An Assessment of the Sexual Health Needs of the North Yorkshire Population

Leon Green
Senior Public Health Intelligence Specialist, North Yorkshire County Council

Wendy Rice
Public Health Intelligence Analyst, North Yorkshire County Council

Georgina Wilkinson
Health Improvement Manager, North Yorkshire County Council

Jessica Marshall
Health Improvement Practitioner, North Yorkshire County Council

Document produced by North Yorkshire County Council

February 2019
EXECUTIVE SUMMARY

INTRODUCTION

2.1 Background

2.2 National drivers on sexual health

2.3 Local Changes in Commissioning Responsibility for Sexual Health Services

2.4 Purpose

NORTH YORKSHIRE DEMOGRAPHICS

3.1 Craven

3.2 Hambleton

3.3 Harrogate

3.4 Richmondshire

3.5 Ryedale

3.6 Scarborough

3.7 Selby

3.8 Population Projections

3.9 Ethnicity

3.10 Military population

3.11 Sexual orientation – at risk groups

3.12 Conceptions and births

SEXUAL HEALTH OUTCOMES ACROSS NORTH YORKSHIRE

4.1 Chlamydia

4.1.1 Inequalities in Chlamydia

4.2 Gonorrhoea

4.2.1 Inequalities in Gonorrhoea

4.3 Genital Herpes

4.3.1 Inequalities in Herpes

4.4 Syphilis

4.4.1 Inequalities in Syphilis

4.5 Genital Warts

4.5.1 Inequalities in Genital Warts

4.6 HIV

4.6.1 New Diagnoses of HIV

4.6.2 Inequalities in HIV

4.7 Cervical Cancer

4.8 Pelvic Inflammatory Disease

4.9 Contraception

4.10 Teenage Conceptions

4.11 Abortions

SERVICE PROVISION AND ACTIVITY

5.1 The Integrated Sexual Health Service

5.1.1 Specialist Sexual Health Service (SSHS)

5.1.2 Specialist Clinical Outreach Team (SCOT)

5.1.3 Community outreach service

5.1.4 HIV support service

5.1.5 Psychosexual counselling

5.1.6 Training service

5.1.7 Chlamydia screening

5.1.8 On-line testing

5.1.9 Condom distribution scheme

5.1.10 GUMCAD data - attendances at Level 3 GUM services

5.2 Services Delivered in GP Practices

5.3 Services Delivered in Pharmacies – Emergency Hormonal Contraception

CONCLUSION
7 APPENDICES ............................................................................................................. 52
  7.1 Table of figures .................................................................................................... 52
EXECUTIVE SUMMARY

The sexual health needs assessment highlights that overall compared to other areas in England, North Yorkshire has some good sexual health outcomes. However, there are a number of key local issues and challenges to highlight to help inform current and future service delivery:

- North Yorkshire covers 3,000 square miles ranging from isolated rural settlements and farms to market towns and larger urban conurbations such as Harrogate and Scarborough. Whilst North Yorkshire is in overall terms more affluent than a typical local authority in England, there are nevertheless areas of profound deprivation, including some parts of the County that are ranked within the 20% most deprived areas in England.

- The demographic profiles of the population vary from District to District. For example, Richmondshire has a significantly larger number of young men due to Catterick Garrison; and most districts have an over representation of those aged 45 and over, and an under-representation of those aged 20-44. These demographics profiles are important as young people are more at risk from sexually transmitted infections (STIs) therefore targeting of services are key.

- The ethnic diversity varies within North Yorkshire with Harrogate having the biggest number of those in the non-white categories.

- The sexual health outcomes of the North Yorkshire population vary within districts highlighting inequalities in the disease burden experienced across North Yorkshire. For example, Richmondshire is higher when compared to other North Yorkshire districts for rates of chlamydia and genital warts; likely to be linked to Catterick Garrison.

- Chlamydia is the most commonly diagnosed STI in the local population followed by genital warts; the chlamydia detection rate in 15-24 year olds across the County is below the national target but in line with the England average.

- Genital warts nationally have shown a decrease over recent years. This is likely due to the introduction of the HPV vaccine. North Yorkshire hasn’t seen a dramatic decrease, the overall rate of diagnosis has decreased slightly and remains statistically better than England.

- Rates of herpes in North Yorkshire are lower than the England average. Nationally herpes is on an downward trend although North Yorkshire has seen an increase in the last two years.

- Gonorrhoea, although below the England rate, is increasing in line with the national trend.

- Although low in numbers and below the England figure, rates of syphilis are increasing mirroring the national trend.

- New diagnosis of HIV in North Yorkshire is lower than the England average, although this has remained relatively stable in contrast to the downward trend seen nationally.

- Late diagnosis of HIV remains an issue, with North Yorkshire having the same percentage as England at 41%. However the actual numbers are very small.
• U18 conception rates are below the England average, and have fallen steadily in line with the England trend. However, this masks significant variation at district level with Scarborough having a disproportionately high level of under 18 conceptions.

• Numbers of attendances at genito-urinary clinics is increasing both locally and nationally. Since 2012/13 there has been a 60% increase in attendances by North Yorkshire residents.

**Conclusion**

Despite efforts to control STIs, including the improved availability and update of sexual health screening, we are not seeing a significant impact on numbers of STIs diagnosed, with some STI rates continuing to rise. Whilst some of the increase is associated with improved access to services and more testing, it is clear that high rates of infection persist in some population groups such as men who have sex with men (MSM) and young people. This highlights the continued importance of sexual health services.

The percentage of late stage diagnosis of new cases of HIV remains a concern, and improved uptake of HIV testing, particularly for those with HIV indicator conditions, is vital for early detection and treatment to reduce morbidity and mortality.

Existing prevention efforts, such as greater STI screening coverage and easier, more rapid access to sexual health services need to be sustained and improved in some localities to support earlier diagnosis and prevent onward transmission. These efforts need to be focussed on high risk groups in particular.

LARC is the most effective form of contraception. Provision of LARC services is good across North Yorkshire and maintaining and up-skilling healthcare professionals to support people to make informed choices about contraception, and fit and remove LARC, needs to be ensured.

Whilst good progress has been made on teenage pregnancy rates across North Yorkshire, more needs to be done in certain localities and should be supported by broader prevention work to identify and support young people at risk of teenage pregnancy.

Improving the sexual health of the population of North Yorkshire requires an integrated response from all relevant agencies. The Local Authority is responsible for commissioning comprehensive, open-access sexual health services. It needs to work with key partners to build on the existing good work that has previously occurred.
2 INTRODUCTION

2.1 Background

Sexual health covers the provision of advice and services around contraception, relationships, sexually transmitted infections (STIs) (including HIV) and abortion. Provision of sexual health services is complex and can be delivered by a wide range of providers, including general practice, community services, acute hospitals, pharmacies and the voluntary, charitable and independent sector (Department of Health, 2013).

2.2 National drivers on sexual health

Sexual health is an important and wide-ranging area of public health. Most of the adult population of England are sexually active and access to quality sexual health services improves the health and wellbeing of both individuals and populations. The Government has set out its ambitions for improving sexual health in its publication, A Framework for Sexual health Improvement in England (Department of Health, 2013).

The Public Health Outcomes Framework contains three specific indicators for sexual health:

- Under 18 conceptions.
- Chlamydia detection rate (15-24 year olds).
- Late diagnosis of HIV.

Nationally, significant progress has already been made in improving sexual health, including:

- Access to specialist genito-urinary medicine (GUM) services has improved by promoting rapid access to accessible services (Mercer C et al, 2012 – cited in Department of Health, 2013).
- Teenage pregnancy rates have fallen to their lowest levels since records began (Office for National Statistics, 2013 – cited in Department of Health, 2013).
- The use of more effective long-acting methods of contraception has increased.
- Access to services has been improved through the expansion and integration of service delivery outside of specialist services, particularly in the community and general practice (Church K and Mayhew SH, 2009 – cited in Department of Health, 2013).

Despite the significant progress the Department of Health, in their Framework for Sexual Health in England (2013), highlight there are still improvements to be made:

- Up to 50% of pregnancies are unplanned.
- Rates of infectious syphilis are at their highest since the 1950s.
- Gonorrhoea is becoming more difficult to treat.
- Almost half of adults newly diagnosed with HIV were diagnosed after the point at which they should have started treatment.
- In 2010, England was in the bottom third of 43 countries in the World Health Organization’s European Region and North America for condom use among sexually active young people; previously, England was in the top ten.
2.3 Local Changes in Commissioning Responsibility for Sexual Health Services
Since 1 April 2013, North Yorkshire County Council (NYCC) have been required by regulation to commission HIV prevention and sexual health promotion, open access genito-urinary medicine and contraception service for all age groups. Other elements of the sexual health system are commissioned by partner organisations.

Local authorities commission

- Comprehensive sexual health services. These include:
  1. Contraception (including the costs of LARC devices and prescription or supply of other methods including condoms) and advice on preventing unintended pregnancy, in specialist services and those commissioned from primary care (GP and community pharmacy) under local public health contracts (such as arrangements formerly covered by LESs and NESs)
  2. Sexually transmitted infection (STI) testing and treatment in specialist services and those commissioned from primary care under local public health contracts, chlamydia screening as part of the National Chlamydia Screening Programme (NCSP), HIV testing including population screening in primary care and general medical settings¹, partner notification for STIs and HIV
  3. Sexual health aspects of psychosexual counselling
  4. Any sexual health specialist services, including young people’s sexual health services, outreach, HIV prevention and sexual health promotion, service publicity, services in schools, colleges and pharmacies⁴
- Social care services (for which funding sits outside the Public Health ringfenced grant and responsibility did not change as a result of the Health and Social Care Act 2012), including:
  1. HIV social care
  2. Wider support for teenage parents
### Clinical commissioning groups commission

- Abortion services, including STI and HIV testing and contraception provided as part of the abortion pathway (except abortion for fetal anomaly by specialist fetal medicine services – see “NHS England commissions”)
- Female sterilisation
- Vasectomy (male sterilisation)
- Non-sexual health elements of psychosexual health services
- Contraception primarily for gynaecological (non-contraceptive) purposes
- HIV testing when clinically indicated in CCG-commissioned services (including A&E and other hospital departments)

### NHS England commissions

- Contraceptive services provided as an “additional service” under the GP contract
- HIV treatment and care services for adults and children, and cost of all antiretroviral treatment
- Testing and treatment for STIs (including HIV testing) in general practice when clinically indicated or requested by individual patients, where provided as part of “essential services” under the GP contract (ie not part of public health commissioned services, but relating to the individual’s care)
- HIV testing when clinically indicated in other NHS England-commissioned services
- All sexual health elements of healthcare in secure and detained settings
- Sexual assault referral centres
- Cervical screening in a range of settings
- HPV immunisation programme
- Specialist fetal medicine services, including late surgical termination of pregnancy for fetal anomaly between 13 and 24 gestational weeks
- NHS Infectious Diseases in Pregnancy Screening Programme including antenatal screening for HIV, syphilis, hepatitis B

---

### 2.4 Purpose

The Public Health Team within North Yorkshire County Council have carried out a Sexual Health Needs Assessment (SHNA) for the population of North Yorkshire to inform future provision of sexual health services across the patch.

This report:

1. Provides information on general population demographics of NY.
2. Provides a general overview of each District Council area.
3. Describes sexual health outcomes across NY.
4. Provides an overview of current service provision and activity levels.
3 NORTH YORKSHIRE DEMOGRAPHICS

Covering over 3,000 square miles, North Yorkshire ranges from isolated rural settlements and farms, to market towns and larger urban conurbations such as Harrogate and Scarborough. Whilst North Yorkshire is, in overall terms, more affluent than a typical local authority in England, there are nevertheless areas of profound deprivation, including some parts of the County that are ranked within the 20% most deprived areas in England.

The map shows all of the 2015 Lower Super Output Areas (LSOA) across North Yorkshire. These are units of administrative geography with similar sized populations. Each LSOA has an Indices of Multiple Deprivation (IMD) 2015 score. The colours represent the quintile of grouped IMD score, where red are the most deprived 20% of the North Yorkshire LSOA’s. The majority of NY deprived LSOA are concentrated in the Scarborough and Ryedale districts, with smaller parts of Skipton, Harrogate, Northallerton, Whitby and Selby having part of those communities in the most deprived quintile.
The geography in terms of organisations is very complex across North Yorkshire. North Yorkshire is comprised of seven district councils each having the own statute responsibilities and service commissioning for their populations. There are five CCGs across North Yorkshire, with the Vale of York CCG spanning three local authority areas being the most complex (North Yorkshire, York and East Riding). Airedale, Wharfedale & Craven CCG also crosses two local authorities, meaning a coherent picture for North Yorkshire in terms of commissioning is particularly difficult.

As highlighted in Figure 3 below, when compared to the national age structure, North Yorkshire has an older population, with those age 45 and up over-represented across the County for both sexes. However, both sexes in the age 20-44 group are under-represented in North Yorkshire when compared to the national figures. It is important however, to note the variation in profiles across North Yorkshire’s seven districts. For example in Richmondshire there are a high number of males aged 20-29 years, due to the presence of the military base in Catterick. The long term military planning for regiment’s movement has recently changed meaning that regiments are to be fixed to bases. For North Yorkshire this possibly means a more stable military population in the future.
Figure 3 Population pyramid showing North Yorkshires age make up (2017)

Source: ONS, 2018
Craven follows the North Yorkshire pattern of having an over-representation of the 45+ age groups and under-representation of the 15-39 and the 0-9 age groups.

Hambleton follows the North Yorkshire pattern having an over-representation of the 45+ age groups and under-representation of the 0-44 age groups.

In Richmondshire, the population make-up in the 45+ age groups follows the national trend closely. There is an over-representation of the 20-34 age groups for men this is the military population, and an under-representation for women in the 15-44 age groups.
Ryedale follows the North Yorkshire pattern of having an over-representation of the 45+ and under-representation of the 20-39 and the 0-9 age groups.

Scarborough similarly follows the North Yorkshire pattern having an over-representation of the 45+ and under-representation of the 0-44 age groups.

Selby follows the North Yorkshire pattern of having an over-representation of the 45+ and under-representation of the 20-39 and the 0-9 age groups.
3.1 Craven
Craven has a population of 56,604 (ONS 2017 Mid-Year Population Estimates). It is a rural district with a population density of only 48 people per km², the third lowest in North Yorkshire and the sixth lowest in England. It has no major towns or settlement with populations over 15,000. Its largest town is Skipton which had, in 2015, a population of 14,800.

As in the rest of North Yorkshire, Craven’s population is increasing and ageing with a projected population of 58,000 by 2030. The population of older people (65 and over) is expected to increase by 20.9% between 2020 and 2030, while the population aged 0-19 years is expected to fall by 1.8% for the same time period.

The population of Craven has a smaller proportion of Black, Asian and Minority Ethnic (BAME) groups than the national average of 14.5%. The 2011 Census indicates that only 2.7% of the population in Craven is classified as non-White.

3.2 Hambleton
Hambleton has a population of 90,718 (ONS 2017 Mid-Year Population Estimates). It is a rural district with a population density of 69 people per km², below the North Yorkshire average of 133 and well below the national average of 424. It has one major town with a population over 15,000, Northallerton, home to 18,890 people. Its second largest town is Thirsk which had, according to the 2015 ONS and North Yorkshire County Council estimates, a population of 9,460.

As in the rest of North Yorkshire, the population of Hambleton is increasing and ageing with a projected population of 91,800 by 2030. The population of older people (65 and over) is expected to increase by 22.6% between 2020 and 2030, while the population aged 0-19 years is expected to fall by 2.2% over the same time period.

The population of Hambleton has one of the smallest proportions of BAME groups across North Yorkshire with just 1.7% of the population classified in categories than ‘White’. This is much lower than the national average of 14.5% (2011 Census).

3.3 Harrogate
Harrogate has a population of 160,044 (ONS 2017 Mid-Year Population Estimates). It is a fairly rural district with a population density of 122 people per km², below the North Yorkshire average of 133, and well below the national average of 424. It has three major towns or settlements with a population over 15,000; Harrogate town (75,260 people), Ripon (16,430 people) and Knaresborough (15,300 people).

As in the rest of North Yorkshire, the population of Harrogate is increasing and ageing with a projected population of 162,000 by 2030. The population of older people (65 and over) is expected to increase by 25.1% between 2020 and 2030, while the population aged 0-19 years is expected to fall by 5.9% over the same period.

The population of Harrogate has the highest proportion of BAME groups compared to the other districts in North Yorkshire with 3.7% of the population in one of these categories. Within these minority groups, the highest proportion is those in the Asian/Asian British categories, with 1.5% of the Harrogate population falling into this group (2011 Census).
3.4 Richmondshire
Richmondshire has a population of 53,699 (ONS 2017 Mid-Year Population Estimates). It is a rural district with a population density of 40 people per km², below North Yorkshire average of 133 and well below the national average of 424. Its only major town or settlement with a population over 15,000 is Catterick Garrison, home to 15,570 people. Its second largest town is Richmond, home to 8,450 people.

The population of Richmondshire is decreasing and ageing, with a projected population of 51,800 by 2030. The population of older people (65 and over) is expected to increase by 25.2% between 2020 and 2030, while the population aged 0-19 years is expected to fall by 7% over the same period.

The population of Richmondshire has a smaller proportion of BAME groups than the national average of 14.5% with just 4.6% of the population classified in non-white categories. Within these minority groups, the ‘Asian or Asian British’ category accounts for 2.4% of the total population of Richmondshire (2011 Census).

3.5 Ryedale
Ryedale has a population of 54,311 (ONS 2017 Mid-Year Population Estimates). It is a rural district with a population density of 36 people per km², below the North Yorkshire average of 133 and well below the national average of 424. It has no major towns or settlements with populations over 15,000. Malton has a population of 13,180.

As in the rest of North Yorkshire, the population of Ryedale is increasing and ageing with a projected population of 57,900 by 2030. The population of older people (65 and over) is expected to increase by 21.2% between 2020 and 2030, while the population aged 0-19 years is expected to fall by 4.6% over the same period.

The population of Ryedale has the smallest proportion of BAME groups in North Yorkshire, and is significantly less than the national average of 14.5%. The 2011 Census indicates that only 1.3 % of the population in Ryedale is classified as non-White.

3.6 Scarborough
Scarborough has a population of 108,370 (ONS 2017 Mid-Year Population Estimates). It is a fairly rural district with a population density of 132 people per km², just below the North Yorkshire average of 133, and also below the national average of 424. The town of Scarborough (population 52,160) is its only major town or settlement with a population over 15,000.

As in the rest of North Yorkshire, the population of Scarborough is increasing and ageing with a projected population of 108,500 by 2030. The population of older people (65 and over) is expected to increase by 18.1% between 2020 and 2030, while the population aged 0-19 years is expected to fall by 3.2% over the same period.

The population of Scarborough has a smaller proportion of BAME groups than the national average of 14.5% with just 2.5% of the population classified in these categories (2011 Census).

3.7 Selby
Selby has a population of 87,887 (ONS 2017 Mid-Year Population Estimates). It is a fairly rural district with a population density of 146 people per km², above North Yorkshire average of 133 but well below the national average of 424. Selby town, with a population of 22,410 is its only major town or settlement with a population over 15,000. Its second largest town is Sherburn-in-Elmet, home to 6,700 people.
As in the rest of North Yorkshire, the population of Selby is increasing and ageing with a projected population of 94,300 by 2030. The population of older people (65 and over) is expected to increase by 26.5% between 2020 and 2030, while the population aged 0-19 years is expected to increase by 3% over the same period.

The population of Selby has a smaller proportion of BAME groups than the national average of 14.5% with just 1.6% of the population classified in these categories (2011 Census).
3.8 Population Projections

The population projections presented below indicate the population changes expected between 2017 and 2030. For England we can see that there is growth forecast in the 60+ age group for both genders, adding an increased burden to services. For ages 25-29 years, it is estimated that we will see a reduction by 2030 compared to the current 2017 population.

North Yorkshire will also see an increase in the older population in 2030 compared to 2017. Further, the respective increases are greater in North Yorkshire compared to the projected England increases for the same age groups.

Figure 11 Predicted population change, North Yorkshire and England 2020 to 2030

Source: ONS, 2018

Figure 3 Population pyramid showing England’s population change between 2017 and 2030

Source: ONS, 2018

Figure 4 Population pyramid showing North Yorkshire’s population change between 2017 and 2030

Source: ONS, 2018
Overall, only 3,987 (6.9%) of young people in North Yorkshire live in the most deprived quintile. The majority of the districts have under 5% of young people in the most deprived quintile, but Scarborough district has almost 30% of its 15-24 year olds living in the most deprived quintile and over half (53.4%) of the young population in the two most deprived quintiles. These data indicate that there are currently no young people living in any areas ranked as being in the most deprived quintile in Hambleton, and the district with the highest proportion of 15-24 year olds living in an area ranked as the least deprived is Harrogate, with 40.9% living in the highest ranked quintile.
Each area shows some variation in age distribution. The younger groups make up smaller proportions across the districts when compared with the older age groups. Richmondshire has the highest proportion of people between the ages of 20-29 (13.8%), likely due to the military presence in the district. Craven has the highest proportion of people aged 80+, with 7.3% of its population being in this age bracket.
This graph shows the spread in the districts of deprivation among those aged 15-49. This is an important age group in relation to sexual health provision, and understanding the distribution of deprivation among young people also gives information on areas which may need further attention regarding their sexual health needs. Scarborough has the biggest proportion of its 15-49 residents in the most deprived quintiles, but Hambleton has no residents aged 15-49 in the most deprived quintile. There is great variation across the districts, but Harrogate and Selby have the highest proportion in the least deprived quintile.
When we drill down to just look at those aged 15-24, we see that Scarborough still has the greatest proportion of young people living in an area ranked as most deprived, but also has the lowest proportion of young adults in the least deprived quintile. Hambleton has no young people living in an area ranked as being the most deprived. Again, Selby and Harrogate have the highest proportion of young people in the least deprived quintile. Overall, in all the districts but Scarborough and Ryedale, the majority of young adults are in the two least deprived quintiles.
### 3.9 Ethnicity

**Figure 17 Census 2011 Ethnicity breakdown by district (All ages)**

<table>
<thead>
<tr>
<th>District</th>
<th>Craven</th>
<th>Hambleton</th>
<th>Harrogate</th>
<th>Richmondshire</th>
<th>Ryedale</th>
<th>Scarborough</th>
<th>Selby</th>
<th>NYCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>53,910</td>
<td>87,503</td>
<td>151,968</td>
<td>49,537</td>
<td>50,983</td>
<td>106,067</td>
<td>81,919</td>
<td>581,887</td>
</tr>
<tr>
<td>White; Gypsy or Irish Traveller</td>
<td>54</td>
<td>132</td>
<td>107</td>
<td>19</td>
<td>81</td>
<td>37</td>
<td>158</td>
<td>588</td>
</tr>
<tr>
<td>Mixed/Multiple Ethnic Group</td>
<td>375</td>
<td>593</td>
<td>1,776</td>
<td>502</td>
<td>302</td>
<td>869</td>
<td>626</td>
<td>5043</td>
</tr>
<tr>
<td>Asian/Asian British</td>
<td>970</td>
<td>600</td>
<td>2,409</td>
<td>1,247</td>
<td>273</td>
<td>1,364</td>
<td>493</td>
<td>7356</td>
</tr>
<tr>
<td>Black/African/Caribbean/Black British</td>
<td>61</td>
<td>188</td>
<td>1,147</td>
<td>496</td>
<td>80</td>
<td>240</td>
<td>212</td>
<td>2,424</td>
</tr>
<tr>
<td>Other Ethnic Group</td>
<td>39</td>
<td>124</td>
<td>462</td>
<td>164</td>
<td>32</td>
<td>216</td>
<td>41</td>
<td>1,078</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>55,409</td>
<td>89,140</td>
<td>157,869</td>
<td>51,965</td>
<td>51,751</td>
<td>108,793</td>
<td>83,449</td>
<td>598,376</td>
</tr>
</tbody>
</table>

Source: Census, 2011

The ethnic diversity varies between districts, with Harrogate having the biggest number of those not in the non-white categories; however, Richmondshire has the greatest proportion of BME groups in the County, with non-white groups making up 4.6% of the population. Ryedale is the least diverse district, with only 1.3% of the population being non-white.
### 3.10 Military population

North Yorkshire is home to a number of military bases, including RAF bases at Fylingdales, Leeming and Linton-on-Ouse and a number of Army bases including Catterick Garrison, Ripon, Dishforth and Topcliffe as well as the Army Foundation College, Harrogate.

At present, there are 12,200 Ministry of Defence (MoD) jobs in North Yorkshire. The following table shows the districts where these are located, along with the proportion they comprise of all jobs in that district. Craven, Scarborough and Selby districts do not host any MoD jobs, although some MoD staff may be resident in those districts.

<table>
<thead>
<tr>
<th>Area</th>
<th>Number of Jobs</th>
<th>Proportion of all jobs in area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richmondshire</td>
<td>6,940</td>
<td>39%</td>
</tr>
<tr>
<td>Harrogate</td>
<td>2,860</td>
<td>3%</td>
</tr>
<tr>
<td>Hambleton</td>
<td>2,400</td>
<td>6%</td>
</tr>
<tr>
<td>Ryedale</td>
<td>180</td>
<td>1%</td>
</tr>
<tr>
<td>North Yorkshire</td>
<td>12,200</td>
<td>4%</td>
</tr>
</tbody>
</table>

Catterick Garrison in Richmondshire is the largest base in North Yorkshire and the MoD plans to increase the number of personnel based there. The base currently has a population of around 13,000. They make a huge contribution in terms of economic activity, including council tax and their personal interaction with local organisations. There could be an increase of around 3,000 military personnel and 2,000 dependents (including 1,200 school children), with perhaps half of these arriving by 2020, although scale and timing are yet to be confirmed. Many of this community and new arrivals are likely to be younger adults, typically aged 18-40, who will require access to sexual health services in the community.

### 3.11 Sexual orientation – at risk groups

#### Table 4 Men who have had a sexual experience with another man

<table>
<thead>
<tr>
<th>Area</th>
<th>16-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
<th>65-74</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Craven</td>
<td>175</td>
<td>181</td>
<td>237</td>
<td>377</td>
<td>408</td>
<td>201</td>
<td>1559</td>
</tr>
<tr>
<td>Hambleton</td>
<td>321</td>
<td>360</td>
<td>381</td>
<td>643</td>
<td>619</td>
<td>326</td>
<td>2630</td>
</tr>
<tr>
<td>Harrogate</td>
<td>570</td>
<td>651</td>
<td>757</td>
<td>1113</td>
<td>989</td>
<td>493</td>
<td>4541</td>
</tr>
<tr>
<td>Richmondshire</td>
<td>389</td>
<td>338</td>
<td>246</td>
<td>324</td>
<td>317</td>
<td>164</td>
<td>1808</td>
</tr>
<tr>
<td>Ryedale</td>
<td>179</td>
<td>171</td>
<td>213</td>
<td>362</td>
<td>392</td>
<td>204</td>
<td>1505</td>
</tr>
<tr>
<td>Scarborough</td>
<td>411</td>
<td>399</td>
<td>424</td>
<td>711</td>
<td>753</td>
<td>414</td>
<td>3101</td>
</tr>
<tr>
<td>Selby</td>
<td>294</td>
<td>344</td>
<td>421</td>
<td>618</td>
<td>555</td>
<td>253</td>
<td>2456</td>
</tr>
<tr>
<td>North Yorkshire</td>
<td>2339</td>
<td>2443</td>
<td>2678</td>
<td>4148</td>
<td>4032</td>
<td>2054</td>
<td>17600</td>
</tr>
<tr>
<td>Yorkshire &amp; Humber</td>
<td>23794</td>
<td>26464</td>
<td>25738</td>
<td>33788</td>
<td>30704</td>
<td>14393</td>
<td>154981</td>
</tr>
<tr>
<td>England</td>
<td>223191</td>
<td>282641</td>
<td>267035</td>
<td>339280</td>
<td>298604</td>
<td>142201</td>
<td>1554053</td>
</tr>
</tbody>
</table>

---

Modelled estimates of same-sex experiences in the County were previously developed using data from the 2010-12 National Survey of Sexual Activity and Lifestyles (Natsal) and methodologies laid out in Mercer et al (2013)\(^1\). Table 3 shows the estimated number of men who have had a sexual experience with another man, derived from rates presented in the Natsal for each district by age group. Men who have sex with men are a group with significant health inequalities, particularly in relation to sexually transmitted diseases such as gonorrhoea and HIV. Table 4 shows the number of women who have had a sexual experience with another woman, derived from estimated rates as discussed above.

There is value in having estimates of men who have sex with men and women who have sex in women, as knowing where concentrations of these populations are will help us to target interventions. It must be noted, however, that these are modelled estimates and therefore should just be taken as a guide. Further as the data they are derived from is from 2010-12, figures could have changed in the interim.

### 3.12 Conceptions and births

During 2016 there were 6,442 conceptions to women in North Yorkshire. Conception data is compiled by combining information from registrations of births and notifications of legal abortions. It includes pregnancies that result in one or more live or still births (a maternity), or a legal abortion under the Abortion Act 1967. It does not include miscarriages or illegal abortions.

In 2016, the general fertility rate (GFR; the number of live births per 1,000 female population aged 15-44) in North Yorkshire was 62.7, statistically similar to the the national average of 62.5. The GFR in the districts ranged between 53.7 in Craven to 71.4 in Richmondshire.

---

\(^1\) Mercer et al (2013) “Changes in sexual attitudes and lifestyles in Britain through the life course and over time: findings from the National Surveys of Sexual Attitudes and Lifestyles (Natsal),”, *Lancet*, 382:1781-94.
The number of live births in North Yorkshire fell almost 5% between 2016 and 2017, and is down by 12% since 2008. Population projections from the ONS indicate that the number of live births in the County are expected to remain steady over the next few years, followed by a slow decline in numbers between 2023 and 2030. The net effects of these changes are an overall decrease of 16.1% between 2008 and 2030. This projected decline is consistent with population estimations indicating a decrease in the proportion of those in the age groups considered to be of child-bearing age.

Figure 19 Number of live births 2008-2017 with projections 2018-2030 for North Yorkshire*

*Blue columns are the actual population; red columns are population projections
4  SEXUAL HEALTH OUTCOMES ACROSS NORTH YORKSHIRE

4.1 Chlamydia

Chlamydia is caused by the bacterium *Chlamydia trachomatis* and is the most common bacterial sexually transmitted infection in England. It is most prevalent among sexually active young people and infection is mostly asymptomatic. If untreated, Chlamydia can lead to complications including pelvic inflammatory disease (PID), ectopic pregnancy and infertility. The National Chlamydia Screening Programme (NCSP) to control Chlamydia offers opportunistic screening to sexually active under-25s.

![Figure 20 Proportion of population aged 15 to 24 screened for chlamydia](image)

Chlamydia screening and diagnoses increased both regionally and nationally after the introduction of the NCSP in 2003. The NCSP has the objective of controlling Chlamydia through the early detection and treatment of asymptomatic infection by targeting young people in the 15-24 years age group. Screening uptake has increased over the last few years in North Yorkshire and the proportion of young people being screened in the region are higher than those seen in England (22.4% in North Yorkshire compared to 19.3% in England). These figures are based on tests at NCSP registered sites, non-NCSP sites and genitourinary medicine (GUM) clinics. During 2017/18, 8.5% of those aged 15-24 screened in North Yorkshire tested positive for Chlamydia, below the regional and national figures of 10.9% and 9.9%, respectively.
4.1.1 Inequalities in Chlamydia

Figure 22 Chlamydia diagnosis rate per 100,000 populations in those aged 15-24, North Yorkshire Districts, 2017

Source: PHE Fingertips, 2018
Table 6 National Chlamydia Screening Programme coverage: Proportion of target population screened

<table>
<thead>
<tr>
<th>Craven</th>
<th>Hambleton</th>
<th>Harrogate</th>
<th>Richmondshire</th>
<th>Ryedale</th>
<th>Scarborough</th>
<th>Selby</th>
<th>North Yorkshire</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.1</td>
<td>19.6</td>
<td>24</td>
<td>28.9</td>
<td>16.3</td>
<td>22.3</td>
<td>21.8</td>
<td>22.4</td>
<td>19.3</td>
</tr>
</tbody>
</table>

Source: PHE Fingertips, 2018

North Yorkshire’s overall diagnostic rate is statistically similar to the England diagnostic rate. The NCSP aims for a diagnostic rate of 2,300 per 100,000 people. Only Richmondshire exceeded the target rate; Richmondshire also had the greatest proportion of young people screened (28.9%). This is linked to targeted work with the military population. There is variation in both the proportion of 15-24 year olds screened and the diagnostic rate in the region. Richmondshire and Selby have the highest diagnostic rate, however, only 21.8% of the eligible population in Selby were screened. Ryedale has the lowest proportion of the eligible population screened (16.3%) and the lowest diagnostic rate is in Craven (1459.3 per 100,000 population).

4.2 Gonorrhoea

*Neisseria gonorrhoea* is the second most common bacterial STI in the United Kingdom. It can lead to serious complications including pelvic inflammatory disease (PID), and if untreated, can cause inflammation to the joints or heart valves, resulting in endocarditis or septic arthritis. Gonorrhoea can usually be effectively treated with antibiotics but this is threatened by emerging resistance to currently recommended drugs (specifically ceftriaxone and cefixime).

Young people are most commonly infected, and in North Yorkshire, the greatest number of diagnoses are in males aged 20-24 years and females aged 16-19 years. Gonococcal infection tends to be concentrated in the UK amongst homosexual/bisexual men and black ethnic minority populations. Because of the small overall BAME population in North Yorkshire, it is not possible to comment on the diagnoses of STIs in this population, but nearly 30% of the diagnosed gonococcal infections in 2017-18 were among men who have sex with men. Overall, there is an upward trend both locally and nationally in gonorrhoea diagnoses, though the rate of diagnosis in North Yorkshire is significantly below the England rate.
4.2.1 Inequalities in Gonorrhoea

Because gonorrhoea is frequently asymptomatic, it is difficult to determine the true burden of disease. Within North Yorkshire, the majority of gonorrhoea diagnoses continue to be in men (72% of cases). In North Yorkshire, 27% of diagnoses seen in men during 2017 were among men who have sex with men. Nationally gonorrhoea is concentrated in urban areas, and those at greatest risk include young adults, certain black ethnic minorities and men who have sex with men. In North Yorkshire, 49.5% of diagnoses during 2017 were amongst the 16-24 age groups.
Whilst the diagnostic rate for all of the areas in North Yorkshire is less than the national rate, there is variation between areas. In particular, Selby has a higher rate of diagnoses compared to the other districts. The overall lower diagnosis rate in the County could possibly be attributed to the high proportion of the population living in rural areas; gonorrhoea is highly concentrated in urban areas.

### 4.3 Genital Herpes

Genital herpes simplex virus (HSV) infection is the most common ulcerative sexually transmitted disease in the UK. Symptoms can start with mild soreness and groups of small painful blisters appearing on the genitals and surrounding areas. Further episodes of these symptoms can occur from time to time as recurrent episodes. The virus can cause severe systemic disease in neonates (new-born infants) and the immunosuppressed. It may also facilitate HIV transmission. Many HSV infections are subclinical (not detectable, as there are no signs or symptoms). There are two distinct subtypes of HSV. Type 1 causes oral herpes (or cold sores) but has increasingly been implicated in genital infections. Type 2 is almost exclusively associated with genital infection. Genital herpes is a major viral cause of poor sexual health. It can be effectively managed by antiviral drugs, though it can recur frequently post treatment. In rare cases, the virus can be transmitted from mother to new-born, resulting in serious infant morbidity or death.

![Figure 25 Herpes diagnostic rate per 100,000 trend](source: PHE Fingertips, 2018)

Herpes rates nationally have been slowly decreasing in recent years. However, in North Yorkshire, an increase over the same time period has been seen, with a nearly 10% increase seen in the last two reported years. Despite this, North Yorkshire is significantly below the national levels.
4.3.1 Inequalities in Herpes

Figure 26 Herpes diagnostic rate per 100,000 by district (2017)

While none of the districts in North Yorkshire exceed the England national rate, the confidence intervals for Richmondshire and Scarborough both cross the national rate, indicating that the actual rate in those districts could be greater than the national rate. Overall, less HSV is diagnosed in Craven than anywhere else in the County.

4.4 Syphilis

Syphilis is caused by a bacteria-like spirochete *Treponema pallidum* subspecies *pallidum*. Syphilis can be transmitted between partners during sexual activity and from an infected pregnant woman across the placenta to a developing baby. In England, diagnoses of syphilis have increased since 1997, driven in part by outbreaks in cities such as Manchester and London. Concern about the potential spread of Syphilis amongst both men who have sex with men and heterosexual men and women has resulted in the development of surveillance initiatives by the PHE and colleagues in genito-urinary medicine. Late stage syphilis can cause very serious side effects occurring 10–30 years after infection began. Symptoms of the late stage of syphilis include difficulty coordinating muscle movements, paralysis, numbness, blindness, and dementia. In the late stages of syphilis, the disease damages internal organs and can result in death.
Proportionally, the diagnostic rate for syphilis is relatively low in the nation; however, it is the increasing trend in the diagnoses of syphilis infections that is of concern. Nationally, between 2012 and 2017, we have seen an over 200% increase in diagnoses per 100,000 population. This increase is mirrored in North Yorkshire, but because of small numbers, overall trends need to be examined to understand the possible impact of the disease for both the local population and health service providers. However, in North Yorkshire, 86% of the cases diagnosed in 2017–18 were among men who have sex with men. It is important to do further work and outreach with this group, particularly regarding health promotion and prevention.

4.4.1 Inequalities in Syphilis
The highest rate of Syphilis infection diagnosis in 2017 was in Harrogate at 8.1 per 100,000. Harrogate, Craven, Ryedale and Selby all had rates of infection higher than the overall North Yorkshire figure. None of the districts exceeded the national rate but the upper confidence interval for Craven, Harrogate, Ryedale and Selby all indicate a possible true value above the national rate. However, the confidence intervals are very wide, likely due to small numbers, so need to be interpreted with caution.

4.5 Genital Warts

There are more than 100 types of HPV (human papillomavirus), including 40 which can infect the genital tract and are sexually acquired. Genital HPV infections are frequently asymptomatic and resolved without causing disease. However, certain HPV infections can cause cervical cancer, other cancers and genital warts. Warts are the most common viral STI diagnosed in the UK, with highest rates of new cases in 20-24 year old men and 16-19 year old women. Warts are found on or around the penis, anus or vagina. Low risk HPV types 6 and 11 cause the majority of genital warts.

The HPV vaccine was introduced in 2008 for 12-13 year old girls as part of the routine vaccination schedule, in order to protect against cervical cancer. The vaccine also provides protection against genital warts.

![Figure 29 Genital Warts diagnostic rate per 100,000 trend](source: PHE Fingertips, 2018)

Genital warts nationally have shown a decrease over recent years. This is likely due to the introduction of the HPV vaccine. North Yorkshire hasn’t seen as dramatic a decrease, but following an increase in 2014, the overall rate of diagnosis has decreased slightly and remains statistically better than England. However, in North Yorkshire, 94.5% 13-14 year old girls received both doses of their HPV vaccine dose in 2016/17, statistically better than the overall proportion in England at 83.1% coverage.
4.5.1 Inequalities in Genital Warts

The distribution of genital warts across the area shows that Richmondshire is the only district with a rate higher than the England rate. Hambleton and Craven have the lowest rate of infection in County.

4.6 HIV

The human immunodeficiency virus (HIV) is a lentivirus (slowly replicating retrovirus) that causes the acquired immunodeficiency syndrome (AIDS), a condition in humans in which progressive failure of the immune system allows life-threatening opportunistic infections and cancers to thrive. Infection with HIV occurs by the transfer of blood, semen, vaginal fluid, pre-ejaculate, or breast milk. Within these bodily fluids, HIV is present as both free virus particles and virus within infected immune cells.

HIV infects vital cells in the human immune system such as helper T cells (specifically CD4+ T cells), macrophages, and dendritic cells. HIV infection leads to low levels of CD4+ T cells through a number of mechanisms including: apoptosis of uninfected bystander cells, direct viral killing of infected cells, and killing of infected CD4+ T cells by CD8 cytotoxic lymphocytes that recognize infected cells. When CD4+ T cell numbers decline below a critical level, cell-mediated immunity is lost, and the body becomes progressively more susceptible to opportunistic infections.

HIV treatment introduced in the mid-1990s, transformed HIV from a fatal condition into a long term condition. People diagnosed at a late stage of progression of the infection have a ten times greater risk of

---

death within one year than those diagnosed early. Early diagnosis also facilitates risk reduction and prompt treatment (if appropriate), which reduces infectivity (CMO report 2012).

4.6.1 New Diagnoses of HIV
Nationally, we have seen a downward trend in the rate of new HIV diagnosis – between 2011 and 2017, England saw a decrease of 32% in the rate of new diagnoses. The North Yorkshire rates have not decreased as significantly and instead seem to be relatively stable. However, the low numbers in these areas mean the figures should be interpreted with caution. It must also be noted that residents tested and diagnosed outside of North Yorkshire may not be reflected in this data.

![Figure 31 Rate of new HIV diagnoses per 100,000 population among those aged 15+](source: PHE Fingertips, 2018)
Although only small numbers of new diagnoses are made each year, in North Yorkshire during 2017, 41% were classified as ‘late diagnoses’ (as measured by the CD4 count of less than 350 cells cubic millimetre$^2$). North Yorkshire is not significantly different to the England rate for late diagnosis of HIV. However, the health outcomes are better for those who are diagnosed sooner and subsequent transmission risk is also decreased with earlier diagnosis. Therefore, this needs to remain an important focus for sexual health promotion within sexual health services.

4.6.2 Inequalities in HIV

Within England, during 2017, the majority of diagnoses were seen in the 25-44 age groups, with more diagnoses in men than women. The demographic profile of cases is also changing with an increase in new diagnoses among those in white ethnicity groups and particularly among men who have sex with men$^4$. During 2017, the prevalence of diagnosed HIV per 1,000 population of residents aged 15-59 in North Yorkshire was 0.7, compared to a national prevalence of 2.3 per 1,000. Within North Yorkshire, the prevalence ranged between 0.4 in Hambleton and 1.0 in Harrogate. Prevalence has increased in the County since 2011. As the diagnosis of new infections in the County have remained stable, this increase in prevalence could be due to new and better tolerated treatment options for people living with HIV, which has allowed people with HIV to live longer lives.

Table 7 Comparison of 2011 prevalence versus 2017 prevalence (per 100,000 population)

<table>
<thead>
<tr>
<th>District</th>
<th>2011</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Craven</td>
<td>0.3</td>
<td>0.8</td>
</tr>
<tr>
<td>Hambleton</td>
<td>0.2</td>
<td>0.4</td>
</tr>
<tr>
<td>Harrogate</td>
<td>0.8</td>
<td>1.0</td>
</tr>
<tr>
<td>Richmondshire</td>
<td>0.3</td>
<td>0.5</td>
</tr>
<tr>
<td>Ryedale</td>
<td>0.2</td>
<td>0.6</td>
</tr>
<tr>
<td>Scarborough</td>
<td>0.4</td>
<td>0.8</td>
</tr>
<tr>
<td>Selby</td>
<td>0.4</td>
<td>0.5</td>
</tr>
<tr>
<td>North Yorkshire</td>
<td>0.5</td>
<td>0.7</td>
</tr>
<tr>
<td>England</td>
<td>2.0</td>
<td>2.3</td>
</tr>
</tbody>
</table>

Source: PHE Fingertips, 2018

Figure 33 Diagnosed HIV prevalence per 1,000 population aged 15-59 (2017)

Table 8 Number of people receiving HIV-related care, 2016

<table>
<thead>
<tr>
<th>District</th>
<th>Craven</th>
<th>Hambleton</th>
<th>Harrogate</th>
<th>Richmondshire</th>
<th>Ryedale</th>
<th>Scarborough</th>
<th>Selby</th>
<th>North Yorkshire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of people receiving HIV-related care, 2016</td>
<td>26</td>
<td>20</td>
<td>99</td>
<td>17</td>
<td>22</td>
<td>57</td>
<td>36</td>
<td>277</td>
</tr>
</tbody>
</table>

Source: PHE LASERs, 2016
4.7 Cervical Cancer

Screening for cervical cancer is estimated to save 4,500 lives in England per year. Reporting the proportion of eligible women screened is important for understanding if there are possible gaps in screening coverage. All of the districts in North Yorkshire have significantly higher proportion of women screened compared to the England average. Scarborough, however, has the lowest coverage of the seven North Yorkshire districts, with 75.9% of eligible women screened.

Figure 34 Proportion of eligible women screened for cervical cancer in the past 3.5 or 5.5 years, 2017

Source: PHE Fingertips, 2018

Figure 35 Cervical cancer registrations per 100,000 population, 2011-13

Source: PHE Fingertips, 2018
Overall, numbers of cases of cervical cancer are low. The cervical cancer registration rates for 2011-13 (the most recent available) in the above chart shows that the overall rate for North Yorkshire and the rates for all districts was higher than the national average; however none of these met statistical significance. Data for 2011-13 is not available for Richmondshire or Ryedale. When we look at more recent data related to mortality, rates cannot be calculated for any of the districts in North Yorkshire because of small numbers. However, when pooled, we are able to establish that the most recent data indicates that the age-standardised rate for North Yorkshire is similar to the England rate. A decreasing trend is seen both nationally and regionally.

![Figure 36 Cervical cancer mortality rate trend 1995 - 2015](source)

### 4.8 Pelvic Inflammatory Disease

Pelvic inflammatory disease (or disorder) (PID) is a term for inflammation of the uterus, fallopian tubes, and/or ovaries as it progresses to scar formation with adhesions to nearby tissues and organs. This can lead to infertility. PID is a vague term and can refer to viral, fungal, parasitic, though most often bacterial infections. Common infections such as Chlamydia, Gonorrhoea have been known to cause PID. Although a sexually transmitted infection (STI) is often the cause, many other routes are possible, including lymphatic, postpartum, post abortal (either miscarriage or abortion) or intrauterine device (IUD) related, and haematogenous spread. Two thirds of patients with laparoscopic evidence of previous PID were not aware they had PID.
The rate of hospital admission for PID has been stable nationally. Admissions for North Yorkshire residents for the same time period have increased.

Pelvic inflammatory disease admissions in North Yorkshire are statistically similar to England. However, the increasing trend in North Yorkshire warrants further investigation. Given the fact that many people do not realise they have the condition, there is value in encouraging regular sexual health screening in groups where sexual risk-taking behaviours are higher.
4.9 Contraception

Long acting reversible contraception (LARC) is a highly effective form of birth control and LARC methods are an important component in reducing unwanted pregnancies for women of fertile age, as identified in the Department of Health’s “Framework for Sexual Health Improvement in England” (2013). Further, ensuring access to the full-range of contraception is a strategic priority, and LARC provision can be used as proxy measure for overall access to contraception. Overall, the rate of prescribed LARC in North Yorkshire is higher in all districts than the England rate, and is particularly high in Scarborough.

![Figure 39 Rate of prescribed LARC uptake (excluding injections) per 1000 females aged 15-44, 2017](image_url)

Source: PHE Fingertips, 2018

4.10 Teenage Conceptions

In the past twenty years, there has been a general decrease in the rate of conceptions for young women aged 15-17. Under-18’s conceptions refers to pregnancies that occur in women aged under 18 that result in either one or more live or still birth, or a legal abortion. Following national trends, North Yorkshire has seen a decrease in the rate of under-18’s conceptions between 1998 and 2016. The decrease in North Yorkshire has been more pronounced then in England, at around 67% compared to 60%.
Figure 40  Under 18 conception rates per 1,000 women in age group

Figure 41  Teen conception rate per 1,000 by district area (2016)

Source: ONS, 2018

Source: PHE Fingertips, 2018
Table 9 Number of teenage conceptions by District 2016

<table>
<thead>
<tr>
<th>District</th>
<th>Craven</th>
<th>Hambleton</th>
<th>Harrogate</th>
<th>Richmondshire</th>
<th>Ryedale</th>
<th>Scarborough</th>
<th>Selby</th>
<th>North Yorkshire</th>
<th>ENGLAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>8</td>
<td>18</td>
<td>15</td>
<td>13</td>
<td>5</td>
<td>41</td>
<td>19</td>
<td>119</td>
<td>17014</td>
</tr>
<tr>
<td>of Conceptions 2016</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: PHE Fingertips, 2018

There is some variation in the rates of teenage conceptions between most of the districts in North Yorkshire. Harrogate has the lowest rate, at 5.5 conceptions per 1,000 young women aged 15-17. Scarborough has the highest rate, and is the only district to be higher than the England rate (26.1 in Scarborough compared to 18.8 in England). Overall, the rate in North Yorkshire is significantly better than that national rate, but the variation we see between districts should be investigated further to understand if there is further work that could be done in terms of education and health promotion in these areas. In North Yorkshire, around 53% of under-18 conceptions result in abortion, similar to the rate seen in England (52%).

Table 10 Number of births to mums aged under 20 years of age in 2017

<table>
<thead>
<tr>
<th>District</th>
<th>Craven</th>
<th>Hambleton</th>
<th>Harrogate</th>
<th>Richmondshire</th>
<th>Ryedale</th>
<th>Scarborough</th>
<th>Selby</th>
<th>North Yorkshire</th>
<th>ENGLAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Births to mums under 20 in 2017</td>
<td>8</td>
<td>22</td>
<td>21</td>
<td>14</td>
<td>10</td>
<td>49</td>
<td>27</td>
<td>151</td>
<td>18956</td>
</tr>
</tbody>
</table>

Source: NOMIS, 2018

In 2017, the rate of births to mothers under aged 20 was lower than the national rate for all districts in North Yorkshire other than Scarborough. However, the rate in Selby is similar to the national average.
4.11 Abortions

The reporting of abortion statistics was revised by the Department of Health in 2013 in the interest of ensuring the protection of women who terminate a pregnancy. The suppression of small numbers means that deductive disclosure of this sensitive information is not possible. For the districts of North Yorkshire, however, this means that the counts and rates by the separate districts is not possible. This is further complicated by the fact that some of the CCGs in North Yorkshire also cover other local authority areas, and abortion statistics are compiled at the CCG level. Therefore, caution must be taken when interpreting all abortion-related statistics.

Because of the reporting changes, it is not possible to report trend data related to abortions in North Yorkshire. However, the 2017 ONS statistics indicate that the rate of abortions per 1,000 women aged 15-44 in North Yorkshire is statistically below the England rate (13.5 per 1,000 compared to 16.5 per 1,000). The age group with the highest abortion rate for both North Yorkshire and England was 20-24 age group. However, as more than half of the under 18 conceptions ended in abortion in 2016, both nationally and regionally, the reproductive health of this age group is of key importance.
5 SERVICE PROVISION AND ACTIVITY

The sexual health system in North Yorkshire was redesigned and re-procured in 2014/15. The integrated sexual health service went live on 1 July 2015. In addition to this service, GP Practices and Community Pharmacies are contracted directly by NYCC to provide targeted sexual health services in primary care.

5.1 The Integrated Sexual Health Service

The integrated sexual health service is provided by York Teaching Hospital NHS Foundation Trust, and is known as YorSexualHealth (www.yorsexualhealth.org.uk).

There are a range of different elements that make up the service.

5.1.1 Specialist Sexual Health Service (SSHS)

There are four centres that provide level 3 complex care. These are based at:
- Heatherdene, Harrogate, HG2 7SX
- Friarage Hospital, Northallerton, DL6 1JG
- Selby Hospital, Selby, YO8 9BX
- Northway Clinic, Scarborough, YO12 7AF

In addition, there are also a range of specialist community clinics. These are currently based at:
- Crosshills Group Practice, Crosshills, BD20 7LG
- Dyneley Barn, Skipton, BD23 2HZ
- Ripon Community Hospital, HG4 2PR
- Trax, Harrogate, HG1 1SP (young people’s service)
- Thirsk Health Centre, YO7 1LG
- Friary Community Hospital, Richmond, DL10 4AJ
- Harewood Medical Centre, Catterick, DL9 3JD
- Infantry Training Centre, Catterick Garrison, DL9 3PS
- Stokesley Health Centre, TS9 5DY
- Whitby Community Hospital, YO21 1EE
- Pickering Medical Centre, YO18 8BL
- Malton Hospital, YO17 7NG
- Sherburn Group Practice, LS25 6ED

All clinic details can be accessed at www.yorsexualhealth.org.uk
Data provided by YorSexualHealth for 2017/18 shows that there were 16,424 clinic attendances across services provided in North Yorkshire.

<table>
<thead>
<tr>
<th></th>
<th>U15</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>19-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>Over 55</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>184</td>
<td>199</td>
<td>455</td>
<td>595</td>
<td>749</td>
<td>3747</td>
<td>2618</td>
<td>1193</td>
<td>558</td>
<td>117</td>
</tr>
<tr>
<td>M</td>
<td>8</td>
<td>23</td>
<td>59</td>
<td>120</td>
<td>213</td>
<td>2068</td>
<td>1944</td>
<td>679</td>
<td>505</td>
<td>387</td>
</tr>
</tbody>
</table>

A total of 8484 STI tests were carried out (excludes chlamydia screening programme and on-line tests).

The following numbers of STIs were diagnosed:
- Genital warts = 904
- Chlamydia = 674
- Genital herpes = 237
- Gonorrhoea = 136
- Syphilis = 24
- HIV = 3
The following contraception methods were provided (excludes condoms which are reported below):
Injectable = 713
Implants = 967
IUDs = 225
IUSs = 473
COP = 1177
POP = 1028
Patch = 61
Diaphragm = 18
Vaginal ring = 6

5.1.2 Specialist Clinical Outreach Team (SCOT)
A team of sexual health nurses who work outside the standard clinics, to support the sexual health needs of the most socially complex vulnerable adults and young people; and to support colleagues and other professionals when providing sexual health care to these groups. They provide clinical care, training, and guidance and advice about sexual health. There are clear referral criteria for access to this team.

Data from 2017/18 shows that there were 116 referrals; and of these 68 received a clinical intervention.

5.1.3 Community outreach service
Provide community based prevention and sexual health promotion services to most at risk populations. This includes men who have sex with men (MSM), black African communities, people misusing drugs, people who are homeless and sex workers. Services provided include condom and lube distribution, point of care STI testing, online outreach, physical outreach, one to one support, motivational interviewing, peer support and group workshops.

Data from 2017/18 shows that the number of new service users in receipt of a structured service was 363.

5.1.4 HIV support service
Provides support to people living with HIV to maximise self-management of their physical and mental health, their social and economic wellbeing and to optimise peer support opportunities. Also provides support to carers.

Data from 2017/18 shows that there were 10 new referrals for people with a HIV diagnosis; and 7 new referrals for carers.
5.1.5 Psychosexual counselling
A free counselling service for people living in North Yorkshire who want support around different aspects of sexual health. There are clear criteria around appropriate and inappropriate referrals.

Data from 2017/18 shows that 96 service users were seen; with a total of 48 first appointments and 212 follow-up appointments delivered.

5.1.6 Training service
Provision of training to front-line staff across a broad range of sexual health topics. There are 3 types of training:
- Open to all – various sessions run throughout the year e.g. Young people’s sexual health, Sexual health awareness, condom distribution and chlamydia training
- Bespoke training – to specific specialist groups related to their training needs e.g. Community Pharmacy training; GP update training
- Faculty of Sexual and Reproductive Healthcare (FSRH) registered training

Data from 2017/18 shows that the following were delivered:
- 12 Sexual Health Awareness sessions
- 31 bespoke sessions including a GP education session, a Community Pharmacy session and training for staff in a wide range of statutory and non-statutory partner organisations.
- FSRH training – 1 Course of 5 session; trained 5 GPs and 1 Practice Nurse in FSRH Diploma/Coil fitting

5.1.7 Chlamydia screening
The service manages the delivery of the National Chlamydia Screening Programme (NCSP) across North Yorkshire. The NCSP targets 15-24 year olds. As well as providing testing within the specialist sexual health service, YSH support opportunistic screening through a large range of service providers including GP Practices, Community Pharmacies, and young people’s services. They provide the training and resources required, and manage all test results to ensure treatment (including postal treatment) and partner notification are provided. In addition chlamydia screening outreach is provided at key locations including North Yorkshire army and RAF bases.

Data from 2017/18 shows that 5488 NCSP chlamydia screens were carried out from 15-24 year olds. 3158 of these were through the YorSexualHealth Chlamydia Screening Programme and 2330 through the Preventx online NCSP testing service. 409 (7.5%) of tests were positive.

5.1.8 On-line testing
The service offers the option of postal testing kits for those aged 16 and over who live in North Yorkshire. Testing is available for chlamydia, gonorrhoea, syphilis and HIV. Test results are sent to the service user by their preferred contact method. Anyone with a reactive test is followed up for further testing and treatment.

Data from 2017/18 shows that through on-line testing 2330 tests were provided for chlamydia alone; and 1790 tests were provided for two or more STIs.
5.1.9 Condom distribution scheme
Management of the condom distribution scheme to provide free condoms to at-risk groups through clinical and non-clinical settings. The at-risk groups targeted are: under 25 year olds, MSM, known injecting drug users, sex workers, homeless people, and military personnel.

Data from 2017/18 shows that there were 42 organisations signed up to deliver the scheme; and a total of 43,344 condoms were provided to organisations for distribution.

5.1.10 GUMCAD data - attendances at Level 3 GUM services
Overall, there is a general increasing trend in the attendances by North Yorkshire residents to sexual health services. Since June 2017, there has been a 3% increase in attendances to June 2018 (Table 5). While this is a less dramatic increase of attendances compared to previous years, since 2012/13, we have seen an overall increase of 60% in attendances at sexual health services by North Yorkshire residents. This figure includes attendances by North Yorkshire residents to services in other areas, with nearly 26% of patients choosing to access out-of-area services. Table 6 below shows the most common locations of services accessed by patients residing in North Yorkshire. Of the 11,631 North Yorkshire-based patients accessing sexual health services, Monkgate Health Centre in York was visited by 1,591 North Yorkshire residents between July 2017 and June 2018 (12% of patients). However, 74% of North Yorkshire-based patients still choose to access services within the North Yorkshire boundaries.

Table 11 Trend of GUM (level 3) services attended by patients residing in North Yorkshire

<table>
<thead>
<tr>
<th>Year</th>
<th>Total attendances</th>
<th>Change (%)</th>
<th>Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012/13</td>
<td>10236</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013/14</td>
<td>11197</td>
<td>9.4</td>
<td>↑</td>
</tr>
<tr>
<td>2014/15</td>
<td>9892</td>
<td>-11.7</td>
<td>↓</td>
</tr>
<tr>
<td>2015/16</td>
<td>14333</td>
<td>44.9</td>
<td>↑</td>
</tr>
<tr>
<td>2016/17</td>
<td>15908</td>
<td>11.0</td>
<td>↑</td>
</tr>
<tr>
<td>2017/18</td>
<td>16385</td>
<td>3.0</td>
<td>↑</td>
</tr>
</tbody>
</table>

Source: GUMCAD, 2018

Table 12 All GUM (level 3) services attended by patients residing in North Yorkshire by services used

<table>
<thead>
<tr>
<th>Service location</th>
<th>Service name</th>
<th>Number of patients</th>
<th>% of total patients</th>
<th>New attendances</th>
<th>Follow-up attendances</th>
<th>Total attendances</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Yorkshire</td>
<td>Harrogate District Hospital</td>
<td>3,614</td>
<td>27.5</td>
<td>3,975</td>
<td>1,145</td>
<td>5,120</td>
</tr>
<tr>
<td>North Yorkshire</td>
<td>Northway Clinic</td>
<td>2,308</td>
<td>17.6</td>
<td>2,692</td>
<td>637</td>
<td>3,329</td>
</tr>
<tr>
<td>North Yorkshire</td>
<td>Friarage Hospital</td>
<td>1,726</td>
<td>13.1</td>
<td>1,911</td>
<td>405</td>
<td>2,316</td>
</tr>
<tr>
<td>York</td>
<td>Monkgate Health Centre</td>
<td>1,591</td>
<td>12.1</td>
<td>1,598</td>
<td>553</td>
<td>2,151</td>
</tr>
<tr>
<td>North Yorkshire</td>
<td>New Selby War Memorial Hospital</td>
<td>1,000</td>
<td>7.6</td>
<td>1,038</td>
<td>416</td>
<td>1,454</td>
</tr>
<tr>
<td>Darlington</td>
<td>Darlington Memorial Hospital</td>
<td>244</td>
<td>1.9</td>
<td>282</td>
<td>97</td>
<td>379</td>
</tr>
<tr>
<td>Leeds</td>
<td>Leeds Sexual Health</td>
<td>241</td>
<td>1.8</td>
<td>309</td>
<td>114</td>
<td>423</td>
</tr>
<tr>
<td>Total North Yorkshire residents seeking sexual health services</td>
<td></td>
<td>11,631</td>
<td></td>
<td>12,788</td>
<td></td>
<td>3,597</td>
</tr>
</tbody>
</table>

Source: GUMCAD, 2018
The most recent figures (June 2017 to July 2018) indicate that of the 14,400 attendances at North Yorkshire-based clinics, 85% of attendances were from North Yorkshire residents. These attendances represent 10,300 individual patients, and 84% of those patients were North Yorkshire residents. Of the out-of-area patients whose county of residences was known, 4% of the patients were from Leeds, and 3% were from York.

Figure 44 Patient attendances at all sexual health GUM services in North Yorkshire by LA of residence

Source: GUMCAD, 2018

Sexual health services related to Harrogate District Hospital were the services most frequently accessed by patients choosing to seek services in North Yorkshire. This is consistent across all three time frames looked at, and there is an overall increasing trend in the number of patients accessing the Harrogate services, with 20% more patients attending Harrogate services in 2017/18 compared to 2015/16. This trend is seen across all four of the main sexual health services covered by GUMCAD.
5.2 Services Delivered in GP Practices

A proportion of GP practices have signed up to across North Yorkshire to provide a sexual health service in primary care. This includes Long Acting Reversible Contraception (LARC), chlamydia screening and condom distribution. This service is delivered outside of the General Medical Service (GMS) contract.

Seventy three GP practices are currently signed up to deliver LARC in North Yorkshire. Activity from 2017/18 shows that there were 1299 IUD fitted, 1268 IUS fitted, and 2288 implants fitted.

5.3 Services Delivered in Pharmacies – Emergency Hormonal Contraception

A proportion of community pharmacies across North Yorkshire have signed up to provide a sexual health service. This includes Emergency Oral Hormonal Contraception (EHC), chlamydia screening and condom distribution. EHC is provided via a Patient Group Direction (PGD) free of charge to service users aged 13 years to 24 years inclusive.

Service users excluded from the PGD criteria are referred to another local service that is able to assist them, as soon as possible, e.g. GP, YorSexualHealth, or are invited to purchase the pharmacy medicine product if the exclusion from supply via the PGD is only due to their age.

Seventy four pharmacies are currently signed up to deliver EHC in North Yorkshire. Activity from 2017/18 shows that there were 538 consultations for EHC which resulted in the provision of 332 levonorgestrel tablets and 177 ulipristal acetate tablets.
6 CONCLUSION

Despite efforts to control STIs, including the improved availability and update of sexual health screening, we are not seeing a significant impact on numbers of STIs diagnosed with some STI rates continuing to rise. Whilst some of the increase is associated with improved access to services and more testing, it is clear that high rates of infection persist in some population groups such as men who have sex with men (MSM) and young people. This highlights the continued importance of sexual health services.

The percentage of late stage of diagnosis of new cases of HIV remains a concern, and improved uptake of HIV testing, particularly for those with HIV indicator conditions, is vital for early detection and treatment to reduce morbidity and mortality.

Existing prevention efforts, such as greater STI screening coverage and easier, more rapid access to sexual health services need to be sustained and improved in some localities to support earlier diagnosis and prevent onward transmission. These efforts need to be focussed on high risk groups in particular.

LARC is the most effective form of contraception. Provision of LARC services is good across North Yorkshire and maintaining and skilling up healthcare professional to support people to make informed choices about contraception and fit and remove LARC needs to be ensured.

Whilst good progress has been made on teenage pregnancy rates across North Yorkshire, more needs to be done in certain localities and should be supported by broader prevention work to identify and support young people at risk of teenage pregnancy.

Improving the sexual health of the population of North Yorkshire requires an integrated response from all relevant agencies. The Local Authority is responsible for commissioning comprehensive, open-access sexual health services. It needs to work with key partners to build on the existing good work that has previously occurred.
7 APPENDICES

7.1 Table of figures

Figure 1  A map of the LSOA’s in North Yorkshire by local IMD 2015 quintiles 8
Figure 2  A map of the districts and CCG’s across North Yorkshire 9
Figure 3  Population pyramid showing North Yorkshires age make up (2017) 10
Figure 4  Population pyramid showing Craven age make up against England (2017) 11
Figure 5  Population pyramid showing Hambleton age make up against England (2017) 11
Figure 6  Population pyramid showing Harrogate age make up against England 11
Figure 7  Population pyramid showing Richmondshire age make up against England (2017) 11
Figure 8  Population pyramid showing Ryedale age make up against England (2017) 12
Figure 9  Population pyramid showing Scarborough age make up against England (2018) 12
Figure 10  Population pyramid showing Selby age make up against England (2017) 12
Figure 11  Predicted population change, North Yorkshire and England 2020 to 2030 16
Figure 12  Population pyramid showing England’s population change between 2017 and 2030 16
Figure 13  Population pyramid showing North Yorkshires population change between 2017 and 2030 16
Figure 14  District population distribution 10 year age bands (2018) 18
Figure 15  Persons aged 15-49 by deprivation quintile for each district 19
Figure 16  Persons aged 15-24 by deprivation quintile for each district 20
Figure 17  Census 2011 Ethnicity breakdown by district (All ages) 21
Figure 18  General Fertility rate by district North Yorkshire districts, 2016 24
Figure 19  Number of live births 2008-2017 with projections 2018-2030 for North Yorkshire 24
Figure 20  Proportions of population aged 15 to 24 screened for chlamydia 25
Figure 21  Rate of chlamydia detection per 100,000 young people aged 15 to 24 26
Figure 22  Chlamydia diagnosis rate per 100,000 populations in those aged 15-24, North Yorkshire Districts, 2017 26
Figure 23  Gonorrhoea diagnostic rate per 100,000 trend 28
Figure 24  Gonorrhoea diagnostic rate per 100,000 by North Yorkshire districts (2017) 28
Figure 25  Herpes diagnostic rate per 100,000 trend 29
Figure 26  Herpes diagnostic rate per 100,000 by North Yorkshire districts (2017) 30
Figure 27  Syphilis diagnostic rate per 100,000 trend 31
Figure 28  Syphilis diagnostic rate per 100,000 by district (2017) 31
Figure 29  Genital Warts diagnostic rate per 100,000 trend 32
Figure 30  Genital warts diagnostic rate per 100,000 by district (2017) 33
Figure 31  Rate of new HIV diagnoses per 100,000 population among those aged 15+ 34
Figure 32  Percentage of adults (aged 15 or above) newly diagnosed with a CD4 count < 350 cells mm$^{-3}$ 2015-17 35
Figure 33  Diagnosed HIV prevalence per 1,000 population aged 15-59 (2017) 36
Figure 34  Proportion of eligible women screened for cervical cancer in the past 3.5 or 5.5 years, 2017 37
Figure 35  Cervical cancer registrations per 100,000 population, 2011-13 37
Figure 36  Cervical cancer mortality rate trend 1995 - 2015 38
Figure 37  Pelvic inflammatory disease admission women aged 15-44 trend 39
Figure 38  Pelvic inflammatory disease North Yorkshire 2016/17 39
Figure 39  Rate of prescribed LARC uptake (Excluding injections) per 1000 females aged 15-44, 2017 40
Figure 40  Under 18 conception rates per 1,000 females aged 15-44, 2017 41
Figure 41  Teen conception rate per 1,000 by district area (2016) 41
Figure 42  Number of births to mums under 20 42
Figure 43  Abortion rate per 1,000 by broad age group and England and North Yorkshire, 2017 43
Figure 44  Patient attendances at all sexual health GUM services North Yorkshire by LA of residence 49
Figure 45  Number of patients by services in North Yorkshire 49