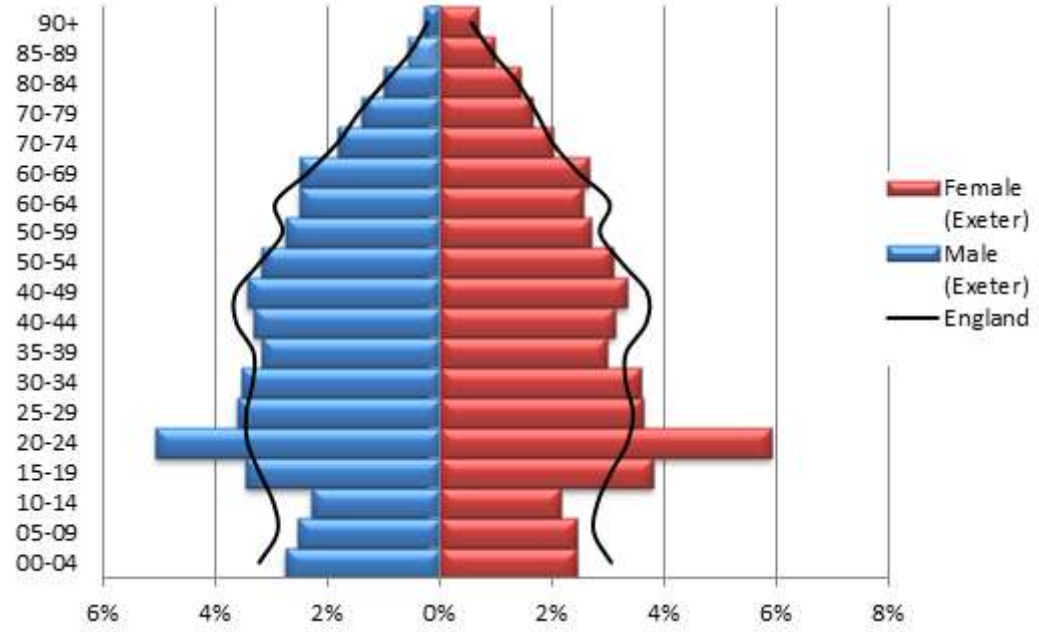
NEW Devon CCG Northern Locality



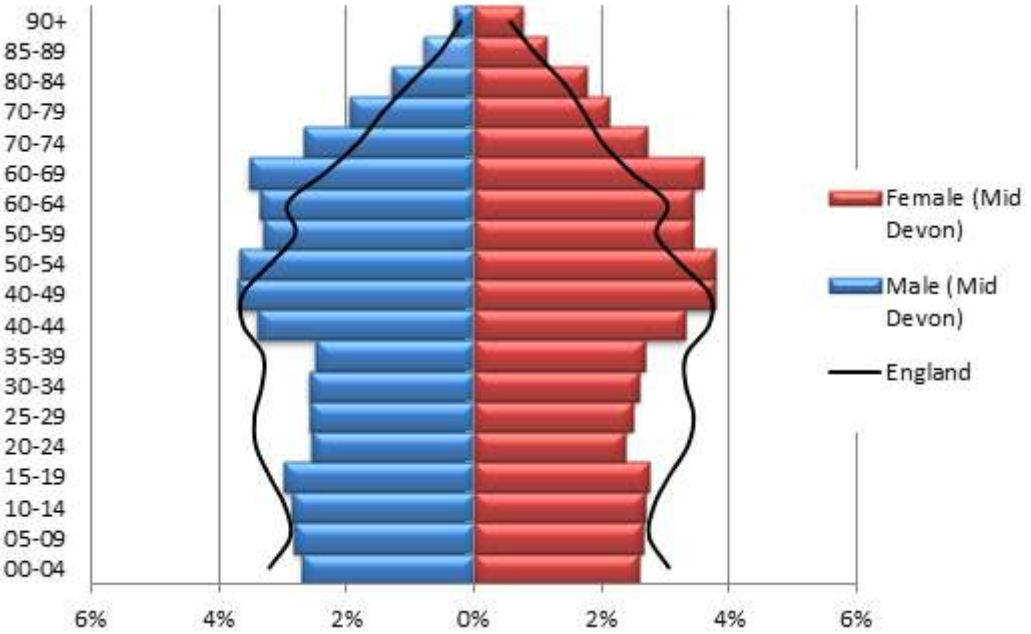
NEW Devon CCG Eastern Locality



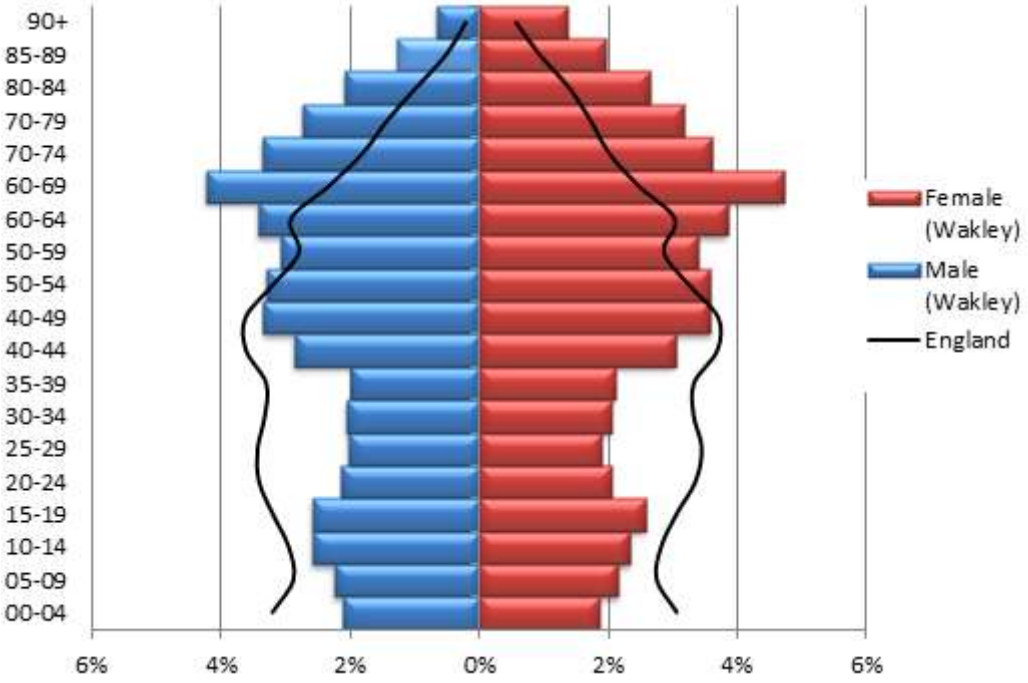
NEW Devon CCG Exeter Sub Locality



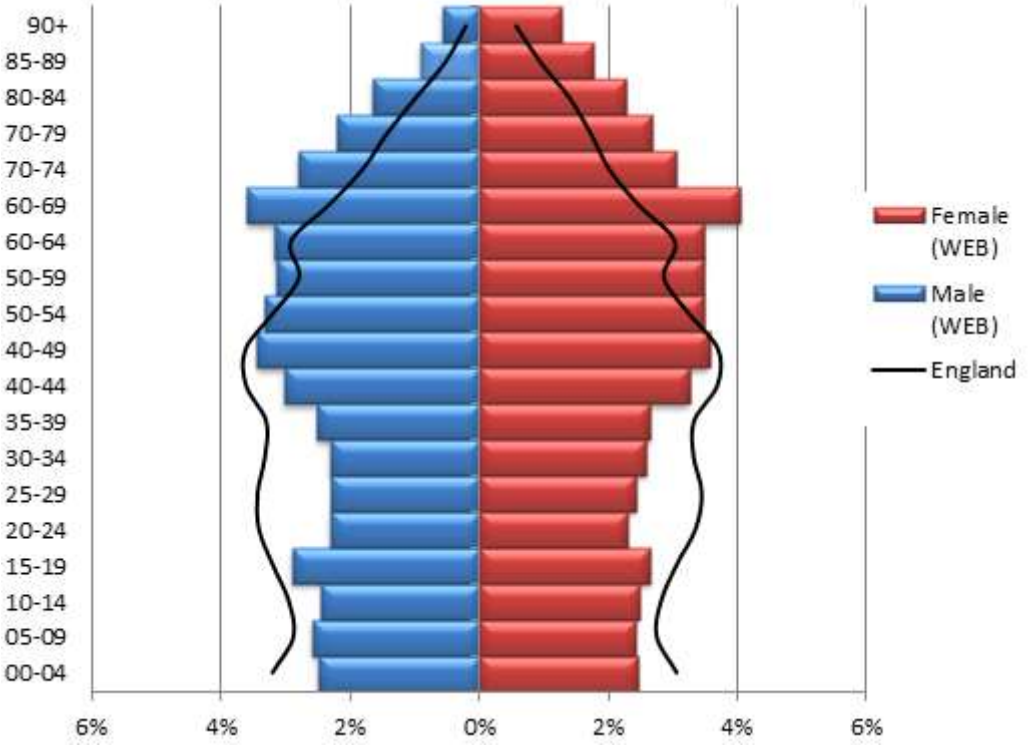
NEW Devon CCG Mid Devon Sub Locality



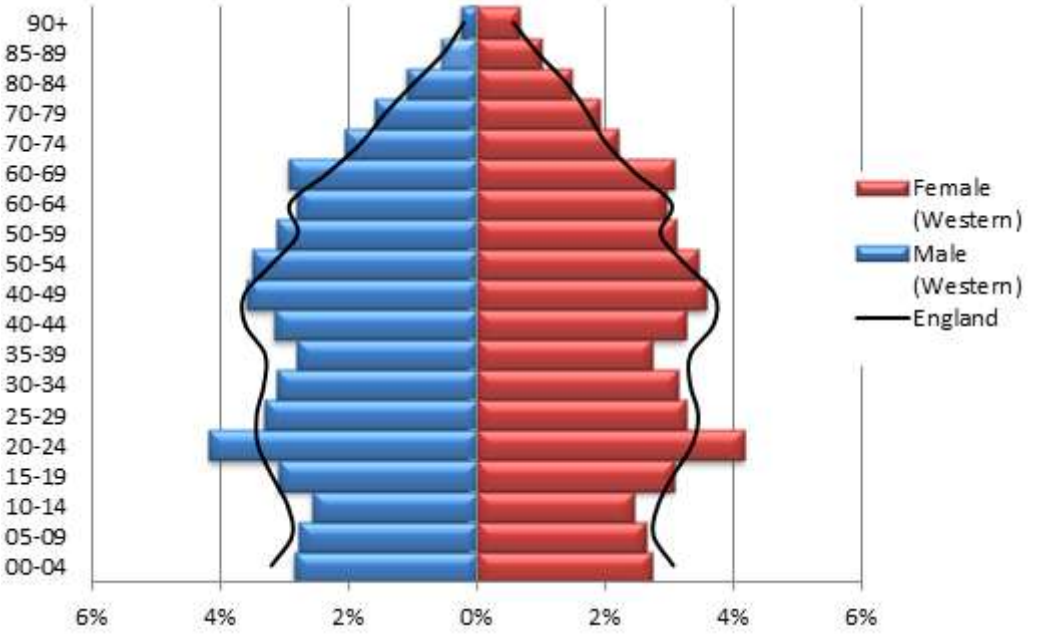
NEW Devon CCG Wakley Sub Locality



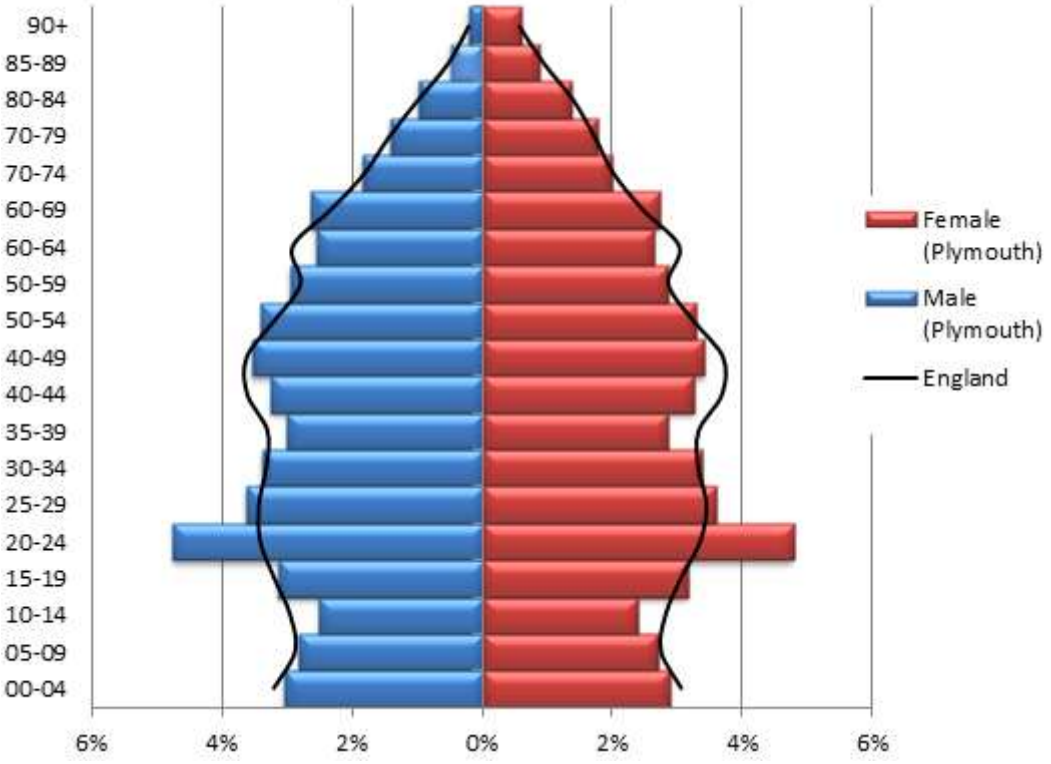
NEW Devon CCG WEB Sub Locality



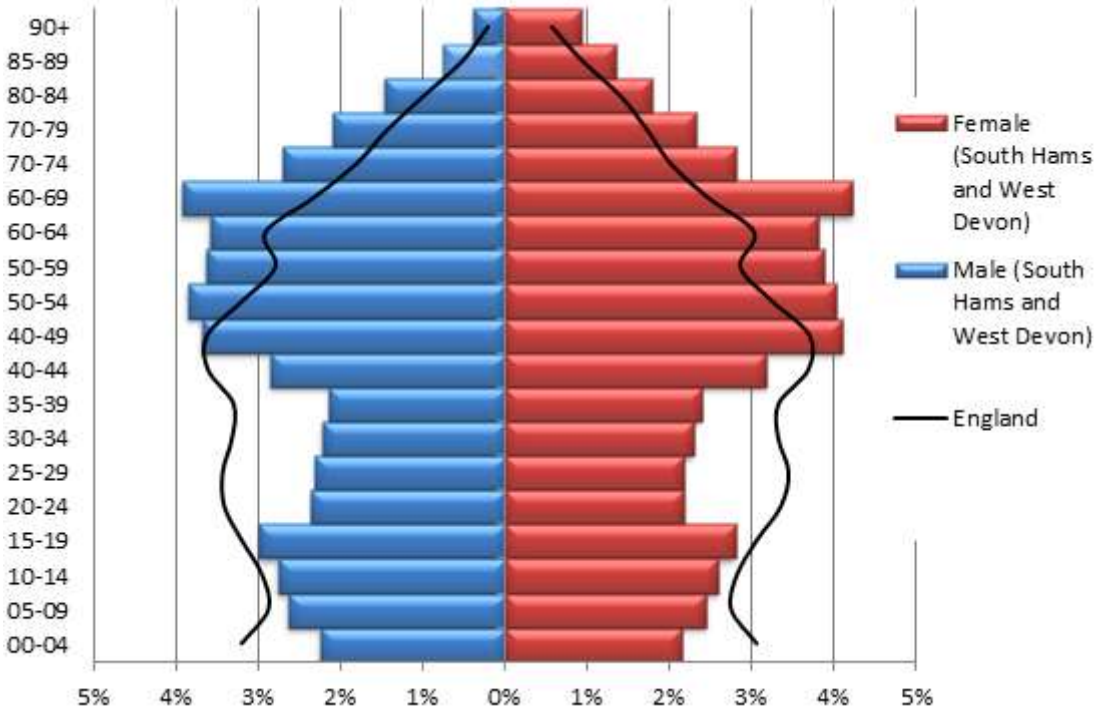
NEW Devon CCG Western Locality



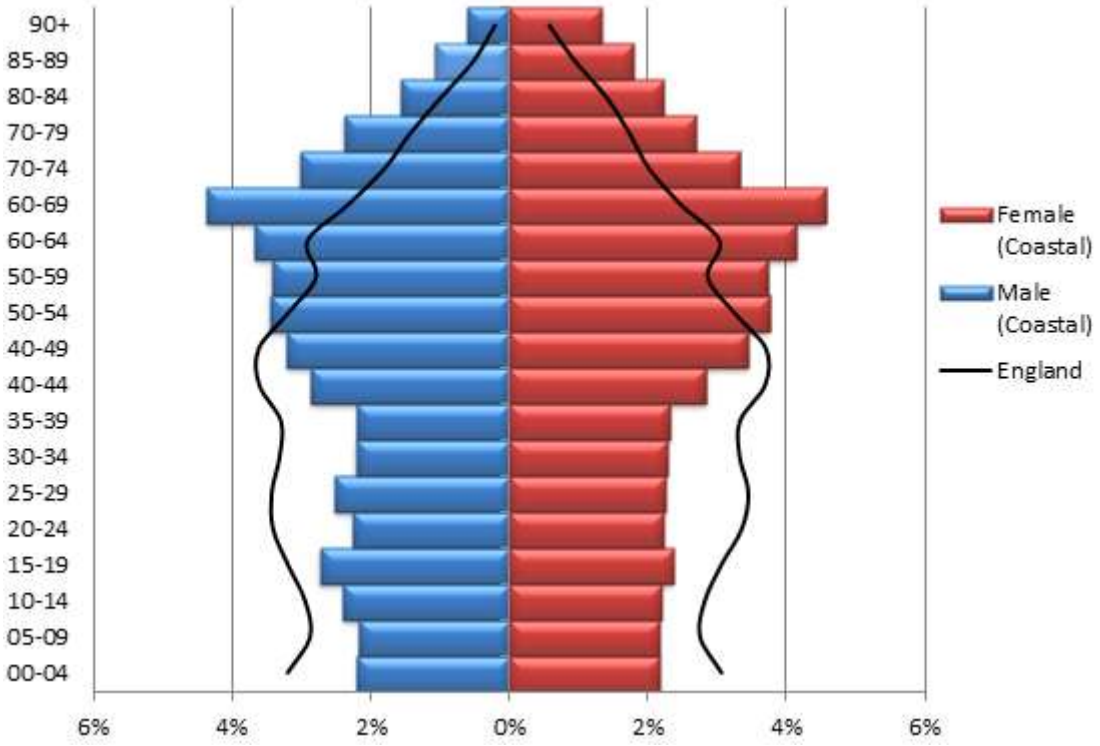
NEW Devon CCG Plymouth Sub Locality



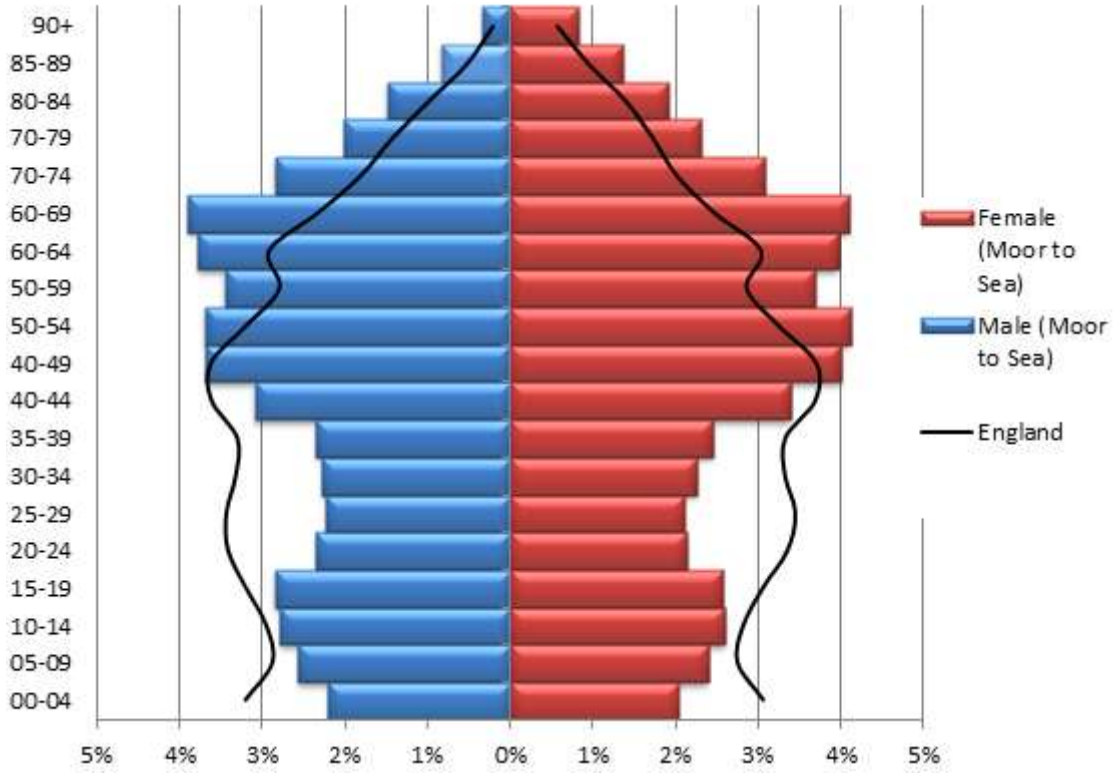
NEW Devon CCG South Hams and West Devon Sub Locality



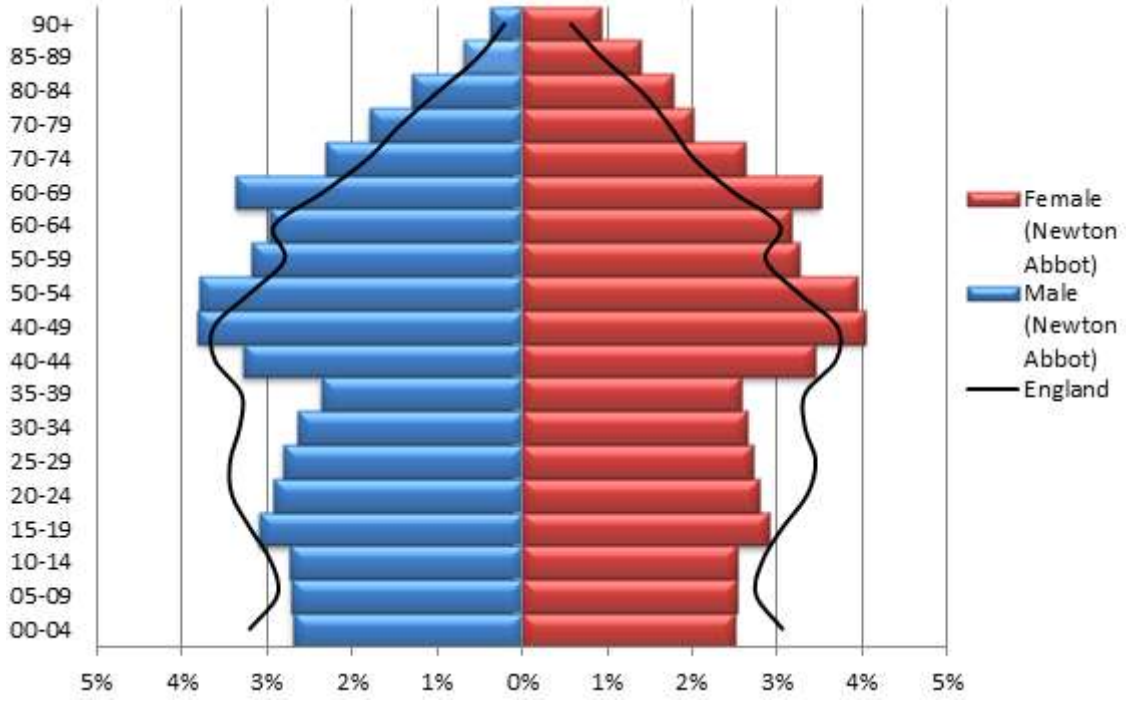
South Devon and Torbay CCG Coastal Locality



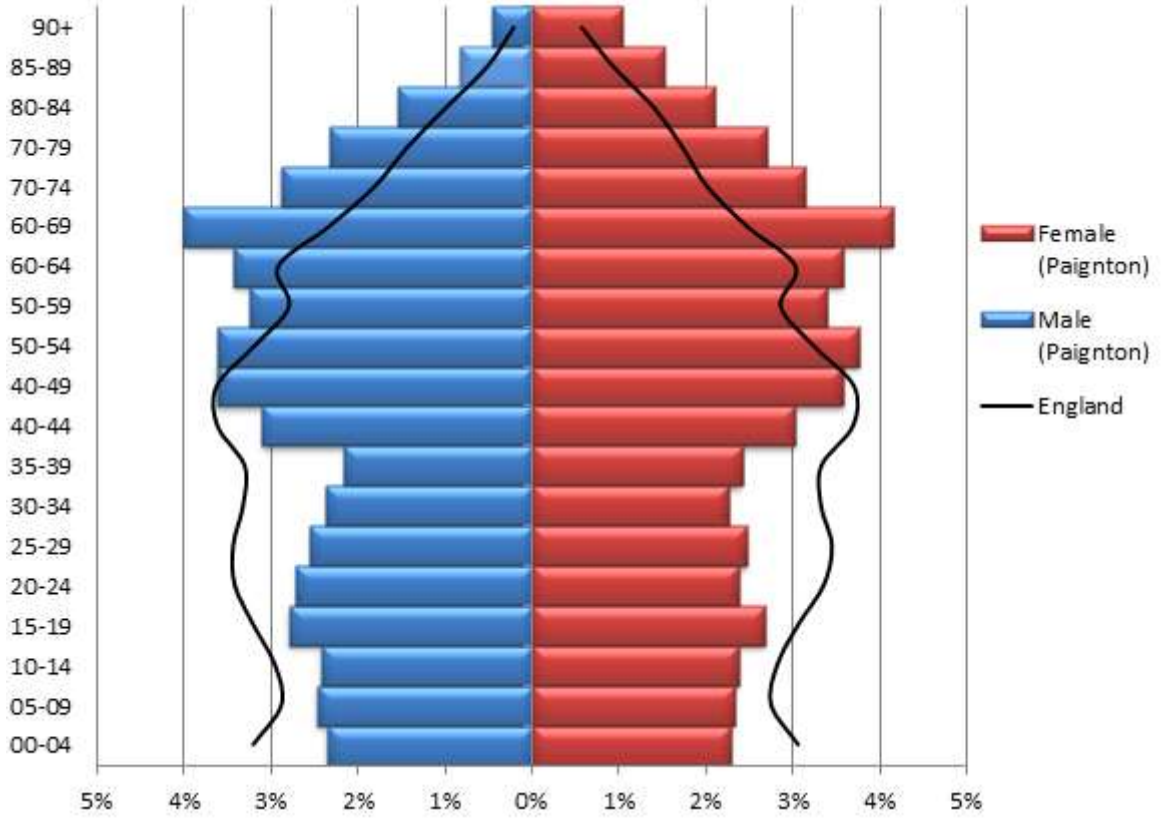
South Devon and Torbay CCG Moor to Sea Locality



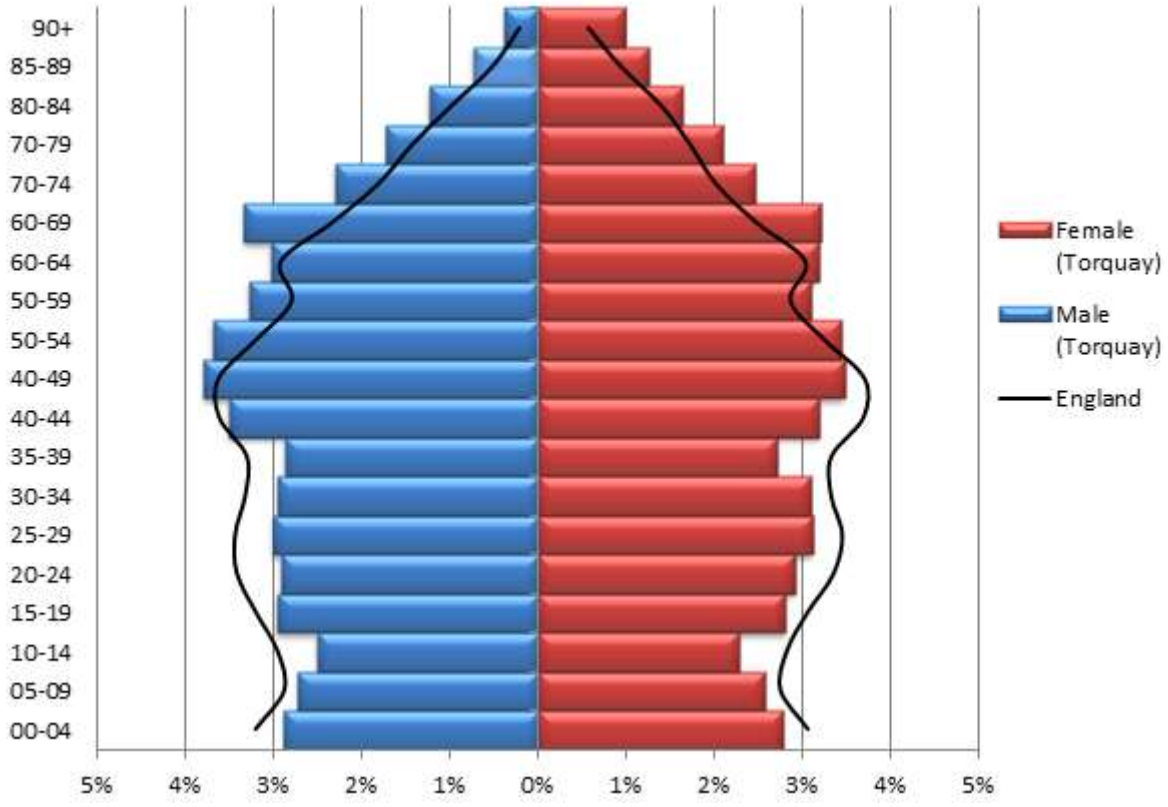
South Devon and Torbay CCG Newton Abbot Locality



South Devon and Torbay CCG Paignton Locality



South Devon and Torbay CCG Torquay Locality



Mortality

Directly age standardised mortality rate by disease area

Asthma

CCG Area	Directly Age Standardised Rate Per 10,000 People 2007-09	2008-10	2009-11	2010-12
NEW Devon CCG	0.39	0.34	0.32	0.30
Eastern Locality	0.39	0.27	0.23	0.17
Exeter	0.40	0.31	0.33	0.26
Mid Devon	0.51	0.29	0.12	0.06
Wakley	0.27	0.24	0.25	0.17
WEB	0.37	0.19	0.23	0.25
Northern Locality	0.48	0.48	0.46	0.38
Western Locality	0.33	0.34	0.37	0.43
Plymouth	0.30	0.33	0.37	0.42
South Hams and West Devon	0.40	0.35	0.35	0.44
South Devon and Torbay CCG	0.42	0.44	0.50	0.46
Coastal	0.23	0.18	0.17	0.23
Moor to Sea	0.31	0.35	0.50	0.29
Newton Abbot	0.66	0.68	0.58	0.62
Paignton	0.53	0.53	0.70	0.63
Torquay	0.38	0.42	0.43	0.42

COPD

CCG Area	Directly Age Standardised Rate Per 10,000 People 2007-09	2008-10	2009-11	2010-12
NEW Devon CCG	6.56	6.74	6.80	7.02
Eastern	5.60	5.82	5.78	5.91
Exeter	6.42	6.31	6.90	7.44
Mid Devon	6.24	6.35	5.79	5.72
Wakley	4.51	4.88	4.93	4.75
WEB	5.24	5.94	5.25	5.53
Northern	6.77	7.44	7.34	7.13
Western	7.75	7.59	7.90	8.48
Plymouth	8.77	8.63	9.24	10.13
South Hams and West Devon	5.39	5.17	4.84	4.77
South Devon and Torbay CCG	6.49	6.42	6.73	6.95
Coastal	5.15	5.46	6.42	7.15
Moor to Sea	5.85	5.85	5.33	5.96
Newton Abbot	7.14	6.63	6.76	6.95
Paignton	7.02	6.84	7.30	6.92
Torquay	6.79	6.96	7.69	8.06

CHD

CCG Area	Directly Age Standardised Rate Per 10,000 People 2007-09	2008-10	2009-11	2010-12
NEW Devon CCG	21.85	20.43	19.11	18.50
Eastern	19.86	18.50	17.17	16.52
Exeter	21.40	19.54	17.55	17.29
Mid Devon	19.60	17.94	17.24	16.98
Wakley	18.60	16.98	16.07	14.77
WEB	19.26	19.50	17.83	17.00
Northern	23.17	21.70	20.04	19.56
Western	23.77	22.30	21.21	20.55
Plymouth	25.82	24.42	23.69	22.92
South Hams and West Devon	19.05	17.48	15.63	15.27
South Devon and Torbay CCG	19.53	19.15	18.11	17.25
Coastal	17.27	18.93	18.91	18.69
Moor to Sea	19.62	19.38	18.99	17.11
Newton Abbot	21.72	19.24	16.71	16.65
Paignton	19.52	19.42	18.05	17.31
Torquay	19.68	18.97	18.23	17.13

Heart Failure

CCG Area	Directly Age Standardised Rate Per 10,000 People 2007-09	2008-10	2009-11	2010-12
NEW Devon CCG	9.86	9.40	8.58	8.64
Eastern	10.14	9.60	8.75	8.70
Exeter	11.63	10.71	9.53	9.06
Mid Devon	9.58	9.34	9.35	9.79
Wakley	9.54	9.04	7.67	7.38
WEB	9.34	8.92	8.37	8.68
Northern	10.35	9.60	8.66	8.35
Western	9.23	9.02	8.32	8.78
Plymouth	10.06	9.81	8.94	9.55
South Hams and West Devon	7.29	7.21	6.94	7.08
South Devon and Torbay CCG	7.19	7.18	7.09	7.22
Coastal	5.01	5.35	5.88	7.43
Moor to Sea	8.06	7.61	6.99	7.25
Newton Abbot	7.95	7.82	7.08	6.93
Paignton	7.39	7.53	7.55	7.44
Torquay	7.31	7.37	7.69	7.26

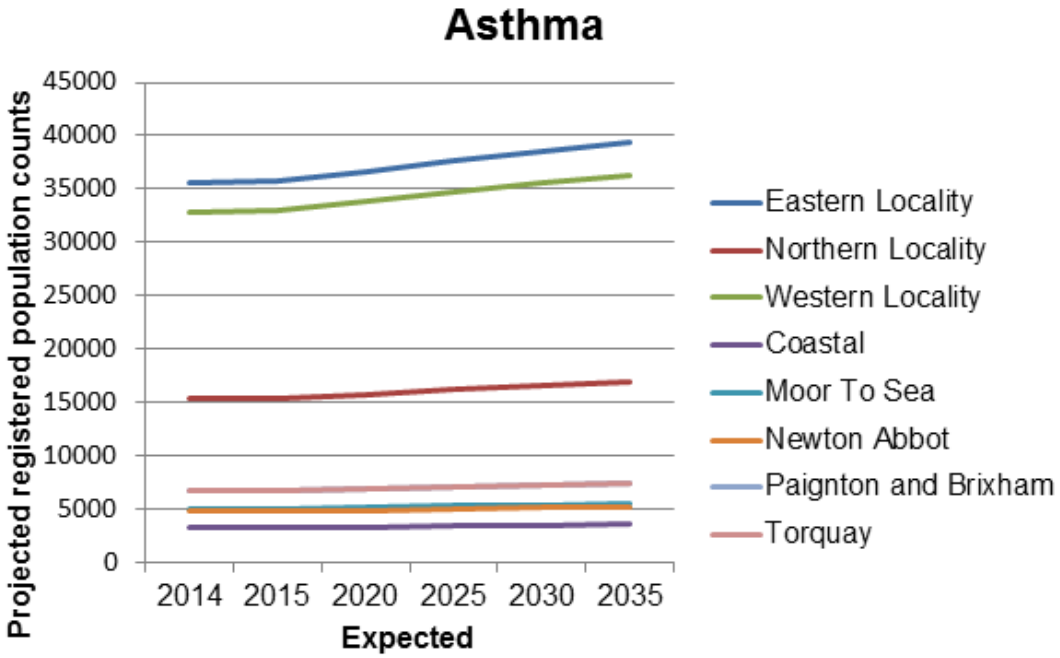
Stroke

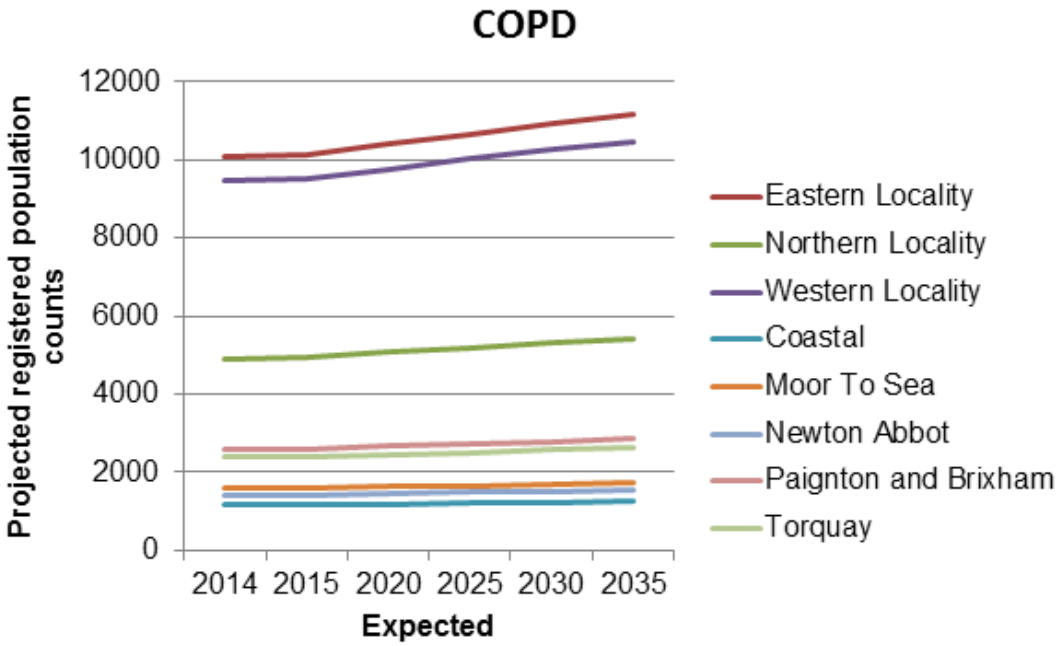
CCG Area	Directly Age Standardised Rate Per 10,000 People 2007-09	2008-10	2009-11	2010-12
NEW Devon CCG	13.35	12.46	12.15	11.59
Eastern	12.76	11.57	11.27	10.75
Exeter	12.85	11.37	11.14	10.92
Mid Devon	12.50	12.05	11.68	10.85
Wakley	13.26	12.12	11.79	10.81
WEB	12.14	10.21	9.94	10.22
Northern	14.02	13.88	13.52	13.54
Western	13.78	12.84	12.57	11.61
Plymouth	13.12	12.66	12.44	11.62
South Hams and West Devon	15.17	13.20	12.78	11.56
South Devon and Torbay CCG	12.19	11.93	11.85	11.30
Coastal	12.94	14.51	14.50	13.97
Moor to Sea	11.00	11.25	11.19	10.24
Newton Abbot	11.77	11.41	11.20	11.04
Paignton	12.44	11.12	11.04	10.86
Torquay	12.64	12.11	12.08	11.32

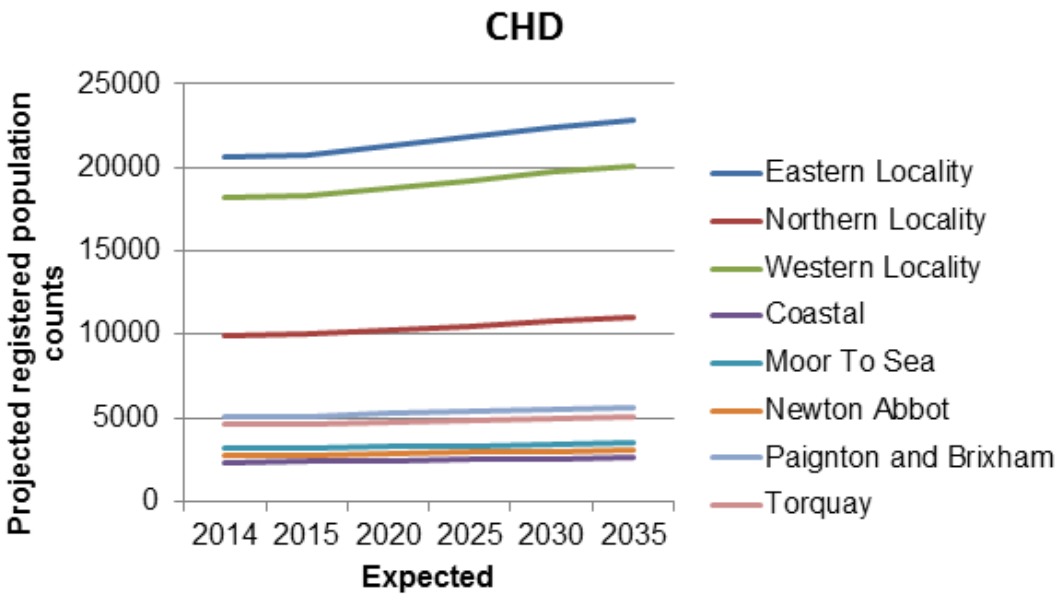
CKD

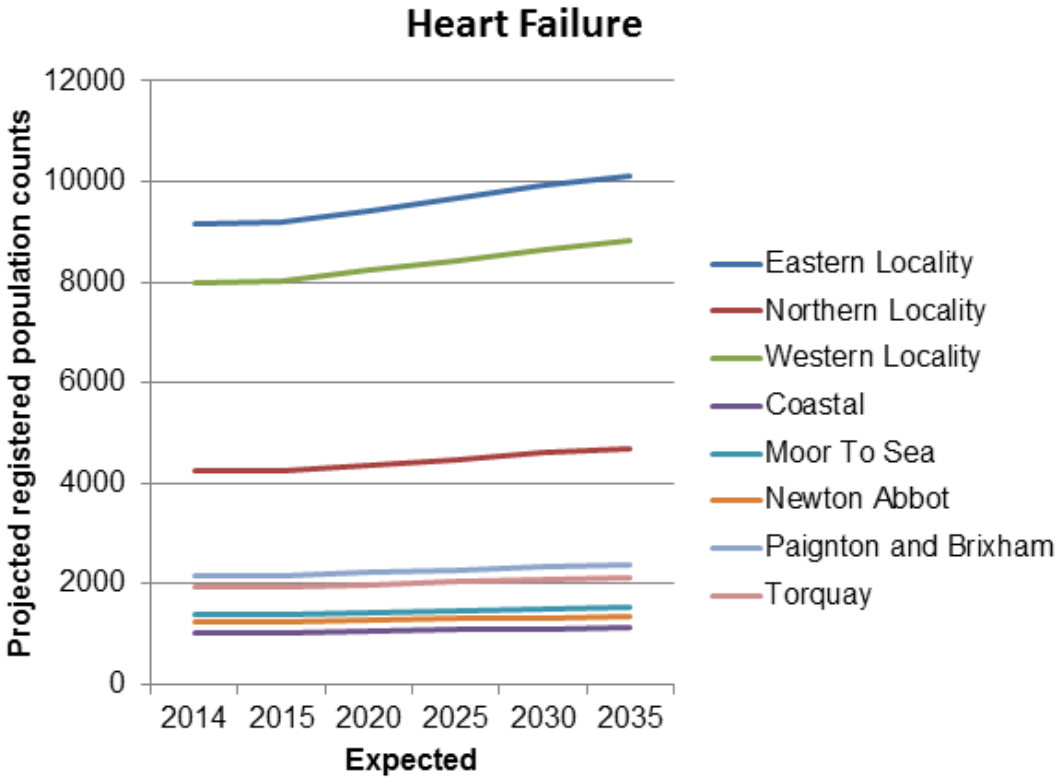
CCG Area	DASR Per 10,000 People 2007-09	2008-10	2009-11	2010-12
NEW Devon CCG	2.89	2.61	2.31	2.04
Eastern	2.48	2.25	1.92	1.64
Exeter	2.74	2.19	2.02	1.75
Mid Devon	2.74	2.51	2.04	1.72
Wakley	1.72	1.70	1.54	1.31
WEB	2.88	2.91	2.21	1.93
Northern	3.40	3.44	3.09	2.74
Western	3.17	2.62	2.39	2.19
Plymouth	3.37	2.82	2.62	2.41
South Hams and West Devon	2.70	2.17	1.88	1.68
South Devon and Torbay CCG	2.40	2.20	1.90	1.72
Coastal	2.30	2.17	1.95	2.22
Moor to Sea	2.62	2.00	1.54	1.35
Newton Abbot	2.05	2.23	1.76	1.74
Paignton	2.46	2.28	1.97	1.63
Torquay	2.45	2.24	2.16	1.77

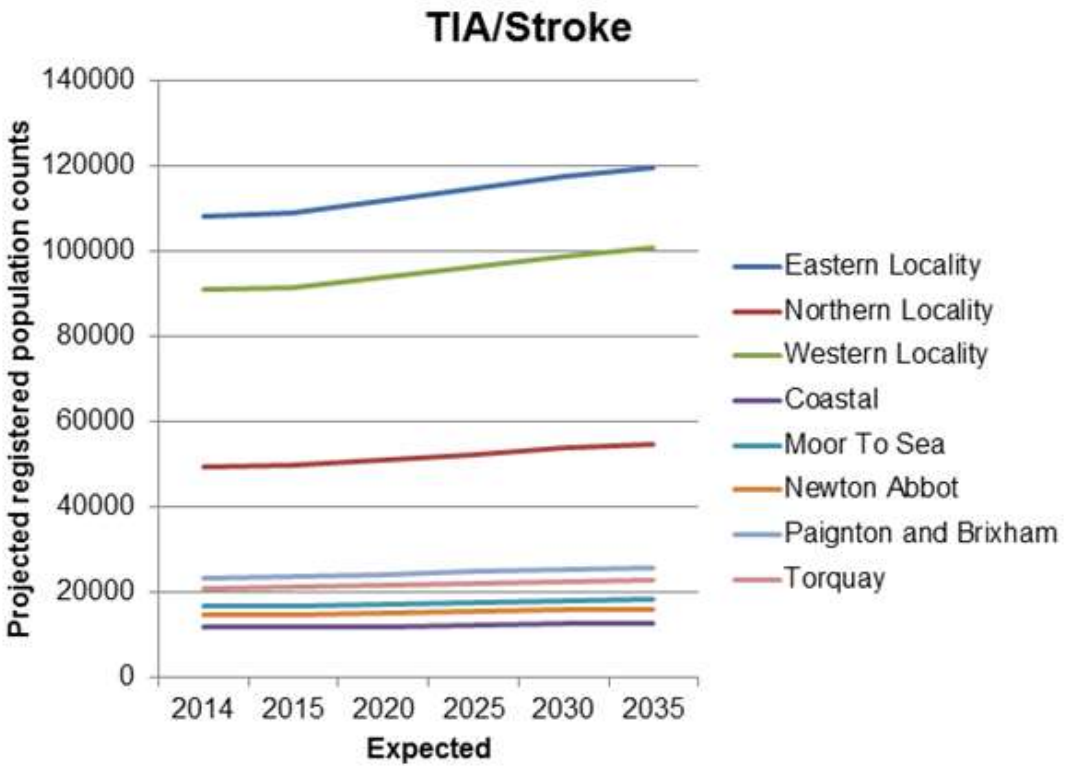
Prevalence Projections by QOF Disease Area

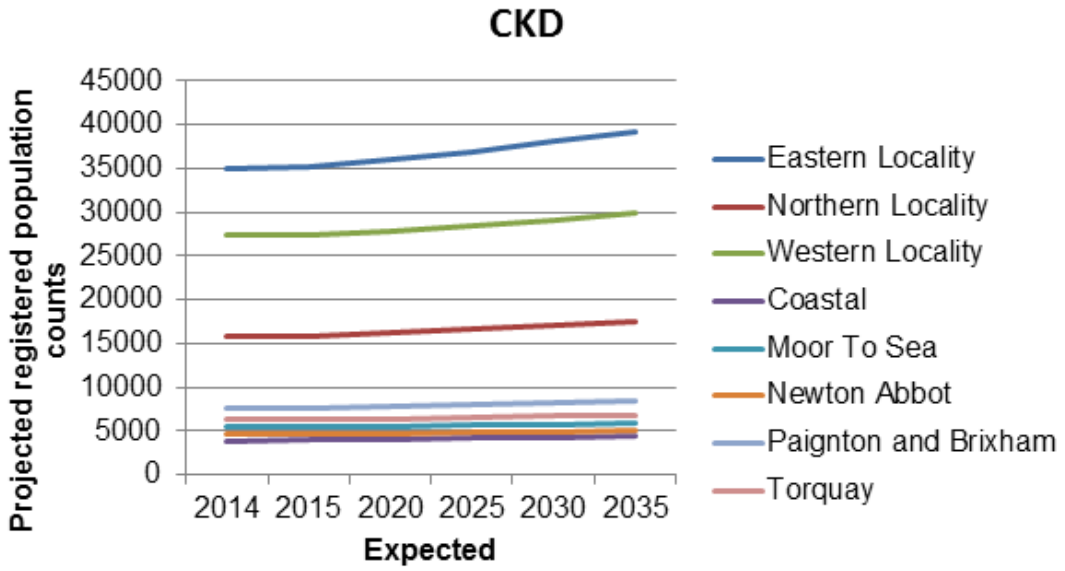


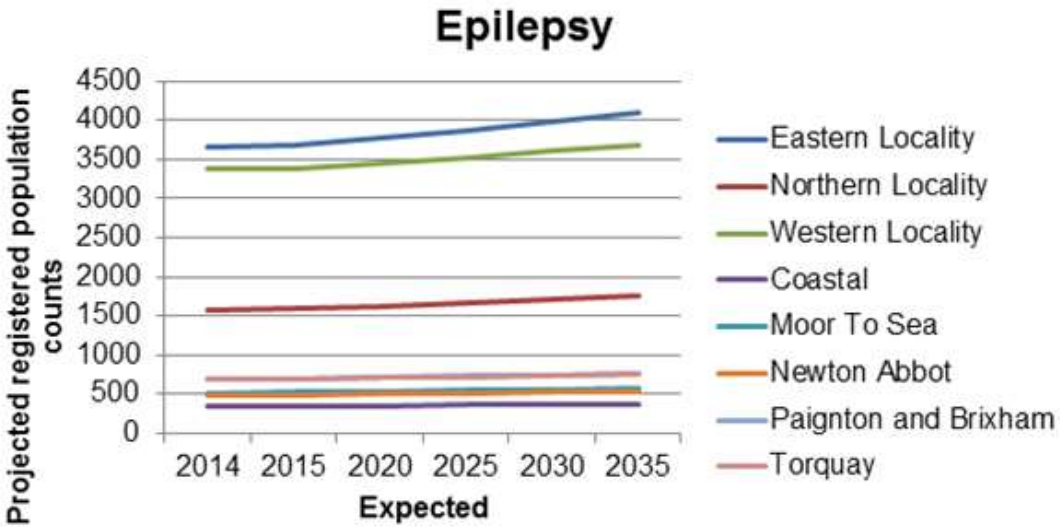



CHD
Projected registered population counts
25000
20000
15000
10000
5000
0
2014 2015 2020 2025 2030 2035
Expected
Eastern Locality
Northern Locality
Western Locality
Coastal
Moor To Sea
Newton Abbot
Paignton and Brixham
Torquay


Heart Failure
Projected registered population counts
12000
10000
8000
6000
4000
2000
0
2014 2015 2020 2025 2030 2035
Expected
Eastern Locality
Northern Locality
Western Locality
Coastal
Moor To Sea
Newton Abbot
Paignton and Brixham
Torquay


TIA/Stroke
Projected registered population counts
140000
120000
100000
80000
60000
40000
20000
0
2014
2015
2020
2025
2030
2035
Expected
Eastern Locality
Northern Locality
Western Locality
Coastal
Moor To Sea
Newton Abbot
Paignton and Brixham
Torquay


CKD
Projected registered population counts
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
2014
2015
2020
2025
2030
2035
Expected
Eastern Locality
Northern Locality
Western Locality
Coastal
Moor To Sea
Newton Abbot
Paignton and Brixham
Torquay



Data for diabetes mellitus was not available at locality level.

Ratio of Recorded v's Expected QOF prevalence:

Locality level data available in main text, sub locality data unavailable.

Admissions to hospital

Locality level data available in main text, sub locality data unavailable.

Patient Perspective: % who feel supported to manage own condition

Locality level data available in main text, sub locality data unavailable.

Risk factors amenable to prevention:

Locality level data available in main text boundaries outlined on maps, sub locality data unavailable.

Symphony Modelled Data on NEW Devon CCG and South Devon & Torbay CCG and Local Authority Level Population

1.2 The following tables show the number and cumulative percentage of the total population in terms of the number of conditions people were recorded with. This is taken from the Somerset Symphony project, applied by age, sex and deprivation to local CCG, local authority and locality populations.

Estimated number of conditions using South West AHSN Symphony dataset for Somerset, 2013-14

	CCG		Local Authorities			NEW Devon Localities		
Conditions	NEW Devon	SD&T	Devon	Plymouth	Torbay	Eastern	Northern	Western
No Conditions	560,339	168,646	479,968	169,607	79,560	239,391	99,314	221,785
1 Condition	193,561	62,929	169,195	56,686	30,573	82,529	35,735	75,262
2 Conditions	75,253	26,636	67,837	20,726	13,286	32,267	14,724	28,222
3 Conditions	29,671	10,912	26,959	8,015	5,565	12,733	5,958	10,936
4 Conditions	10,688	4,021	9,738	2,851	2,101	4,597	2,182	3,890
5 Conditions	3,451	1,328	3,141	923	707	1,474	718	1,251
6 Conditions	1,054	409	951	287	220	446	220	384
7 Condition	240	92	216	66	50	101	52	87
8+ Conditions	52	21	46	15	12	21	12	20
Total	874,309	274,993	758,052	259,175	132,075	373,559	158,914	341,836

Estimated cumulative percentage of conditions using South West AHSN Symphony dataset for Somerset, 2013-14

	CCG		Local Authorities			NEW Devon Localities		
Conditions	NEW Devon	SD&T	Devon	Plymouth	Torbay	Eastern	Northern	Western
1+ Condition	35.91%	38.67%	36.68%	34.56%	39.76%	35.92%	37.50%	35.12%
2+ Conditions	13.77%	15.79%	14.36%	12.69%	16.61%	13.82%	15.02%	13.10%
3+ Conditions	5.16%	6.10%	5.42%	4.69%	6.55%	5.19%	5.75%	4.85%
4+ Conditions	1.77%	2.13%	1.86%	1.60%	2.34%	1.78%	2.00%	1.65%
5+ Conditions	0.55%	0.67%	0.57%	0.50%	0.75%	0.55%	0.63%	0.51%
6+ Conditions	0.15%	0.19%	0.16%	0.14%	0.21%	0.15%	0.18%	0.14%
7+ Condition	0.03%	0.04%	0.03%	0.03%	0.05%	0.03%	0.04%	0.03%
8+ Conditions	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%