Excess weight in adults
An overview of South Devon and Torbay – 2016

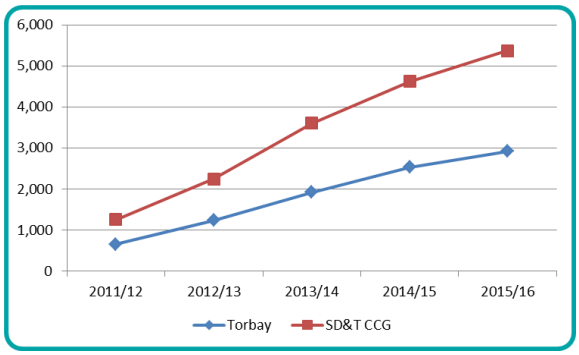
Excess weight is an increasing challenge nationally with two thirds of men (66.4%) and over half of women (57.5%) aged 16 years and over being classified as either overweight or obese (NOO, 2016). It is estimated that over half of the UK adult population could be obese by 2050 (WHO, 2016). While obesity takes time to develop, evidence suggests that children with excess weight are more likely to become obese adults and may develop a range of non-communicable diseases such as type 2 diabetes, cardiovascular disease, musculoskeletal disorders and certain types of cancer (WHO, 2016). Behavioural risk factors are the leading cause of poor health in England and include smoking, alcohol use, low physical activity and poor diet (GBD, 2013).

Classification – Excess weight is defined as abnormal or excessive fat accumulation with a body mass index greater than or equal to 25kg/m² that presents a risk to health (WHO, 2016).

Prevalence – The Sport England Active People Survey estimates Torbay (68.1%) to be significantly worse compared to England (64.4%) for excess weight in adults aged 16 years and over (2012-14). Conversely, Devon (63.8%) is not significantly different to England.

Inpatient Admissions – Obesity related admissions are classified as an admission episode which has an ICD10 code of E66 recorded in any primary or secondary diagnostic field. In South Devon and Torbay (SD&T), there has been a stark increase in the number of obesity related admissions from 2011/12 to 2015/16 as shown in Fig 2 below.

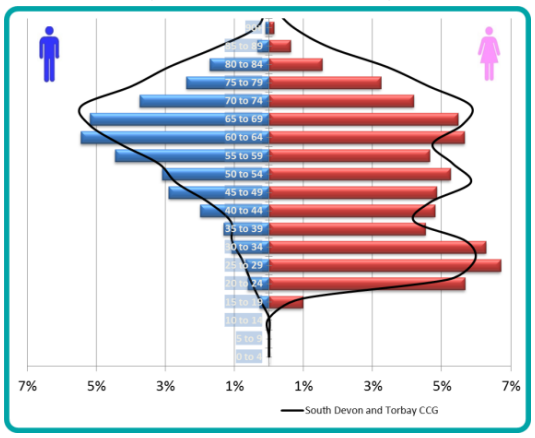
Fig 2. Count of obesity related inpatient admissions (2011/12 – 2015/16)



Source: SUS, 2016.

An age and sex population pyramid comparing Torbay and SD&T is presented in Fig 3. Based on a five year average, there are higher proportions of females compared to males for obesity related admissions in SD&T. Torbay has higher rates for obesity in the 20 to 34 year age group which are primarily prenatal or postnatal complications due to endocrine, nutritional and metabolic diseases.

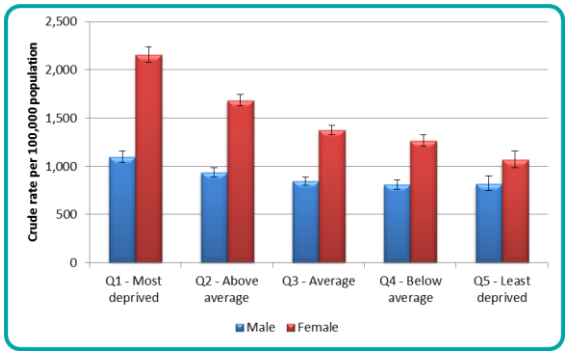
Fig 3. Population pyramid of obesity related inpatient admissions (2011/12 – 2015/16)



Source: SUS, 2016

Deprivation – There is a strong association between deprivation and obesity showing significantly higher rates of obesity, particularly in females, in the more deprived quintiles compared to the lesser deprived quintiles (Fig 4). This is consistent with national data where obesity prevalence in females increases with increasing levels of deprivation (NOO, 2016).

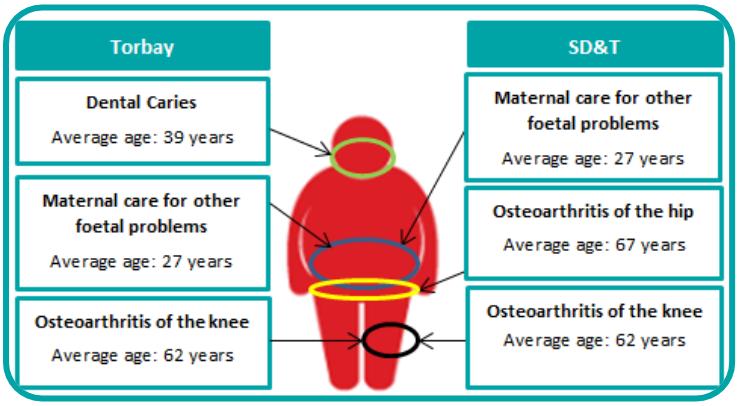
Fig 4. Obesity related inpatient admissions crude rate per 100,000 population in SD&T (2011/12 – 2015/16)



Source: SUS, 2016

Diagnoses and procedures – The most common primary diagnoses for obesity related admissions from 2011/12 to 2015/16 in SD&T are osteoarthritis of the knee, osteoarthritis of the hip and maternal care for other foetal problems (Fig 5).

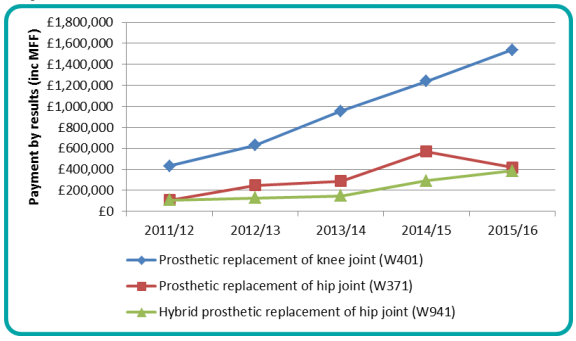
Fig 5. Top 3 primary diagnoses for obesity related inpatient admissions in Torbay and SD&T



Source: SUS, 2016

In Torbay, dental caries is the second most frequent primary diagnosis which may suggest that poor diet could be a contributory risk factor to the multiple health issues these patients are presenting with. The top 3 procedure costs for obese inpatients in SD&T over the last five years, illustrated in Fig 6, are prosthetic replacement of the knee joint, hip joint and hybrid prosthetic replacement of hip joint which collectively account for around £7.5 million. Costs are expected to increase due to an ageing population and estimated increasing levels of obesity.

Fig 6. Top 3 procedure costs for obesity related inpatient admissions in SD&T (2011/12 – 2015/16)

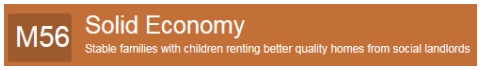


Source: SUS, 2016

Case types – Around 70% of admissions were day case and inpatient elective with the most common procedures being endoscopic resection of cartilage of knee, dialysis and gall bladder removal. Around 30% of obesity related admissions were non-elective and emergency admissions in SD&T and over half recorded no procedure code costing approximately £2.5 million in SD&T and £1.4 million in Torbay (2011/12 to 2015/16). Moreover, patients presenting as emergency or non-elective admissions tend come from the more deprived areas. This relationship with deprivation tends to be stronger in Torbay compared to SD&T.

Bariatric Surgery –There were 107 bariatric procedures carried out in SD&T, 43 of which were on patients living in Torbay (2011/12–2015/16). The majority of these procedures were day case or inpatient elective and cost around £481,000 in SD&T and £184,000 in Torbay. Findings from a systematic review suggest that there are significant improvements in quality of life following bariatric surgery with greater improvements in surgical interventions (Brennan & Hachem, 2016).

Social Segmentation



Segmenting the population by obesity related admissions shows that Torbay and SD&T have more 'Solid Economy' type (M56) admissions than would be expected as compared to the local population. They are more likely to be families with children, renting from a social landlord with a low income and are less likely to have A-level or above qualifications. Their use of NHS Direct helpline is also higher than average. They appear to engage less in exercise and are more likely to feel overweight. Their preferred supermarket is ASDA and online activity suggests that M56's use bingo sites more than expected. Suggested channel preference for these types would be by phone or computer to allow social marketing messages to be targeted effectively.