KENT PUBLIC HEALTH OBSERVATORY

Kent Sexual Health Needs Assessment

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Contents

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Abbreviations

ACE Adverse Childhood Experiences- is the term given to describe all types of abuse, neglect, and other traumatic experiences that occur to individuals under the age of 18.

BBV Blood borne virus

FGM Female genital mutilation refers to all procedures which involve the partial or total removal of the external female genitalia or any other injury to the female genital organs for non-medical reasons.

GUM Genito Urinary Medicine

HIV Human Immunodeficiency Virus

LARC Long Acting Reversible Contraception

LASER Local Authority Sexual Health Reports

LGBTQ Lesbian, Gay, Bisexual. Transgender, Questioning

MSM Men who have sex with Men

NHSE National Health Service England

PHE Public Health England

STI Sexually Transmitted Infection

Executive summary

This needs assessment has reviewed the changes that have taken place over the last five years. During this time the commissioning of specific sexual health services became a mandated responsibility of local authorities.

Sexual health is not a single issue: It is affected by varying things including childhood and adult experiences, vulnerability, lifestyle and mental health.

Mental health: This is a significant factor in sexual health behaviour and should not be underestimated. Identifying clear service referral pathways and understanding of harmful sexual behaviours across the system should be implemented.

Alcohol: There is much evidence on the impact of alcohol and sexual behaviour although much of this has focused on young people. Reviews suggested that sexual health services needed to look at alcohol use and as such Kent local authority have included these in-service specifications since April 2015. For example, the assessment which takes place for all receiving free emergency oral contraception through contracted pharmacies includes alcohol use. In 2016 a brief intervention took place with an average of 12% of clients per month.

Sexual abuse amongst children and young people has long lasting consequences not least for their future sexual health behaviours. There has been increase in the reporting of sexual abuse to police in Kent and greater awareness of child sexual exploitation. Supportive evidence-based programmes that work with children and young people to help them:

- understand and develop more healthy relationships
- have an increased awareness and confidence to respect themselves and others.

The NSPCC[1] have estimated that 16% of children aged under 16 experience some form of sexual abuse during childhood. This would equate to approximately 47,300 children under 16 years of age in Kent.

The police found a 36% [October 2015 - September 2016] increase in sexual offences reported by children and young people against the previous year. Those children and young people who were then in contact with the sexual assault referral centre [SARC] represent 12% of these cases reported to the police. There are fewer boys and young men in contact with the SARC (7%). The majority of C&YPs seen in the SARC are aged 16-17 years.

Gender identity: That the differing needs of young LGBTQ are **not** being met locally is becoming more evident. There has been an observed increase in the number of people expressing or questioning their gender identity as seen through sexual outreach services and in forums identified to support individuals and their families/carers.

Reproductive health: A key public health outcome is to reduce the number of unwanted pregnancies. The NATSAL survey identified that 49% of pregnancies are unplanned or women are ambivalent towards them. Inconsistent contraception use or no contraception puts all women of reproductive years at risk of pregnancy.

The needs assessment highlights the availability of contraception. Contraceptives are accessible through a range of service providers in Kent: general practice, integrated sexual health services, 99 pharmacies offering emergency oral contraception, 152 general practices providing LARC and the Get it programme providing free condoms for young people from 264 sites and online.

Preconception care is an invaluable opportunity to proactively help reduce the level of excess weight amongst women of reproductive age.

Kent like England has decreasing teenage pregnancy rates with the rates in Kent (similar to England). In 2016 the rate of under 18 conceptions in England was 18.8 and Kent 18.5. In 2016 the rate of under 16 conceptions in England was 3.0 and Kent 2.9. In 2016 the districts with the highest rates of Under 18 conception rates per 1,000 15-17 female. population were Thanet (26.9), Swale (26.9) and Dover (23.9).

Genito urinary medicine: The data shows decrease in overall detected infections in Kent, but Kent is not meeting the two PHE public health outcomes which relate to health protection to reduce the:

- Rate of chlamydia detected per 100,000 young people aged 15-24 years. In Kent the rate is 1,272 compared to 1,882 in England in 2017
- Percentage of adults [aged 15 and above] newly diagnosed with HIV with a CD4 count less than 350 cells per mm^3. In Kent the rate is 56.8 compared to England 40.2 in 2014-16.

Chlamydia testing: Access to chlamydia testing for 16-24 year olds has changed in the last two years providing opportunity for home testing whilst the availability of testing kits in community settings stopped in October 2017. The average monthly detection from online testing was 11%. The importance of informing and advising young people/adults about perceived and actual risk is evidenced in the low rates of testing and detection. Lower percentages of sexual health screens amongst 16-19 year olds and 20-24 year olds on first attendances highlight the missed opportunities to screen for chlamydia infection.

Late diagnosis of HIV: A virus which does not necessarily present with symptoms HIV can remain undetected for years if testing is not undertaken. As seen in the prevalence rate of HIV diagnosis late in the stage of disease Kent is higher than England. Although actual numbers in Kent with late diagnosis of HIV are reducing the rates remain high when compared to England. This is likely to be a reflection of the plateauing of HIV diagnosis in England compared to Kent where rates are continuing to rise. The significance of appreciating personal risk and the opportunities to free HIV testing is understated. The reluctance of the population to test for HIV is evidenced in the sexual health services performance activity.

HIV: The increased use of protection against infection will help reduce transmission and effective partner notification will help reduce reinfection. However, when looking at the rate of change in the prevalence of diagnosed HIV per 1,000 population aged 15-59 years this is found to be highest in the districts of Maidstone, Gravesham and Thanet. That said there is a wide variation in prevalence rate and it is Dartford [2.11] and Gravesham [2.02] districts which have the highest prevalence rates. These areas should consider proactively testing all new GP registrants.

The burden of STIs is unevenly distributed across the county, geographically and amongst populations and is constantly changing.

- The districts with the highest rate of detected new sexually transmitted infections in 2017 were Canterbury and Thanet.
- Canterbury and Swale districts had the highest rates of diagnosed genital warts in 2017.
- Canterbury district has the highest rate of diagnosed genital herpes with a rate of 61.5 per 100, 000 population, higher than the England average 56.7.
- Dartford district had the highest rate of diagnosed gonorrhoea of 54.2 per 100,000 population higher than the South East average 45.9.
- The districts of Dartford and Gravesham district had the highest rates of syphilis per 100,000 population 11.4 and 10.4 respectively, higher than the South East average of 9.5.
- Young adults/people have the highest rates of detected STIs, 20-24 years, 15-19 years followed by 25-34 years.

Emerging themes

A key theme identified through this needs assessment is the continual lack of individual's awareness for their own and potential partner's risk to sexually transmissible infections. There is little awareness that most of the infections present with no symptoms and that all sexually active persons of any age are potentially at risk. Consequently, the need for protection is not considered. This would indicate that there are many undetected STIs in the population. This is seen in part through the rates of ectopic pregnancy and pelvic inflammatory disease in Kent which are and have been higher than the England average over the last three years. These conditions are more likely where there is undetected chlamydia or gonorrhoea.

A theme highlighted is the impact on sexual health and wellbeing, from those individuals reluctant to disclose or share personal experience. This is impacting on potential diagnosis of STIs, access to appropriate support and messaging on sexual health advice.

An important issue identified in this assessment is the change in the proportion of sexual health screens offered to first attendances at the specialist sexual health services. This has reduced significantly amongst females since the introduction of the integrated service model.

The need to further develop more flexible clinical provision to support and implement policy change or clinical guidance.

Compelling evidence about the need for a renewed emphasis and focus on preconceptual care to help improve conception, maternal and offspring health outcomes.

Service use suggests a changing use of sexual health services in terms of:

- increase in clinic attendances in Kent;
- reduction in the proportion of services used out of area;
- reduction in the percentage of young people 16- 24 years accessing clinics but similar use to England amongst under 16-year olds;
- increasing access to and uptake of online services – Get It and STI testing.

Service need is constantly evolving and specialist sexual health services are not necessarily best placed to provide the support needed. This includes individuals displaying harmful sexual behaviours or presenting with complex needs associated with long term conditions.

Extended executive summary for commissioners

Service access

- To improve the uptake of cervical screening, through the expansion of cervical screening for those invited to attend for screening as part of the screening programme, once arrangements have been agreed nationally and regionally by NHSE to co commission this activity.
- Further work is needed to ensure pathways of care to specialist mental health services are clear specifically for those identified as LGBTQ.
- Identifying clear service referral pathways and understanding of harmful sexual behaviours across the system should be implemented.

Service availability

- There is not the uniformity in service provision which is needed to address demand- specifically for symptomatic care in the evening and on Saturdays. This should be an aspect of service review.
- Review of service appointments only clinics from 2017/18 where DNA rates are high to help inform future service access.

Service change

- Establishment with NHSE the assessment and care pathways for the ageing HIV positive population with multiple health needs.
- Support women to access planned contraception differently. Engage with NHSE and CCGs about the changing demands on specialist sexual health services from primary care to improve availability of and access to oral contraception differently such as online or rapid self-review whilst helping to reduce demand on primary care.
- Engage with NHSE and CCGs about the changing 'referrals' for complex reproductive sexual health services [non-contraceptive procedures, lost threads].
- Provide evidence-based guidance and workforce development to enable sexual health services staff to respond to the need of clients from the impact of Adverse Childhood Experiences [ACE]s on their sexual health needs.
- Commissioning specialist service to support the specific identified and unidentified unmet needs of LGBT groups such as utilisation of the psychosexual services in colleges building on the model piloted.
- Proactive support working with the whole system to embed and improve preconception health.

Service information

- Development and distribution of a communication about what the clinical and non-clinical services do and do not offer.
- Increase the interactivity capability of the sexual health website to:-
    - enable persons to book clinic appointments online [This would need monitoring to review if this system reduces DNAs].
    - provide a search option for clinic opening times and service by days of the week/times /location.
    - provide webchat as a key component of service provision and monitor impact on service use and providers.
- Integrate further service analysis and feedback of young people [under 18s] for service development.

Service investment

- Levels of investment and outcomes should be taken into account.

Recommended calls to action

For services

- Commencement of a six-month research programme to introduce and compare chlamydia diagnoses through vulval and rectal swabbing amongst women in MTW NHS Trust who have sought ethical approval to undertake this research.
- There is a need to review provider approaches to testing, as variation was found in the provider survey, to ensure that there is consistent equitable screening at first attendances to females. Lower percentages of sexual health screens amongst 16-19 year olds and 20-24 year olds on first attendances highlight the missed opportunities to screen for chlamydia infection.
- HIV testing amongst new registrants to practices in North Kent.
- Collaborative review and shared learnings of late diagnosis of HIV across primary and secondary care should be supported by NHSE.
- Increasing awareness of the impact of smoking on sexual health through sexual health services and online could be beneficial.
- Targeted and focused preconception care to reduce the level of excess weight amongst women of reproductive age and promote the importance of preparing for conception.
- Implementation of proactive dialogue to identify those clients accessing the services affected by Adverse Childhood Experiences [ACE]s to better understand sexual health behaviour and or risks.

For public health

- There is a suspected gap in services for young people under and over 16 years of age displaying harmful sexual behaviours. An audit of the same should be undertaken with subsequent development of shared agreed pathways of care following NICE guidance for those children and young people displaying harmful sexual health behaviours making use of available evidence-based framework[2] This will identify gaps in provision and workforce development need.
- Design and implementation of a campaign to increase awareness of common STIs, who is at risk of an STI and the fact that they are often not visible. The campaign would also need to shift a change in the attitude of those testing through someone else.
- Explore the opportunities to integrate wider HIV testing amongst the BME community and secondary care services.
- In collaboration with the campaign activity, advise and promote information about those 'symptomatic' conditions which can be treated from over the counter treatment at pharmacies for example *thrush.*
- Focusing on the areas identified in chapter 3 of this health needs assessment are recommended for the sexual health network to help further improve service developments. This should continue to engage with providers, commissioners [NHSE, CCGs, KCC], mental health, alcohol and drug services, domestic abuse, sexual assault, prison health services and PHE.
- Engage in further research opportunities to inform and influence policy to promote and prevent poor sexual health outcomes.
- Action research is needed to understand how best to engage with and support asylum seekers, migrants and refugees to address their sexual health needs.
- Inclusion of preconception care as part of the strategy and priorities to proactively address obesity, nutrition and lifestyle behaviours amongst women in the reproductive years. This will include integration with the LMS and STP and require workforce development.
- Prioritising and embedding preconception health to improve understanding of the impact of poor conception health on population health.

List of graphs and figures

Graph 48: QOF indicator CS002 – Percentage of women aged 25- 64 years who have had a cervical screen in the previous five-year period [2013/14 – 2016/17]

1 Introduction

This sexual health needs assessment has reviewed changes from the last five years.

1.1 National context

Sexual health is an important 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 set out its ambitions for improving sexual health in its publication in 2013 *A Framework for Sexual Health Improvement in England.*[3]

Local Authorities are mandated[4] to commission comprehensive open access sexual health services (including free STI testing and treatment, notification of sexual partners of infected persons and free provision of contraception).

The development of an integrated sexual health service model has sought to improve sexual health by providing easy access to services through open access 'one stop shops', where the majority of sexual health and contraceptive needs can be met at one site, usually by one health professional, in services with extended opening hours and accessible locations. The provision of integrated sexual health services was supported by accredited training programmes and guidance from relevant professional bodies including FSRH, BASHH, BHIVA, MEDFASH, RCOG and NICE and relevant national policy and guidance issued by the Department of Health and Public Health England.

1.2 Sexual health

Sexual health includes the provision of advice and services around relationships, contraception, sexually transmitted infections (STIs), HIV, and sexual assault.

'While sexual relationships are essentially private matters, good sexual health is important to individuals and to society. It is therefore important to have the right support and services to promote good sexual health.'[5]

Poor sexual health creates a significant burden of disease through sexually transmitted infections, particularly repeat, diagnosed late or undiagnosed infections. These are prevalent amongst males and females, but risk can be reduced or prevented. Poor contraception management makes for unplanned and/or unwanted pregnancies across the reproductive years. Sufficient access to emergency contraception and termination of pregnancy services can alleviate or support women but planned contraception makes for better sexual health.

The importance placed on improving the sexual health of the population is seen through the inclusion of sexual health indicators in the public health outcomes framework[6].

1.3 Who's at greater risk of poorer sexual health?

Sexual ill health is not equally distributed within the population. Although everyone who is sexually active risks exposure to a sexually transmitted infection [STI], links exist between deprivation and STIs, with the greatest burden of infections typically borne by those aged 20-24 years, men who have sex with men (MSM) and black and minority ethnic groups. Females experience the impact of unplanned pregnancies, some of which may lead to abortion and the long-term consequences on emotional, mental and physical health from sexual assault. Recent research[7] suggests that those children/young people exposed to adverse childhood experiences [ACE], of which there are ten, are more likely to adopt health harming behaviours.

There are different risks to wellbeing and sexual health for different sectors of the population including sexuality, sexual preference, gender identification, lifestyle and behaviours, age and ethnicity. In turn these vary depending upon individual self-esteem, resilience or self-confidence. Those who are typically at greater risk of poorer sexual health include:

- men who have sex with men [MSM]
- an individual who has unprotected sex, whether oral, anal or vaginal
- those with multiple or co-partners
- some participants of chem-sex
- transgendering men and women
- specific ethnic groups where there is higher prevalence of HIV
- country of birth where diagnosed rates of STI rates are higher
- history of sexual abuse
- individuals in abusive not loving relationships

In the UK, a woman has an average of **8** male sexual partners, a man has an average of **12** female sexual partners (Source Natsal-3)

1.4 Factors that may lead to poorer sexual health outcomes

ACE: Adverse childhood experiences impact on child development and subsequent responses to stress. These can lead to much poorer health outcomes with the adaptation of harmful health behaviours in response to the stresses faced. This presents an increased risk to sexual health from unplanned pregnancy, unprotected sexual intercourse and sexual abuse. Compared with people with no ACEs, those with 4 or more ACEs are 6 times more likely to have had or caused an unplanned teenage pregnancy.[8]

Unprotected sex: vaginal or anal penetration by an infected partner who is not wearing a condom transmits some diseases with particular efficiency. Without a condom, a man who has gonorrhoea has a 70 to 80 percent chance of infecting his female partner in a single act of vaginal intercourse. Improper or inconsistent use of condoms can also increase the risk. Oral sex is perceived to be less risky, but infection may still transmit without correct use of a condom or dental dam.

Multiple sex partners: multiple numbers of sexual partners increases the risk of developing STIs. This is true for consecutive as well as concurrent partners. Each time a person breaks up with one partner and moves on to another, even if each relationship is monogamous, the STI risk is increased.

Alcohol misuse or drug misuse: alcohol and substances may inhibit a person's judgment, leading to participation in non-negotiated or risky behaviours. Needle sharing spreads many serious infections, including blood borne viruses such as HIV and Hepatitis C.

Domestic abuse: a victim may experience emotional, financial, physical, psychological or sexual abuse. This is not just in heterosexual relationships but also amongst LGBT.

Chem-sex: is a diverse and complex phenomenon – but a behaviour in which a wide variety of men engage. Chemsex will be experienced at different times or points in men's lives and through use of a range of drugs with complex consequences. The drugs most commonly used in chemsex are GBL, methamphetamine and /or mephedrone. The use of drugs prolongs the sexual experience and may involve more partners – which will increase the likelihood of STI transmission and or blood borne viruses [BBV]. The impact on mental health includes: anxiety and acute paranoia, whilst the impacts on physical health include: disrupted sleep patterns, overdose and sexual consent.

Learning disability: increased risk of bullying, vulnerability to unintended and unwanted relationships, or may display inappropriate sexual behaviour.

Mental ill health: can be a cause of or a symptom of risky sexually health behaviours. Poor mental health can make it difficult to achieve good sexual health and suboptimal mental health and sexual health often coexist.

Sexual assault: being subjected to touching with sexual intent without consent. This includes abuse, rape and coercion.

History of one or more STIs: being infected with one STI makes it much easier for another STI to take hold. If a person is infected with herpes, syphilis, gonorrhoea or chlamydia and has unprotected sex with an HIV-positive partner, he or she is more likely to contract HIV. This is true for other blood borne viruses, Hepatitis B and Hepatitis C as well.

Sex toys: sharing of these toys should be avoided. Cleaning and covering with a condom between uses will help protect against infection.

Mother to Infant transmission: certain STIs, such as gonorrhoea, chlamydia and syphilis, can be passed from an infected mother to her child during pregnancy or delivery. STIs in infants can cause serious problems and may be fatal. Screening and identification of HIV infection during pregnancy provides opportunities to prevent transmission to the baby. The number of women resident in Kent identified as HIV positive antenatally is unclear.

1.5 National guidelines

BASHH Chlamydia testing recommendations 2013[9]

UK National Guidelines on safer sex advice BASHH and BHIVA 2012[10]

Standards of care for people living with HIV, BHIVA 2018[11]

Standards for the Management of Sexually Transmitted Infections-BASHH 2014[12]

UK National guideline for the management of infection of chlamydia trachomatis 2015[13]

BASHH Guideline for the Management of PID 2018[14]

DH Healthy Lives, Health People white paper 2010[15]

DH A Framework for Sexual Health Improvement in England 2013[16]

FRSH Service standards for Sexual and Reproductive Healthcare 2016[17]

Clinical guidance: Progestogen-only Implants FRSH 2014[18]

Service Standards for Intrauterine Contraception FRSH October 2015[19]

Service Standards for Resuscitation in Sexual and Reproductive Healthcare Services FRSH August 2016[20]

Clinical guidance: Problematic Bleeding with Hormonal Contraception FRSH July 2015[21]

NICE Long acting reversible contraception: the effective and appropriate use of long acting reversible contraception 2005 and reviewed 2017

FRSH [2017] CEU Statement Contraceptive choices and sexual health for transgender and non-binary people[22]

FRSH [2017] Clinical guidance – Quick starting contraception[23]

FRSH [2017] Guidance contraception for women aged over 40 years[24]

NICE Harmful sexual behaviour among children and young people 2016[25]

NICE 2017 Sexually Transmitted Infections: Condom Distribution Schemes[26]

PHE 2017 Sexual Health, Reproductive Health and HIV - A Review of Commissioning[27]

1.6 Local context

In April 2015 a new model for the delivery of sexual health services was introduced integrating contraception services, Genito urinary medicine and HIV services. At the same time there was establishment of two bespoke outreach services. One to evaluate and inform the development of a condom programme and a second to develop and monitor outreach activity for children at risk of sexual exploitation, and young LGBTQ. There was also expansion of a new psychosexual therapy services across the county. Chlamydia screening was identified as key to health protection and so investment in chlamydia screening programme to coordinate, increase and monitor testing was commissioned. In addition, in primary care there was:

- an extension and requirement for a consistency of sexual health service offered through pharmacies and
- requisite that primary care practitioners in general practice would obtain the letters of competency to deliver the long acting reversible contraception contract.

From January 2016 there has been access to those aged 16 and over to online testing for HIV and chlamydia screening [up to 25 years of age]. In October 2017 the offer of tests to those Kent residents aged 16 and over increased to include chlamydia, gonorrhoea, syphilis, HIV, Hepatitis B and Hepatitis C.

The services continue to evolve and adapt to meet the changing requirements of government policy, evidence-based standards, drug regimes whilst reflecting local need. For example, the introduction of a weekly complex GUM level 3 service in Sevenoaks, increased investment to meet user demand, extended Saturday opening alongside reduction on opening on Friday afternoon in one clinic in response to client demand.

2 Demographic background

The estimated population aged 15 and above in Kent is 1,447,800. The establishment of two new towns and numerous housing developments in the next 5 years is likely to increase this population to 1,457,500 by 202328.

2.1 Ethnicity

Diversity of the population is increasing with 6.3 %[29] identified as BME.

2.2 MSM population

It is estimated[30] that the MSM population is from 2-3% of the male population. In Kent this equates to approximately 15,000 of the male population aged 18 and over.

2.3 LGBTQ

In 2015, 1.7% of the UK population aged 16+ identified themselves as lesbian, gay or bisexual (LGB)[31]. Of these, 1.1% identified as gay or lesbian and 0.6% as bisexual. This equates to approximately 21,000 in Kent, however this is likely to be an underestimate.

2.4 Teenage parents

The exact number of teenage parents is unknown. What is clearer is the number of teenage mothers. Early parenthood brings its own challenges for the parents themselves but is often seen during a period of considerable emotional, intellectual, physical and developmental change which adolescence brings. Nationally the rates of teenage pregnancy are higher in areas of deprivation, coastal towns and Kent is no different.

2.5 Sex workers

A sex worker defines people who: commercially sell themselves for sex; provide 'escort' services; self-film sexual behaviours for distribution online; studio porn filming.

The health of sex workers is changing as access to services and rapid testing improves and the move to isolated working and increased dependence on the use of the internet and social media to publicise their services.32 The latter brings its own risks in relation to personal safety in terms of potential assault or violence, group/gang sex and subsequent mental health issues.

The development of the porn industry may mean that some sex workers are exposed to an increased risk of STIs as condom less sex is required. Some of these workers are dependent upon sexual health services to provide regular STI testing and 'proof' of their STI and HIV status.

A study33 of male GUM clinic attendees in 2011 found that just under 1% identified themselves as male sex workers [MSW] and of these the median age was 29 years. MSW were more likely to be migrants. Compared to other men the rates of chlamydia, gonorrhoea and HIV were higher amongst this group.

There is suggestion in another study34 that sex workers are 10 times more at risk of HIV compared with the general population because of inability to negotiate consistent condom use, experiences of violence and other social factors.

2.6 Prisoner population

The prison population of Kent is approximately 3380 with the largest prison being HMP Elmley which is a remand prison. This category of prison presents particular challenges because the throughput, i.e. the daily number of new prisoners entering the prison and the number of detainees leaving or transferring to other facilities, is very high. A changing throughput is also seen at HMP Maidstone as the detainees here are entirely foreign nationals transferred from other UK prisons.

2.7 Learning disabilities

Approximately 20 in every thousand people have a learning disability. In Kent the number of people with a learning disability and registered with a GP is n=7077[35].

2.8 Mental ill health

'4-10% of people in England will experience depression in their lifetime.[36] A study in 2016[37] found that one in six adults had a common mental disorder. Estimates[38] indicate that 24% of the adult population in Kent aged 18-64 years, nearly 1 in 10 of children aged 5-16 years and 17.5% of 16 – 24-year-olds have a mental health illness[39].

2.9 Domestic abuse

In 2015 there were 22.1 domestic abuse incidents per 1000 population reported to the police nationally and 23.1 per 1,000 to the police force area which covers Kent. In 2016/17 the number of reported incidents of domestic violence to Kent police reduced slightly to a rate of 20 per 1,000 population. Incidences of domestic abuse can include verbal or physical sexual abuse/rape.

More than a quarter (28 per cent) of trans people in a relationship in the last year have faced domestic abuse from a partner[40].

3 Sexual health - not a single issue

Our sexual health is affected by many factors. These include lifestyles, childhood experiences, exposure to risk and health status. This chapter provides overview of some the key challenges for consideration.

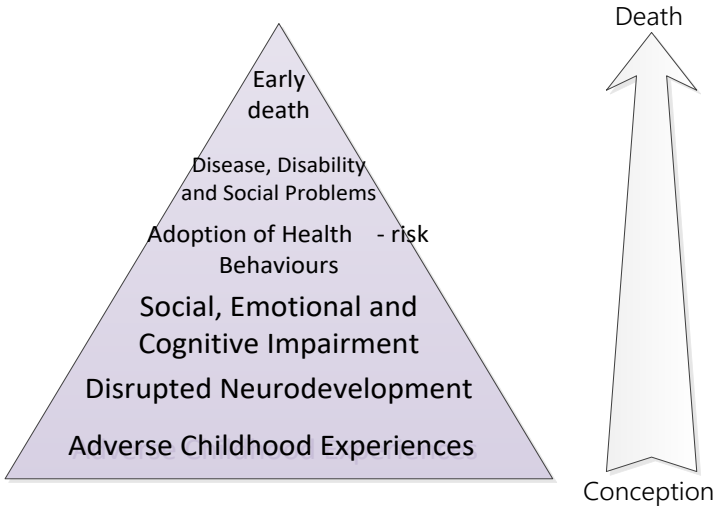
3.1 Adverse Childhood Experiences [ACE]s

The sexual and mental health of young people is rightfully receiving much more attention in recent decades and the importance of a good start for life for children is regarded as significant for both.

Adverse childhood experiences have been described as potentially traumatic events that can have negative lasting effects on health and wellbeing. This includes maltreatment and abuse as well as living in an environment that is harmful to their development. [41]

National retrospective surveys [42],[43] help with our understanding about how adverse childhood experiences (ACEs) facilitate health-harming behaviours throughout adulthood. Having just one ACE (versus none) is associated with a significant increase in sexual health outcomes such as: unintended teenage pregnancy and earlier sexual initiation and persistent, low mental well-being. The exposure to adversity is now known to change the genetic and molecular make up of children and alter the function and development of endocrine, neurological and immune systems.[44] which may help to explain the increased risk to those experiencing 4 or more ACEs of heart disease, cancer and diabetes as illustrated below.

Figure 1: The ACE pyramid model[45]



Following on from a study in the USA the findings from research undertaken in Wales[46] identified the impact of four or more ACES on sexual health behaviours. Their survey suggested a clear relationship between an unintended pregnancy under 18 years of age or

being responsible for a pregnancy and exposure to ACEs and that teenage pregnancy was 6.5 times higher amongst those with 4 or more ACEs than those experiencing no ACEs.

Evidence from a local epidemiological study in Blackburn and Darwin[47] suggested that experience of four or more ACEs increased the:

- risk of pregnancy amongst under 16's was 4.5 times higher than those with no ACEs
- likelihood of having an STI was 30.6 times greater than those with no ACEs

One systematic review[48] focused on the impact of sexual abuse in childhood indicating the existence of poor sexual and mental health outcomes in those abused such as unprotected sex, sex with multiple partners, sex trading and mental health impacts ranging from depression to personality disorders. Adverse childhood experiences can sometimes come about because of war and displacement, with the child coping in isolation before they are identified by services as in the case of unaccompanied refugee minors. Another review [49] identified higher levels of post-traumatic stress disorder (PTSD) and greater frequency of sexual abuse among those unaccompanied compared to those with families.

3.2 Domestic violence

In 2015 /16 the crude rate of domestic abuse-related incidents and crimes recorded by the police in Kent was 23.1 per 1,000 population higher than the England average of 22.1 per 1,000 population.[50]

The victims of domestic violence are more likely to be women and can relate to sexual assault, intimate partner violence and sexual violence. The victims of domestic are higher amongst those in: poverty, BME and refugees, pregnant women and those with a disability – physical or learning.

Sexual violence was not initially disclosed to researchers[51] interviewing women with learning disabilities on domestic abuse, suggesting that it was hard to talk about. However, in their sample it was found to be common.

A survey of gay and bisexual men identified that from the age of 16 years, 50% had experienced domestic abuse at least once from a partner or family member compared to the experiences of 17% male population in general52

The study53 of patients [males and females] with severe mental illness who are receiving ongoing psychiatric care, also looked at domestic violence and found that similarly they were 2-8 times more likely, compared to the general population, to experience domestic violence. This study also identified that most of these patients did not disclose this violence to health care staff.

3.3 Mental health and sexual health

Achieving good sexual and mental health, when considered independently of each other, is considered vital to good overall health. Additionally, those experiencing poor mental health, poor sexual health, sexual violence or abuse may often feel side-lined; not least because of prejudice, misunderstanding and fear. What we know from research, our providers and from service users is that poor mental health can make it difficult to achieve good sexual health and that suboptimal mental health and sexual health often coexist.

Additionally, some of those individuals and groups experiencing poor sexual health, particularly when a condition is long-term (e.g. HIV), find that they develop poor mental health that is often enduring.

In isolation of ACE, the impact of poor mental health symptoms and sexual health risk-taking behaviour in young people has undergone decades of scrutiny with observers citing strong correlation between psychiatric disorders, substance misuse and risky sexual behaviour.[54],[55] Sexual risk-taking behaviour among young people who are depressed was considered in one study [56] with higher risks of sexually transmitted infections, greater difference in the male partner age for women, more partners and greater use of substances before sex in those reporting feeling depressed. These and other risks were examined in a randomised control trial [57] with the study advocating the need for general practitioners to identify comorbidities (including mental health issues) in young attendees and management of the resultant risk-taking behaviour (including sexual health risk-taking).

Large sample surveys such as the Netherlands Mental Health Survey and Incidence Study (NEMESIS)[58] support the assumption that people with same-sex sexual behaviour are at greater risk for psychiatric disorders (present in the preceding 12 months and long-term) compared to those reporting being heterosexual.

Commentators[59] on the presence of comorbid mental health issues among gay, bisexual and MSM at risk of HIV argue that mental health issues must be considered as representing the functional context in which HIV prevention models are grounded.

In a general population study[60] using a systematic sample (n=201) of patients attending a sexual health clinic, a 29% prevalence of Personality Disorders and 12% current prevalence of mood disorder was identified among patients. Again, the authors argued that these service users were at high risk of HIV and that their mental health status compromised prevention interventions. This HIV risk was identified in a study[61] a year previously where the authors observed that people with schizophrenia were 1.8 times more likely to have a HIV diagnosis and those with a mood disorder 3.8 times more likely than the general population.

Mental health issues can also be the cause of underlying psychosexual problems such as erectile dysfunction in men[62] and the existence of mental health issues can result in loss of libido in some individuals or with some mental health issues, (e.g. mania in Bipolar Disorder) the seeking out of risky sexual behaviour. Equally, the treatment of mental health disorders may result in sexual dysfunction.[63]

A study[64] of patients [males and females] with severe mental illness who were receiving ongoing psychiatric care, found that they were 2-8 times more likely, compared to the general population, to experience sexual violence and more likely to disclose this to the police or healthcare staff than those who are sexually assaulted and not experiencing severe mental illness. Adult females with severe mental illness are more likely than the general population to attempt suicide following sexual assault.

Recent study has reiterated that LGBT are at greater risk of mental health problems to heterosexuals and found that experiences of poor mental health are highest amongst the trans community.[65]

A recent Stonewall report[66] of a study of 3,713 11-19 year olds who completed an online questionnaire found that 84% of trans young people had self-harmed compared to 61% of lesbian, gay, bisexual young people. This study also found that 45% trans young people had attempted to take their own life compared to 22% lesbian, gay, bisexual young people.

3.4 Alcohol and sexual health

In 2011, The Royal College of Physicians (RCP) and the British Association for Sexual Health and HIV (BASHH) jointly published a report in recognition of the impact of high alcohol consumption on sexual health in the under 25's particularly where consumption is hazardous.[67] The report clearly cites the evidence that demonstrates the impact of alcohol in relation to the increased risk of acquiring an a Sexually Transmitted Infection (STI) and/or becoming a teenage parent. More critically, the report authors argue that whilst the links between alcohol use and poor sexual health exist; there is still not enough being done to tackle the problem systematically and explicitly within sexual healthcare settings.

Adolescence is a time for what the evidence cites as a clustering of risk-taking behaviour such as regular alcohol use, binge drinking and other behaviours such as substance use and risky sexual behaviour.[68] It is thought that the young brain, especially the hippocampus may be particularly vulnerable to the effects of alcohol.[69]

One systematic review of the literature proposed two theories of how alcohol causally disinhibits sexual behaviours.[70] One argument is that alcohol restricts cognitive capacity and the primary focus becomes sexual arousal with limited capacity to consider the risks involved. The other theory focusses on expectancy. Alcohol expectancy theory proposes that behaviour during or following alcohol consumption is strongly influenced by outcome expectancies associated with consuming alcohol.[71]

In acknowledgement of the fact that high-risk alcohol consumption and sexual risk-taking is not exclusive to the United Kingdom, a cross sectional study of young people in nine European cities concluded that respondents reported strategic use of specific substances (including alcohol) for different sexual purposes. Alcohol was reported as being utilised by nearly 29% of respondents to facilitate sexual encounters.[72]

In another systematic review the concept of alcohol consumption and intention to engage in unprotected sex was explored with the reviewers finding an increase in respondent perception to engage in unprotected sex as Blood Alcohol Content (BAC) increased and this was true even at lower BAC levels.[73] The reality of alcohol-induced engagement in unprotected sex (versus the intention to engage in unprotected sex) and the nature of the relationship was explored in one particular study among college students.[74] Students reported on their last sexual encounter with details of the sexual behaviour engaged in, the nature of the relationship and general and event-specific alcohol consumption. Instances of Unprotected Vaginal Intercourse (UVS) were reported by 39% of study participants and 32% of the participants consumed alcohol before a sexual encounter.

Additionally, alcohol use prior to sex was strongly related to unprotected sex for encounters that were casual in nature.

One systematic review looked specifically at the association between alcohol consumption and STIs and concluded that the literature supported an overall association across a wide variety of populations.[75] In the discussions about implications for prevention and treatment, the reviewers argue, similarly to RCP and BASHH, that whilst the association is acknowledged many clinicians fail to address alcohol consumption as part of their STI/HIV prevention strategy and in sexual health clinical environments, in particular, the focus tends to be on a single health issue. As such the current sexual health services are required to undertake brief alcohol interventions.

3.5 Harmful Sexual Behaviours [HSB]

Local service information indicates that a plethora of agencies refer young people directly to integrated sexual health services, sexual health outreach programmes and psychosexual therapy. The level of referral of children and young people with inappropriate sexual health behaviours into all the sexual health outreach services in the last eighteen months has illustrated both a gap in service provision and a gap in knowledge and understanding of needs. NICE[76] refer to differing needs and the need for appropriate identification. Those with neurodevelopmental disorders such as learning disability or autism are most likely to be over represented amongst those displaying harmful sexual behaviour (HSB).

Children and young people who engage in HSB have usually had experience of neglect and abuse[77]. The definition of "Harmful Sexual Behaviour in Young People" (derived from Hackett, 2014, Hackett et al., 2016) is vast in scope and, thus, problematic.

Coercion and manipulation are features of many, if not most, abusive sexual relationships, as is some degree of power imbalance, whether physical, economic or derived from social status, yet these concepts dominate the definition. Vulnerable young people engaging in disturbing self-harming sexual activities and those young people "grooming" or seeking to actively engage in patterns of HSB with other under 16s represent two distinct groups, the "problematic" and "abusive". This divide is highlighted in both the NSPCC guideline and NICE Guidance, yet these obviously have some overlap.

Young people with sexual trauma and abuse histories seek abusive contact as a way of gaining relief and distraction; functions associated with other forms of self-harm. Many young people with histories of physical trauma, emotional and sexual abuse need assistance with the management of sexual boundaries and training in skills development to seek comfort and self-soothing through strategies and activities other than those which are sexual and involve substance misuse.

HSB in those under 16 is not a rare phenomenon. At least one third of all sexual offences against children and young people are committed by others under the age of 16 and the extent of this may be much higher than recorded (Hackett et al., 2016). Amongst perpetrators, there appears to be under-referral of young females into treatment services across the UK (Smith et al., 2013). In terms of problematic, rather than abusive HSB, there would appear to be a marked gap in service provision, combined with a lack of co-ordination of service provision.

Local agencies report use of amphetamine, cocaine and ecstasy as being directly linked to disinhibited and particularly risky sexual behaviours in those aged under 16, but perceive the more indirect link between young people developing dependencies/habits using cannabis and alcohol at levels they are unable to afford, as more highly correlated with CSE.

Under-16-year olds report that they often pay for drugs and alcohol by allowing themselves to be used sexually in whatever way is demanded by their suppliers. Sexual acts are often videoed, and this footage is then used in a variety of abusive ways, often leading to further abuse, profound shame and escalating problematic HSB. Self-harming of genitalia has also been reported to the psychosexual therapy service.

The psychosexual therapy service identifies the need for both risk assessment with recommendation for case management and intensive therapeutic work with reference to normal sexual relationships, management of difficulties with trust, treatment of intrusive and disturbing thoughts/memories, and specific treatment of the sequelae of sexual trauma (NICE recommended treatment is Eye Movement Desensitisation Reprogramming).

3.6 Pre-conception care – preventing maternal obesity and the increase in non-communicable disease

The epidemic of obesity has led to rising levels of obesity amongst females of reproductive years which is impacting on the reproductive and maternal health of individuals. In 2013 it was reported[78] that in England 50.8% of women aged 25–34 were overweight or obese. This has implication on future health, pregnancy and health of their children. In Kent and Medway in 2017,[79] 50% of pregnant women were recorded as overweight, obese or morbidly obese at booking appointment. Of these 22% aged 25-34 were obese or morbidly obese.

Sexual health services and general practice provide contraception to many women. This is notable with the extending intervals between first sexual intercourse and childbirth with women on average spend 30 years preventing unintended pregnancy. NICE guidelines[80] advise supporting women with a BMI of 25 kg/m$_2$ or more to lose weight before conceiving at a rate per week not exceeding 0.5-1kg. Moreover, the WHO have considered different definitions for Asian woman who are at increased risk of cardiovascular disease or type 2 diabetes to define excess weight for them from a BMI 22kg/m$_2$[81] Whilst recognising that many pregnancies are unplanned using the opportunities presented to prepare women conceiving for the first time or subsequent occasions is fundamental.

The CMO in her report in 2015[82] commented that the 'current delivery of pre-conception care by health professionals is patchy, and women's compliance with pre-conception health guidelines remains low even among women with a clear intention of becoming pregnant, revealing multiple missed opportunities for improving maternal and child health. These opportunities include removal of a contraceptive device or implant, the need for emergency contraception, as part of the discussion on weight when prescribing the contraceptive pill as well as those specifically requesting pre-pregnancy advice. It is particularly important to use these opportunities with those who have existing health conditions including mental health disorders and diabetes. For example, one review[83] recommends that pregnancy should be avoided during rapid weight loss such as post bariatric surgery until bodyweight has stabilised.

The UK National Diet and Nutrition survey[84] found that women of reproductive years had diets low in iodine, iron and folic acid. A range of studies have suggested that diets higher in fish, nuts, fruit, vegetables and pulses and low in processed or red meat over a three-year period prior to conception are associated with reduction in preterm birth, pregnancy induced raised blood pressure problems and gestational diabetes.

Recent publication[85] emphasise the challenges with conception in later years. Infertility increases beyond aged 35 as the optimum ages for women to conceive are 20 – 34. This infertility is having impact on mental health and well-being.

The approach proposed by the CMO in her report, and which subsequent studies have highlighted, is the need to support women to have a healthy weight and health lifestyle during the reproductive years in order to reduce the current and potential growth of non-communicable diseases for them and their children. Providers of contraception can improve preconception health through appropriate counselling. Recommended counselling[86] includes:

- Raising awareness of reduced fertility and risks to pregnancy associated with excess weight. For example lower fertility rates and risk of early miscarriage amongst obsess pregnant women.
- Advice on lifestyle interventions to improve pre-pregnancy health by increasing motivation and changing attitudes of both partners. Greater success may be experienced where the messages promote health not just bodyweight. One systematic review found the prevalence of depression higher amongst obese pregnant women to those of normal weight [33% v 23%].
- Folic acid supplementation

4 The findings

4.1 Introduction

The presentation of the sexual health in the population of Kent is provided through an overview of the epidemiological picture, the views of health staff and local insights research. Kent has a diverse population in terms of socio economic challenges, rural and urban communities, seaside towns, high numbers of transient students, as well as a significant transport corridor to Europe, all present differing challenges in the aim to promote safer sexual health. This includes: the provision of sexual health information and advice; contraception; testing, diagnosis, treatment and management of STIs and HIV; and raising awareness about the prevention of STIs. The data shown is the most up to date available at the time of analysing.

4.2 Sources of data

The collection of routine data on sexual health is collected through three national data sets, Genitourinary Medicine Clinic Activity Dataset (GUMCAD), Sexual Reproductive Health Activity Dataset (SHRAD) and the HIV and AIDS Reporting System (HARS). These capture all STI diagnoses & sexual health service use in the integrated sexual health services. Activity is presented using national Sexual Health and HIV Activity Property Type code [SHAPPT][87]. In addition, the laboratories populate all the chlamydia activity relating to those in the age profile for the national chlamydia screening programme. 15 – 24-year olds, onto the Chlamydia Testing Activity Dataset [CTAD]. Activity from all of these is collated and presented on PHE fingertips tools[88] and on NHS Digital which are in the public domain. Local sexual health, mainly contraceptive activity, within primary care is taken from the Kent integrated data set [KID].

4.3 Epidemiological findings - Sexually Transmitted Infections [STIs]

The local population of Kent can access sexual health services online and in a variety of community and hospital settings. These services provide condoms, offer sexual health advice, contraception, emergency contraception, psychosexual counselling, testing, diagnosis, treatment and management of STIs and HIV. In Kent the clinics offer all clients a range of tests for sexually transmitted infections as recommended by national guidance on STI testing.[89] This includes tests for chlamydia, syphilis, gonorrhoea and HIV.

Many of these STIs are asymptomatic or present with only mild symptoms. Therefore, infection can remain undetected, which may lead to serious long-term consequences in later life.

The table below provides an overview of the detection of these STIs amongst the population in England, South East and Kent. It is possible to measure and compare these through a form of standardisation whereby a **crude rate** is presented for an entire population. A crude

rate is defined consistently and so makes comparisons with other populations possible even when the population sizes may be quite different.

The following graph presents an overview of the rate of the more common STIs diagnosed amongst the population resident in England and Kent 2013- 2016.

Graph 1: Crude rates of sexually transmitted infections 2013 – 2017

	2013		2014		2015		2016		2017	
	England	Kent	England	Kent	England	Kent	England	Kent	England	Kent
New STI diagnosis rate per 100,000 population	817	568	812	575	778	481	750	486	743	466
The rate of gonorrhoea per 100,000 population	56.1	21.6	66.4	24.8	73.0	27.6	64.9	25	78.8	31.0
The rate of Syphilis per 100,000 population	6.0	2.9	7.9	2.7	9.3	4.3	10.6	5.9	12.5	6.0
The rate of Genital herpes per 100,000 population	60.8	50.0	60.0	50.2	59.2	43.8	57.2	45.3	56.7	41.4
The rate of Genital warts per 100,000 population	138.1	130.3	131.6	121.7	121.8	107.5	112.5	102.1	103.9	91.9

Source: GUMCAD

The following graph provides an overview of the changing age specific rates of STIs in England. The definition of a new STI referred to in graph 2 is drawn from a range of STIs codes presented onto the national dataset GUMCAD.[90] These figures indicate a decreasing new STI rate.

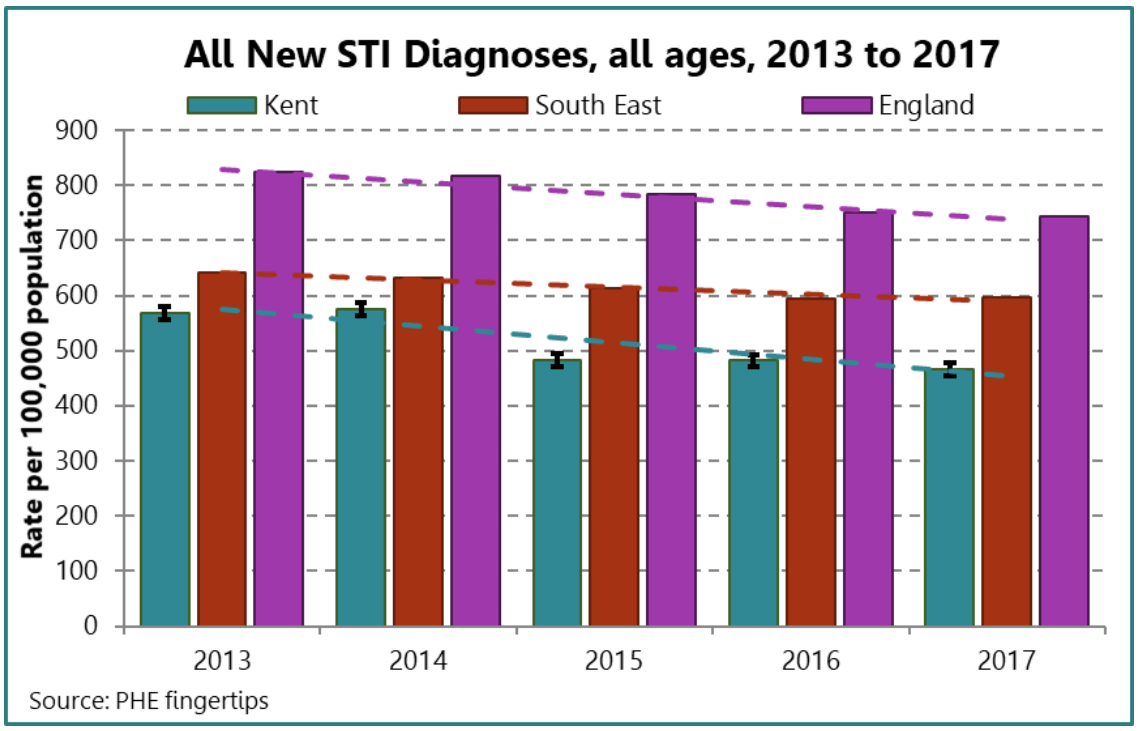
Graph 2: England Age specific STI rates per 100,000 population 2013-2017

Age group	<15	15-19	20-24	25-34	35-44	45-64	65+	Total
Rates of diagnoses per 100,000 population, 2013	126.2	3382.3	4208.2	1724.3	604.3	197	20.1	823.1
Rates of diagnoses per 100,000 population, 2014	106.8	3251.7	4140	1771.5	634.9	203.5	21.1	817.9
Rates of diagnoses per 100,000 population, 2015	86.8	2952.3	3935.9	1767.8	635.2	203.6	21.2	783.2
Rates of diagnoses per 100,000 population, 2016	67.7	2771.5	3818.9	1734.1	616.3	201	20.7	758
Rates of diagnoses per 100,000 population, 2017	64.6	2668	3752.3	1727.8	617.4	197	20.1	749.1

Source: GUMCAD

The same data set shows the rates of new STIs in Kent are lower than England possibly a reflection of the general population in terms of ethnicity and age resident in Kent.

Graph 3: All new STI diagnosis rate per 100,000 population Kent, 2013-2017



Of note the data captured to present these statistics does not include those genital skin infections, genital warts or PID diagnosed in general practice or Accident and Emergency as these are not populated onto national datasets.

The picture above shows decreases in detected infections however the picture in Kent is different and show some increases in rates of STIs when infections are looked at individually or by district.

Looking at the new STI diagnosis rates per 100,000 population in Kent by district, illustrates where the highest burden of infection was in 2017. Canterbury (766), Maidstone (477) and Thanet (516) bore the highest burden of infection compared to other districts in Kent.

4.3.1 Gonorrhoea

Gonorrhoea is a sexually acquired infection caused by *Neisseria gonorrhoeae*, a bacterium. It is transmitted through unprotected vaginal, oral or anal intercourse or genital contact with an infected partner. The rates of gonorrhea infection can provide a guide as to the sexual ill health of the population because the risk of contracting gonorrhea increases with more sexual partners.

The most recent, 2016 LASER Public Health England report, provides insight into how the rate of gonorrhoea infection is changing from year to year with rates cited as increasing by nearly 65% in England between 2015 and 2016.

Increases nationally and locally may in part be explained by the introduction and use of more sensitive screening mechanisms such as Nucleic Acid Amplification tests [NAATs].

Repeat diagnosis of gonorrhoea is seen mostly amongst males in England (10% reinfections within one year of presentation for years 2012-2016 according to LASER reports 2016). In Kent the reinfection rate was reported at being below the England rate with rates in males ranging from zero percent in Shepway to 9.1% in Tonbridge and Malling. Reinfection rates in women in England were reported at 3.9% in the same period with reinfections reported in Kent in the districts of Thanet (1.6%), Canterbury (1.9%) and Gravesham (10.5%).

Figure 2: Rates of gonorrhoea reinfections within one year of presentation (for presentations between 2012-2016)

Rates of gonorrhoea reinfections within one year of presentation (for presentations between 2012-2016)		
	Males	Females
England	10.3	3.9
Ashford	6.3	0
Canterbury	6.7	1.9
Dartford	6.6	0
Dover	3.6	0
Gravesham	7.9	10.5
Maidstone	6.2	0
Sevenoaks	4.5	0
Shepway	0	0
Swale	8.6	0
Thanet	3.8	1.6
Tonbridge and Malling	9.1	0
Tunbridge Wells	7.0	0

Source: PHE 2016

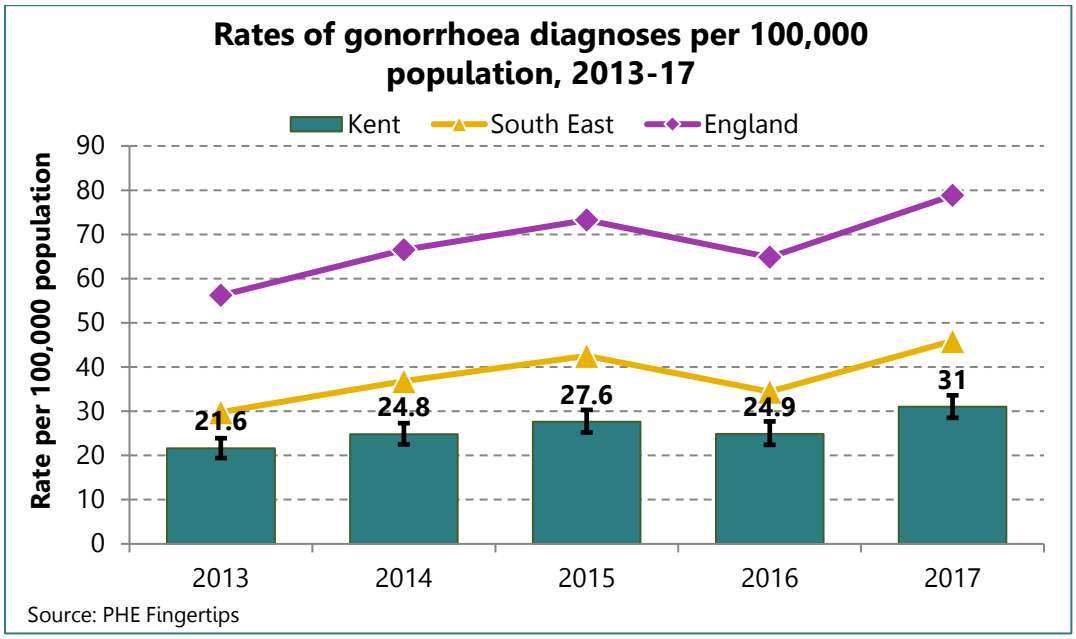
The pattern of detected rates of gonorrhoea in England, the South East and locally between 2013- 2017 has shown a steady rise. The single district with rates above the SE region in 2017 which had an average rate of 45.9 per 100,000 population was Dartford with a rate of

54.2 per 100,000 population. Other districts higher than the Kent average were Canterbury, Gravesham, Swale and Thanet. The average annual rate of change per year over the regression line fitted over the period 2013 – 2017 for detected gonorrhoea in Kent is 1.89 per 100,000 population, or 32 diagnoses per year. The rate per 100,000 population increase over this period is 24.9%.

Increasing levels of gonorrhoea transmission are a concern, given the emergence of gonococcal resistance to frontline antibiotic therapy, which included azithromycin. The same treatment had been used for chlamydia and as such changes to the treatment of non - simple chlamydia have been implemented. The prompt diagnosis, adherence to prescribing guidelines, identifying and managing potential treatment failures effectively alongside reducing transmission are important.

Kent local authority have included swabbing for gonorrhoea as part of the online testing service, which means that detection of this infection may increase, which in turn will enable treatment to be provided and help reduce onward transmission.

Graph 4: Rates of gonorrhoea per 100,000 population in Kent, 2013-2017

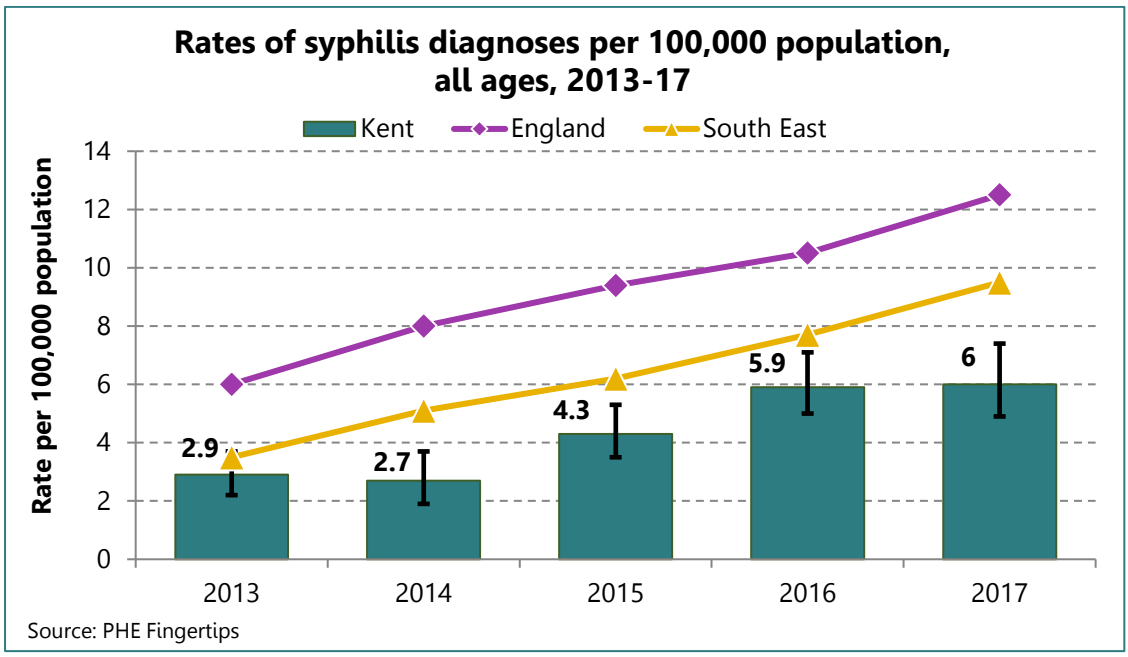


4.3.2 Syphilis

Syphilis is a caused by a bacteria-like spirochete *Treponema pallidum* subspecies pallidum. Syphilis can be transmitted between partners during sexual intercourse and from an infected pregnant woman across the placenta to a developing baby. Transmission of infection is most likely to occur during the stage of infection known as infectious syphilis.

The total number of syphilis infections detected in Kent is small, but the changing pattern should not be ignored with increasing rates of infection observed. Thanet being higher than the England average of 10.6 with a rate of 17.2 per 100,000 population in 2016. However, in 2017 highest detection of syphilis was found in Dartford and Gravesham districts with rates of 11.4 and 10.4 per 100,000 population higher than the South East average rate of 9.5. The annual average rate of change for the gradient over the time period 2013-2017 for detected syphilis in Kent was 0.94 per 100,000 population, or 15 diagnoses per year. The rate per 100,000 population increase in the diagnosis of syphilis in Kent from 2013 – 2017 is 122.2%.

Graph 5: Rates of syphilis per 100,000 population in Kent, 2013-2017



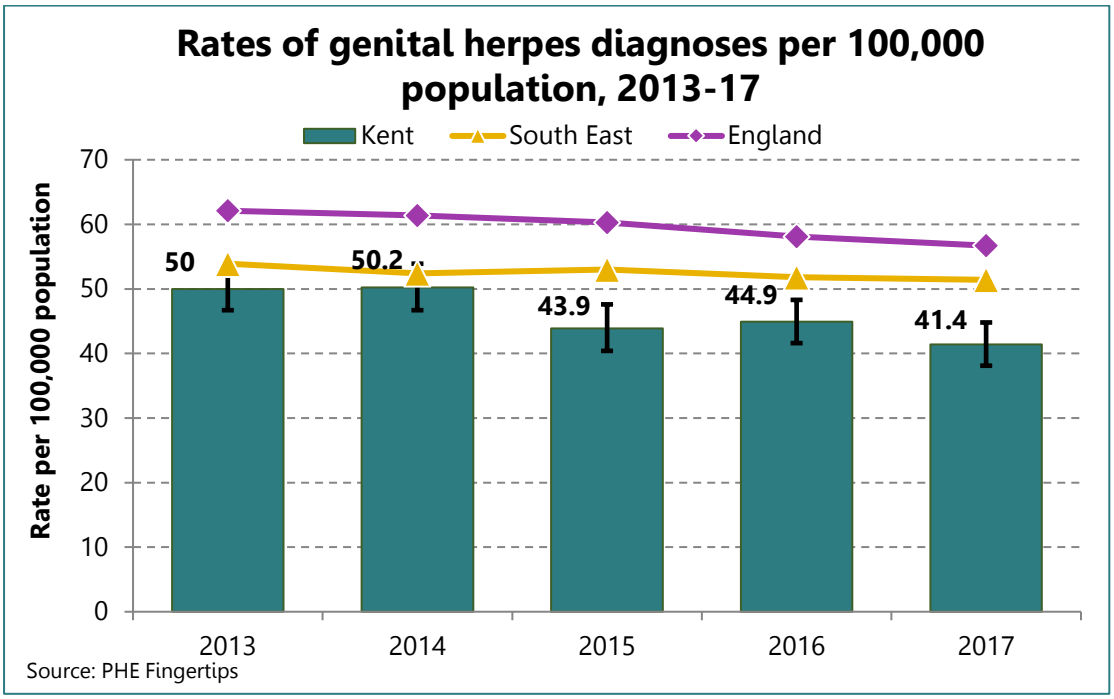
Source: PHE Fingertips

4.3.3 Genital herpes

Genital Herpes Simplex Virus (HSV) infection is a very common ulcerative STI passed on by direct contact which although treated can reoccur necessitating further treatment. The data presented below represents those with first diagnoses not repeat episodes.

The diagnoses rate for genital herpes per 100,000 population in Kent has been consistently lower than the England average from 2013- 2016. However in 2017 the burden of infection was higher than the England average of 56.7 per 100,000 population in Canterbury district with a rate of 61.5 per 100,000 population.

Graph 6: Rates of genital herpes per 100,000 population in Kent 2013-2017

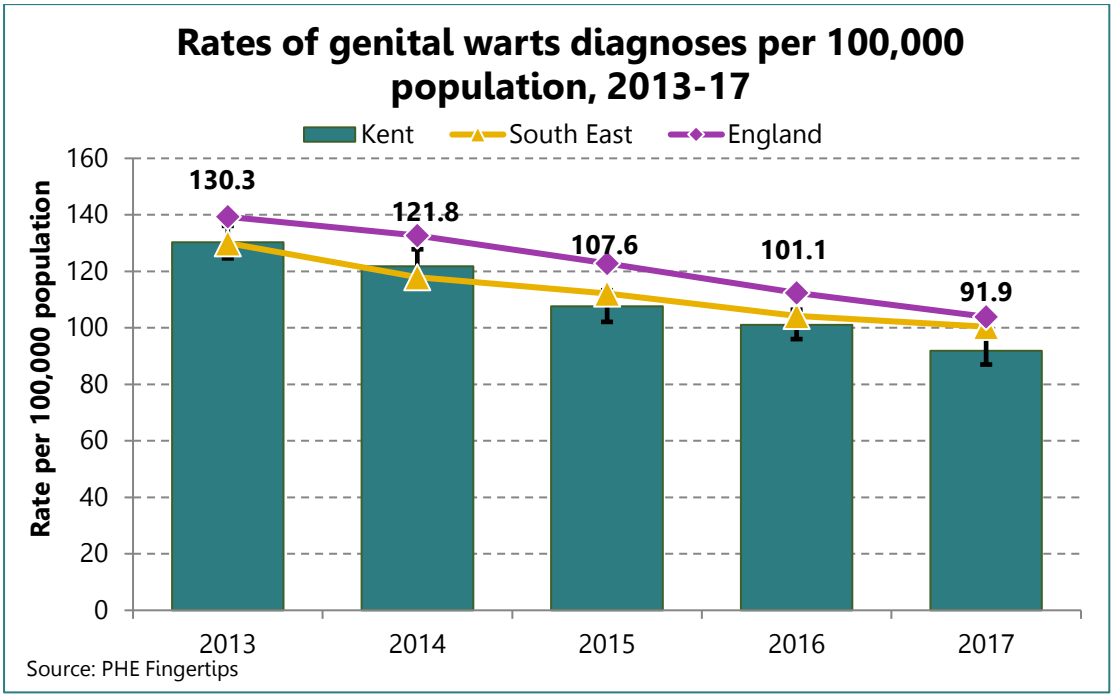


4.3.4 Genital warts

Genital warts or Human Papilloma Virus (HPV) are the most common viral STI and can present around the penis, anus or vagina. The diagnoses rate of genital warts per 100,000 has decreased since 2013 in Kent and England. This is likely to be as a result of the HPV vaccination programme which was introduced in 2008. The highest rates in 2017 was seen in the districts of Canterbury at 126.8 per 100,000 population and Swale 107.6 per 100,000 population. The impact for individuals with this infection can be a prolonged course of treatment requiring multiple visits to the service and reoccurring outbreaks. The data below presents first episodes of genital warts.

Genital warts are the second most commonly detected STI in Kent. Rates of all STIs are consistently lower in Kent when compared to the South East. The exception has been seen when observing the rates of genital warts which shows the rates in Kent have been very similar to the South East. Consideration should be given as to whether this is a reflection of the populations perception of recognising STIs in terms of being as seen as something visible rather than invisible.

Graph 7: Rates of genital warts per 100,000 population in Kent 2013-2017



4.3.5 Chlamydia

Chlamydia is a bacterial infection which, like a number of sexually transmitted infections, does not present with symptoms. The rates of detected chlamydia infection in Kent have fallen in under 25s but are slowly increasing amongst the population over 25 years.

Chlamydia is a sexually transmitted bacterial infection, transmitted through unprotected oral, vaginal or anal sex. It can also be transmitted through unwashed/unprotected sex toys, during pregnancy or childbirth. It is expected that 1 in 12 of the population will be detected with this infection.

Local insight in 2017 reiterated that perceptions of who is at risk of an STI is misguided and incorrect.

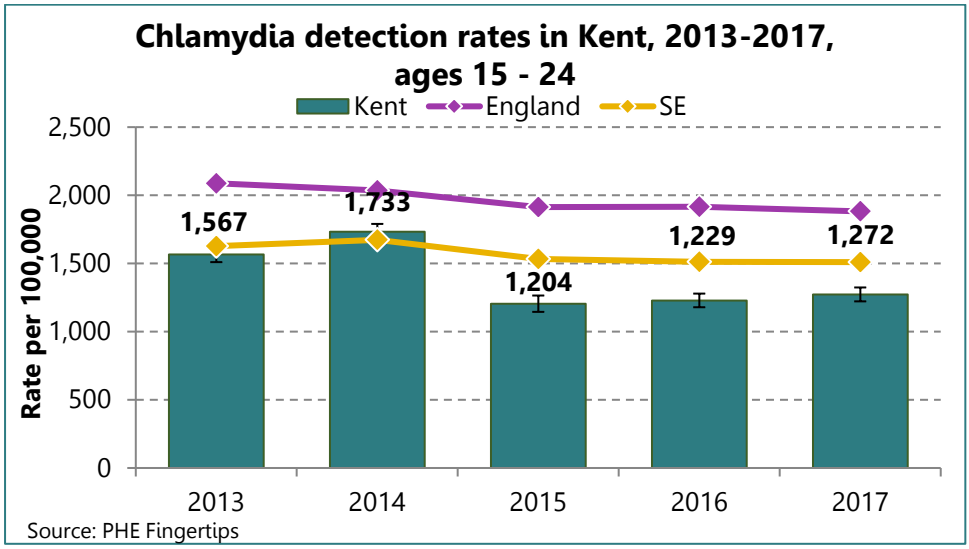
'Exclusive' relationships seen as low-risk. If people were in an 'exclusive' relationship, where neither partner slept with other people, then the perception of risk was low. This would be the case even if these relationships just lasted a couple of months (exclusive did not mean long term). They also thought they would be able to tell if their partner had a STI and they trusted that their partner was 'clean' if told so by them. '[91]

Recent evidence[92],[93],[94] has suggested that amongst women the rectum can be a reservoir for chlamydia infection which would not be picked up through the most commonly used test in women, a vaginal swab. A recent small study in a local service has looked at the acceptability of rectal screening amongst women. [73% of this sample cohort were aged under 25 years]. This study found that 77% of those females who participated would find rectal chlamydia testing acceptable regardless of their reason for attending the service. Information with guidance on how to take a self-test was the preferred option. A local research programme to explore the differences amongst the rates of chlamydia detection rectally and cervically in women will begin later this year.

The detection of chlamydia has decreased nationally and regionally over the last three years. It is reported as significantly lower than expected amongst 15- 24-year olds in Kent in 2017 although observed to be rising slowly.

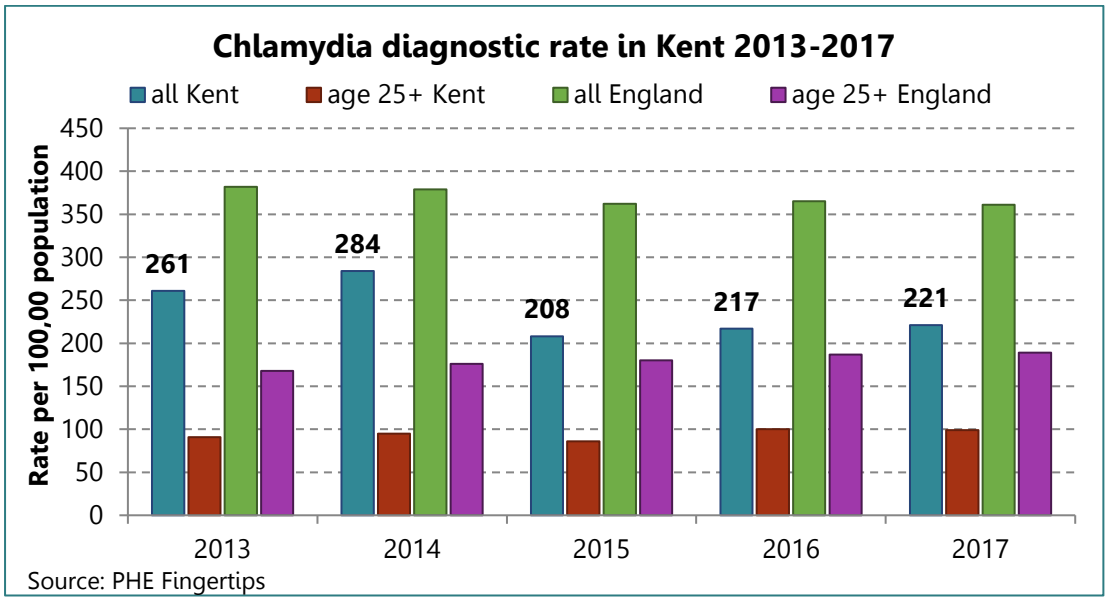
Detection rates in 2017 amongst 15 – 24-year olds were highest in the districts of Ashford [1,730] Shepway [1,664] Canterbury [1,631] and higher than the South East average detection rate of 1,510. This may be a reflection of the high uptake of online services from these districts. The highest positivity rate in Kent in 2017 was seen in the district of Swale at 8.18%

Graph 8: Rates of detected chlamydia infection per 100,000 population aged 15 – 24 years, in Kent 2013 – 2017



The detection of chlamydia amongst those aged 25 years and over in Kent shows a small increase but remains significantly lower than the England average. The following graph which looks at the rates of chlamydia detected in the wider population highlights the difference between Kent and the England average. At district level Canterbury has the highest chlamydia diagnostic rate of 431 per 100,000 population in 2017 higher than the England average 361

Graph 9: Chlamydia diagnostic rates per 100,000 population in Kent 2013-2017.

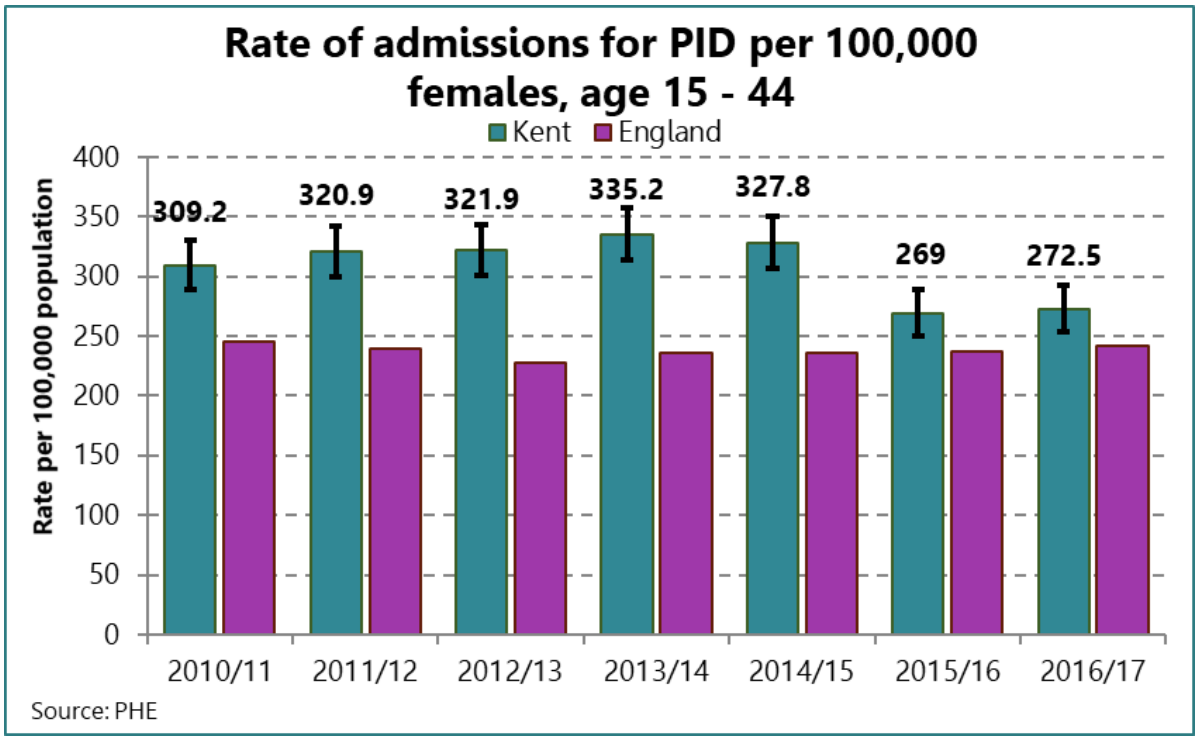


4.3.6 Pelvic Inflammatory Disease (PID)

PID can be present without any symptoms and may become evident when conception is difficult or a conception results in an ectopic pregnancy. An untreated sexually transmitted infection, for example chlamydia or gonorrhea could be a cause. Kent has a rate of 272.5 PID hospital admissions per 100,000 females aged 15 – 44 years old, which is significantly higher than England with rates of particular concern in the districts of Dartford at 435.2 per 100,000, and Thanet at 407.5 per 100,000 in 2016/17.

The crude rate of pelvic inflammatory disease [PID] amongst 15 - 44-year-old women in Kent remains higher than the England average. The continual increase in the crude rate of PID amongst 15- 44-year-old females has been particularly notable in North and West Kent districts. Initial exploration of PID admissions has suggested that the initial management of PID is not consistent. A case notes audit is being undertaken in the sexual health services to identify management of care and learning.

Graph 10: Crude rate of PID admissions per 100,000 female population aged 15-44 years in Kent 2010/11 – 2016/17



4.3.7 HIV

HIV is considered a long-term condition as research, knowledge and treatments have developed over the last thirty years, therefore the prevalence of this condition will continue to increase.

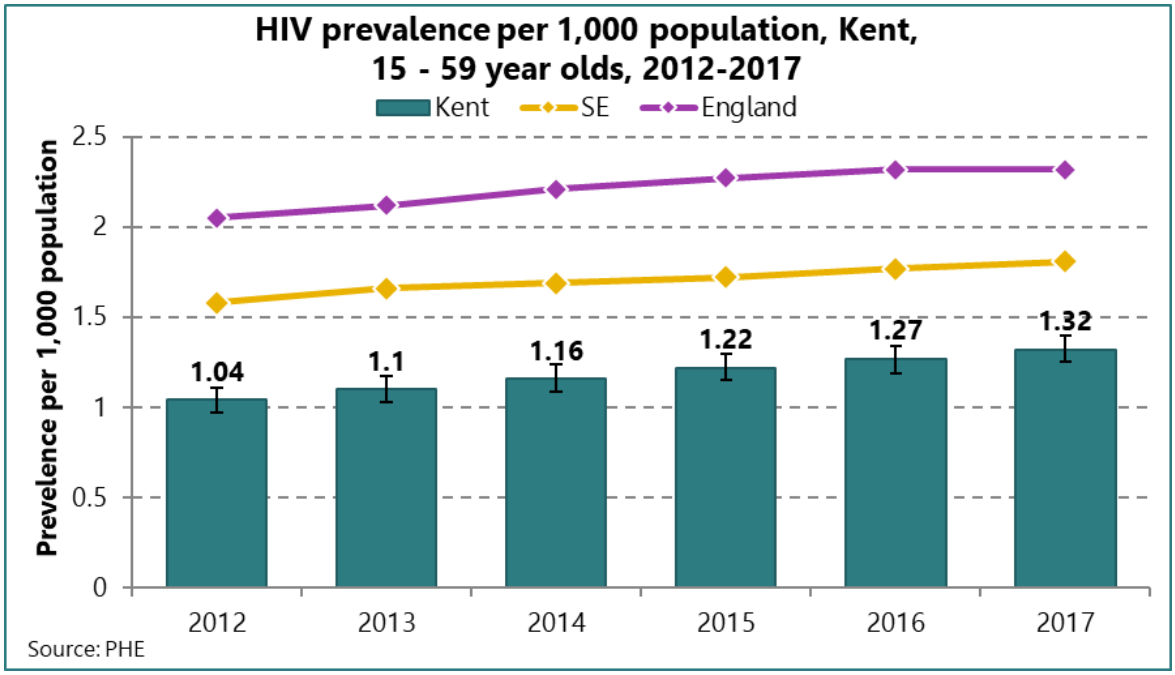
The access to and availability of testing for HIV has improved. The window for detection of the virus is three months following potential infection so often a follow up test is needed to ensure test results. Although stigma and ignorance about HIV testing has improved, the HIV test is most frequently refused in sexual health services locally. Many HIV tests are offered and take place within traditional sexual health services, with highest uptake amongst men who have sex with men (MSM). Most late diagnosis of HIV is amongst the heterosexual community in Kent. Offering and encouraging uptake of HIV tests amongst this group and in a range of settings, such as primary care or general medicine as well as offering access to online testing, should help with the earlier diagnosis of new cases and onward referral to treatment. Everyone is at risk of HIV if they are sexually active however the stigma around HIV testing continues to influence peoples' decision to test.

The vast majority of HIV infections are contracted sexually, although there are other routes of transmission. Around a quarter of the estimated 100,000 people living with HIV do not know that they have the infection; and around half of people newly diagnosed with HIV are diagnosed after the point at which they should have started treatment. This can have implications not just for the care of the individual person with HIV, but also for the onward transmission of the infection.

The following figures illustrate that whilst Kent is not a high HIV prevalence area, which is a rate of two or more per 1,000 population, the rates of diagnosis of HIV in the later stages of the disease continue to be higher in Kent than the England rate.

The prevalence rate of diagnosed HIV amongst 15-59-year olds does not capture all diagnosed infections but is a reliable indicator. In December 2016 PHE revised the definition of high prevalence of HIV. 'Local authorities in England are now categorised by diagnosed HIV prevalence levels into low prevalence (<2/1,000 among 15-59-year olds), high prevalence (2-5/1,000 among 15-59-year olds) and extremely high prevalence areas (>5/1,000 15-59-year olds).' Kent is identified as a low prevalence area when looked at as one area as shown in graph 11. However, there are districts in Kent who are above 2 per 1,000 among 15-59-year olds which is also shown in graph 12. These areas should consider proactively testing all new GP registrants.

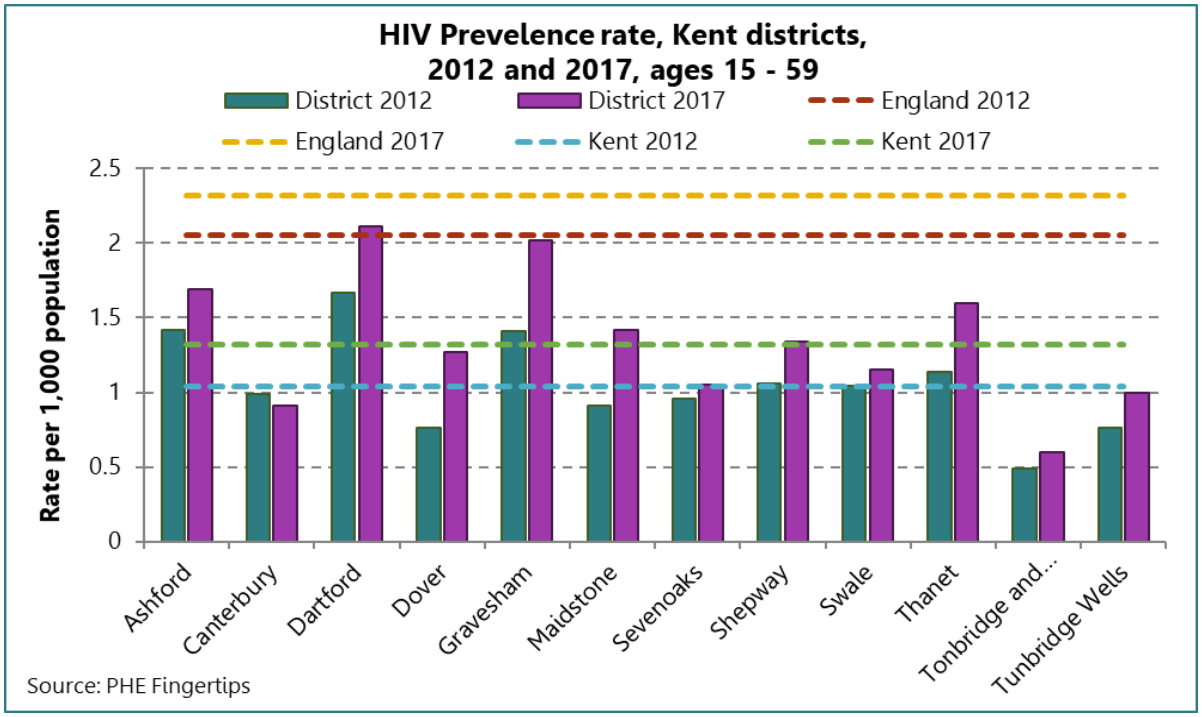
Graph 11: HIV diagnosed prevalence rate per 1,000 15-59-year olds in Kent 2012- 2017



The average rate of change per year over the time period 2012-2016 for detected HIV prevalence in Kent was 0.056 per 1,000 population, a 20.0% increase.

When looked at by district, a wide variation of prevalence rate is shown.

Graph 12: Prevalence of diagnosed HIV infection per 1,000 15-59 year olds by district in Kent 2012 and 2017



Dartford [2.11] and Gravesham [2.02] having the highest prevalence rates. The changes in prevalence rate are shown and highlight where the burden of detected infection is highest. The rate of change in the prevalence of diagnosed HIV per 1,000 population aged 15-59 years is greatest in the districts of Maidstone, Gravesham and Thanet.

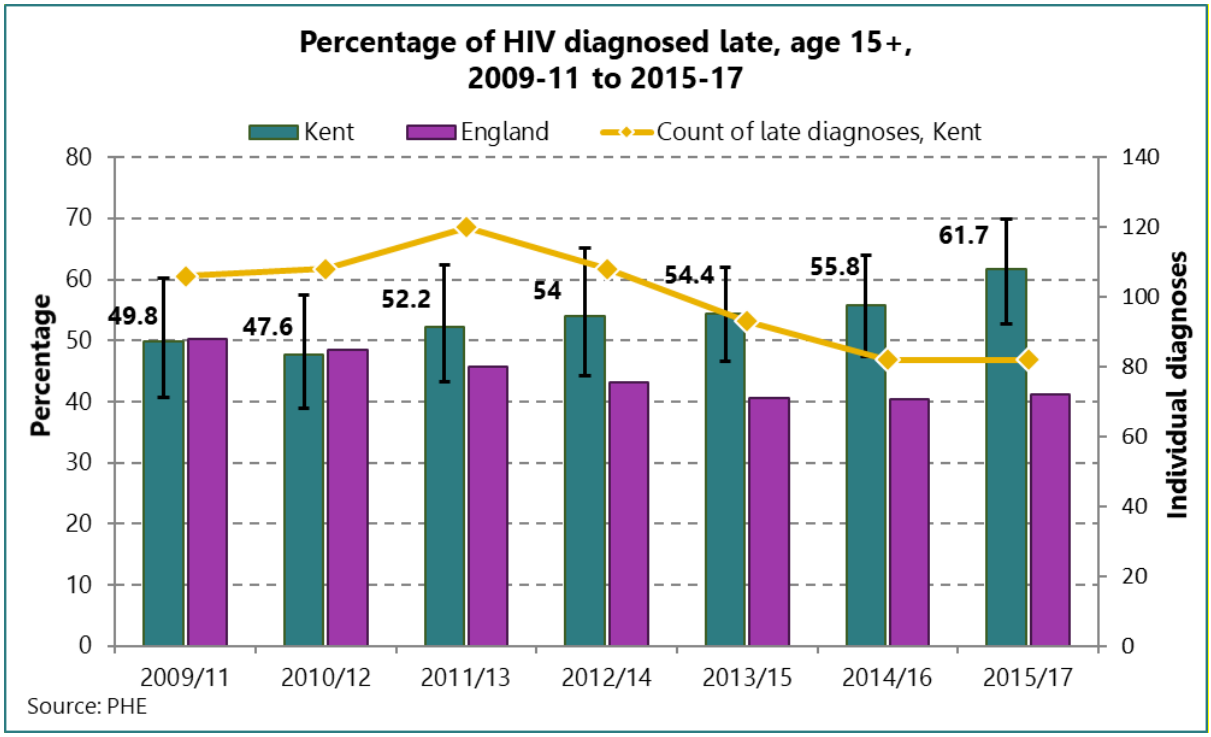
4.3.7.1 Late diagnosis of HIV

Late diagnosis of HIV refers to those individuals diagnosed with HIV late in the stages of the disease. Kent has been an outlier in terms of having higher rates of HIV late diagnosis to England since 2011-13. A local research programme[95] undertaken 2012- 2015 highlighted that opportunities for testing were missed. HIV testing has since been promoted, made more accessible in terms of being offered in services and accessible online.

The numbers of individuals with a late diagnosis of HIV in Kent have reduced by 31.7% between 2011-13 and 2015-17. The proportion diagnosed late, however, has increased from 52.2% to 61.7% over the same time period, compared to England falling to 41.1% in 2015-17, showing a difference of around 20% between Kent and England. This is likely to be a reflection of the plateauing of HIV diagnosis in England compared to Kent where prevalence rates amongst 15-59 years olds are continuing to rise. The presentation of prevalence as a percentage continues to show Kent with a higher rate of late diagnosis compared to the England average.

The following graph presents county wide data but looking at local service information highlights that there are geographical differences in terms of where late diagnoses are made. Those diagnosed with HIV late often have other conditions which are being treated. Late diagnoses in other conditions are reviewed retrospectively to understand where opportunities to diagnose may have been missed and learn from this. Collaborative review and shared learnings across primary and secondary care should be supported by NHSE.

Graph 13: Percentage of adults [15 and above] diagnosed with HIV late (with CD4 count < 350 cells per mm^3) in Kent residents 2009/11-2015/17



4.3.8 Bacterial vaginosis [BV]

Bacterial vaginosis is a common cause of abnormal vaginal discharge amongst child bearing aged women and particularly amongst pregnant women. It is not a sexually transmitted infection but can make those affected more susceptible to STIs. BV is a caused by changes in the balance of bacteria within in the vagina. It can be treated orally with antibiotics or vaginal gel. BASHH[96] estimate that 1 in 10 women will have BV during their life. It is most likely that the numbers are higher in reality.

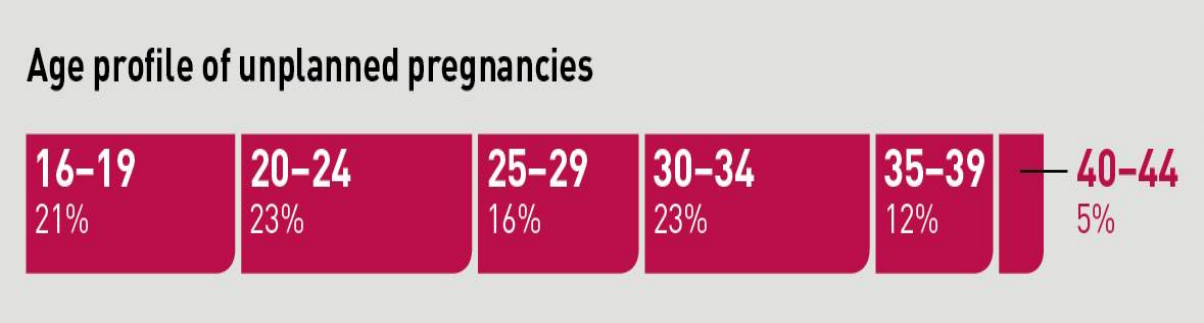
The numbers of BV diagnosed in Kent are constant, but it is unclear if these figures include pregnant women. Some studies[97] have suggested that BV is linked to miscarriage in first and second trimesters and early labour but the evidence is conflicting.

4.4 Epidemiological findings - Reproductive health

A key public health outcome is to reduce the number of unwanted pregnancies. Inconsistent or no contraception use puts all women of reproductive years at risk of pregnancy. Risks are increased when there is: no contraception used; non-compliance to take oral contraception at the same time each day; a gap in maintaining continuity of injectable contraception; poor or no use of barrier methods; or a lack of knowledge about emergency contraception, for example, when it can be used and how to access it.

The most recent NATSAL study in 2014[98] found that 45% of pregnancies were unplanned or that women were ambivalent about them. Of these, 57% led to termination and 43% continued but with an increased risk of poorer health outcomes. There is a breadth of evidence to illustrate the impact from adverse childhood experiences on unintended pregnancy in teenage years and adulthood which may explain some of these figures. Supporting women to access planned contraception differently should not only be considered but acted upon**.**

Figure 3: Age profile of unplanned pregnancies from the NATSAL study 2014



Source: PHE presentation 2017

4.4.1 Pregnancy and birth

In 2016 there were 17,374 live births amongst Kent residents. The rates of births presented below highlights that births are amongst younger women in Kent compared to England. The birth rate in Kent in 2016 was the same as England at 62.3. Approximately 1 in 18 females in Kent aged 15-44 years gave birth in 2016.

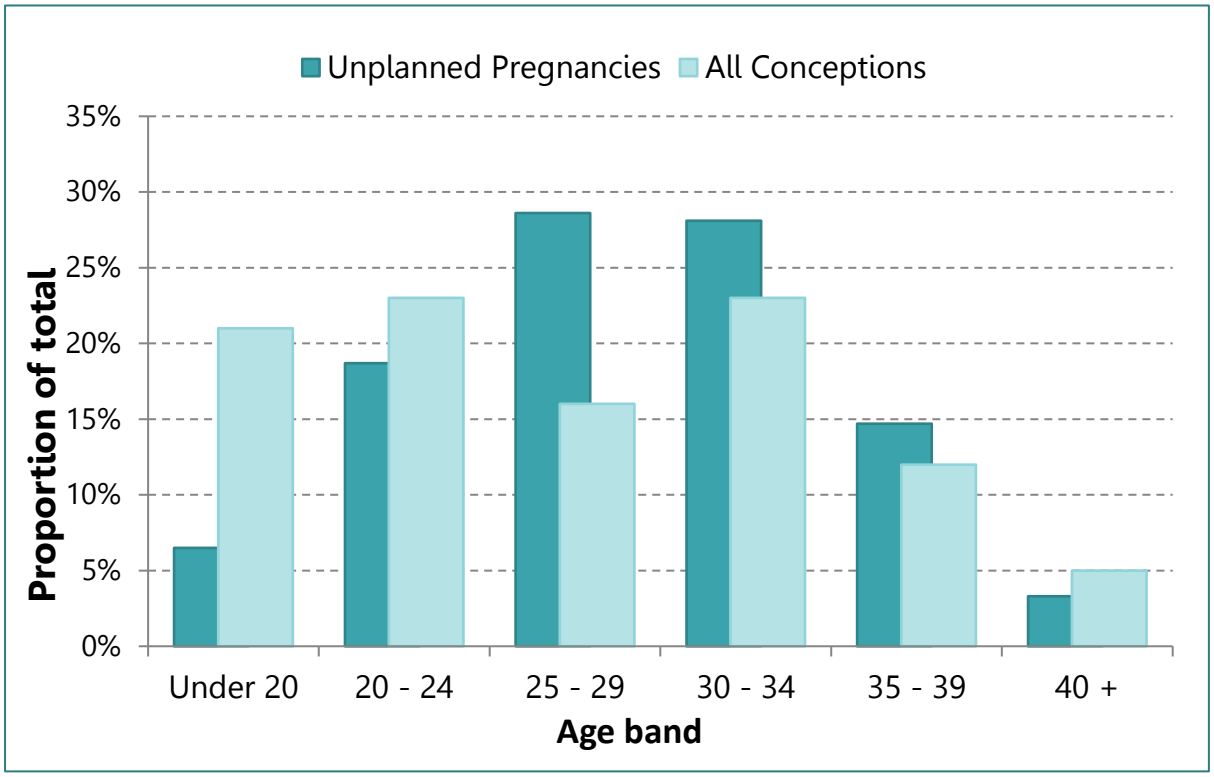
Figure 4: Rate of births per 1,000 women in age group, Kent and England, 2016

Age	Kent %	England %
under 18	6	5.7
under 20	14.7	13.5
20-24 years	63.2	55.6
25-29 years	111.4	98.5
30-34 years	113.8	112.4
35-39 years	63.3	67.5
40-44 years	11.9	14.9
45 & over	0.8	1.1

Source: ONS

Using the above study is a helpful guide to retrospectively estimate unplanned pregnancy in a subsequent year and consider how to support those age ranges where this is higher. This graph illustrates where the proportion of unplanned pregnancies is greater.

Graph 14: Age profile of unplanned pregnancies form NATSAL survey vs total conception in England, 2016

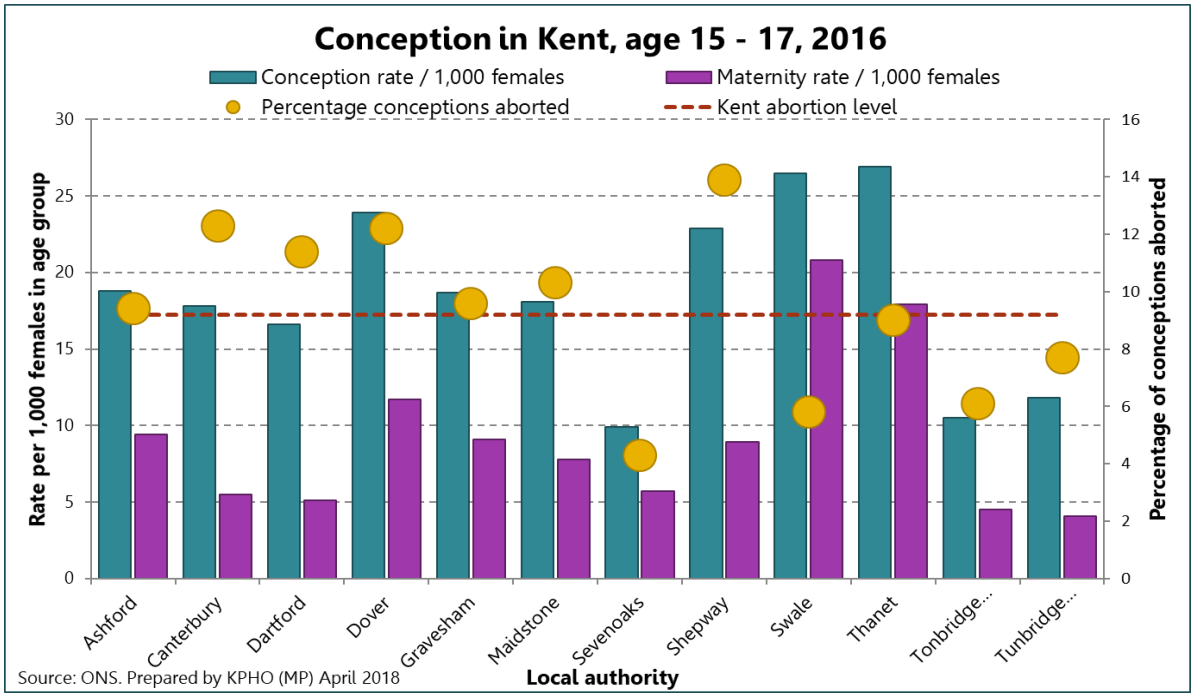


Source: NASTAL and ONS, prepared by KPHO (MP), August 2018

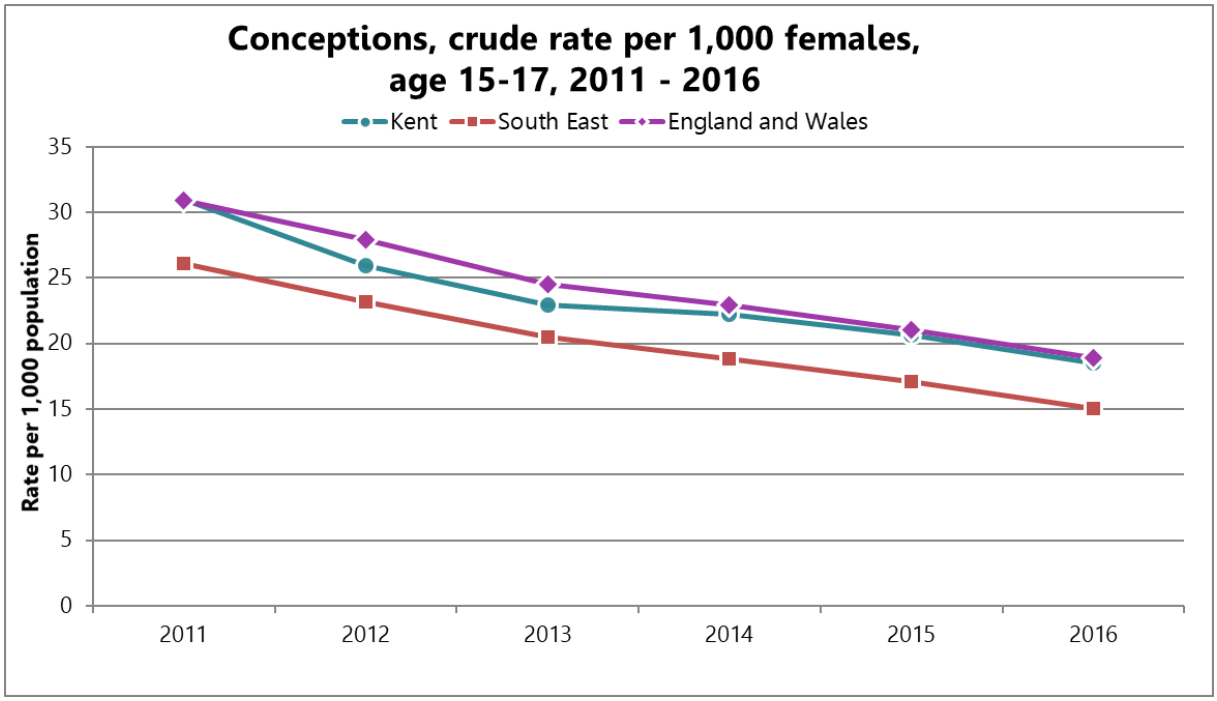
4.4.2 Teenage pregnancy

There has been much investment since 2000 to help reduce the rates of conception amongst teenagers. Under 18 conception rates across Kent have been steadily declining, and have decreased by 40% since 2011, a similar pattern to England & Wales and the South East. Rates remain in line with England and Wales and above the South East rate. Reductions in the rates of teenage pregnancy have been greater in some districts. The districts to the east of the county have higher under-18 conception rates than those in the west: 26.9 per 1,000 in Thanet and 26.5 in Swale, compared with 9.9 per 1,000 in Sevenoaks and 10.5 in Tonbridge & Malling.

Graph 15: Conception outcomes amongst under 18-year olds in Kent 2016

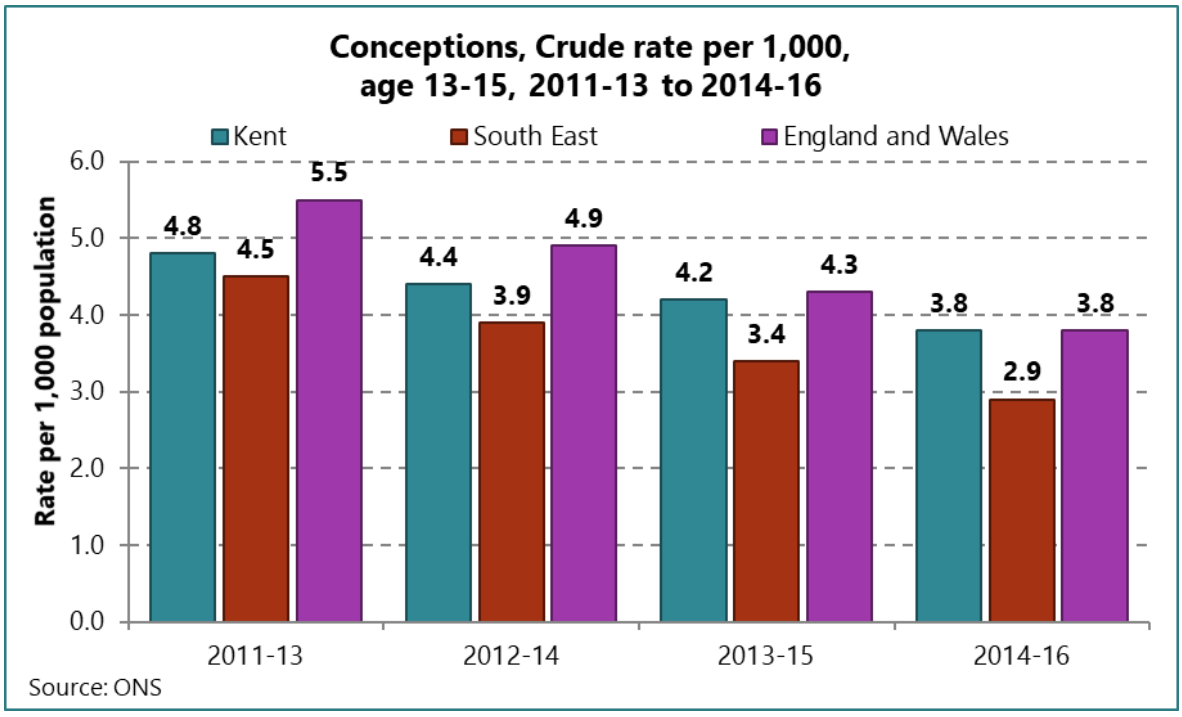


Graph 16: Conception trends amongst under 18-year olds in Kent 2011 – 2016



Pregnancy amongst females under 16 years of age shows a slightly different demographic picture. The highest under-16 conception rates were in Dover and in Thanet, where in both districts nearly 8 females per 1,000 conceived in 2014/16. The lowest rates were in Maidstone and Sevenoaks (2 per 1,000).

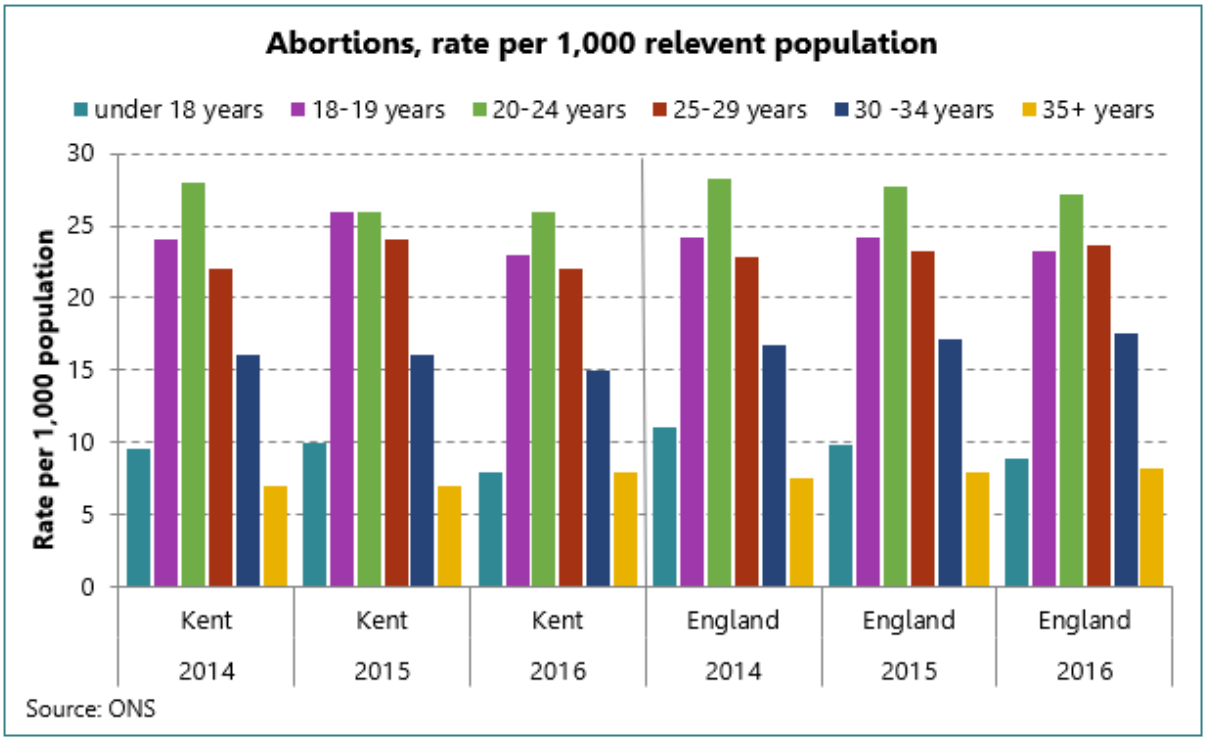
Graph 17: Under 16 conception crude rate per 1,000 females aged 13- 15 years [3 year aggregated data- 2011/13 -2014/16]



4.4.3 Termination of pregnancy

The methods of abortion available are surgical and medical. The latter can only be given up to nine weeks gestation. Medical termination may require two visits, four to six hours apart, whereas a surgical termination is a single visit undertaken with local or general anesthetic. The rates of termination of pregnancy shown below are measured per 1,000 resident female population aged 15-44 years.

Graph 18: Crude rate of abortions per 1,000 female population, 2014-2016



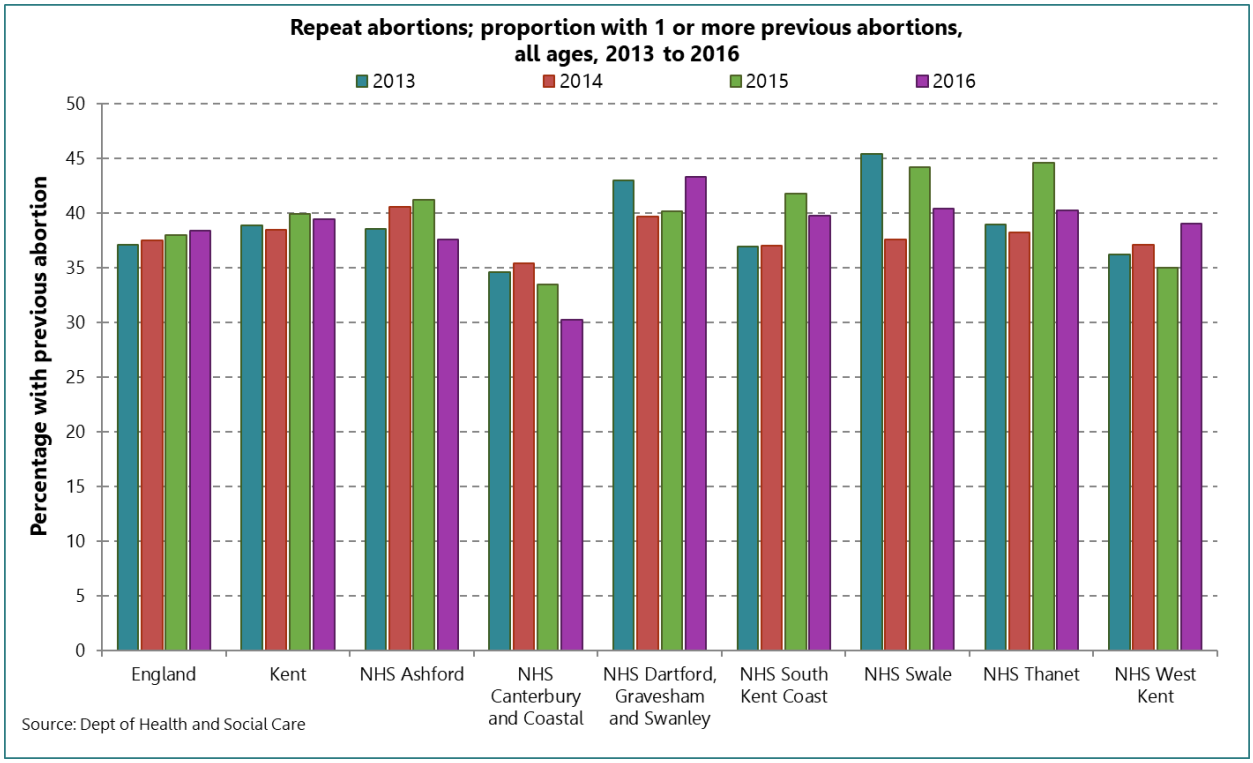
The rate of terminations in England overall has not changed in the last few years and in Kent there has been there little change. In some cultures, termination is used as a form of contraception; this does not, however, explain uptake of this service.

Figure 5: Legal Abortions: Number and rates of Abortion, 15-44 years by CCG and Locality Office of Residence 2013 – 2016

	Total number				Abortion rate per 1,000 resident females aged 15-44 years			
	2013	2014	2015	2016	2013	2014	2015	2016
England					16.1	16.1	16	16
Ashford	368	352	371	319	16.7	15.9	16	14.3
Canterbury	534	500	555	542	12.3	11.6	13	12.4
DGS	835	889	903	932	16.8	17.6	18	18.3
South Kent	595	591	584	563	17.1	17.1	17	16.5
Swale	357	330	366	334	17.5	15.9	18	16
Thanet	473	421	482	395	19.7	17.1	19	16
West Kent	1126	1240	1171	1132	14	15.1	14	13.8
Kent LA	4343	4323	4432	4217	15.7	15.6	16	15.2

Source: ONS

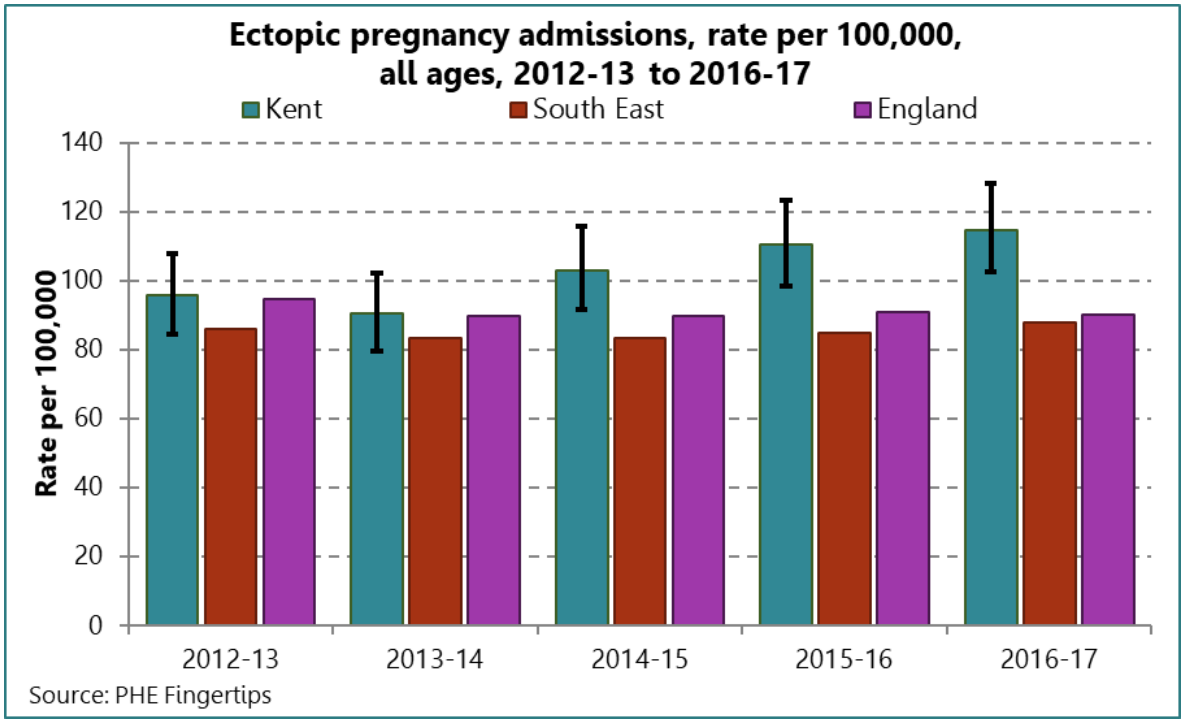
Graph 19: Repeat terminations 2013-2016 by CCG in Kent



4.4.4 Ectopic pregnancy

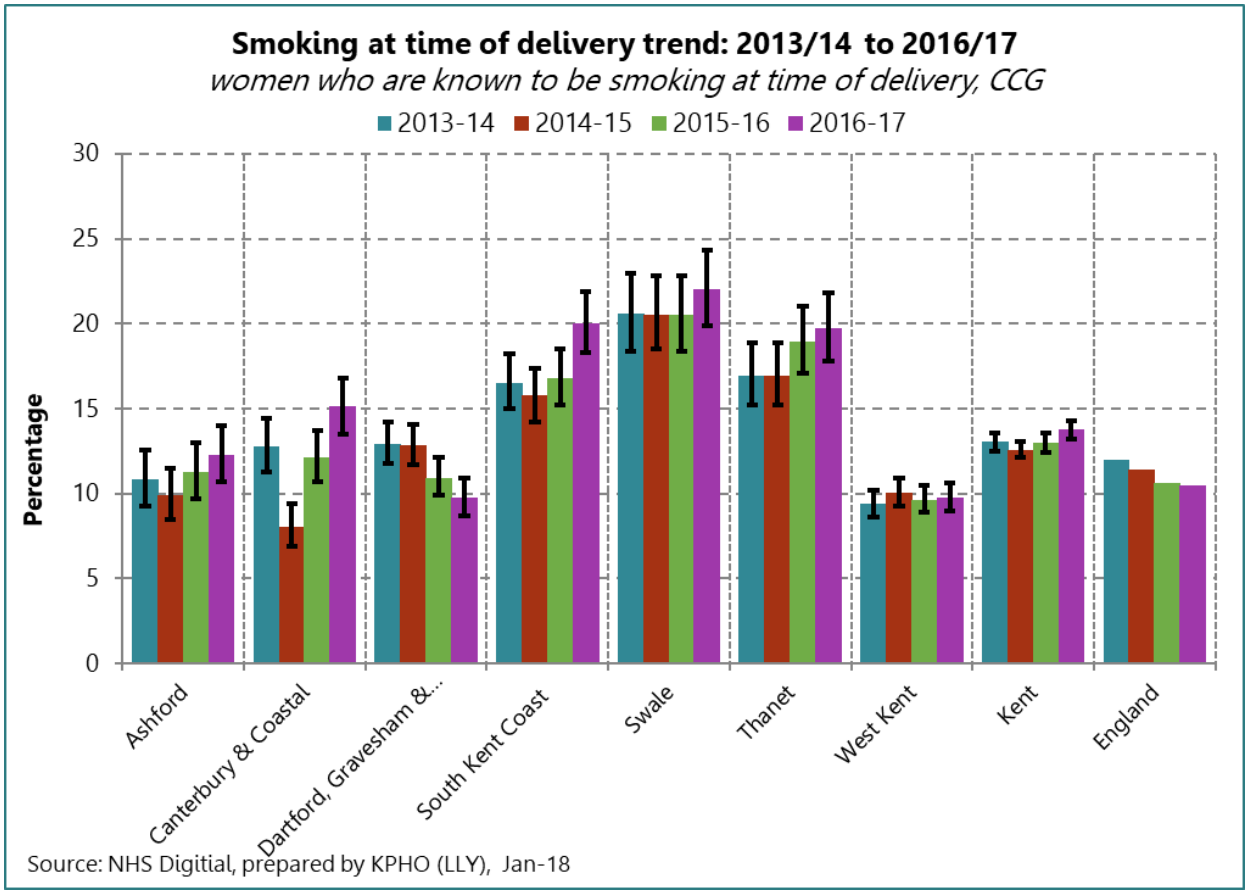
This is a pregnancy, sometimes referred to as tubal pregnancy which attempts to grow outside of the uterus. The rates in Kent vary but had been consistently similar to the England average with the exception of the last three years, where Kent are now higher than the England average. This needs to be better understood.

Graph 20: Rates of Ectopic pregnancies per 100,000 female population aged 15-44 years in Kent 2012/13- 2016/17



A recent paper 'The impact and potential consequences of undiagnosed sexually transmitted infections amongst females aged 15 - 44 years in Kent' is presented in Appendix 3. This highlights the potential impact of untreated chlamydia and gonorrhoea which are risk factors for ectopic pregnancy. More clearly associated with ectopic pregnancy is cigarette smoking, both exposure to second hand smoke and smoking status which have been demonstrated to increase risk.[99]. In Kent the prevalence of smoking in pregnancy in 2016/17 measured by smoking status at delivery was 13.8%, higher than the 10.7% England average. Increasing awareness of the impact smoking on sexual health through sexual health services and online could be beneficial.

Graph 21: Smoking at time of delivery 2013/14 to 2016/17 by CCGs in Kent



However, the districts with rates of ectopic pregnancies higher than the Kent average of 114.8 in 2016/17 were Dartford 142.0, Maidstone 139.0 and Tonbridge and Malling 134.8 per 100,000 female population aged 15-44 years. These do not have the highest rates of smoking at the time of delivery but could improve the detection of chlamydia amongst females of reproductive age.

4.5 Contraception

There are currently 15 types of contraception available to suit the differing needs and lifestyles of females. The correct and consistent use helps prevent unwanted pregnancy.

4.5.1 Oral contraception

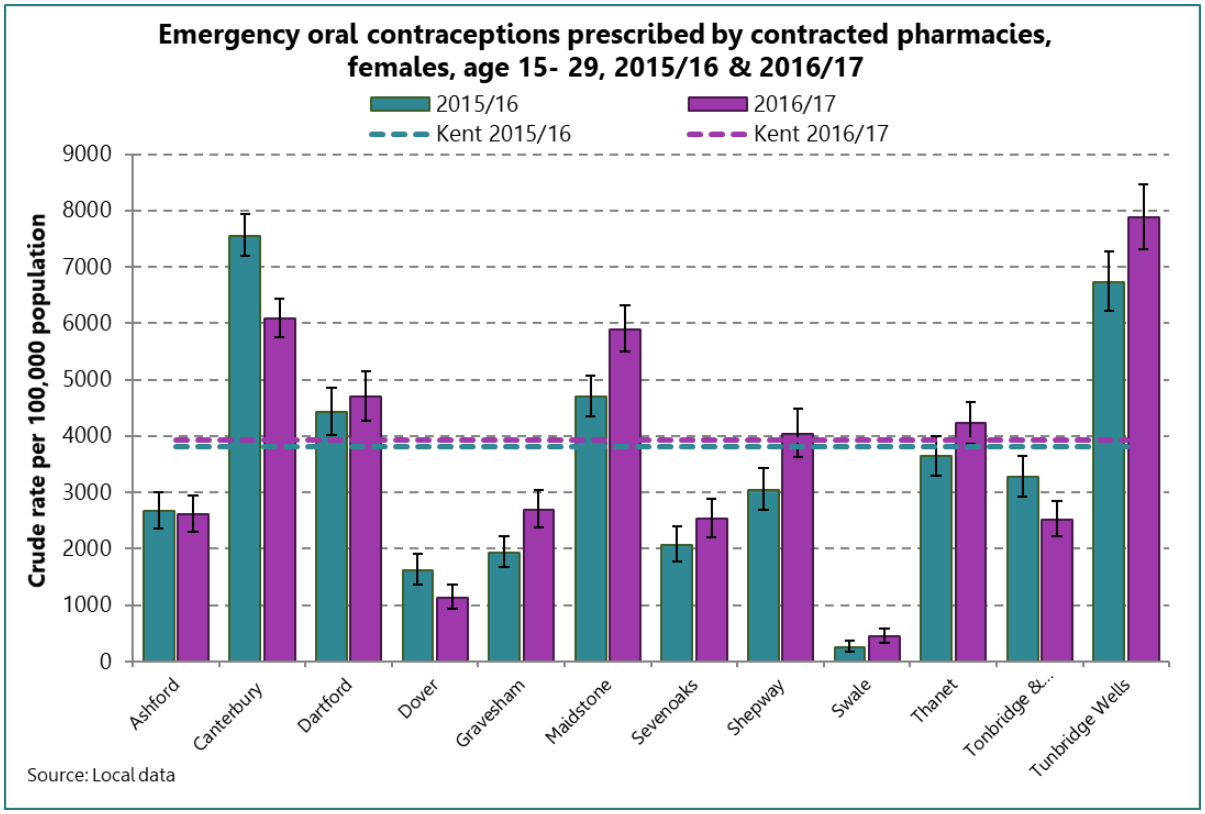
The most common form of contraception used in Kent is oral contraception with *microgynon* [a combined pill] being the most frequently prescribed in primary care. The number of general practices who provide much of the non-complex contraception as part of their general medical system contracts has reduced with the closure of single practices, merging of practices and GP vacancies. Localised policies which limit the volume of oral contraception prescribed at any one time means that access is rapidly changing. This change in practice to the distribution of oral contraception will require transformation and innovation of the provision of contraceptive services to meet user demand.

There has been a small increase in the use of long term contraception over the last four years. This is a contraception which continues working and protects against pregnancy for a longer period of time. The most common form used in Kent is injectable contraception which needs to be given every 12 weeks (Depo-Provera).

4.5.2 Emergency contraception

Emergency oral contraception is available free through many pharmacies to women under 30 years of age. It is also available through general practice and sexual health services. Levonelle can be used up to 72 hours and EllaOne up to 120 hours following unprotected sex, or contraception failure. Uptake of this contraceptive method for women aged 30 and under through pharmacies is consistently higher the districts of Tunbridge Wells, Canterbury and Maidstone. In eight out of 12 districts in Kent the uptake increased from 2015/16 to 2016/17.

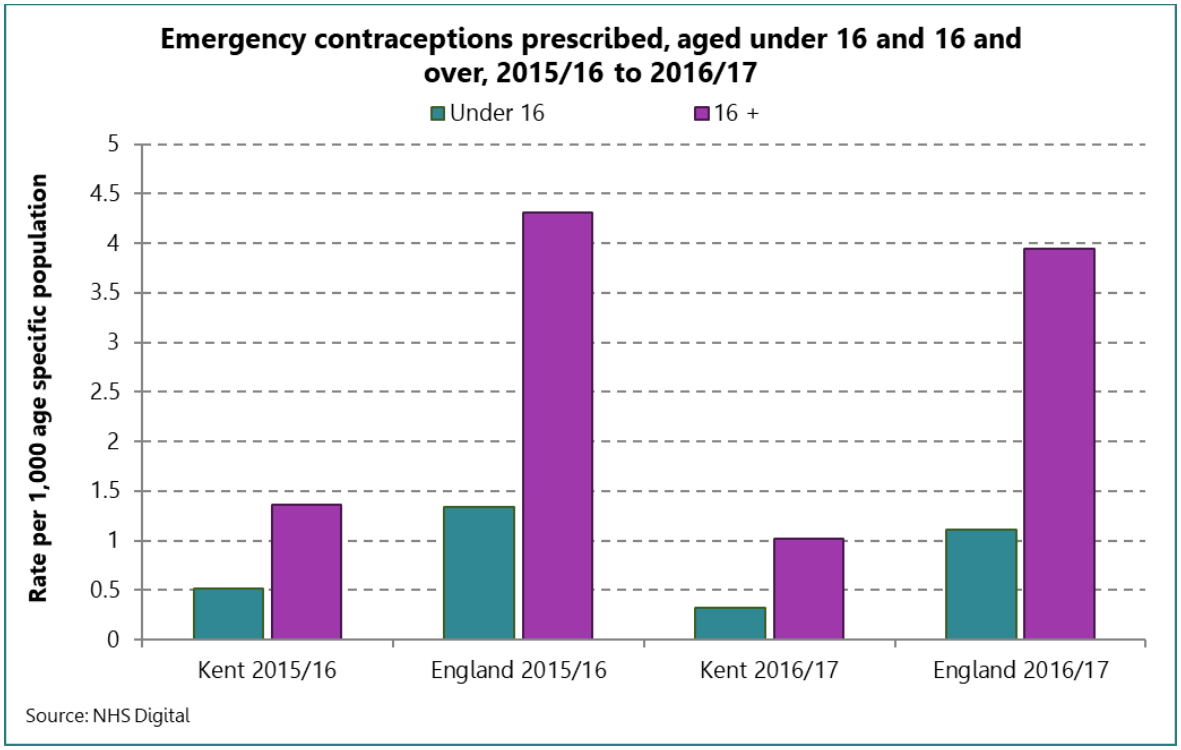
Graph 22: Crude rate per 100,000 female population aged 15-29 years receiving oral contraception from contracted pharmacies by district in 2015/16 and 2016/17



Guidelines published in 2017[100] recommend a coil as the most effective form of emergency contraception. This can be inserted up to 5 days following unprotected sexual intercourse and then left in-situ as a long-term method of contraception. Anecdotal data had suggested that this has not been the practice but locally change is being observed with younger women keeping these as a contraceptive method.

The rate of emergency contraception provided by SRHS to women has been decreasing from 2015/16 in the under 16 age group and is significantly lower in Kent than in England overall which may be as a consequence of the increased uptake through pharmacies.

Graph 23: Rates per 100,000 age specific population of prescribed emergency contraception provided by Sexual and Reproductive Health Services (SRHS)



4.5.3 Long acting reversible contraception [LARC]

Long acting reversible contraception [LARC] includes intrauterine contraceptive devices and subdermal implants. These can be effective for three to five years. Current usage suggests, however, that lack of tolerance or understanding of the need to manage menstrual bleeding may result in early removal of implants or insertions and, therefore, the benefits of these as long-term contraception are lost.

Early removals refer to devices removed within 12 months of insertion. Of those early removals there will be some that removed less than six months after insertion and even earlier at 1 month or less after insertion.

4.5.3.1 LARC in general practice

The local authority is responsible for the commissioning of this mandated service in general practice.

A local study has explored the impact of dedicated professional development from 2015-2017 on the rates of early removals of LARC. Training commissioned in Primary Care settings between 2015-17 has resulted in 167 practitioners achieving a Letter of Competency (LoC) in November 2017 with a further 21 practitioners in the process of completion.

Additionally, 14 practitioners across Kent signed up for Advanced Contraception Awareness Training and this coupled with LoC has we believe contributed to an increase in best practice delivery of LARC provision. More specifically, the training has demonstrated its impact in a

change in the percentage of early removals undertaken from 28% in Q1 and Q2 in 2015 to 14.2% in Q1 and Q2 2017.

Figures 6 and 7 illustrate the situation regarding removals and early removals comparing Q1 and Q2 2015 and 2017.

Figure 6: All LARC removals Q1 and Q2 2015/16 and 2017/18

Q1 and Q2	All Removals	SDI No and %	IUS Mirena No's & %)	IUD No and %	Not coded
2017/18	2204 (100%)	1167 (53%)	841 (38%) 826 (98%)	196 (9%)	-
2015/16	1464 (100%)	1416			48

Figure 7: Early LARC removals Q1 and Q2 2015/16 and 2017/18

Q1 and Q2	Number of early LARC removals & as a percentage of all LARC removals	SDI	IUS (Mirena No's & %)	IUD
2017/18	313 (14.2% of all removals)	182 (58%)	90 (29%) (87, 98%)	41 (13%)
2015/16	396 (28% of coded early removals)	396		

Of the 2204 LARC removals (seen above in Figure 6) carried out in Kent in Q1 & Q2 of 2017/18, 313 (14% of all removals) devices were removed early of which there were 182 Subdermal Implants (SDIs) {58% of all early removals}, 90 Intrauterine Systems (IUS's) {29% of all early removals} and 41 Intrauterine Devices (IUD's) {13% of all early removals}. Nearly all (98%) of the IUS devices removed were Mirena. Early removals form 8.3% of all removals in Ashford CCG to 17.9% in Swale CCG.

In Kent, of the 313 early removals carried out in Q1 & Q2 of 2017/18, 133 (36% of all early removals) devices were removed <6 months of insertion, ranging from 5.3% in Ashford CCG to 42.8% in West Kent CCG of all early removals. 36 devices were removed as early as one

month after insertion (11% of all early removals), ranging from 2.8% in Ashford and West Kent CCG to 38.9%.

Figure 8: Early removals under 1 year, 6 months and 1 month by CCG in Kent [Quarters 1 and 2, 2017/18]

CCG	Number of early removals	% of removals that are early	Removals < 6 months by CCG	% Removals >6 months	% of all early removals that are < 6 months	Early removals ≤1 month by CCG	% removals ≤ 1 month	% of all early removals that are ≤1 month
Ashford CCG	13	8.3	7	5.3	2.2	1	2.8	.3
C&C CCG	55	16.3	20	15.0	6.4	7	19.4	2.2
DGS CCG	50	13.5	21	15.8	6.7	6	16.7	1.9
SKC CCG	21	13.4	8	6.0	2.5	1	2.8	.3
Swale	22	17.9	8	6.0	2.5	5	13.9	1.6
Thanet CCG	32	14.1	11	8.3	3.5	2	5.5	.7
WK CCG	118	14.4	57	42.8	18.2	14	38.9	4.5
Medway CCG	2	13.3	1	.8	.3	-	-	-
Total	313	14.2	133	100	42.5	36	100	11.5

4.5.4 Barrier methods

The most commonly used barrier method is condoms.

Condoms may be used alongside oral, injectable or LARC methods of contraception, known as ‘double dutch’, but can be used as an individual contraception method.

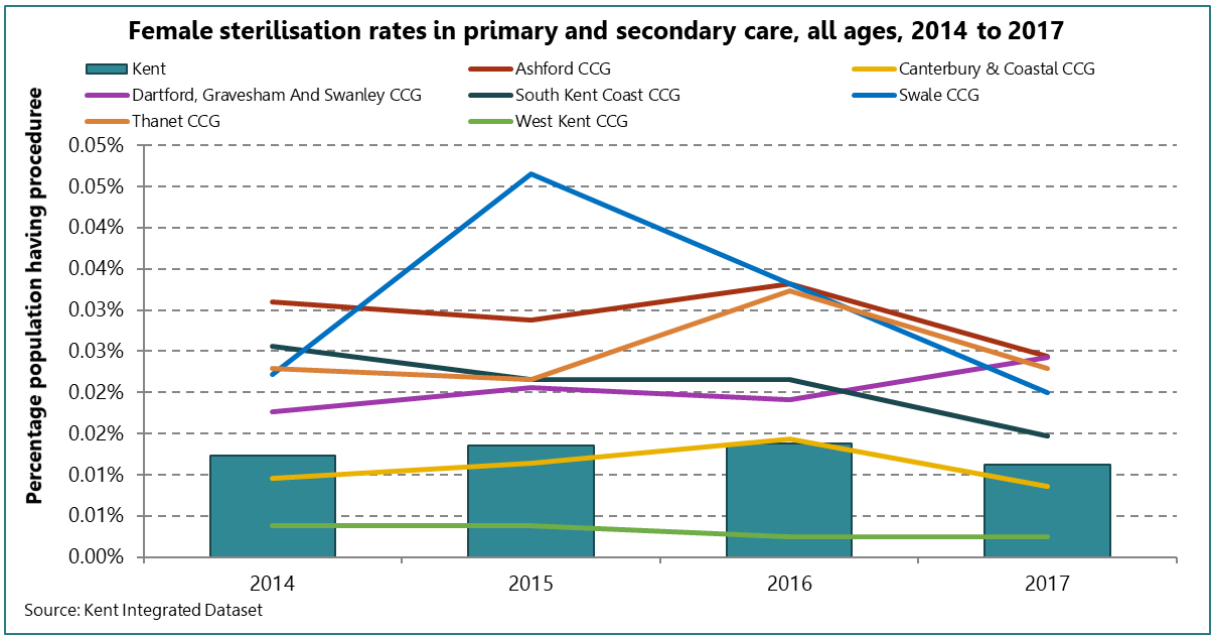
In July 2016 Kent local authority extended the provision of a free condom programme to those under 25 years of age, in response to evaluation of the c card programme and evidence that the highest volumes of detected STIs were amongst 20-24 year olds. This programme is called ‘Get It’. There has been an increased access to this programme amongst 17-19 year olds and a growing uptake across the county through registered pick up points and the online access.

4.5.5 Female sterilisation

Female sterilisation is carried out by blocking or removing a portion of the fallopian tubes using clips, rings or salpingectomy. It has been decreasing in popularity. Nationally there has been a reduction in the number of female sterilisation procedures of 72% from 2000/01 - 2010/11.[101] This may be a reflection of the introduction and uptake of long acting reversible contraception alongside the increased range of oral contraceptives [combined or progesterone only].

No national data is available at sub-England level for sterilisation, so the Kent Integrated Dataset (KID) was used to look for trends over the previous four years. Primary and secondary procedure codes in Secondary User Service (SUS) data, and read codes for primary care data were searched, and results combined and compared against participating general practice's populations. Currently 91% of Kent practices flow data for their registered patients to the KID.

Graph 24: Combined primary and secondary sterilisation procedures, all ages, 2014-17, limited to patients in the Kent Integrated Dataset by CCG of patient residence



The majority of the activity was delivered in secondary care, and the vast majority of these appeared to be related to caesarean birth complications. 342 out of 364 sterilisation procedures across the four years were also coded with a caesarean procedure. 90 procedures were found in primary care.

Figure 9: Combined primary and secondary Sterilisation procedure counts, 2014-2017

Female Sterilisation Counts	2014 & 2015	2016 & 2017	Total
NHS Ashford CCG	27	26	53
NHS Canterbury And Coastal CCG	22	24	46
NHS Dartford, Gravesham And Swanley CCG	52	59	111
NHS South Kent Coast CCG	48	37	85
NHS Swale CCG	31	24	55
NHS Thanet CCG	33	41	74
NHS West Kent CCG	18	12	30
Kent	231	223	454

There were differences seen across the Kent CCGs, with West Kent and Canterbury & Coastal CCGs notably lower.

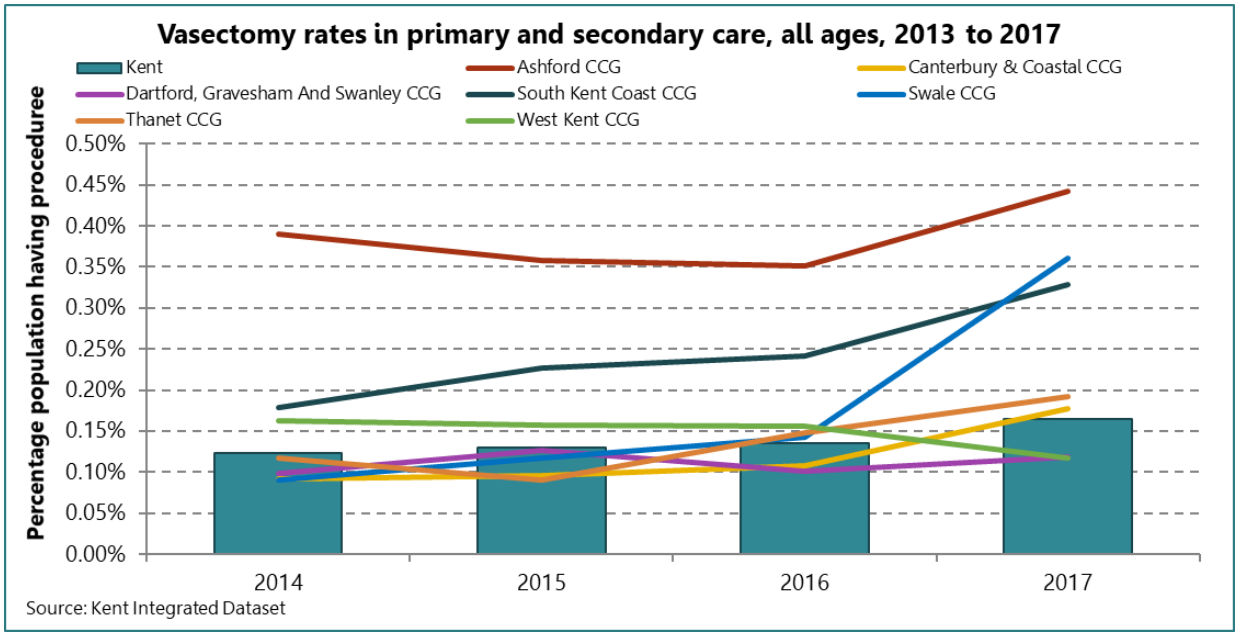
Anecdotal evidence suggests the rate of sterilisations may be lower in Kent than the national picture, but this is difficult to prove without national figures to benchmark against. The mean age of first time mothers has changed over the last 20-30 years. In England and Wales, the mean age of first time mothers in 2016 was 28.8 years[102]. The need to maintain fertility for longer may go some way to explain the change in demand for female sterilisation. The mean age of Kent female residents 2014-2017 having a sterilisation is 33.5 years.

4.5.6 Vasectomy

Modern vasectomy procedures tend to be short and are frequently carried out under local anaesthetic. There has been a reduction of 52% in the number of vasectomies in England reported from 2000/01- 2010/11.[103]

The responsibility for commissioning vasectomy services are the CCGs[104], but vasectomy reversals are not routinely funded. There is variation in activity between CCGs, with Ashford and South Kent Coast CCGs showing considerably higher rates than the rest of Kent.

Graph 25: Combined primary and secondary sterilisation procedures, all ages, 2014-17, limited to patients in the Kent Integrated Dataset by CCG of patient residence



The vast majority of vasectomies are delivered in primary care, with only 222 (4.5%) of the 4,898 procedures from 2014 to 2017 being done in a hospital setting.

The mean age profile 2014-2017 of Kent residents having a vasectomy is 40 years.

Figure 10 – Combined primary and secondary Sterilisation procedure counts, by CCG 2014-2017

Vasectomy Procedure Counts	2014	2015	2016	2017	Total
NHS Ashford CCG	170	163	161	195	689
NHS Canterbury And Coastal CCG	95	103	109	181	488
NHS Dartford, Gravesham And Swanley CCG	139	178	143	177	637
NHS South Kent Coast CCG	178	228	245	326	977
NHS Swale CCG	44	64	75	157	340
NHS Thanet CCG	85	68	112	145	410
NHS West Kent CCG	370	359	356	272	1357
Kent	1081	1163	1201	1453	4898

4.6 Sexual abuse

Sexual assault in its varying presentations is increasing either because there is greater willingness to report or that this is a more accurate picture of what is taking place in Kent. Services should continue to engage with one another to avoid the need for further examination but also ensure that the range of services available to them is articulated.

4.6.1 Child sexual assault / abuse

There are many estimates that provide an indication of the scale of child sexual abuse. Young people and other children commit around a third of sexual abuse.[105] The NSPCC[106] have estimated that 16% of children aged under 16 experience some form of sexual abuse during childhood. This would equate to approximately 47,300 children under 16 years of age in Kent.

Adolescent boys who are sexually abused are at higher risk of involvement in risky sexual behaviour. One meta-analysis[107] found sexually abused boys were significantly more likely than non-abused boys to report all three risky sexual behaviours. Weighted mean odds ratios were 1.91 for unprotected intercourse, 2.91 for multiple sexual partners, and 4.81 for pregnancy involvement.

The police found a 36% [from October 2015 - September 2016] increase in sexual offences reported by children and young people against the previous year. Those children and young people who were then in contact with the sexual assault referral centre [SARC] represent 12% of these cases reported to the police. There are fewer boys and young men in contact with the SARC (7%). The majority of C&YPs seen in the SARC are aged 16-17 years.

4.6.2 Adult sexual assault

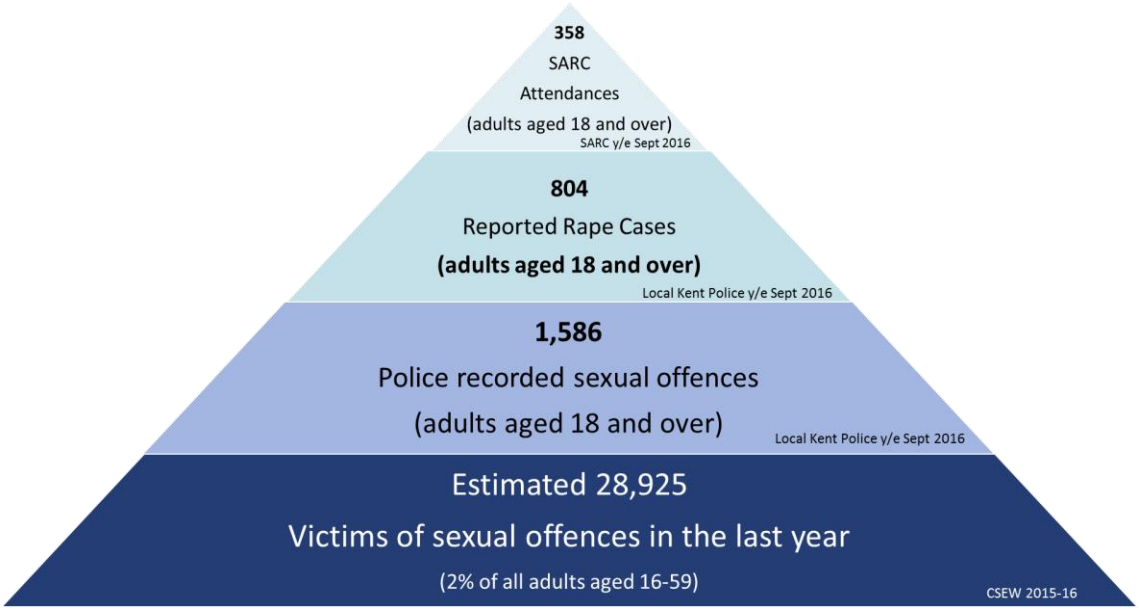
In the 12-months to September 2016, 1,589 sexual offences were reported in Kent. This growth is in part believed to be result of historic cases of rape and sexual assault. Rapes account for half (51%) of all sexual offences and 40% are sexual assault offences.

Kent and Medway Sexual Assault Referral Centre (SARC)In 12-months to September 2016, there were 358 adults in contact with the SARC, an increase of 33% from the previous reporting period (12-months to April 2014). Mostly women present to the SARC (93%). Just under half (47%) are aged under 25. The most common referral route to the SARC is via the police (85%), 13% of adults self-referred to the SARC.

Across all services (SARC, ISVA and counselling), 28% of adults report a mental health need, 23% self-harm, 13% drug and alcohol use, 13% report feeling suicidal and 16% are on medications such as anti-depressants. The need to develop pathways into counselling and mental health services is critical, the recent talking therapies pathway (developed between Kent and Medway NHS and Social Care Partnership Trust (KMPT) and the third sector counselling services) should enhance this provision across all levels of mental health need.

The adult sexual assault needs assessment identified a need to improve the pathways of care to the integrated service and testing.

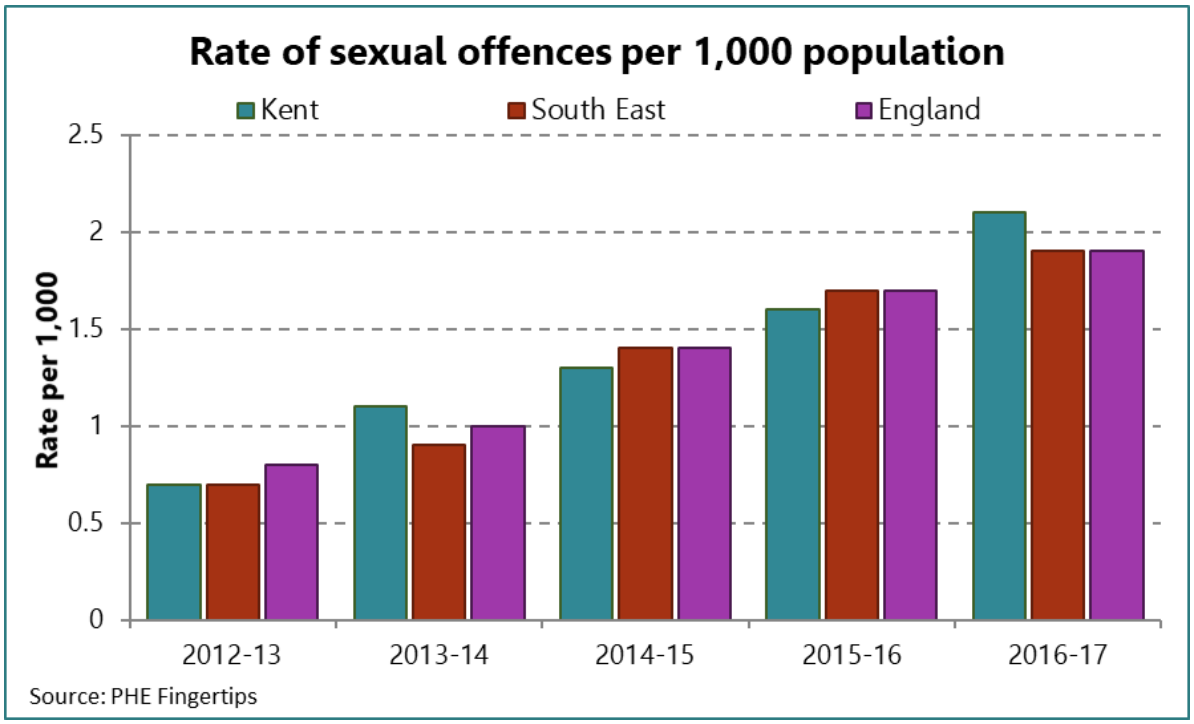
Figure 11: The Scale of Need (Source: CSEW 2015-16, Kent Police Data Sept 2016, SARC Data Y/E Sept 2016)



Source: Kent and Medway Sexual assault JSNA 2016

Concealed pregnancies have impact on infant health outcomes and some studies[108] suggest links with sexual assault.

Graph 26: Crude rates of sexual offences per 1,000 popualtion aged 16 & over in Kent and England, 2012/13 – 2016/17



4.6.3 Sexual exploitation

There is much reported on sexual exploitation particularly in relation to children. Operation Lakeland and other intelligences activities have supported and raised the profile of this in Kent, not just to front line workers but amongst children and young people themselves.

The CEOP in 2011 found that the majority of victims of child sexual exploitation were female and white. Those most at risk are those children who: go missing, are in care, or experience other forms of abuse. Those children with a disability are 3 times more likely to be victims.

4.6.4 Female Genital Mutilation (FGM)

Research[109] presented in 2015 estimated that 137,000 women and girls were affected by FGM, an illegal practice which was impacting on lives, particularly amongst females born in parts of Africa. This report highlighted the problem and has led to the systematic recording and reporting of observed and self-reported FGM.

During the year April 2015 – March 2016 in Kent the majority [25] of FGM were self-reported. All [30] were identified within maternity services and for half of these, their country of birth was West Africa.

4.6.5 Sexting

The birth of social messaging sites and use of text messaging as common communication systems have brought about other challenges from sexting amongst young people in recent years. Sexting is the sharing of sexual, semi naked or naked images or sexually explicit messages.

There have been numerous studies undertaken some of which have found contrasting findings on sexting and its relation to sexual risk. A cross sectional study with young adults suggested that *sexting is robustly associated with high risk behaviour*[110]. A study[111] with females who were in 'romantic' relationships suggested that sexting was linked with attachment insecurity and that this was associated with condom less sex.

This is one form of Technology Assisted Harmful Sexual Behaviour [TA HSB]. One recent study[112] suggests that the average characteristics amongst those boys and young men displaying TA HSB but who display no offline HSB, to be: older when engaging in HSB, in more stable families and have less recorded mental health difficulties.

4.7 Differences seen amongst populations

4.7.1 Young people

The uptake of the range of sexual health services is greatest amongst young people as illustrated earlier in this and the following chapter. The burden of infections detected are highest amongst 20-24-year olds and only slighter lower amongst 25-29 year olds.

Contraception use is less consistent. There are lower rates of [113]planned contraception and emergency contraception is being used as a 'planned' method. The duration of and acceptability of long acting reversible contraception is less when compared to older age groups receiving LARC methods.

4.7.2 Sex workers

The number of sex workers in Kent is not known. However, estimating the numbers of men identifying themselves as male sex workers from the research referenced earlier 1% of male attendees would equate to 150. That said the number attending sexual health services who identify themselves as sex workers and are residents of Kent is relatively low with an average of 121 attendances per year from 2012 – 2016[114].

Although the new rates of STIs are not comparable across these years because of the change to the inclusion criteria for new STIs, the percentage of diagnosed STIs amongst sex workers from 2015 - 2016 in Kent was 8.4%, compared to 11.9% in England over the same time period. [115]

4.7.3 Prisoners

Researchers describe frequent engagement in risky sexual activity post release from prison and recommend the promotion of sexual health to current and former prisoners with increased access to preventive care and STI screening, diagnosis and treatment.[116] Blood-borne viruses (BBVs) often affect a larger proportion of people in prison and detention centres than in the wider population.[117] BBV screening is offered to all detainees.

A recent sexual health needs assessment of prisoners in Kent[118] calculated the rate of STIs per 100,000 population using the prison operational capacity. This demonstrated that the rate of infection is significantly higher [nearly 10-fold] amongst prisoners compared to the general population as shown below.

Graph 27: The observed number and rate of new STIs per 100,000 population, England and England prisoners, 2014

Population	**Number of new STI diagnoses**	**Rate of new STI diagnosed per 100,000 population**
England	430,613	799.4
England prisoners operational capacity	6219	7465.9

Source: GUMCAD

4.7.4 Swingers

The establishment and growth of swingers clubs through social media marketing has identified another population group who are at greater risk of STIs. Frequented by 'couples' these clubs provide alternative sexual lifestyles. However, outreach worker discussion has indicated that protection against infection is not prioritised and knowledge of STIs is low amongst swingers.

4.7.5 Learning disabilities

- Very few adults with a learning disability are in a relationship
- Those individuals with a learning disability face a number of barriers to having personal and sexual relationships - both social and personal
- Knowledge and understanding of sex, sexuality and relationships is often relatively poor amongst people with a learning disability
- Individuals with a learning disability, particularly women, are more likely to be at risk of sexual abuse[119]

In recent years more accessible information to support both adults and young people with a learning disability about relationships, contraception and STIs have been developed and are available through the fpa.[120]

There are studies[121][122][123]which have found that the uptake of cervical screening declines amongst women with learning disabilities to only 13- 25%. Improvement in the offer and uptake of screening for cancer is needed which more accessible information may support.[124]

4.7.6 LGBTQ

Amongst BME lesbian and bisexual women, 1 in 5 [19%] over 25 years of age have never had a cervical screen. This compares to 7% of the general population.

A survey of bisexual and gay men found that 1 in 4 men state that they have never had an STI test[125] The same survey found that 30% had never had an HIV test.

A study of young LGBT pupils has found that 1 in 5 LGBT pupils have been taught about safe sex in relation to same-sex relationships[126]

Experiences of high levels sexual, verbal and physical abuse amongst young LGBT was reported in one study[127]

Anecdotal evidence from outreach sexual health services suggests that the needs of young LGBTQ are not being met locally. There are differences in the health needs of LGB and trans as identified in reported studies. Self-sustainment of LGBTQ groups for young people set up and initially led by Brook as a part of the outreach sexual health service offer until April last year has not been maintained as intended.

Sexual health outreach services have observed the numbers young people self-identifying as LGBTQ to have increased over the three years of the contract and needs have been specifically highlighted in Dartford district in the last 12 months.

Commissioning specialist service to support the specific identified and unidentified unmet needs of LGBT groups is recommended, including psychosexual services.

4.7.7 Asylum seekers, refugees and migrants

This group are at risk of poor health including sexual health outcomes. Many of these relate to their vulnerability and position. They are at high risk of sexual assault, sexual exploitation, forced sex work, FGM, HIV, pregnancy from rape. Outreach workers are meeting directly and providing support to some asylum workers but have found difficulty in engaging with transient migrant workers.

Action research is needed to understand how best to engage with and support these groups.

4.8 Partner notification

People with STIs and HIV can put their current partners at risk of infection and may have infected previous partners as well. Partner notification is an essential infection control component in terms of avoiding the consequences of untreated infection and protecting the wider community from onward transmission. It is important to make sure that partners who may be infected are offered the opportunity and encouragement to be tested and to obtain any necessary treatment.

5 Sexual health services: Utilisation and activity

The way that sexual health services are utilised across ages is very variable and ranges from persons wanting advice only to those needing treatment and management for very complex GUM conditions and pregnancy.

Providers of GUM and sexual & reproductive health services are contracted to deliver fully integrated services in Kent. An integrated sexual health service model aims to improve sexual health by providing easy open access to services through one door where the majority of sexual health and contraceptive needs can be met at one site, usually by one health professional, in services with extended opening hours and accessible locations.

Providers are required to submit data to GUMCAD using SHHAPT national coding. The table below based on GUMCAD data returns from 2016 demonstrates the range and quantity of services carried out by providers in Kent, and other logged data such as partner notifications and sexual assault patients. Other episodes not requiring treatment can be an indication of a negative test.

Under the service specification, providers are required to support the delivery of three key Public Health Framework outcomes:

- Reduction in unwanted pregnancies - Under 18 conceptions
- Increase in the rate of Chlamydia diagnoses (15-24 year olds)
- Reduction in the rates in the population presenting with HIV diagnosis at a late stage of infection

5.1 Out of area activity

Sexual health services are open access, enabling clients resident in Kent to access services in different places across England and vice versa. The volume of service uptake from Kent residents in London and Medway is significant and costly. However, with an increase in access and availability of appointments and walk in locally, alongside the introduction of more extensive asymptomatic STI online testing, the proportions may continue to reduce further. The graph below illustrates the decreasing total percentage of persons accessing services outside of Kent from 2013 – 2017. The total attendance in terms of appointments had increased from 2013-2016 but in 2017 this is observed to have reduced slightly.

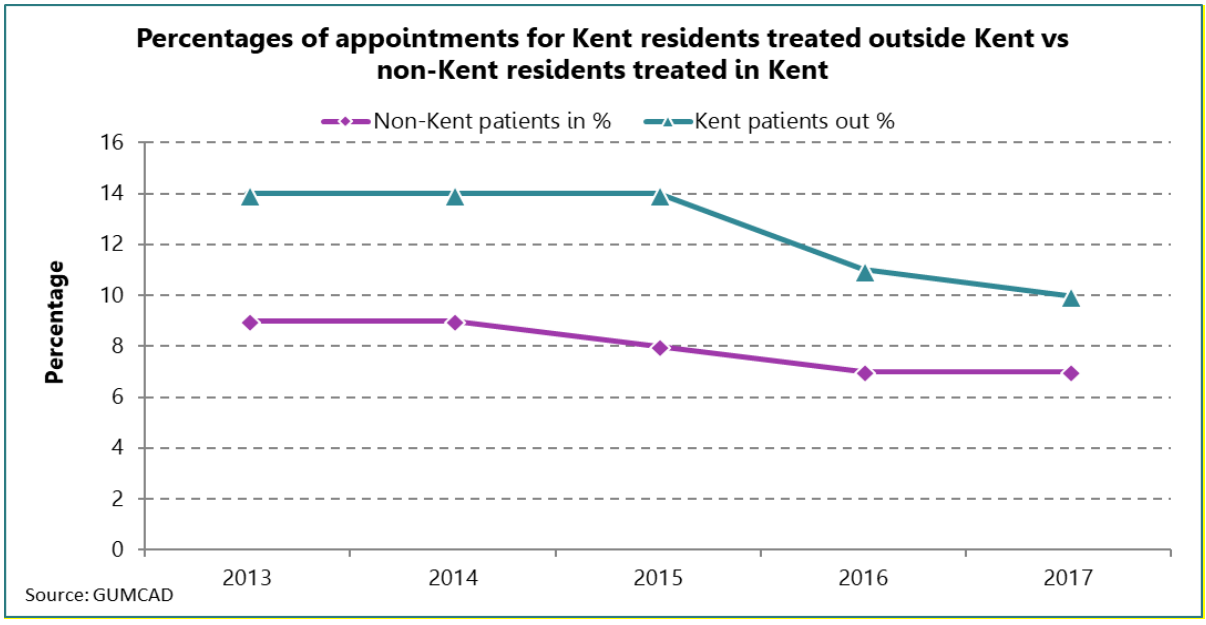
Figure 12: Numbers of Kent residents accessing sexual health services outside of Kent 2013- 2017

Year	Patient numbers	First appointment	Follow up	Total attendances	Total percentage of Kent patients accessing services in Kent LAs	Total percentage of Kent patients accessing services outside Kent	Total percentage of appointments outside Kent
2013	4,127	5,051	1,289	6,340	86%	14%	14%
2014	4,306	5,218	1,090	6,308	86%	14%	14%
2015	4,594	5,593	1,029	6,622	89%	11%	14%
2016	4,652	5,613	1,147	6,729	89%	11%	10%
2017	3,895	4,963	882	5,845	90%	10%	9%

Source: GUMCAD

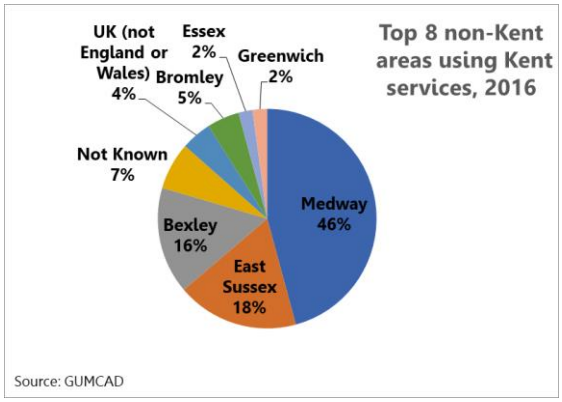
There is more out-flow to services outside Kent than in-flow of non-Kent patients. The graphs below show there has been a reduction in 'SRH tourism' since 2013, with a decline in both in-flow and out-flow of patients in the last 4 years.

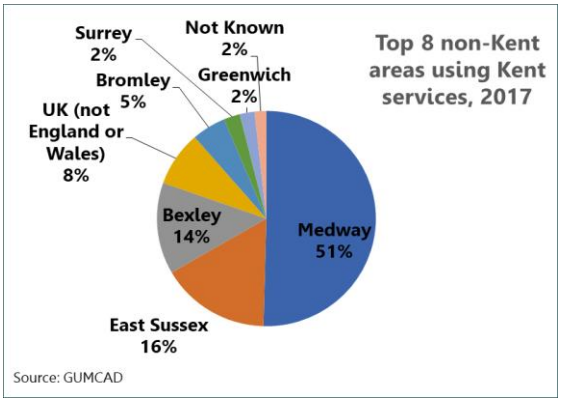
Graph 28: Percentages of Kent residents treated outside of Kent clinics and non-Kent residents treated in Kent clinics, 2013-2017



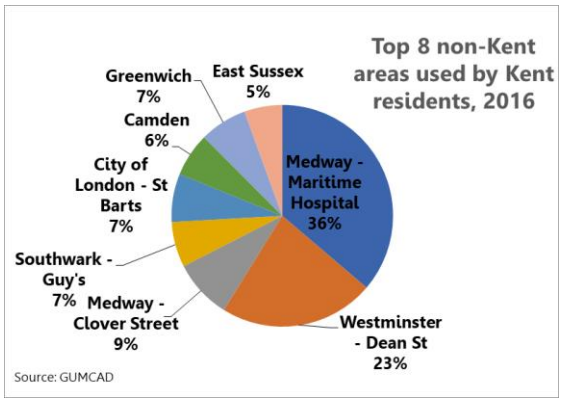
The pie charts below show the top 8 locations of patients being treated in or out of Kent, expressed as a percentage of the total.

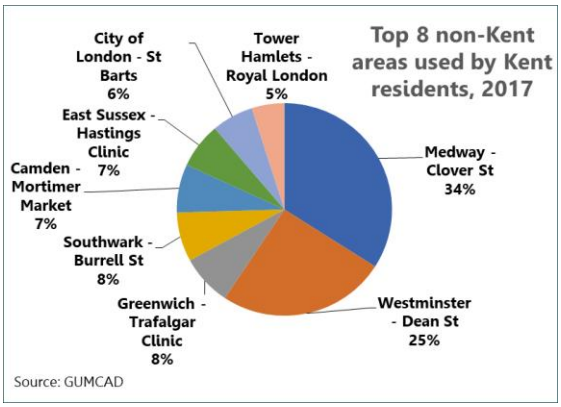
Figures 13 & 14: – Patient In-flow, 2016 and 2017.





Figures 15 & 16: – Patient Out-flow, 2016 and 2017.





5.2 Service Provision

The two key providers of Sexual & Reproductive Health (SRH) and GUM services in Kent are Kent Community Health Foundation Trust (KCHFT) who provide services in East Kent, and Maidstone and Tunbridge Wells NHS Trust (MTW), who cover North and West Kent. Both providers commenced their current contracts in April 2015 and are commissioned and performance monitored by the Public Health department within Kent County Council.

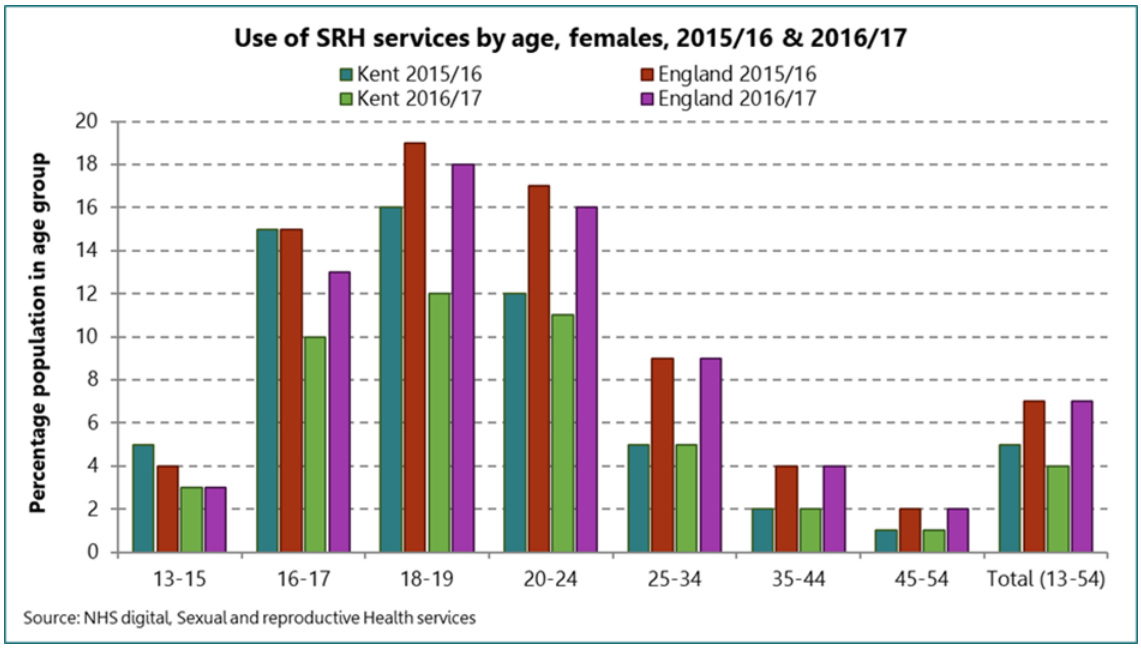
In addition, Maidstone Tunbridge Wells NHS Trust became responsible for online testing services in October 2017. These screens currently account for approximately 1 in 3 to 1 in 4 of tests for Chlamydia, HIV, Syphilis and Gonorrhoea carried out in the county. Online testing is more popular amongst clients in the 20 – 24 age band, who account for 40% of total online activity, compared to 28% of total SRH activity.

The following presents an overview of the activity undertaken and a precise of service use.

5.2.1 How the services are utilised

Young people (aged 16- 19 years) use Sexual and Reproductive Health services proportionately more than older age groups. Usage is lower in Kent in 2016/17 compared to the national average for every age group, after a decrease in people aged < 18 years from 2015/16. It is probable that the expansion in the reach of non-health locations offering free condoms and establishment of the online free condom programme in Kent, 'Get it', in July 2016 has impacted on the percentages of young people accessing the integrated sexual health services. The introduction of online access to chlamydia testing for those aged 16-24 years in January 2016 is more likely to have enabled those who had not previously taken up the offer of available chlamydia testing to undertake a test. Please note, the graph below does not capture online data as it only describes the use of Sexual and Reproductive Health services.

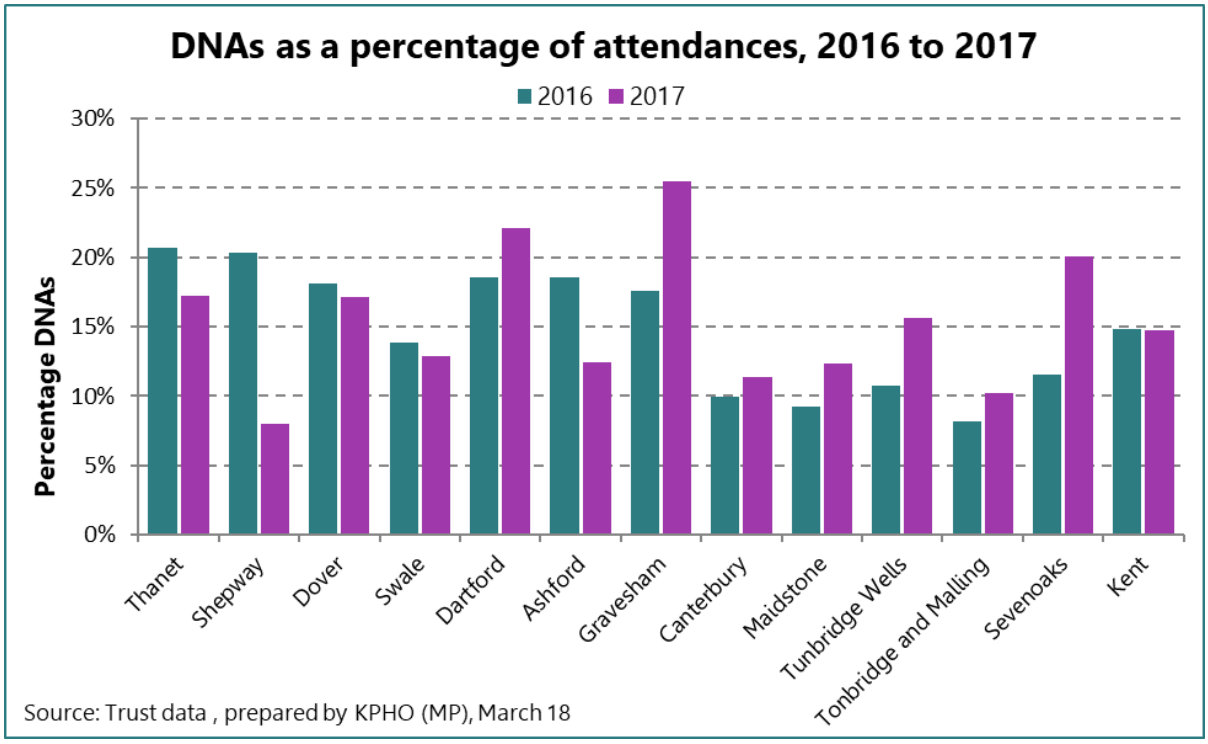
Graph 29: Percentage of the female resident population in Kent using Sexual and Reproductive Health Services by Local Authority of patient residence and age group 2015/16 and 2016/17



5.2.2 Non - attendances

For Kent, rates of non-attendance (DNAs) in the integrated services were 14.8% in 2016 and 14.7% in 2017, expressed as a percentage of total attendances. Rates of DNAs are variable across the districts in Kent as shown in the graph below.

Graph 30: – DNA rates in Kent districts, 2016 and 2017.



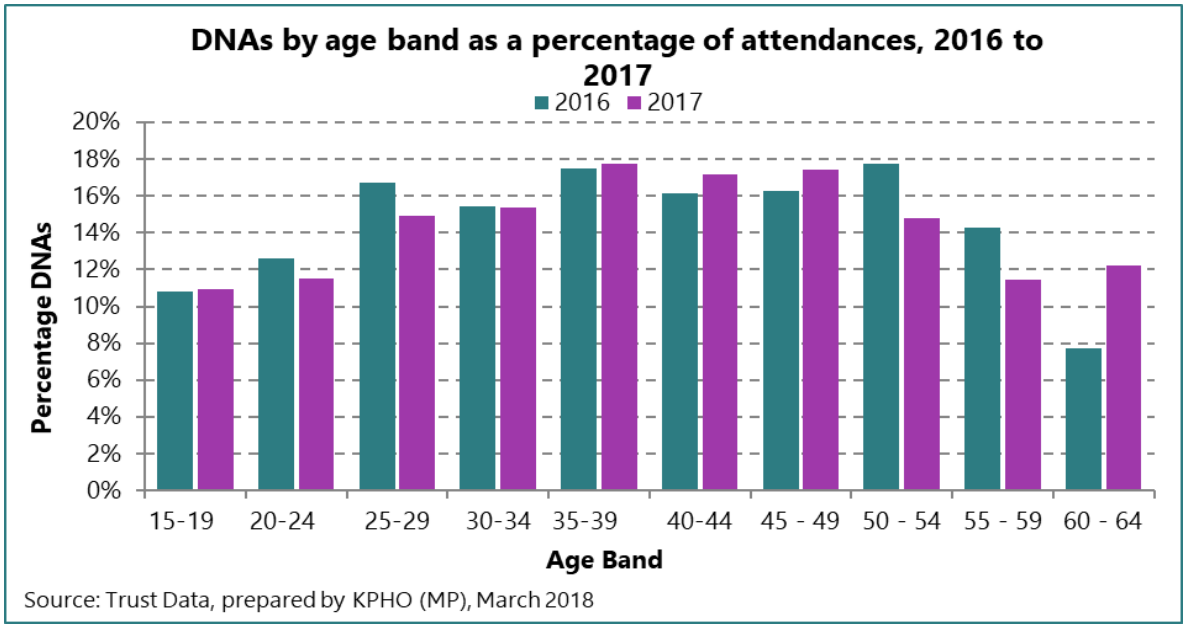
Pronounced increases in DNA rates between 2016 and 2017 have been seen in Gravesham, Dartford and Sevenoaks districts. Whilst the definition of DNA was found to be different in review in 2016, inconsistencies should not now be found. Given that larger numbers of attendances to out of area services are from North Kent residents, the percentage of DNAs should be audited in these local services.

Service audits have found that the highest DNAs are amongst those individuals who contact the service and are offered an appointment to be seen within 48 hours and live in close proximity to a service location.

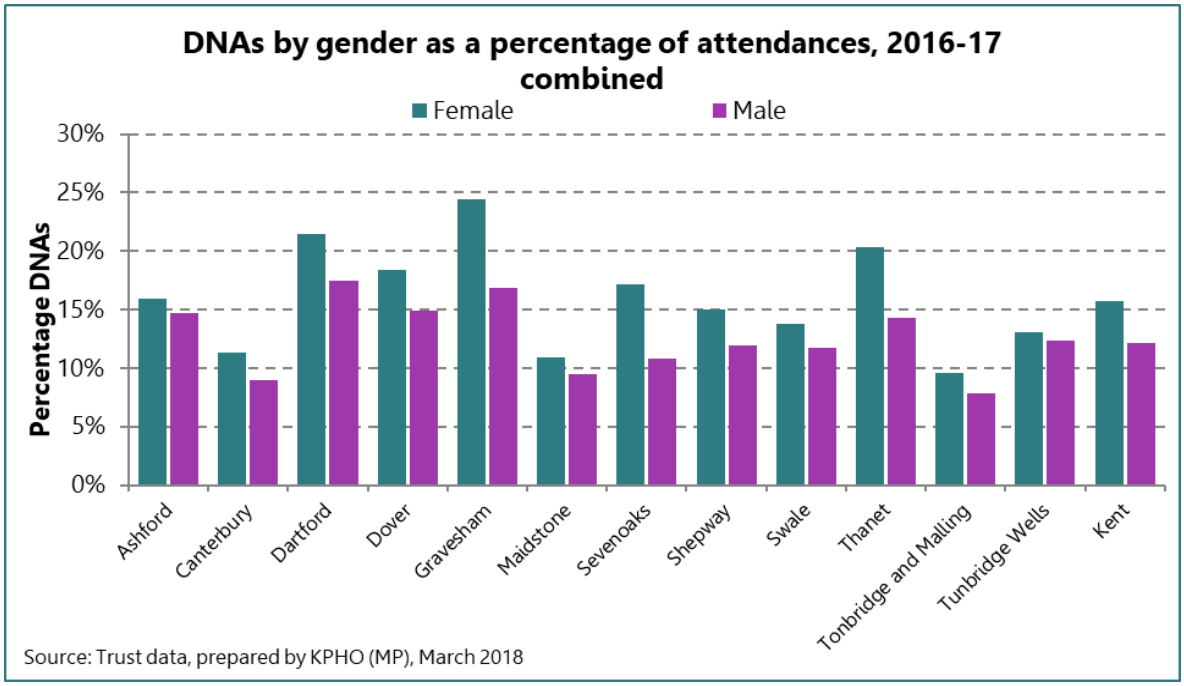
There is concern about the persistency of those not attending appointments who require regular HIV care in some parts of Kent. Further audit or deep dive would help identify specific needs and inform a review of how HIV services are offered.

The two graphs below take trust data supplied by KCHFT and MTW and demonstrate that DNA rates are higher amongst the older age bands between 35 to 54, and in females. This may be explained by the changes to drop in clinics, and the types of services required by different groups.

Graph 31: – Percentage of DNA by age band, 2016 and 2017.



Graph 32: Percentage of DNA by gender 2016 and 2017



The access to all age drop-in clinics has increased over the last eighteen months. All young people clinics have been provided as a drop-in service from 2015 because younger age groups are most likely to not attend appointments. Review of appointment only clinics from 2017/18 would help inform future service access.

5.2.3 Service attendances

The table below shows 2016 usage of integrated services in Kent, including out of area patients who are tested or treated in Kent. There are clear differences between clinics for repeat patients, with an average number of visits per patient of 1.56 for the year.

Figure 17: – Total Activity, Kent GUM services, 2017.

Service Attended	% of total Kent patients	New Attendances	Follow-up Attendances	Total Attendances	Average Attendances per patient	New Attendances per patient
East Kent Services	50.4%	22,476	5,321	27,797	1.63	1.32
North Kent Services	24.3%	10,910	2,582	13,492	1.64	1.33
West Kent Services	25.3%	11,919	3,556	15,475	1.82	1.40
Kent		**45,305**	**11,459**	**56,764**	**1.68**	**1.34**

Source: GUMCAD

Variations in activity also exist between the district of residence of the patients. The table below shows the rate of attendances per 100,000 population is highest in Thanet at 4,863.1 (with an average of 2.47 visits per patient), Canterbury at 4,607.3 (average 2.08 visits) and Shepway at 4,397.9 (2.53 average visits).

Figure 18: – Activity by Local Authority of residence, 2016.

Local Authority	Number of patients	Total Attendances	Resident Population	Patient use per 100,000 population	Attendances per 100,000 population	Average Attendances per patient
Ashford	1,760	3,694	126,151	1,395.2	2,928.2	2.10
Canterbury	3,605	7,483	162,416	2,219.6	4,607.3	2.08
Dartford	1,499	3,051	105,543	1,420.3	2,890.8	2.04
Dover	1,877	4,717	114,227	1,643.2	4,129.5	2.51
Gravesham	1,452	2,742	106,808	1,359.4	2,567.2	1.89
Maidstone	3,583	6,355	166,360	2,153.8	3,820.0	1.77
Sevenoaks	1,354	2,318	119,142	1,136.5	1,945.6	1.71
Shepway	1,935	4,890	111,190	1,740.3	4,397.9	2.53
Swale	2,336	5,668	145,042	1,610.6	3,907.8	2.43
Thanet	2,773	6,840	140,652	1,971.5	4,863.1	2.47
Tonbridge and Malling	1,918	3,320	127,293	1,506.8	2,608.2	1.73
Tunbridge Wells	1,649	2,576	117,069	1,408.6	2,200.4	1.56

Source: Local Data

The uptake of local services, as presented on GUMCAD, by individual Kent residents has increased on average by 30.6% annually between 2013 and 2017. The increase between 2013 and 2017 is 37.1%. Using the same data set, the number of attendances at local services by Kent residents has increased on average by 31. 8% annually between 2013 and 2017 an increase between 2013 and 2017 of 51.1%.

The following two tables show that patient usage and attendances are highest in the 20-24-year age band for both females and males. The average attendances per patient is clearly higher amongst females than males and decreases with age band for both genders, which is to be expected as this reflects the demand and need for contraceptive services.

Figure 19: – Activity by Age band, Services Activity data, Females, 2016.

Age Band	Number of patients	Total Attendances	Population	Patient use per 100,000 population	Attendances per 100,000 population	Average Attendances per patient
<15	94	299	161,345	58	185	3.18
15-19	3,626	10,523	53,648	6,759	19,615	2.90
20-24	4,876	11,819	53,910	9,045	21,924	2.42
25-29	3,234	6,935	55,290	5,849	12,543	2.14
30-34	1,979	4,036	55,769	3,549	7,237	2.04
35-39	1,458	2,833	56,012	2,603	5,058	1.94
40-44	1,122	2,143	58,468	1,919	3,665	1.91
45-64	1,672	2,864	240,862	694	1,189	1.71
65+	61	97	190,301	32	51	1.59

Source: Local Data

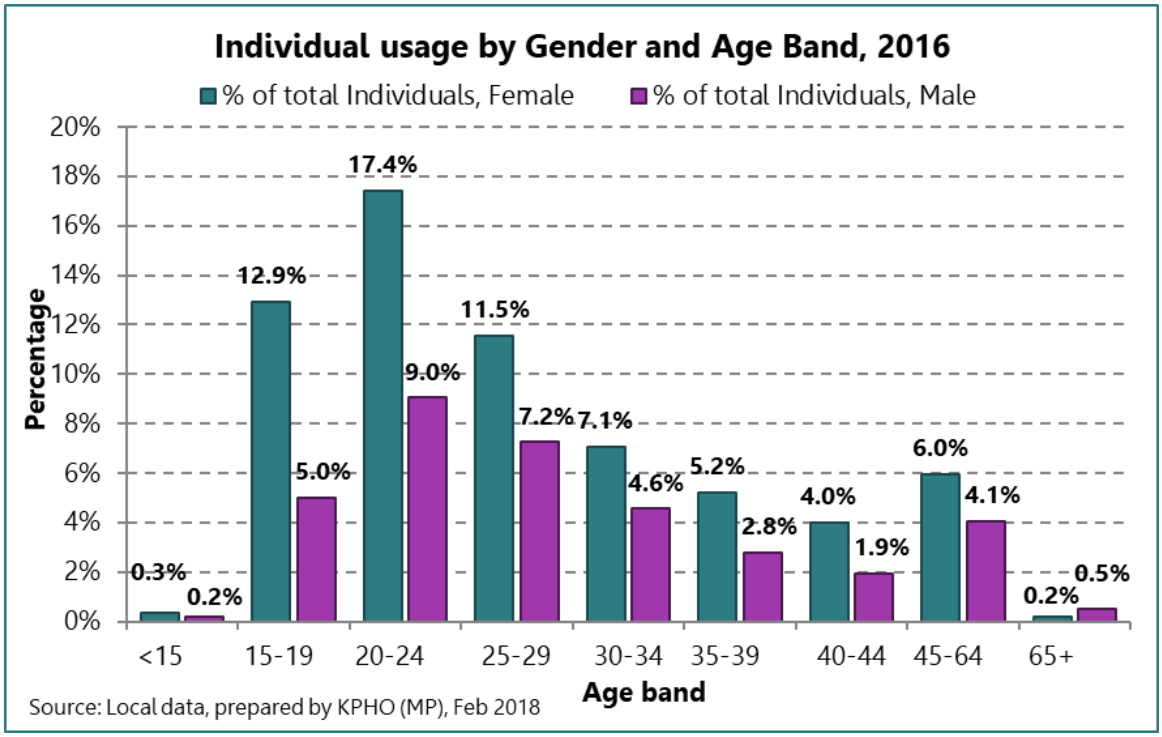
Figure 20: – Activity by Age band, Services Activity data, Males, 2016.

Age Band	Number of patients	Total Attendances	Population	Patient use per 100,000 population	Attendances per 100,000 population	Average Attendances per patient
<15	52	135	169,931	31	79	2.60
15-19	1,398	2,137	56,017	2,496	3,815	1.53
20-24	2,533	4,135	56,423	4,489	7,329	1.63
25-29	2,031	3,185	55,941	3,631	5,693	1.57
30-34	1,275	1,942	52,888	2,411	3,672	1.52
35-39	778	1,243	52,950	1,469	2,347	1.60
40-44	540	833	56,026	964	1,487	1.54
45-64	1,141	1,810	235,794	484	768	1.59
65+	144	240	158,860	91	151	1.67

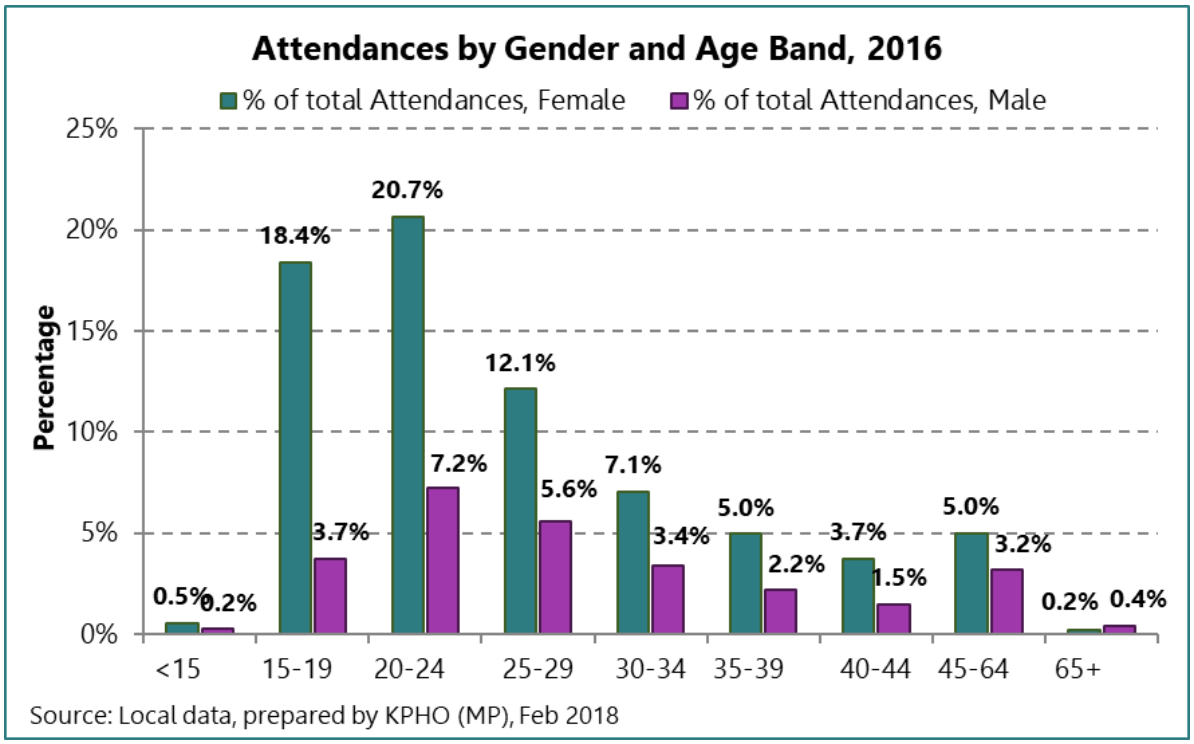
Source: Local Data

The graphs below show the service usage by age bands for both numbers of individuals and total attendances. Particularly notable are the 15 to 19 and 20 to 24-year age bands, which have the greatest differences in usage between the genders. This difference between genders is even greater when examining the total attendances.

Graph 33: – Individual usage, Services Activity data, 2016.



Graph 34: – Attendances, Services Activity data, 2016.



These graphs have shown that the higher service usage is by young people. Review of online STI testing provision for 16- 24-year olds from 2016 is likely to impact on clinic service use.

Integrated services provide a range of advice and contraceptive services for patients. The table below represents non-condom contraceptive activity in the integrated services. A national dataset is not available, and the values below are sourced directly from the providers who may have variations in recording practices.

Figure 21: – Non – condom contraceptive activity in GUM & SRH services in Kent, 2016

Local Authority	Counts	Rate per 1,000 population age 15-59
Ashford	172	0.08
Canterbury	1,096	0.39
Dartford	210	0.11
Dover	236	0.12
Gravesham	191	0.10
Maidstone	1,770	0.62
Sevenoaks	487	0.24
Shepway	430	0.23
Swale	276	0.11
Thanet	256	0.11
Tonbridge and Malling	755	0.35
Tunbridge Wells	550	0.27
Out of Area or NR	429	N/A
Total	6,858	N/A

Source: Local Data

Rates appear higher in Maidstone and Canterbury than the rest of Kent. Canterbury has a high student population and the ages utilising contraceptive services reflected this.

5.3 Testing and Diagnostic rates

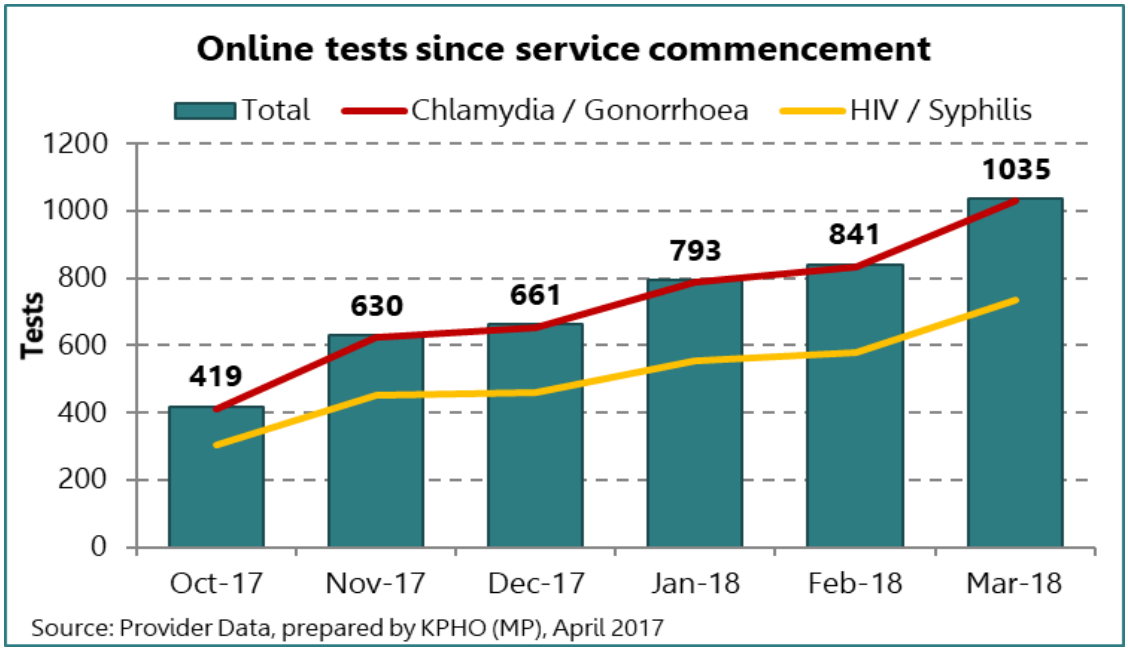
5.3.1 Detection of infections through online STI testing services

Access to chlamydia testing online has been available for 16 - 24-year olds in Kent since February 2016. The average monthly rate of detected chlamydia through this service was 11%, higher than the sexual health clinics. Access to online HIV testing has been available since November 2015. The uptake of this service has increased during promotional periods such as National HIV testing week and reactive screens have been identified and followed up.

The offer to access a wider sweep of STI tests for those experiencing no symptoms, has enabled users to determine the tests they require depending upon their responses and identification of risk. This service was introduced in October 2017.

These tests are not presented on validated data sets as yet but the information below provides a brief overview of the impact of this enhanced service offer since its introduction.

Graph 35 – Extended online testing activity



In the first 6 months of the service [Oct-17 – Mar-18], 4,342 chlamydia / gonorrhoea and 3,084 HIV / syphilis tests were carried out. 6.7% of tests were found to be positive for chlamydia, 0.62% gonorrhoea, 0.3% syphilis and some reactive HIV tests. If the reactive tests are found positive for HIV, at retest this would suggest a detection rate of 4.5 per 1,000 population tested.

The geographical uptake and age profile of those accessing the online service shows that service users ages range between 16 -75 years old with an average age of 26.1. 40% of online users were in the 20-24 age range and 27% aged 16-19. The majority of users are female [68.5%]. Over 50% of the service users are resident in East Kent, with Canterbury district having the highest uptake. Highest detection of chlamydia infection has been detected amongst men who have sex with men who represent 19% of male service users.

Figure 22: – Online STI testing utilisation October 2017 to March 2018, by district

District	Count	% of Total
Ashford	467	10.7%
Canterbury	1,134	25.9%
Dartford	259	5.9%
Dover	322	7.4%
Gravesham	213	4.9%
Maidstone	306	7.0%
Sevenoaks	224	5.1%
Shepway	250	5.7%
Swale	350	8.0%
Thanet	444	10.1%
Tonbridge and	205	4.7%
Tunbridge Well	205	4.7%
Grand Total	**4,379**	**100.0%**

Source: Local data

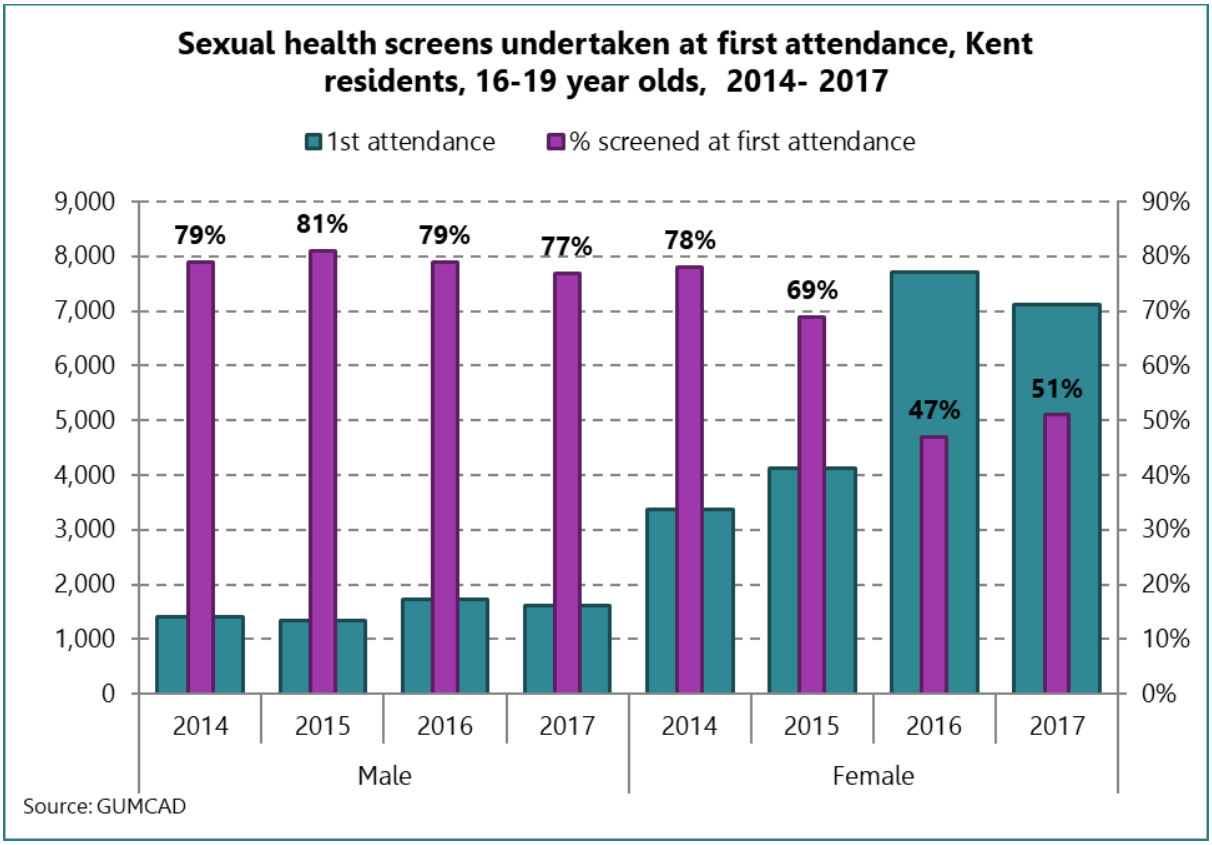
5.4 STI testing

5.4.1 Diagnoses and testing rates in Kent

The information for the following graphs was sourced from GUMCAD and provides illustration of the testing activity undertaken at first attendance sexual health services. To note, -in April 2015 the services of contraceptive and GUM were integrated, whereas previously they had been separate services.

Of interest is the escalation in the volume of first attendances amongst females alongside a substantial decrease in the percentage of tests in this group. These sexual health tests typically include testing for chlamydia, gonorrhoea, HIV and syphilis.

Graph 36: The number of first attendances and percentage of sexual health screens amongst 16-19 year olds 2014 – 2017 in Kent

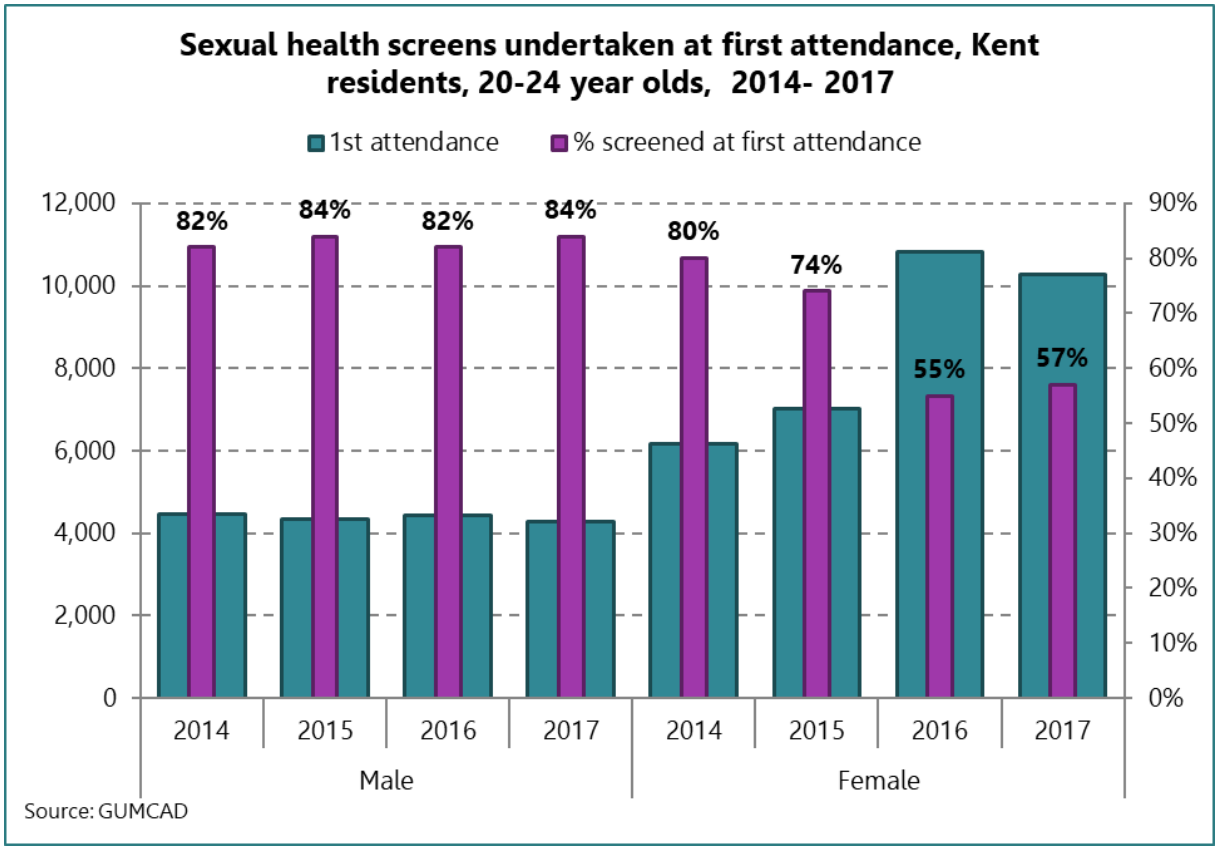


The burden of detected STIs is seen amongst 20 – 24-year olds. The following graph shows a consistency in the numbers of first attendances and percentage of tests amongst males aged 20- 24 years across the time period. In contrast there is an increase in first attendances amongst females in this age group and significant reduction in the percentage having a sexual health test.

The reduction in the percentages of female first attendances being screened is of further concern when responsibility for testing in relationships have been found to be of concern amongst females as highlight in insights theme re: Trust in their partner.

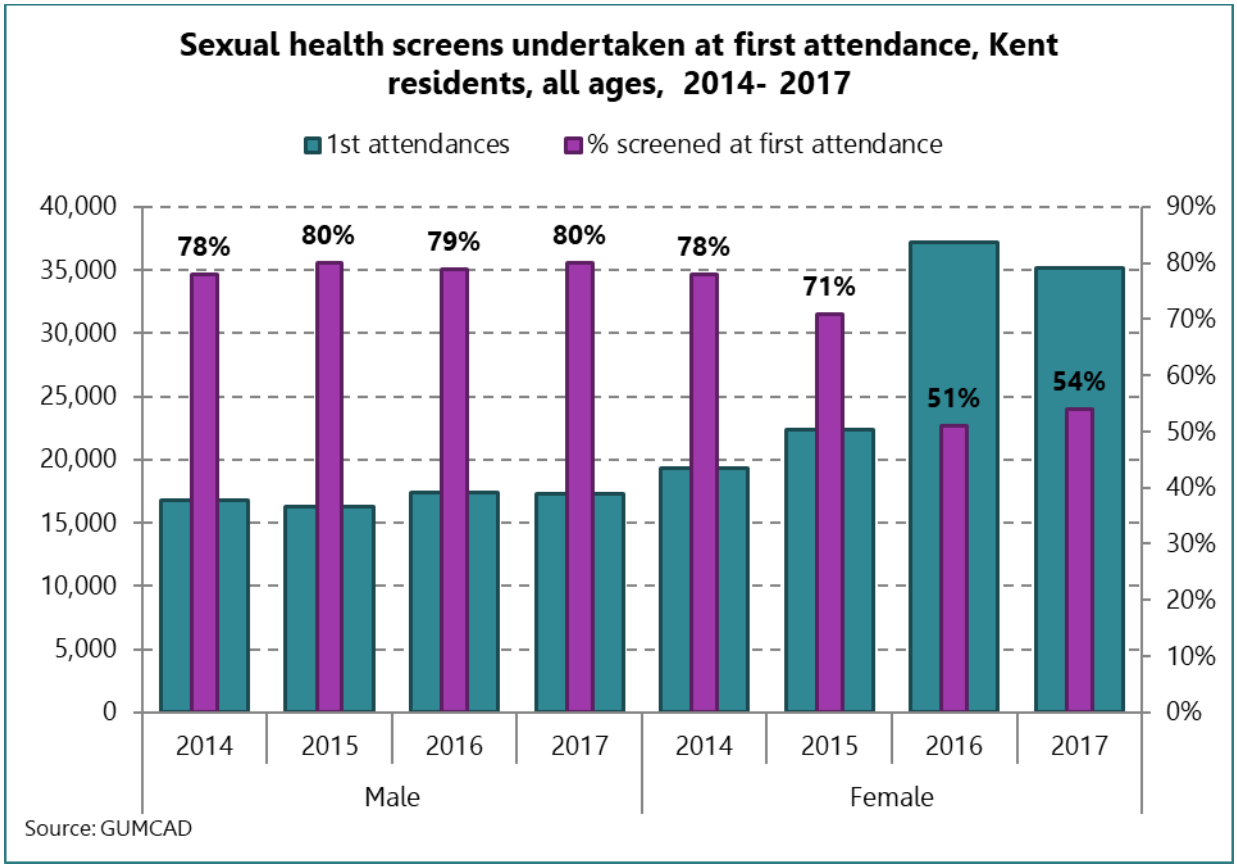
Often the women would be content to be tested themselves and then trust that their partner was 'clean'. They were most concerned that they did not pass an STI on to their partner.

Graph 37: The number of first attendances and percentage of sexual health tests amongst 20-24 year olds 2014 – 2017 in Kent



The reduction in the proportion of all females from 2015 to 2017 having a sexual health test at first attendance is illustrated quite profoundly in the graph below and emphasises the missed opportunity to promote persons new into the service of the benefits of testing for potential infections, several of which present with no symptoms.

Graph 38: The number of all first attendances and percentage of sexual health screens 2014 – 2017 in Kent



Further exploration of GUMCAD suggests that attendees receiving a sexual health test at first attendances in 2017 was variable across the services, ranging from approximately 1 in 4 in a non-complex service to 3 in 4 a complex service clinic in 2017. This compares to the Kent average of screens at first attendance of 6 in 10.

Identification of the country of birth is important to ensure those at higher risk receive testing. The percentages of tests at first attendances amongst Kent residents is similar when looked at by country of birth or when looked at by area such as Caribbean, Sub Sahara, Europe.

There is a need to review the providers approach to testing females, as variation was also found in the provider survey, to ensure that there is consistent and equitable testing at first attendances.

The services in Kent are commissioned to undertake tests for those with and without symptoms. The graph below shows diagnosis and testing rates of selected STIs per attendance. The data presented below was sourced from GUMCAD which provides a picture of part of the service rather than the full extent of the diagnostics, as not all presentations require or involve testing.

Figure 23: Diagnosis and testing rates per attendance, 2017.

Service Attended	Percentage Attended Tested	Percentage Attended Diagnosed	Percentage Tested Diagnosed*
East Kent Services	61.0%	7.6%	12.5%
North Kent Services	51.4%	7.0%	13.5%
West Kent Services	66.8%	12.1%	18.1%
Kent	**60.2%**	**8.6%**	**14.4%**

Source: GUMCAD

*Note selected diagnoses of chlamydia, syphilis, gonorrhoea, genital herpes and genital warts.

5.4.2 HIV testing

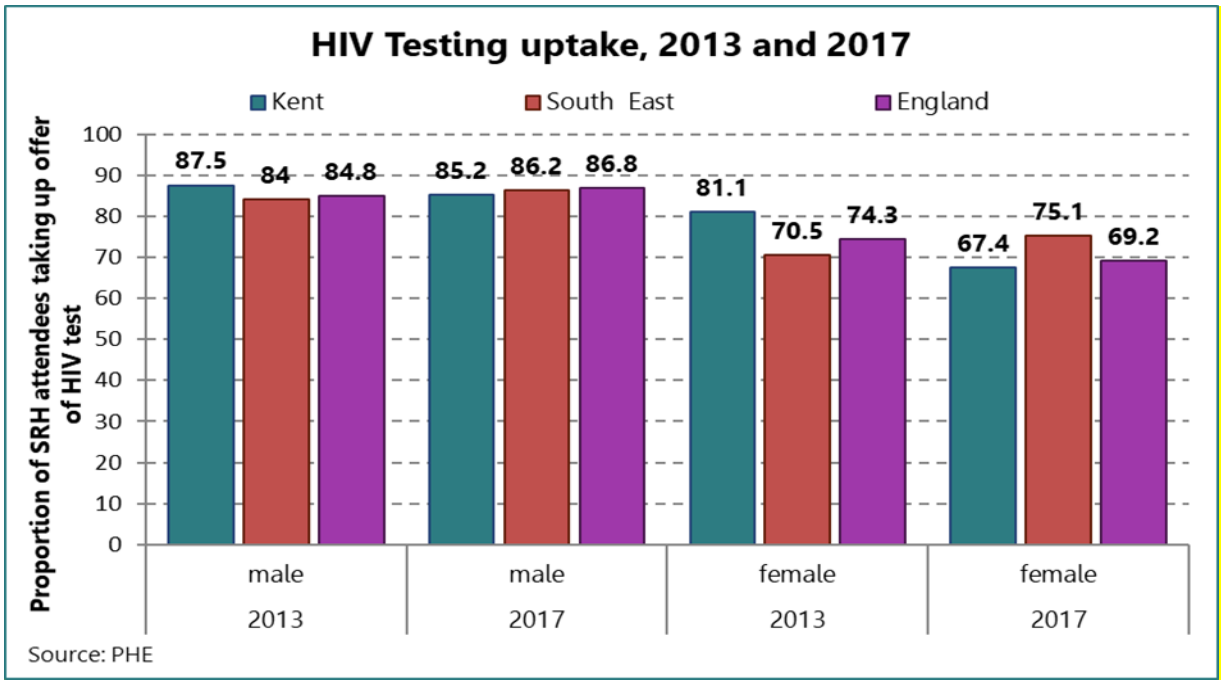
HIV testing takes place in termination of pregnancy services, antenatal care, secondary care and primary care. The following provides presentation of HIV testing as undertaken amongst attendees of local sexual health services. It does not include HIV testing through the online service. The following shows that variations in HIV testing rates exist within Kent integrated services, with patients residing in Maidstone and Thanet districts having significantly higher rates of testing in 2016 when standardised for age.

When looked at by age bands Canterbury showed much higher rates of testing amongst the 15-19 and 20-24-year age groups, which may be explained by the student populations residing there. Thanet and Maidstone also had high numbers of tests carried out amongst 20-24 and 25-29 age groups.

Acceptance of HIV testing has plummeted in the services in Kent since the introduction of integrated services in contrast to England and the South East in 2015 -2016. This should be explored but is possibly further illustration of the reduction in testing at first screening amongst females.

Nationally, in 2016 an HIV test was offered at 81.5% of eligible attendances at specialist sexual health services. Where these were offered, an HIV test was done in 76.5% of these attendances as shown below.

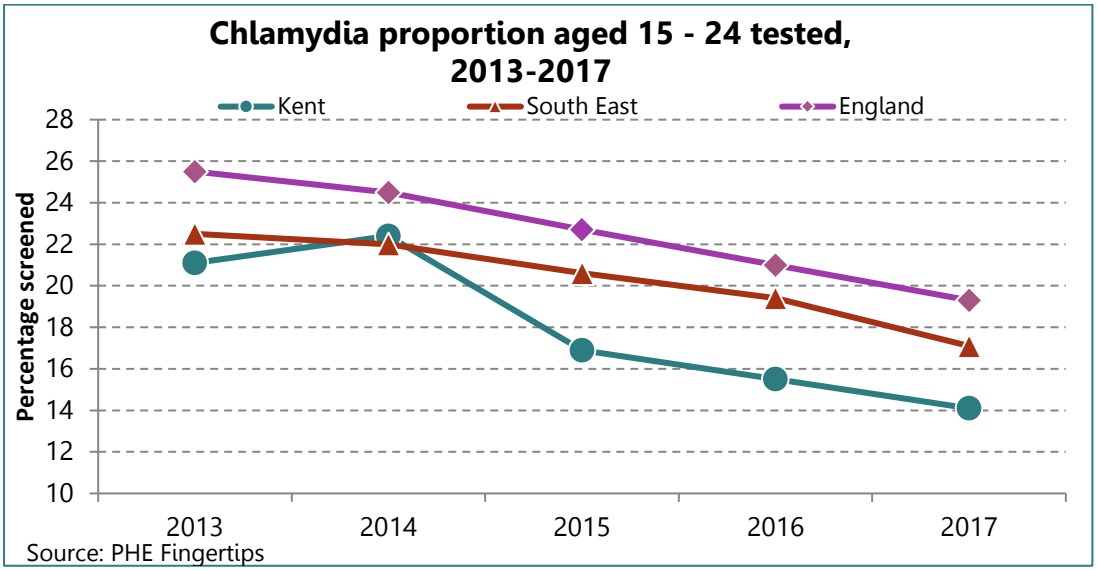
Graph 39: HIV testing uptake, 2013 and 2017



5.4.3 Chlamydia testing

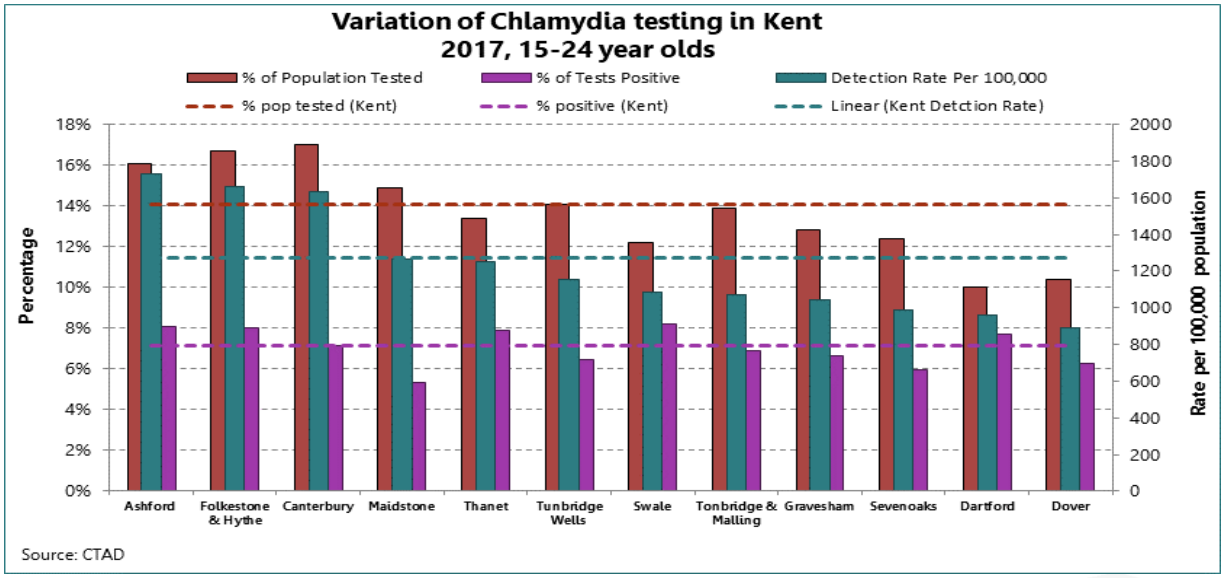
In 2016 nationally 15-24-year old accounted for 62% of detected chlamydia[128]. This fact reiterates the need for consistent and repetitive messaging about chlamydia testing amongst this age group. The uptake of testing in Kent is reducing which is a trend seen nationally and regionally as illustrated below and referenced pp 39-40. Kent has seen a discernable reduction since the introduction of integrated services in 2015. However, increase in the uptake and access to online chlamydia testing has been observed during 2017.

Graph 40: Percentage of 15-24 year old's tested for chlamydia, 2013-2017



A variation in the proportion of testing and detected positivity is also seen across the county amongst 15-24-year olds. Although lower numbers of population tested does not necessarily equate with low positivity, decreasing percentages of screening amongst females at first attendance will be contributing to these low volumes.

Graph 41: Chlamydia testing of 15-24 year olds by district, 2017



5.5 'Get it'

The free condom programme for those aged under 25 years was established in July 2016. This service is accessible on line, and available through registered practitioners in a variety of locations which can be seen on the website. This service has grown exponentially, with increase across all age ranges over 16 years and by district. In 2017/18 the highest rate of registrations to the programme use was amongst 17-year olds at 210.1 per 1,000 population aged 17 years. This would suggest that currently approximately 12% of 17-year olds in Kent are participating in the programme.

The average rate of registration in 2017/18 amongst districts in Kent was 69.5 per 1,000 population age eligible for the programme. The rates of registration in 2017/18 by district ranged from 35.8 per 1,000 population age eligible for the programme in Dartford district to 114.1 per 1,000 population age eligible for the programme in Canterbury district and 78.2 in Dover district.

The average rate of distribution in 2017/18 amongst districts in Kent was 53.8 per 1,000 population eligible for the programme. The rates of distribution in 2017/18 by district ranged from 27.7 per 1,000 eligible population in Dartford district to 81.6 per 1,000 eligible population in Canterbury district. These activity figures are taken from the financial year 2017/18, which means that individuals will have registered at different points across the 12-month period, so it is not surprising to find that higher levels of registration do not necessarily equate with higher levels of distribution.

5.6 Psychosexual counselling

The psychosexual counselling service has extended from provision in the east of Kent and is now accessible across Kent to those aged 16 years and over. This service provides therapy for individuals or couples who have experienced, or currently experience, difficulties in their sexual lives. This may be caused by medication, mental ill health, sexual trauma, sexual assault, or sexual abuse, but will manifest in different ways which can best be supported and helped through a programme of therapy. The service is accessed through GP referral. Given the personal nature of these difficulties, this may be a barrier to initiating contact. This is perhaps observed through the numbers of 'do not attends' to first and follow up appointments. Accordingly, providers have proactively monitored and reviewed practice to improve service use. The number of attendances has increased from 719 in 2015/16 to 1157 sessions delivered in 2016/17.

The psychosexual service piloted a bespoke weekly drop in service from Canterbury Christchurch University in 2016/17. This offered students and staff time space and expertise to reflect on problems and dilemmas in their sexual lives, specific sexual difficulties, issues relating to identity and orientation. It's uniqueness is the drop in facility, links with Student Well-Being and Counselling Services and promotion through the university mediums. Given the expertise the support is available for non-neuro-typical students /staff with autistic spectrum disorders or ADHD.

Suitable accommodation is now being sought to ensure sustainability of this service. This model could be considered in other colleges in Kent where the average age profile is older.

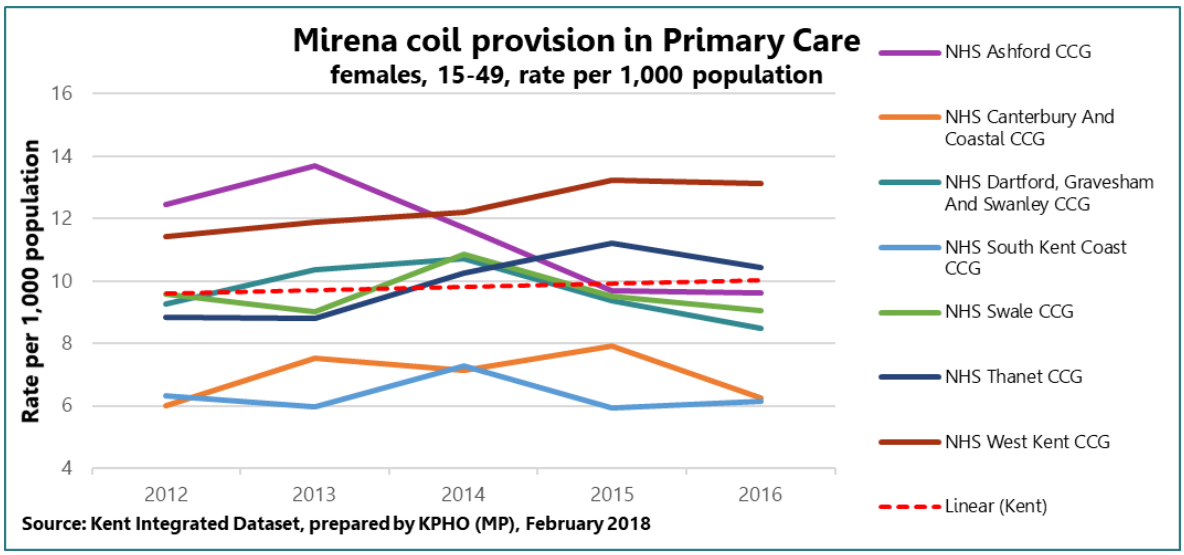
5.7 Primary Care Sexual Health Services

Primary care is commissioned to provide a range of sexual health services across Kent, with variation in contracted services between different areas and practices. Services are mainly limited to contraception, screening and advice. Contraception services vary across Kent, but many GPs are contracted to administer LARC and oral contraceptives, including condom provision, subcutaneous implants, injections, coil insertions, removals and checks. Cervical screening services are also offered by many practices.

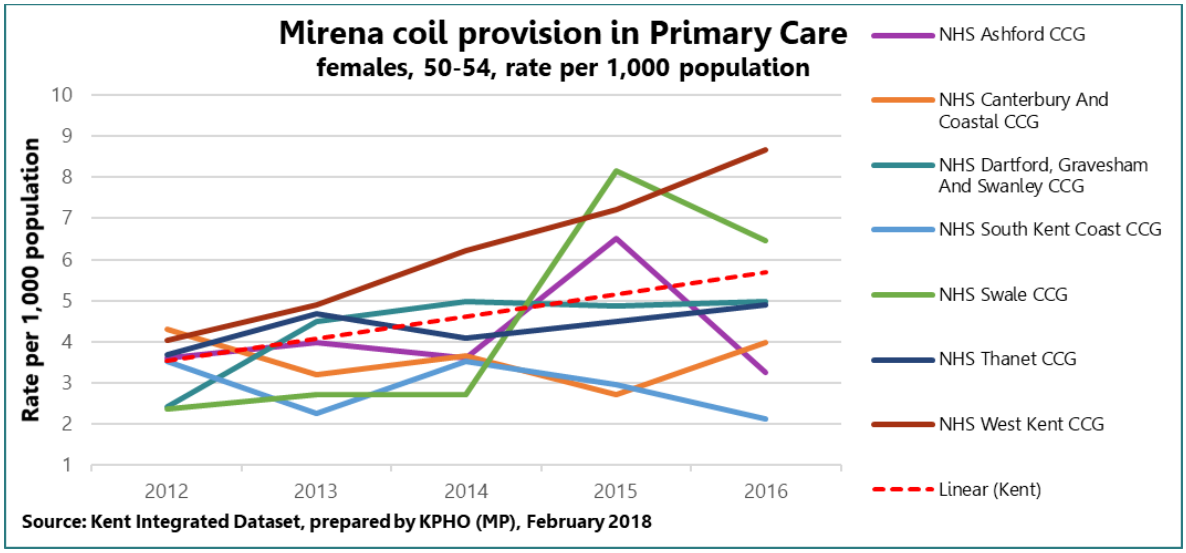
Primary care data was extracted from the Kent Integrated Dataset (KID) and compared to the population in the same age range relating to the GP practices that flow data. At the time or running, 167 out of 199 practices were included in the analysis, grouped according to their Clinical Commissioning Group and compared to relevant populations.

5.7.1 Long acting reversible contraception

Graphs 42: Mirena coil provision in primary care, ages 15-49 rate per 1,000 relevant population.



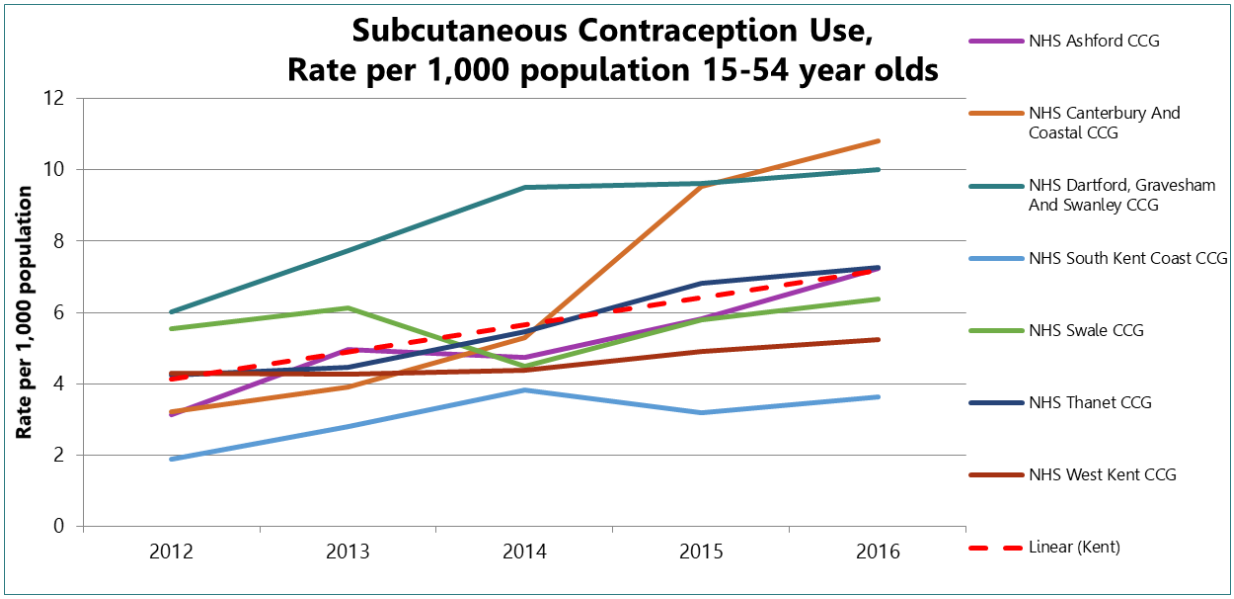
Graph 43: Mirena coil provision in primary care, ages 50-54, rate per 1,000 relevant population.



Mirena coil provision in primary care has marginally increased in Kent since 2012 in 15-49-year-olds, however these have increased more significantly in the 50-54 age group particularly in West Kent.

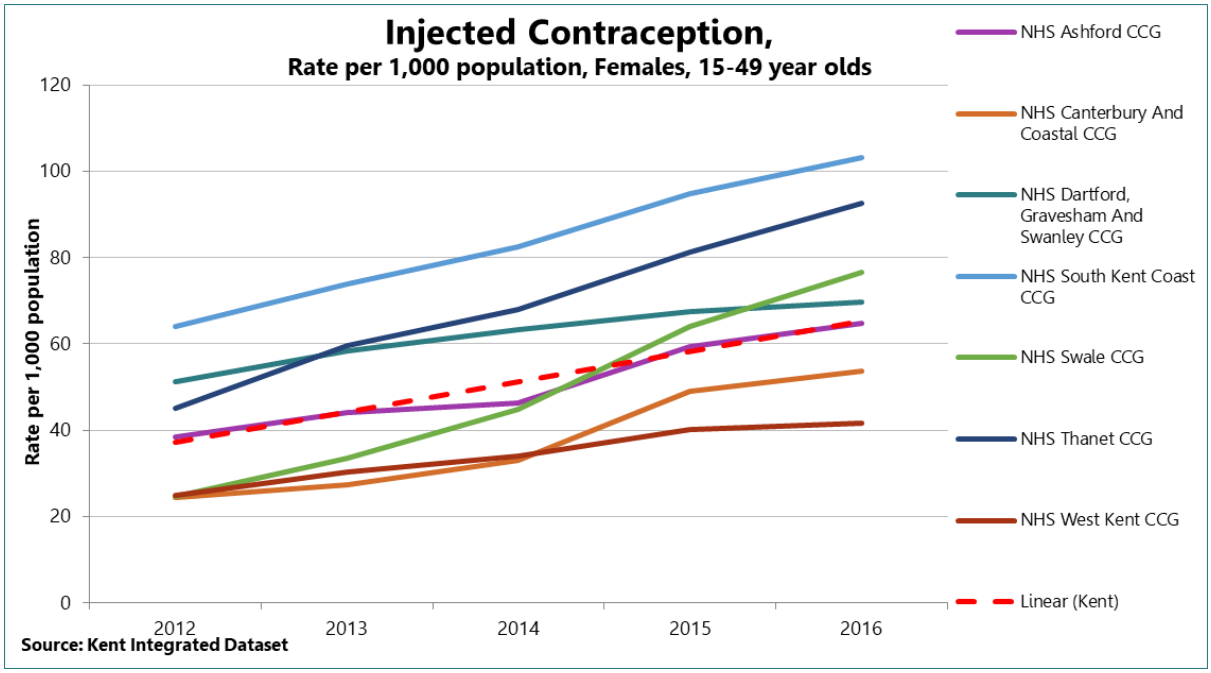
The use of subdermal implants is generally seen amongst young adults. Subdermal implant procedures have increased substantially in primary care in Kent since 2012, increasing by approximately 44% to 2016. Rates vary between CCGs, with usage in Dartford, Gravesham & Swanley and Canterbury and Coastal CCGs being high, and South Kent Coast low.

Graph 44 – Subdermal implant provision in primary care, ages 15-54, rate per 1,000 relevant population.



Injectable contraception is referred to as a long acting contraception. The use has also increased by approximately 42% since 2012, with DGS and Canterbury and Coastal CCGs being higher than the rest of Kent. This may be a reflection of the frequency of injections per year and option for self injecting introduced in 2016.

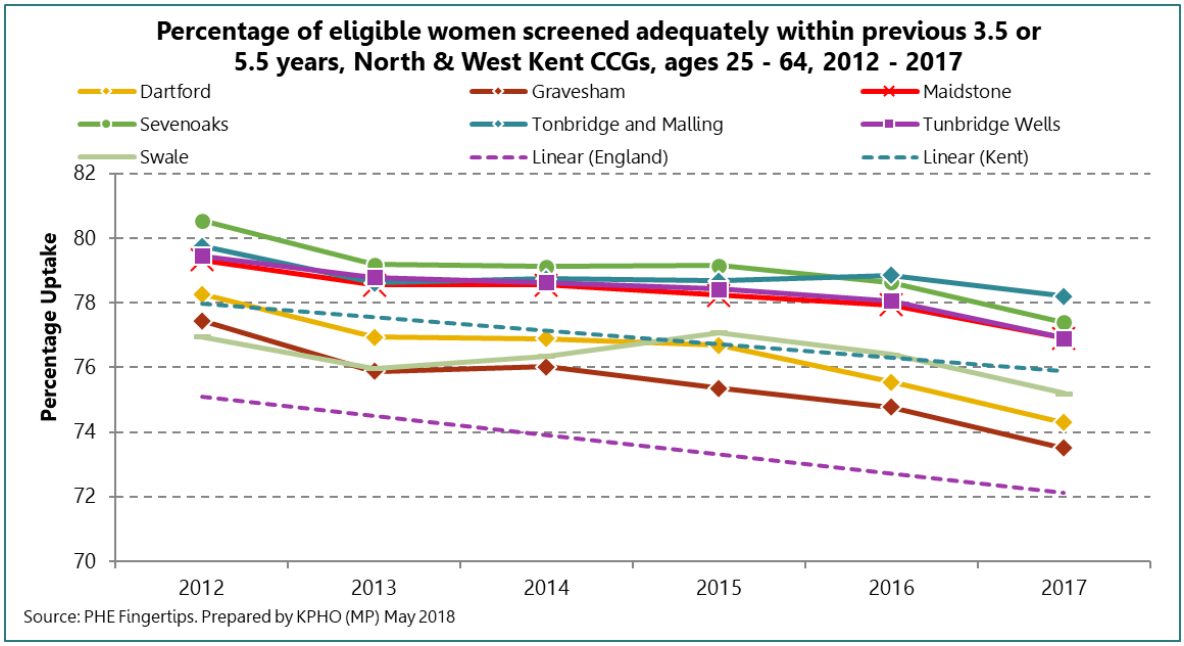
Graph 45 – Injectable contraception provision in primary care, ages 15-49, rate per 1,000 relevant population



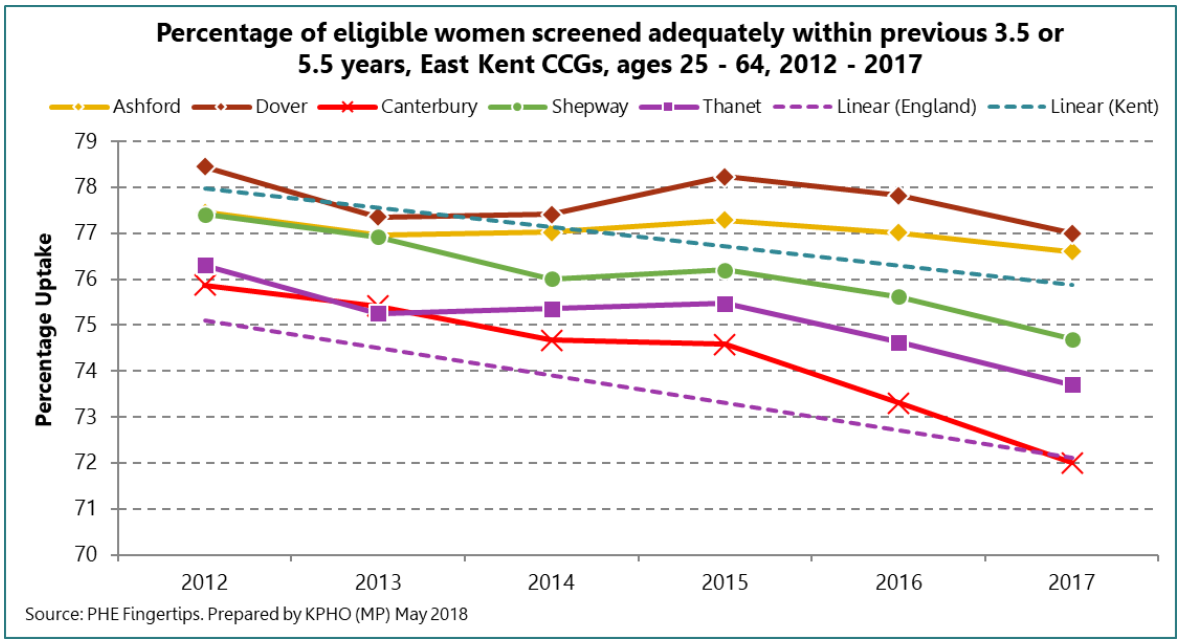
5.7.2 Cervical screening in primary care

There has been a slight decline in screenings done in primary care, which is expected considering the decline in screening uptake across the country. Rates vary across the county, with Thanet CCG having considerably higher uptake than other areas of Kent.

Graph 46: Percentage of eligible women screened in Kent, West & North Kent CCGs



Graph 47: Percentage of eligible women screened in Kent, East Kent CCGs



5.7.3 Quality and Outcomes Framework Achievement (QOF)

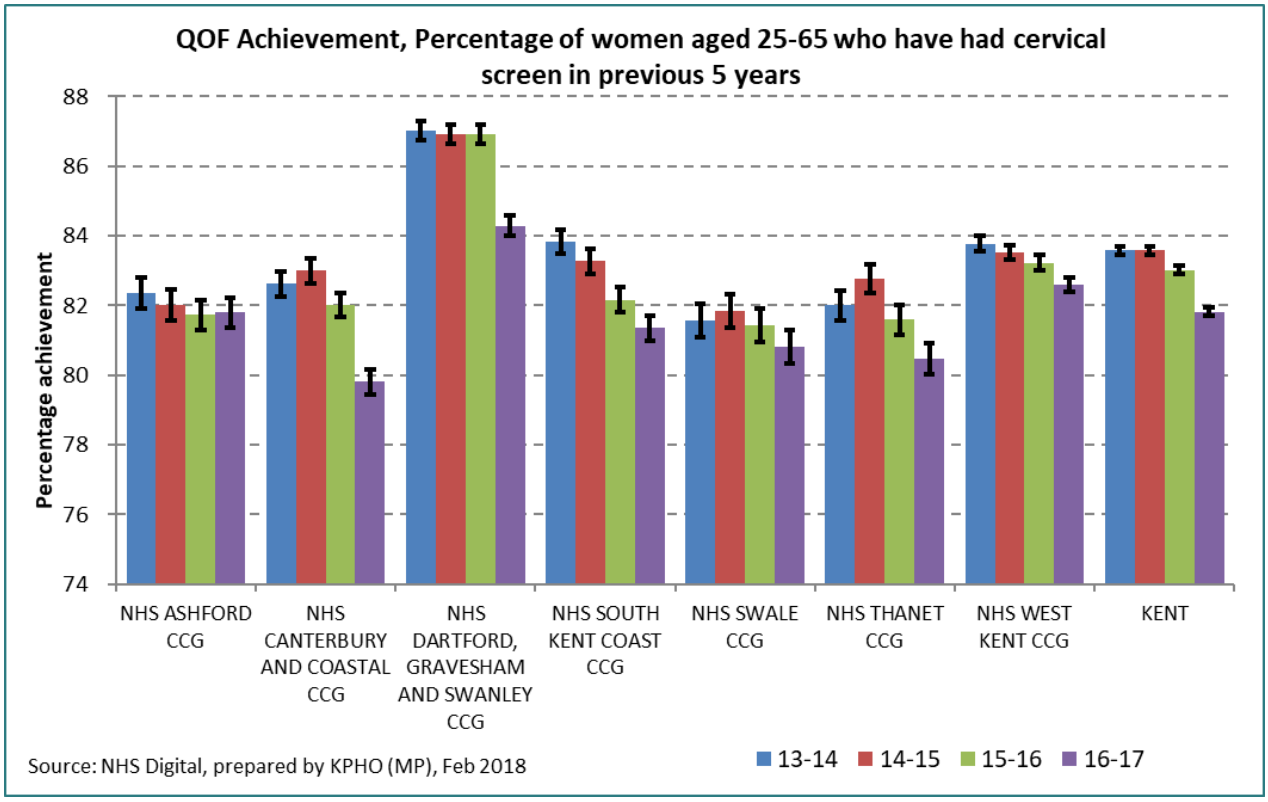
The QOF is a voluntary reward and incentive programme that rewards GP practices for the quality of care they provide to their patients and helps standardise improvements in the delivery of primary care.

Two key outcomes relate to Sexual health within the QOF:

- CS002 - The percentage of women aged 25 or over and who have not attained the age of 65 whose notes record that a cervical screening test has been performed in the preceding 5 years.
- CON003 - The percentage of registered women, prescribed emergency hormonal contraception one or more times in the preceding 12 months by the contractor who have received information from the contractor about long acting reversible methods of contraception at the time of or within 1 month of the prescription.

QOF data is available for the financial years 2013-14 to 2016-17. The graph below shows a significant declining trend in Kent from 83.6% to 81.8% of appropriate aged women having screens within primary care across the four years shown. A statistically significant decline has been seen in Canterbury, DGS, South Kent Coast, Thanet and West Kent CCGs.

Graph 48: QOF indicator CS002 – Percentage of women aged 25- 64 years who have had a cervical screen in the previous five-year period [2013/14 – 2016/17]



6 Prevention of poor sexual health

6.1 Increased access to the services and information about availability

Improvements in the access to sexual health services are continually evolving. The move away from separate contraception and Genito-urinary medicine services to an integrated model has required changes in workforce skills as some staff may have been specialised or more confident in a type of service delivery. The length of service appointments had to increase, which in turns has had impact on the numbers which can been seen at any one time. The success of the all age drop in clinics which are more challenging to manage as demand and need is unknown, identifies or enables those with symptoms to more easily access a service. Appointment run clinics provide different opportunity and are available for those who need to see a clinician urgently.

Contraception services are valuable, but the demands are increasing as women report they are unable to get a primary care appointment, or the service is not provided in the practice. A local brief study in 2017 found that women who were stable on their oral contraception liked the fast track pilot whereby clients requiring repeat prescriptions could take their own measurements to identify their BMI and blood pressure. This was then shared with a health care worker and if no change found had their oral contraception dispensed. The appointment was brief and easily managed. To implement more widely would require changes in the commissioning of contraception services across the whole system.

Pharmacies with appropriate contracts provide emergency oral contraception and present greater access across the week and at times when sexual health services or primary care may not be accessed.

Accessibility to the free condom programme online and to a wider age group [24 years and under] has demonstrated an unprecedented demand. It is likely that this success has contributed to the reduction of attendances in the clinical services amongst younger people.

Wider information about contraception, STIs, HIV, relationships and services is available on the website www.kent.gov.uk/sexualhealth

6.2 Interventions

6.2.1 Condom programme

The free condom programme in Kent has extended its reach and from July 2016 has been made available to under 25-year olds. This can be accessed through a range of outlets, [e.g. colleges, youth hubs, health services and commercial organisations] with staff trained to have initial conversations, support safeguarding and provide registration onto the programme as well as access through the online platform. Those aged 16 and over can register and order condoms online. These are posted to their homes. The uptake of this service 'Get it' has exceeded expectations as more people have not only registered with the programme but have continued to make use of it. The numbers of young people aged 17 – 19 years using this programme has increased quarter by quarter over the two years it has been running.

The delivery and promotion of this programme is supported by a street outreach team who engage and work with the most vulnerable young people.

The condom programme helps to promote and normalise condom use as a protection against most STIs including HIV and pregnancy.

6.2.2 STI testing

Provision of free STI testing, treatment and the notification of sexual partners of infected people are important in the control of sexually transmitted infection outbreaks. Untreated STIs can lead to serious and painful health consequences, ranging from infertility to cancer. The control of sexually transmitted infections in the population is an important element of health protection. This can be supported through the testing of STIs, including chlamydia, HIV, the provision of free effective treatment and partner notification so that onward transmission to partners and reinfection can be avoided. This has been expressed as 'Test yourself not through someone else'.

Targeted social marketing campaigns to raise awareness about HIV, the promotion of HIV testing and the normalisation of testing amongst the heterosexual community would be expected to show an increase in the prevalence of HIV. This could result in some districts being identified as having higher prevalence rates.

6.2.3 Online STI testing

These services are only accessible for individuals aged 16 and over. Accessibility to free STI testing for those who know they have put themselves and their sexual partners at risk may help reduce some of the stigma associated with accessing sexual health clinics. This service is for those who have no symptoms of an STI. Tests can be easily ordered and with the information received identify and recommend the most appropriate tests for individuals. It is reliant on clients completing and returning tests. Return rates in the first two quarters are at 69%.

HIV home sampling is also available separately and has been accessible since November 2015. This is available to encourage those who are at greater risk to retest or undertake a first test. Insights work by THT suggested that it is easier for people to access their first HIV test online.

6.2.4 National chlamydia screening programme

Chlamydia is the most common bacterial sexually transmitted infection, with sexually active young people at highest risk. As chlamydia often has no symptoms and can have serious and costly health consequences (e.g. pelvic inflammatory disease, ectopic pregnancy and tubal factor infertility) it is vital that it is picked up early and treated. There is a national programme of screening aimed at the highest prevalence age group, 15 to 24 year olds. The programme's aim should be to offer opportunistic chlamydia testing to young people aged 15-24 as a routine part of consultations in primary care, sexual health and termination of pregnancy services, rather than as a standalone programme of testing with no links into broader sexual and other healthcare services.

This age specific burden of infection will be due largely to the increase in targeted testing. The programme was instigated by the Department of Health when surveillance findings indicated that levels of chlamydia in this age group were increasing. The programme requires a diagnosis rate of 2,300 per 100,000 population in the target age group.

6.2.5 National cervical screening programme

Cervical screens are important to identify early cervical changes which may become cancerous. Females aged 25–64 years are encouraged to have a regular cervical screen. The invitation to women aged 25 - 49 years is every three years and women aged 50-64 years every 5 years. The uptake of this service in England is at an all-time low with a 19% reduction in uptake. The coverage of cervical screens in Kent in 2015/16 was 82.6%

Studies suggest that the barriers for attending screening are different across age ranges with younger people aged 25-29 concerned that the screening was looking for STIs and not understanding what the screen was for, and over 50's concerns about the pain and discomfort created by the procedure. Equally younger women thought they were not at risk either. This may because they perceive the risk is reduced because of the HPV programme implemented in 2008 or they do not consider that they have been at risk. Other research[129] has found that those from differing BME groups do not access screening or do not understand the relevance of it, with Asian women being unaware of cervical screening.

6.2.6 HPV immunisation

This national HPV vaccination programme was implemented in 2008 with the offer of HPV vaccination to all Year 8 females (13-year-olds). Two vaccines are required to offer protection against types 6, 11, 16 and 18 HPV. Type 6 and 11 HPV are associated with the most common viral sexually transmitted infection, genital warts. The success of this screening programme may present as a slowing down of the prevalence of genital warts over the next five to ten years in 19–25-year olds. In 2016/17[130] the percentage of HPV

Vaccination coverage of one dose amongst females aged 12-13 years in Kent was 79.9 compared to England 87.2. This is a PHOF indicator.

An HPV vaccination programme is being introduced in England to MSM later this year [2018].

6.2.7 PEP

The offer of post sexual exposure HIV prophylaxis treatment is available through sexual health services and A&E but clinical assessment and commencement of treatment must start within 72 hours of the exposure. Local sexual health service information would suggest that there is not 100% compliance with completion of the treatment.

6.2.7.1 PrEP

The offer of pre-exposure prophylaxis treatment where there is risk to HIV infection is being phased in through a three-year research programme amongst a population of 10,000 high risk individuals in England. Kent has a number of 'places' on the research programme which started at the end of 2017. It is expected that the roll out of this programme will follow on directly from the 3 year research programme.

Circumstances which increase risk to HIV are:

- Recreational drug use – chemsex
- Use of PEP
- Recent STI particularly rectal infection for example syphilis or Hepatitis C

PrEP can only provide protection from HIV if used as prescribed. Prevention of other STIs will still be required.

6.2.8 Safeguarding

Safeguarding of all clients is an integral and crucial component of all service delivery.

6.2.9 Sexual health network

A sexual health network established in July 2016 and led by public health has brought a breadth of services and commissioners together to build partnerships and share learning. Participants have included, Public Health England, prison health staff, drug and alcohol services, sexual health and third sector providers. The network has been able to highlight to PHE that presenting information on Hepatitis B vaccination from the sexual health [GUMCAD] data set only, which suggested a reduction in Hepatitis B vaccination, had missed data populated onto other national data sets. Subsequent local audit of Hepatitis B vaccination schedules, identified gaps and subsequent actions were completed by this network. Focusing on the areas identified in chapter 3 of this health needs assessment are recommended to help further improve service developments.

6.3 Investment in the commissioning of sexual health services by KCC

Recent PHE publication[131] of outcomes would suggest that Kent has worse outcomes as shown in the comparative analysis with CIPFA partners. The indicators presented relate to: Chlamydia detection amongst 15- 24-year olds; HIV testing; Percentage of LARC prescribed [excluding injections]; Under 18 conception rates; STI testing rate amongst 15- 64-year olds excluding chlamydia amongst 15-24 year olds, and an overall summary from these.

The spend on sexual health services by the council is approximately 12.9 million pounds per annum, currently 18.5 % of the Kent local authority public health grant. Of this 5.3% is spent on services provided to residents out of area; 15.8% LARC in primary care; 62% Integrated sexual health services; 2.27% Psychosexual therapy; 0.7% on GP training; 2.97% Pharmacy commissioned services; 1.5% Young person condom and outreach programme; 3.7% Online STI testing & diagnosis and 5.9% on premises. Integral to all these services is safeguarding.

The PHE Spend and outcomes tool [SPOT] for local authorities[132] published in June 2018, summary of sexual health services in Kent, indicates that the outcomes from these services are generally worse and for less spend. Looking at the different outcomes and services suggests that this is true in terms of HIV testing amongst men and women and chlamydia detection amongst 15- 24-year olds as highlighted in this assessment. However this tool suggested that spend and outcomes on testing and diagnosis of genital warts, genital herpes, syphilis and gonorrhoea, are low cost and better outcomes where, as shown in this needs assessment, detection rates are higher.

7 Consultation

The information for this section has come from several sources. These include stakeholder survey analysis, stakeholder interviews, online service user feedback and recent external insights work.

7.1 Views of stakeholders

Public health undertook stakeholder insights work with service providers from December 2017 – January 2018. Methods used were paired and individual interviews plus an online survey.

The findings suggest that there is some variation in the presentation of STI testing to clients, service availability, changing demand through policy and guidance but also change in expectation of or perception about the role of sexual health services.

The survey found that staff identified variable presentation in the services with the:

- most common health harming behaviour presented being overwhelmingly unprotected sex with multiple new / casual partners. Alcohol, drugs and self-harm were also included.
- two most common sexual health needs being presented to staff were mostly symptomatic STIs followed by contraception [both starting and repeat] and then genital or skin infections
- most common health need identified was STIs but similarly were contraception, advice on safer sex and mental health.

Staff gave varied responses as to how they determined who should be offered STI testing, from everyone to offering after a detailed sexual assessment. Although the most responses in relation to 'how do you encourage clients to undertake STI testing', was following discussion on and understanding of risk, there were responses which referred to details on infection prevalence. The response to which clients are identified as not needing STI testing is variable from those who state they have never had sex before, to a negative screen in the last year.

Questions about changes to national policy or new guidance confirmed that:

- the implementation of generic HIV treatment has increased workload with longer consultation and additional follow up.
- there has been requirement for update and training to administer emergency oral contraception to be compliant with new guidelines.

The interviews identified a need to improve knowledge of older women about testing and broader understanding amongst older people about the appropriateness of the services.

The interviewees considered that appropriate information available to help people look after their sexual health is inconsistent. Should consider increased connectivity with

national campaigns. Equally that there is need to explain and move carriers of infections to taking ownership rather than an attitude of testing through someone else. Encouraging testing by exploring their reason for not having a test may help.

The sexual health needs of the population evolve and change. Access to clinics by young people has decreased. This may be as a result of the change in age profile using Get It. Outreach work by one organisation is focused on differing vulnerable groups such as unaccompanied asylum seekers, the traveller community and for another includes outreach work at a sauna and with swingers' groups. Views of staff providing the services is that those who are symptomatic or need contraception will find the clinical services. The services have seen an increase in men using the service and clients accessing the service from neighbouring authority areas.

Those not taking up the available services are those who believe they have outgrown them, sex workers, pockets of migrants, trans and SARC referrals. The forthcoming direct access to home testing and improved pathways for follow up should make improvements to SARC referrals.

The referral specifically for GUM care is being sought when gynae or urology is more appropriate. One service has seen specific increase in demand for genital skin condition care.

The unintended consequences of the increase in Consultants in RSH capacity has been seen through an increase in demand for more complex RSH requiring additional equipment and training. These include referral from primary care requiring scan for retrieval of threads, cervical anaesthesia for IUD insertion.

The long term nature of living with HIV, for those not diagnosed late in the stage of disease, means that HIV care is requiring more medical management and assessment for referral into other services such as frailty, osteotherapy or memory clinics. Review and plans for future provision of broader HIV care should be explored.

There is not the uniformity in service provision which is needed to address demand-specifically for symptomatic care, access in the evening and on Saturdays across the county.

Anecdotal evidence suggests that there is gap in support to LGBTQ. Service feedback has stated that referral into sexual health of those individuals displaying harmful sexual health behaviours is not appropriate and is not consistent with NICE guidance.[133] Further work is needed to ensure pathways of care to specialist mental health services.

7.2 Behavioural insights

External insights work was undertaken by NSMC in March 2017. Methods used were interviews- pairs, groups and individual plus customer journey mapping.

The main findings were a lack of knowledge of STIs, perception of risk to STIs, barriers and benefits to testing and variance in service requirements.

There was a lack of awareness about the long-term consequences of STIs. Perception of STI risk was seen as a consequence of one-night stands and belief that it was possible to tell whether a partner had an STI. 'Exclusive' relationships were seen as low risk. These are concurrent 'exclusive' relationships lasting 1-3 months amongst friends. These relationships are possibly at high risk.

Access to appointments, or the specific service [for example testing or implant] that the client wanted at a particular time in Kent [no indication of geographical region] was highlighted with the consequence that services were accessed elsewhere, usually external to Kent. The insights work illustrated a lack of awareness of the sexual health support available locally.

Searches for home testing kits were predominantly done through google which did not necessarily direct users to those available in Kent and was confusing. The availability of home testing kits was reported as being very positive. The establishment of a new enhanced online testing service and recent messaging on the 'free test me' site for Kent residents has hopefully reduced this confusion and frustration.

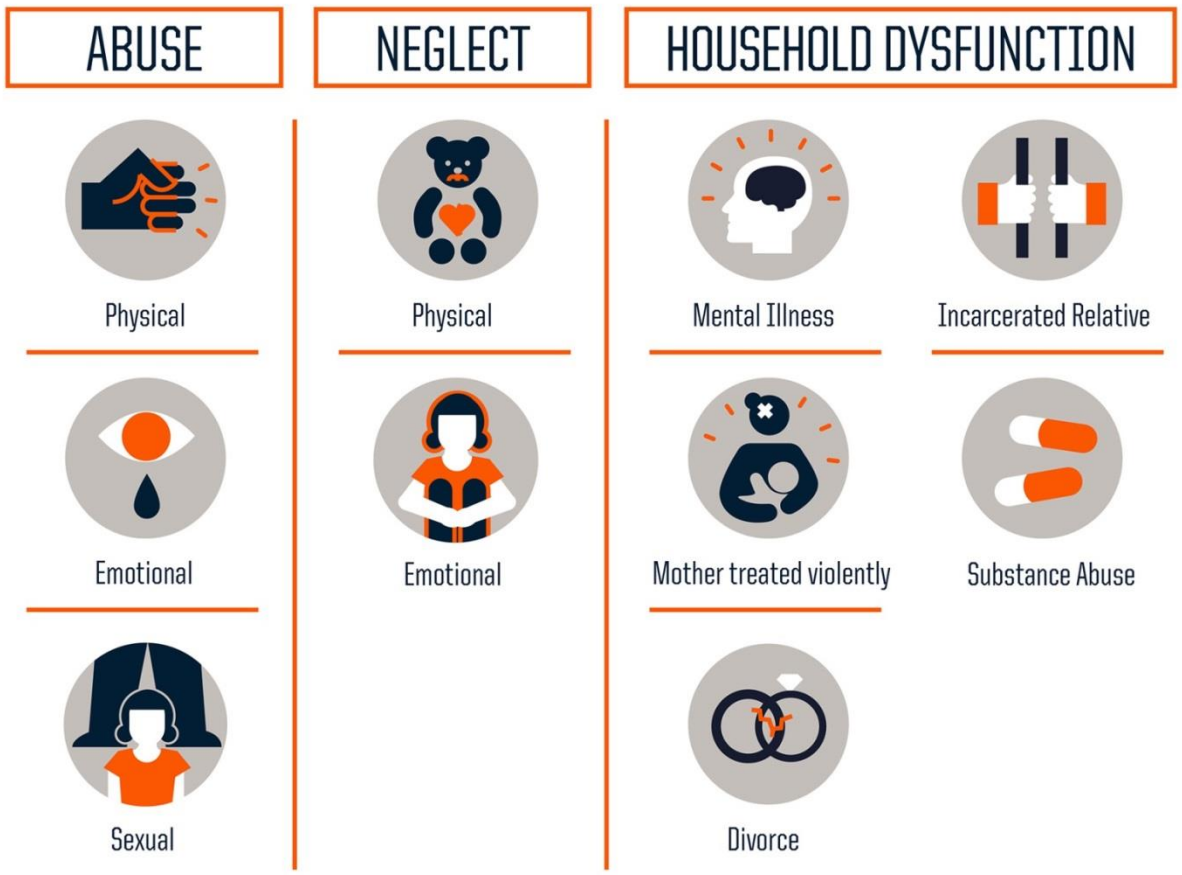
Recommendations included the booking of appointments on line and search option for clinic opening times and service by days of the week/times /location.

7.3 Service feedback

Users of the service are encouraged to provide feedback in the different clinics. The website provides an opportunity for real time feedback and has provided useful insight into information presented on the website, experienced difficulties accessing services, ease of access to online testing.

8 Appendices

8.1 Appendix 1: Ten ACEs which impact on child development and subsequent response to stress



Source: US Centre for Disease Control and Prevention via PHE webinar

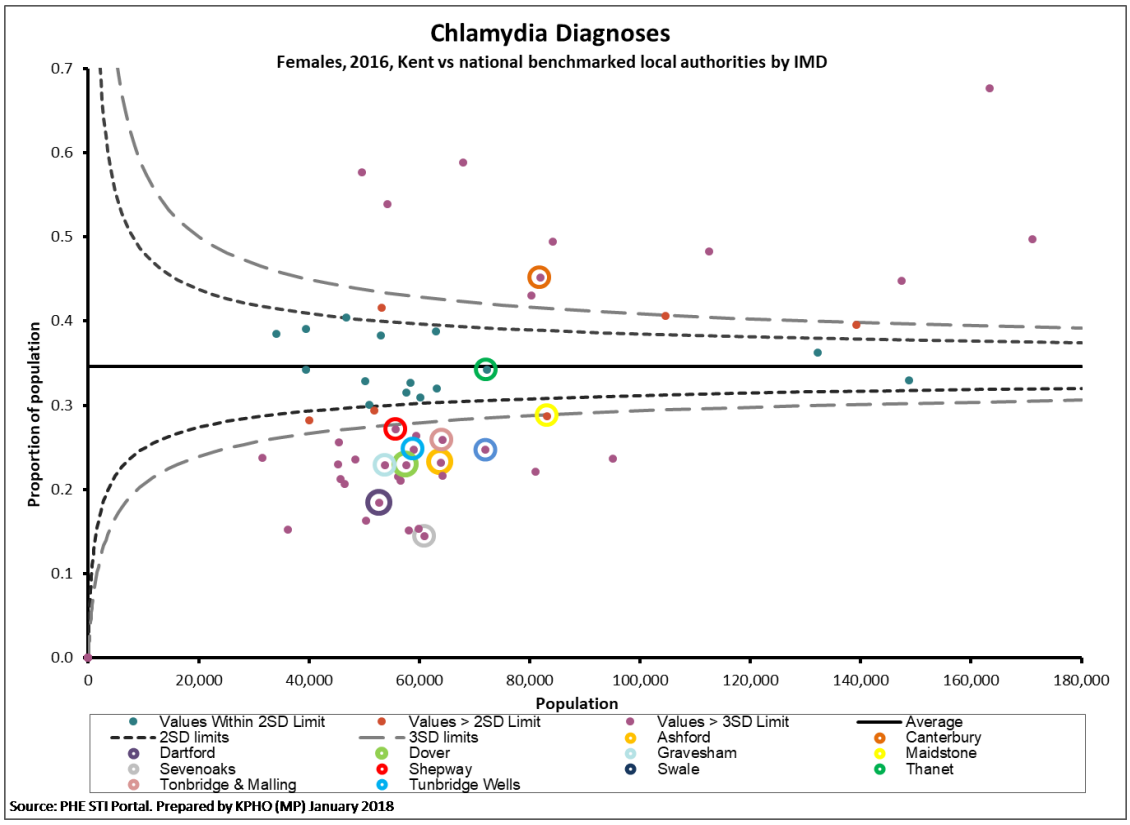
8.2 Appendix 2

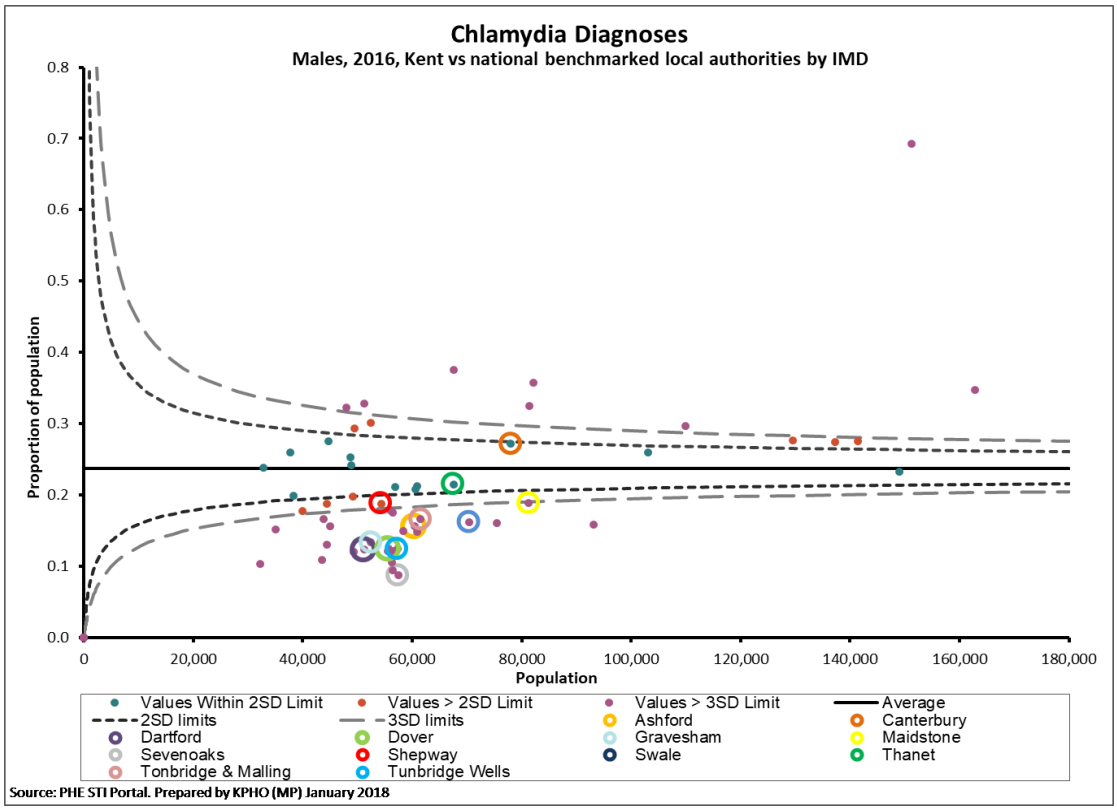
Equality Impact Assessment [EqIA]

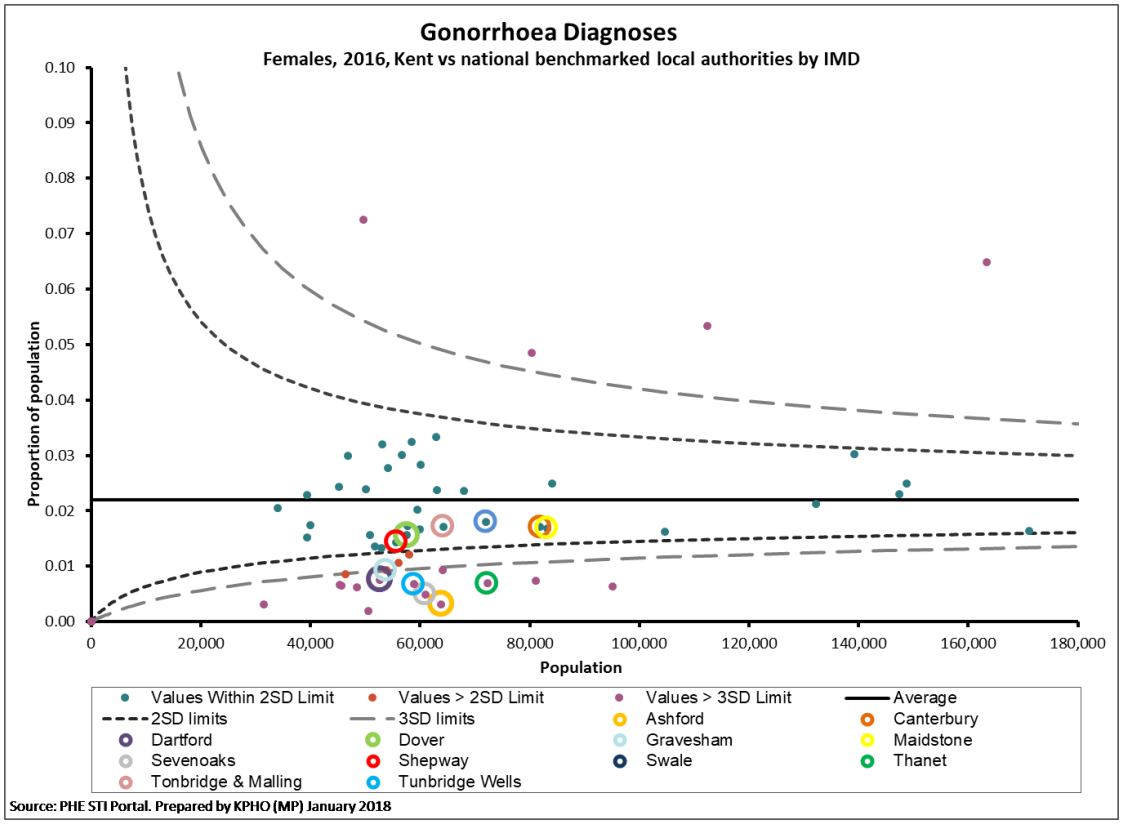
2018.9.24 EqIA sexual health needs

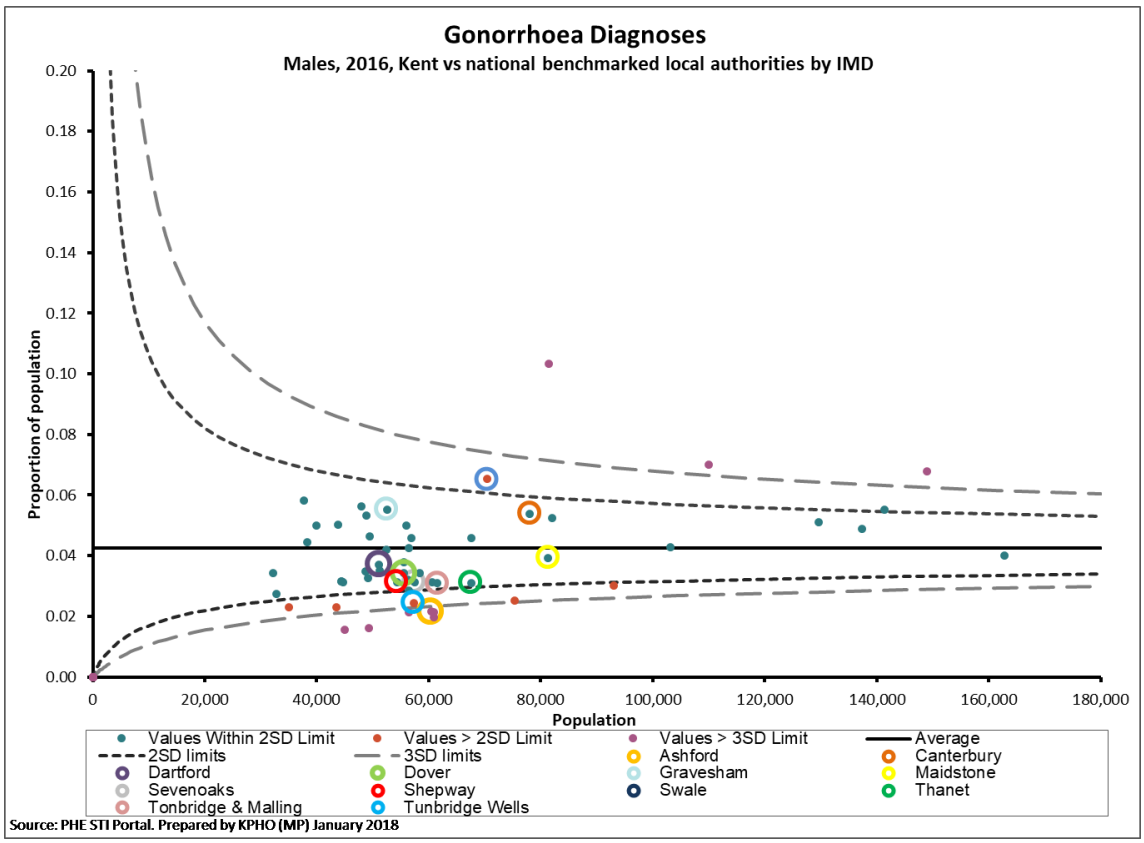
8.3 Appendix 3: Selected STI benchmarks

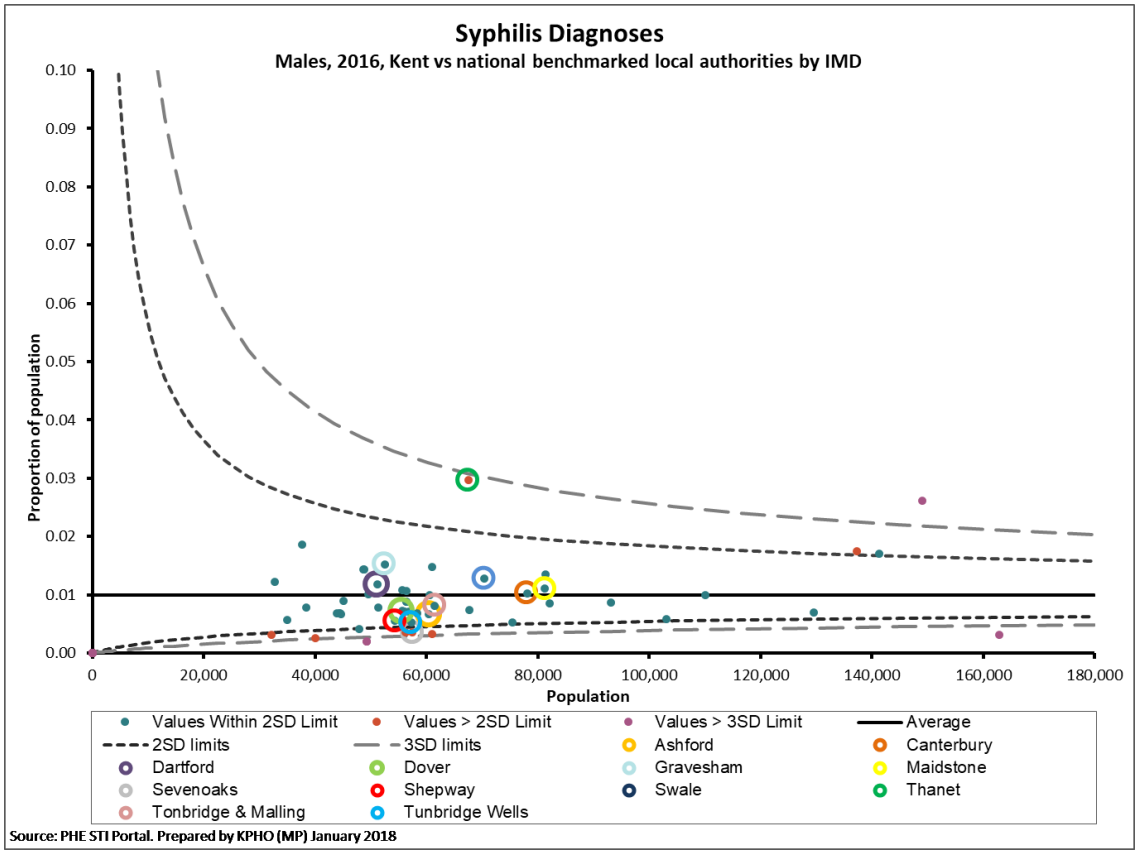
The following funnel plots show the position of the 12 Kent local authorities benchmarked against other unitary authorities and local authorities in counties in depravation decile 7 (with 10 being the lowest depravation).






Gonorrhoea Diagnoses
Females, 2016, Kent vs national benchmarked local authorities by IMD
Proportion of population
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
0
20,000
40,000
60,000
80,000
100,000
120,000
140,000
160,000
180,000
Population
Values Within 2SD Limit
Values > 2SD Limit
Values > 3SD Limit
Average
2SD limits
3SD limits
Ashford
Canterbury
Dartford
Dover
Gravesham
Maidstone
Sevenoaks
Shepway
Swale
Thanet
Tonbridge & Malling
Tunbridge Wells
Source: PHE STI Portal. Prepared by KPHO (MP) January 2018


Gonorrhoea Diagnoses
Males, 2016, Kent vs national benchmarked local authorities by IMD
Proportion of population
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0
20,000
40,000
60,000
80,000
100,000
120,000
140,000
160,000
180,000
Population
Values Within 2SD Limit
Values > 2SD Limit
Values > 3SD Limit
Average
2SD limits
3SD limits
Ashford
Canterbury
Dartford
Dover
Gravesham
Maidstone
Sevenoaks
Shepway
Swale
Thanet
Tonbridge & Malling
Tunbridge Wells
Source: PHE STI Portal. Prepared by KPHO (MP) January 2018


Syphilis Diagnoses
Males, 2016, Kent vs national benchmarked local authorities by IMD
Proportion of population
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
0
20,000
40,000
60,000
80,000
100,000
120,000
140,000
160,000
180,000
Population
Values Within 2SD Limit
Values > 2SD Limit
Values > 3SD Limit
Average
2SD limits
3SD limits
Ashford
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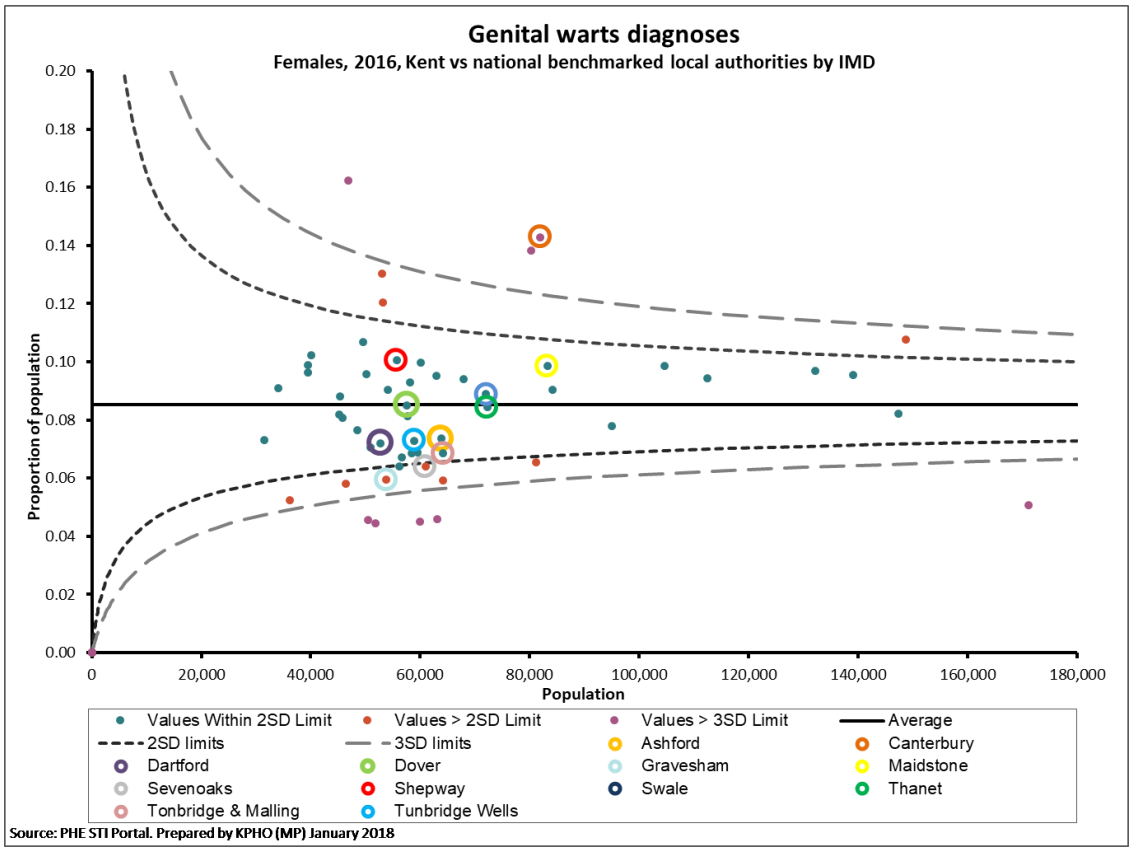
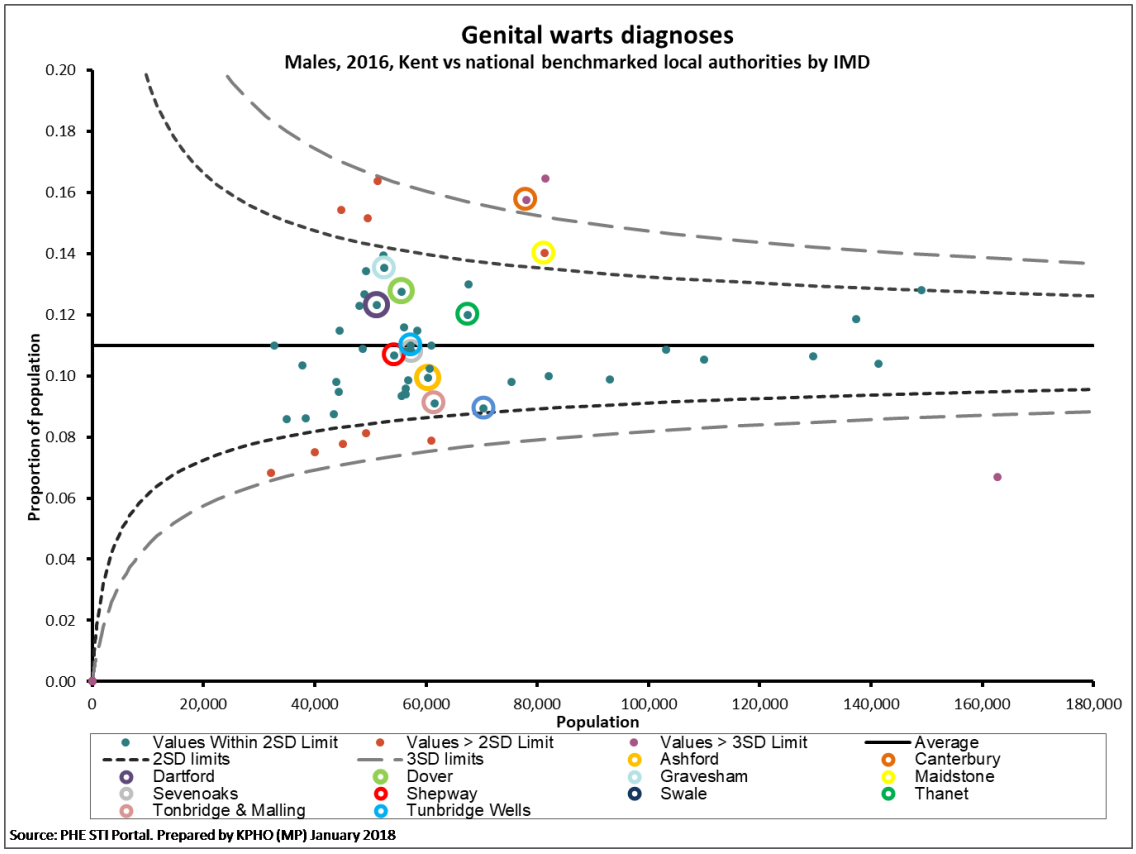
Gravesham
Maidstone
Sevenoaks
Shepway
Swale
Thanet
Tonbridge & Malling
Tunbridge Wells
Source: PHE STI Portal. Prepared by KPHO (MP) January 2018


Genital warts diagnoses
Females, 2016, Kent vs national benchmarked local authorities by IMD
Proportion of population
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0
20,000
40,000
60,000
80,000
100,000
120,000
140,000
160,000
180,000
Population
Values Within 2SD Limit
Values > 2SD Limit
Values > 3SD Limit
Average
2SD limits
3SD limits
Ashford
Canterbury
Dartford
Dover
Gravesham
Maidstone
Sevenoaks
Shepway
Swale
Thanet
Tonbridge & Malling
Tunbridge Wells
Source: PHE STI Portal. Prepared by KPHO (MP) January 2018



8.4 Appendix 4

The impact and potential consequences of undiagnosed sexually transmitted infections amongst females aged 15- 44 years in Kent

Author: Wendy Jeffreys, Public Health Specialist

September 2017

8.5 Background

There is evidence to suggest that there are links between reproductive health and sexually transmitted infections [STIs]. One of the most common bacterial infections chlamydia trachomatis is expected to be seen in 8% of the population. Left untreated the infection can spread and cause pelvic inflammatory disease [PID].

Ectopic pregnancies are associated with pelvic inflammatory disease and sexually transmitted infections such as chlamydia and gonorrhoea. Kent has had consistently higher than the England Kent average crude rates of ectopic pregnancy emergency admissions amongst 15- 44 year old women per 100,000 populations over a 5 year period. The district breakdown highlights variability with highest rates seen in Maidstone.

At the same time the crude rate of pelvic inflammatory disease [PID] hospital admissions amongst per 100,000 females aged 15-44 years have been significantly higher than the

England average over the same 5 year period. PID is often associated with STIs, commonly chlamydia or gonorrhoea. It can lead onto ectopic pregnancy or tubal infertility. What is now known from these data presentations is whether the cohorts of females are the same.

The rates of PID are higher than the England average in nearly all of Kent districts and these are shown in this paper. The breakdown of data is provided to illustrate the issues at a county and district levels. Detail on the rates of chlamydia and of gonorrhoea amongst women aged 15-44 years are also shown but are not broken down by district as the numbers of gonorrhoea are not shown by year because the numbers are sometimes less than 5 in a district.

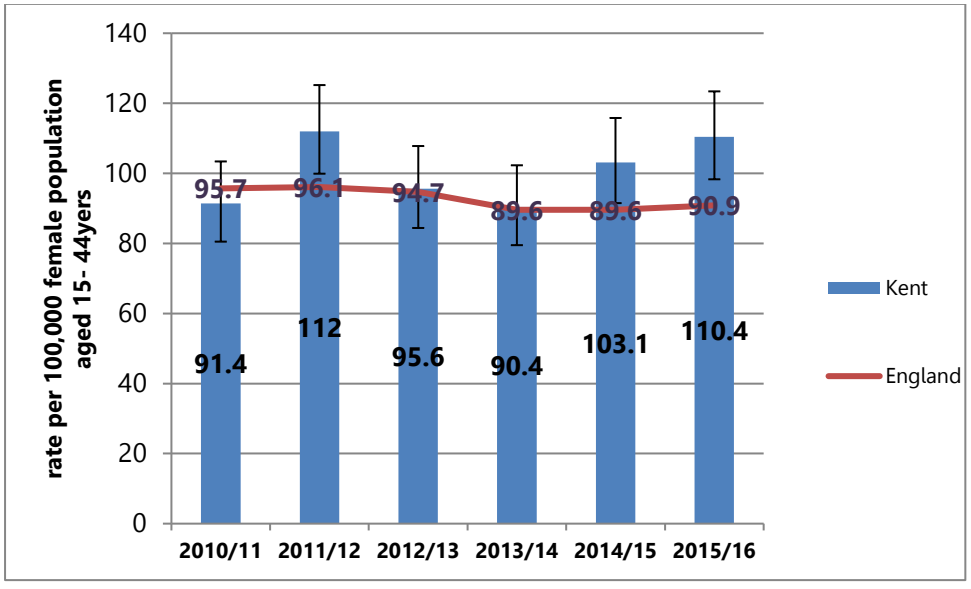
The questions for consideration are:

- Whether the rates of chlamydia and gonorrhoea diagnosed amongst females aged 15-44 years are an accurate reflection or not?
- How can partner notification be improved to limit re infection of chlamydia and gonorrhoea?
- What public health advice should be promoted to heighten awareness of ectopic pregnancy and PID?
- Are other lifestyle behaviours associated with these two conditions?

8.6 Summary of disease

8.6.1 County overview of ectopic pregnancy

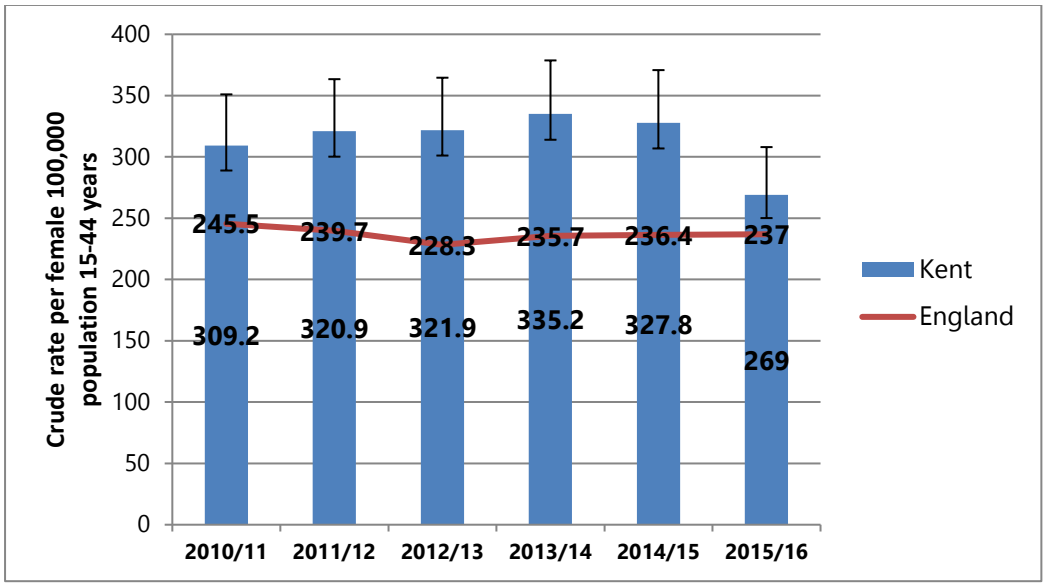
Ectopic pregnancies amongst 15-44 year olds in Kent 2010/11 – 2015/16



Source: PHE Fingertips

8.6.2 County overview of PID hospital admissions

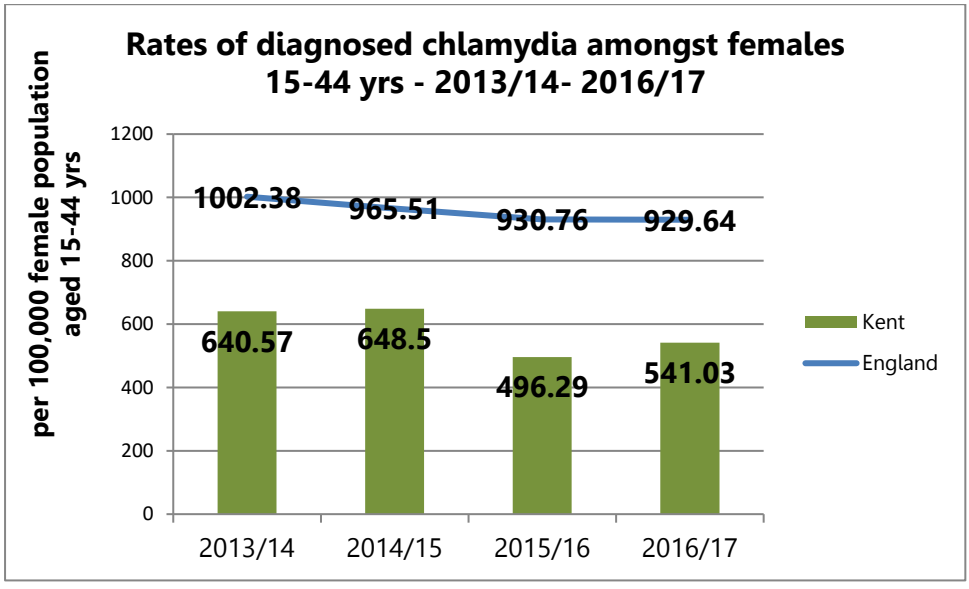
Pelvic Inflammatory Disease [PID] amongst 15-44 year olds in Kent 2010/11- 2015/16



Source: PHE fingertips

8.6.3 Specific sexually transmitted infections [STI]s

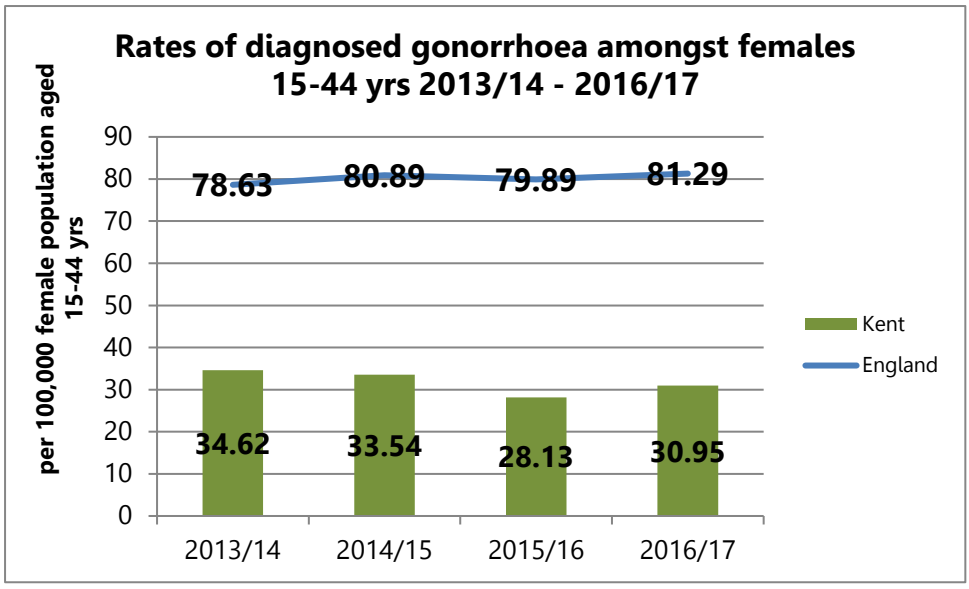
County overview of diagnosed chlamydia infection amongst females



Source: GUMCAD and CTAD

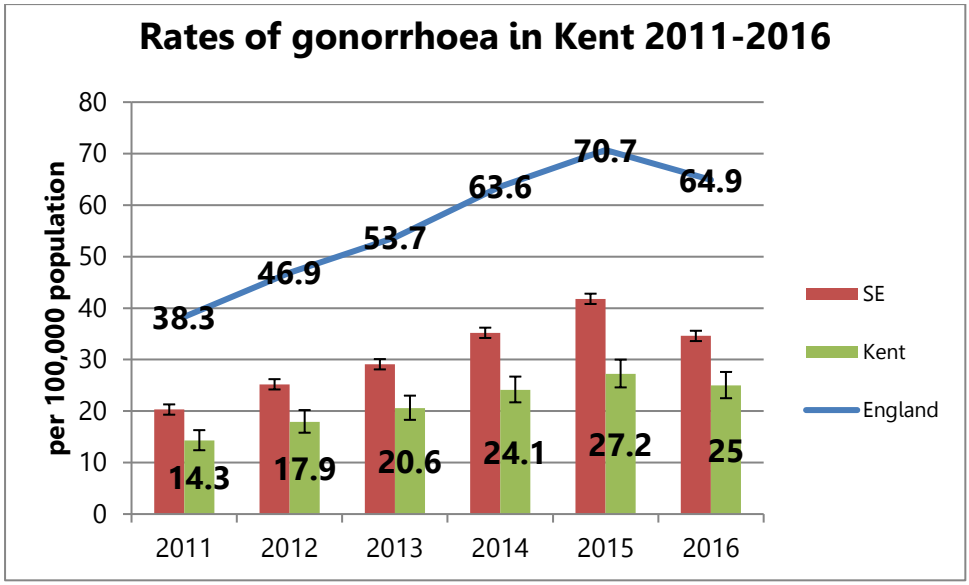
The rates of detected chlamydia in Kent are highest amongst females.

8.6.4 County overview of diagnosed gonorrhoea infection amongst females



Source: GUMCAD

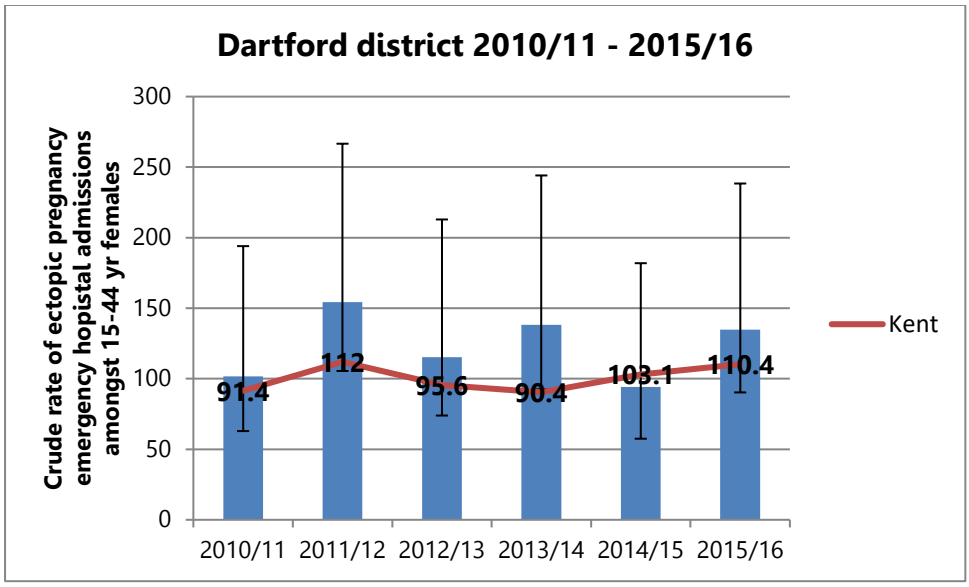
The rates of detected gonorrhoea amongst the population between 2011- 2015 increased in England and Kent, as seen in the next table, which is not reflected when looking at females only aged 15-44 years.



Source: PHE fingertips

8.6.5 Presentation of Ectopic pregnancy and PID in North Kent

Ectopic pregnancies amongst 15- 44 yr olds by districts in North Kent 2010/11 – 2015/16



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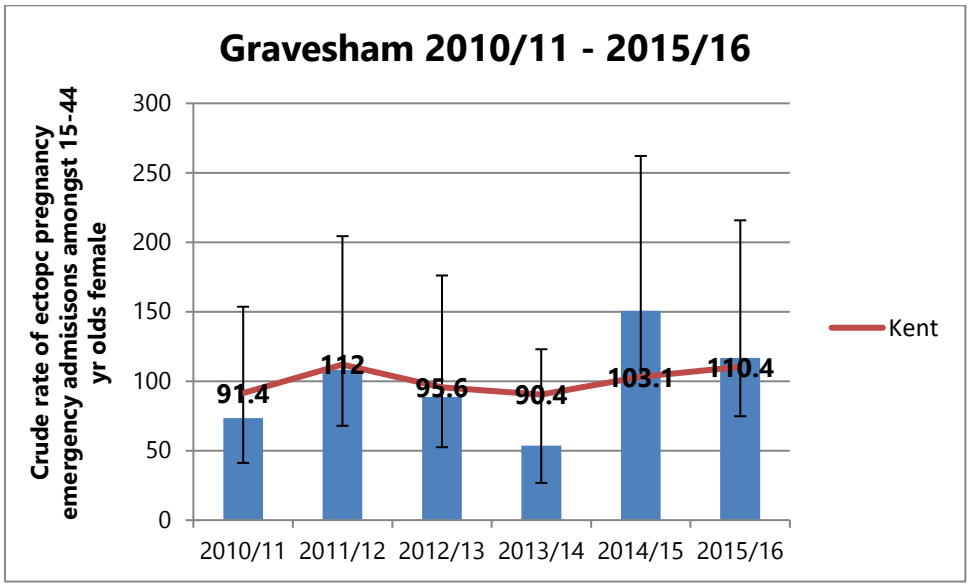
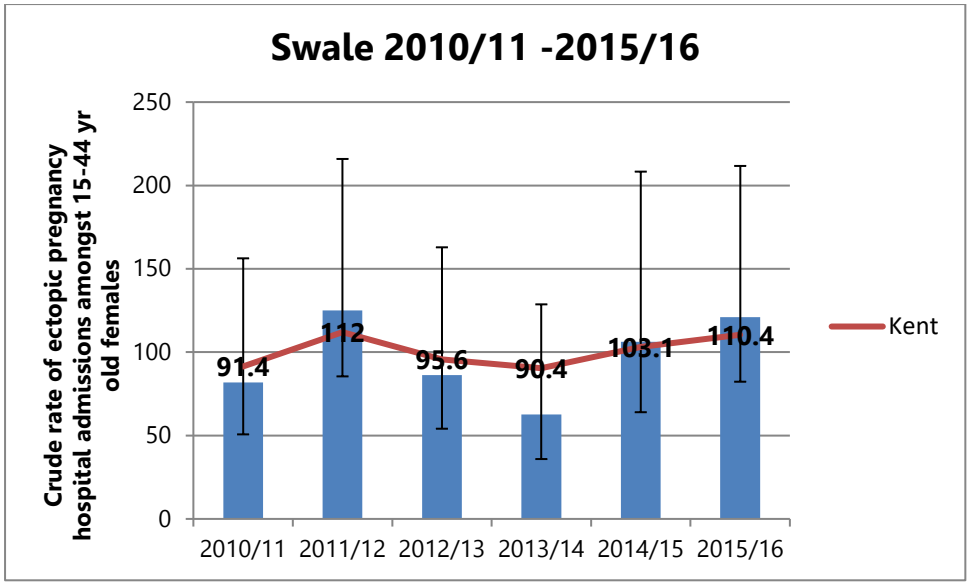
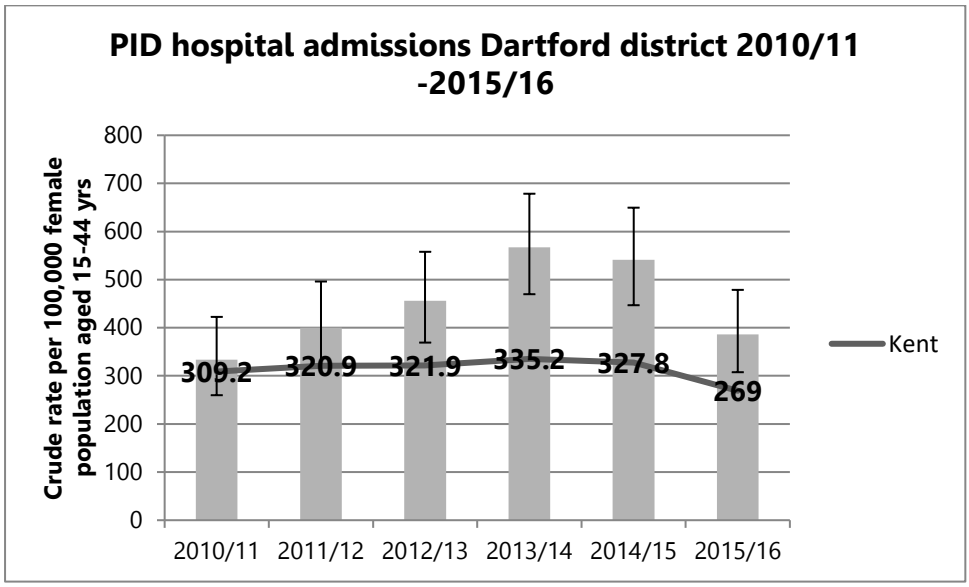


Source: PHE fingertips



Source: PHE fingertips

Crude rates of PID hospital admissions per 100,000 15- 44 yr old females



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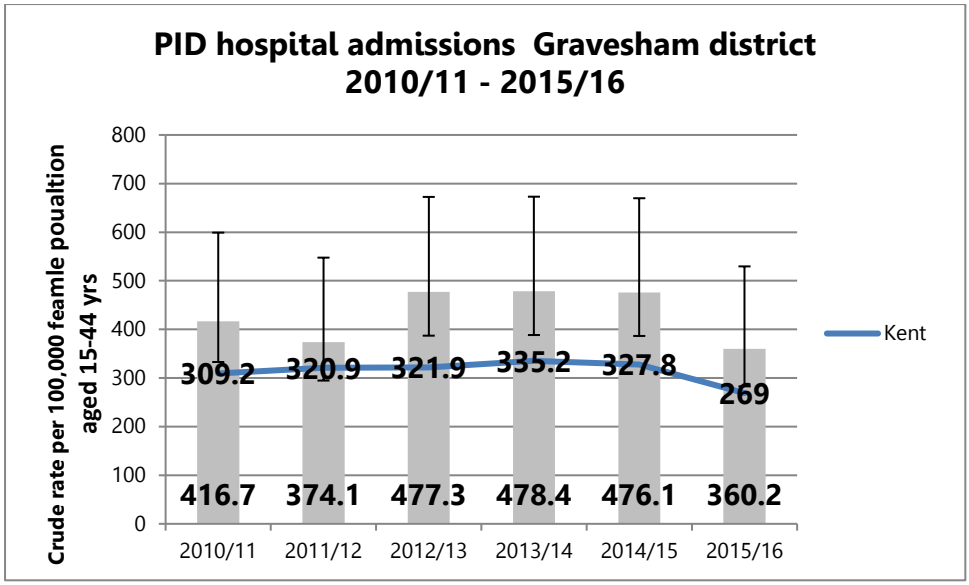
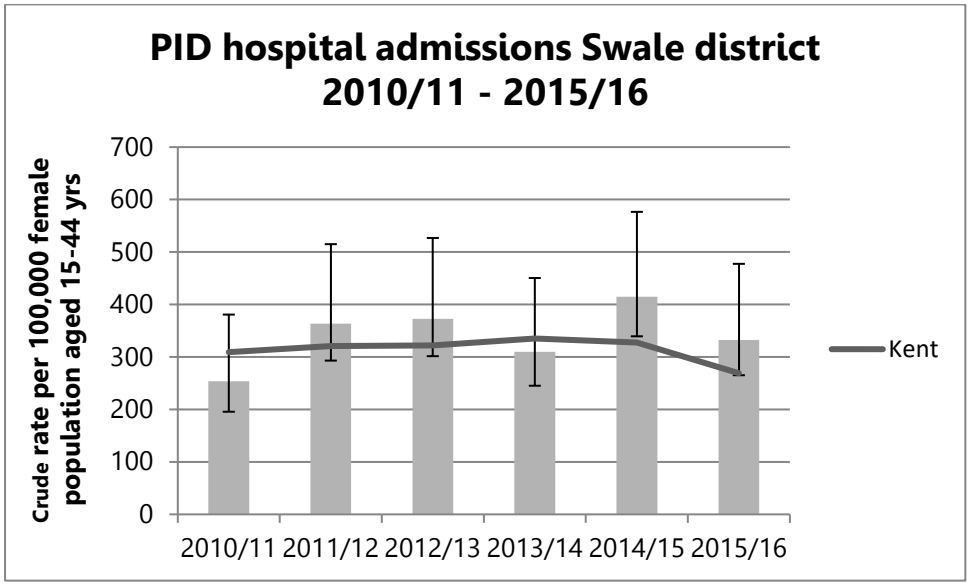


Source: PHE fingertips

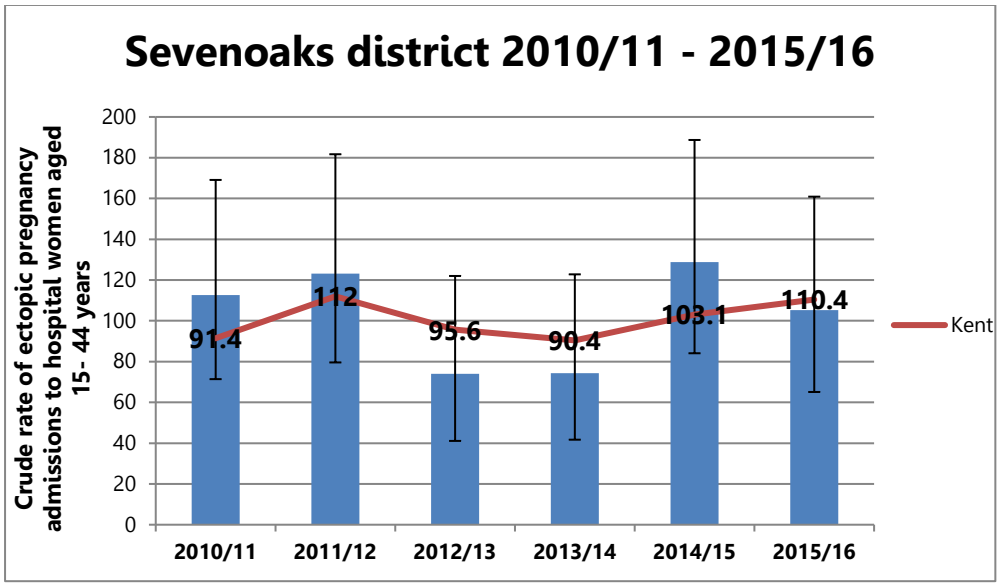


Source: PHE fingertips

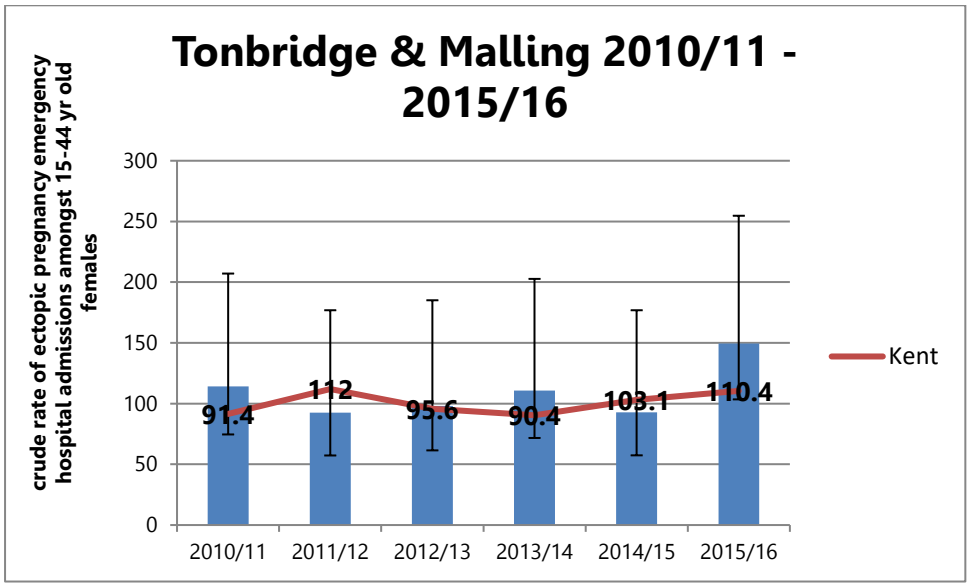
Levels of hospital admissions for PID in North Kent have been consistently higher from 2010/11 – 2015/16 than the Kent average which is worse than the England average.

8.6.6 Presentation of Ectopic pregnancy and PID in West Kent

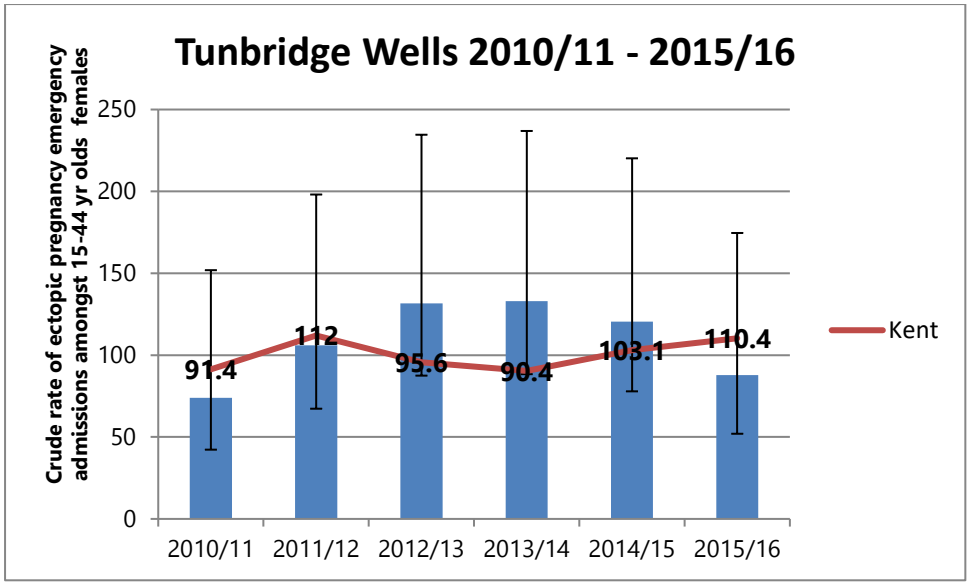
Ectopic pregnancies amongst 15- 44 yr olds by districts in West Kent 2010/11 – 2015/16



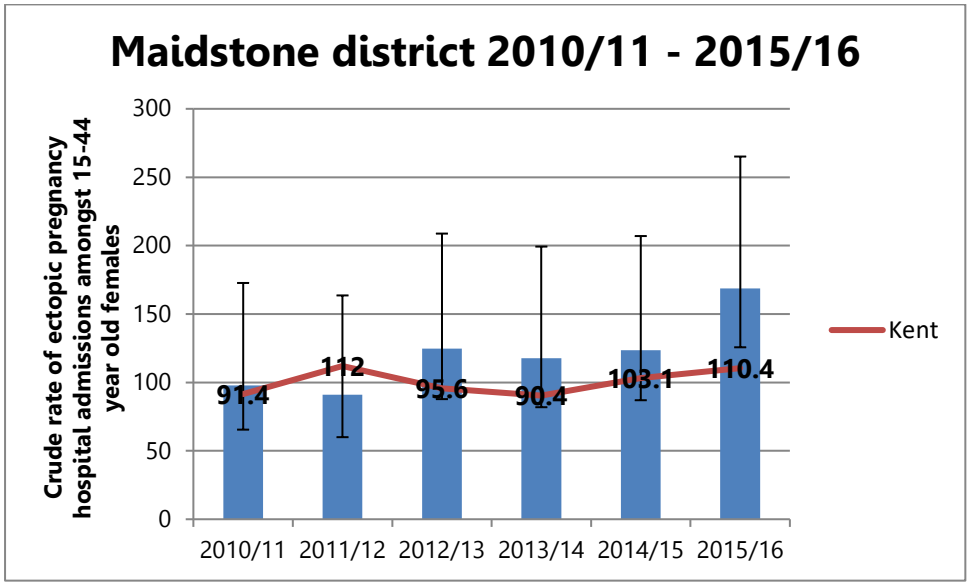
Source: PHE fingertips



Source: PHE fingertips



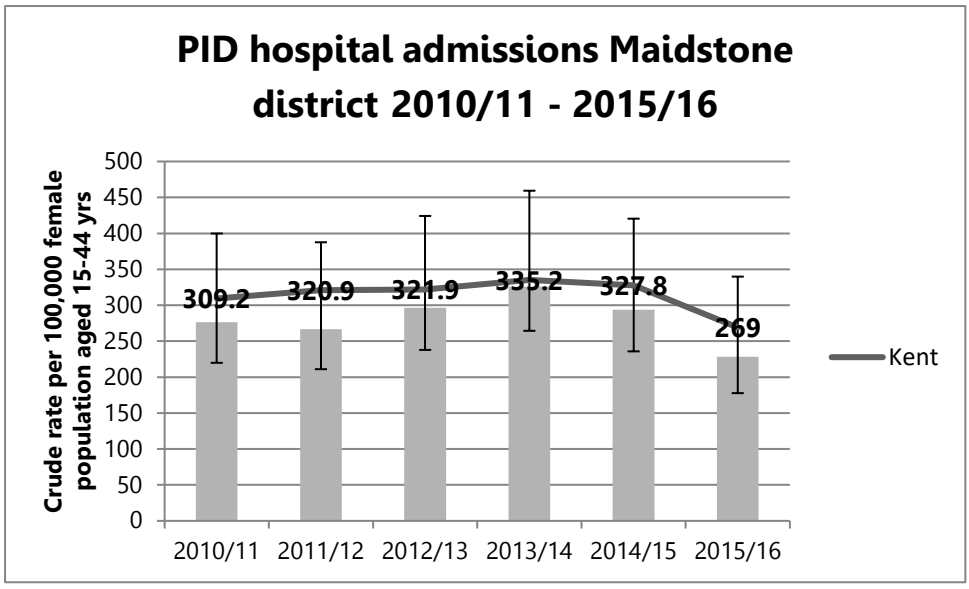
Source: PHE fingertips



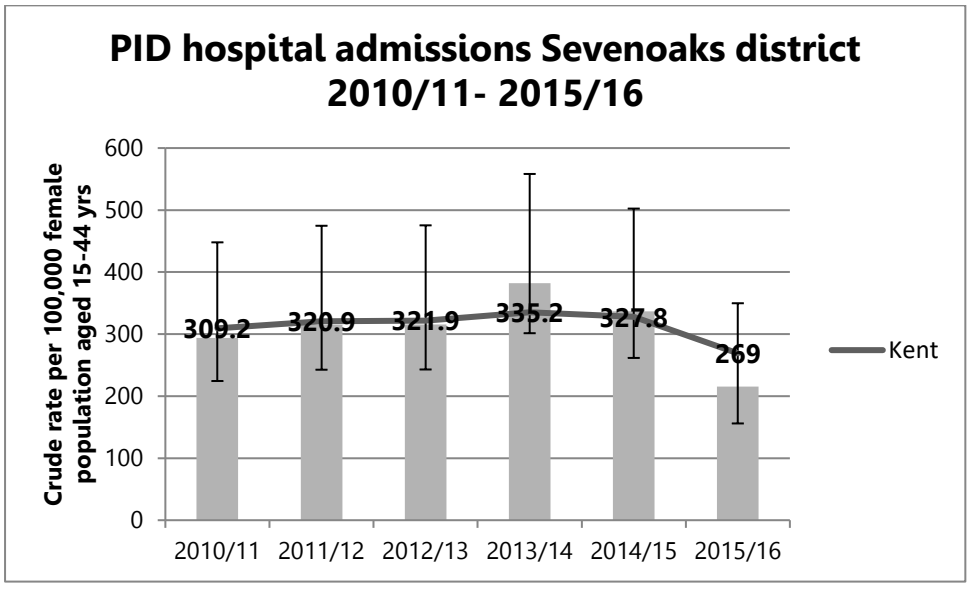
Source: PHE fingertips

Rates of ectopic pregnancy hospital admissions in West Kent have fluctuated between 2010/11 – 2015/16 but with increasing rates in Maidstone district, being higher than the Kent average which has been worse than the England average since 2013/14.

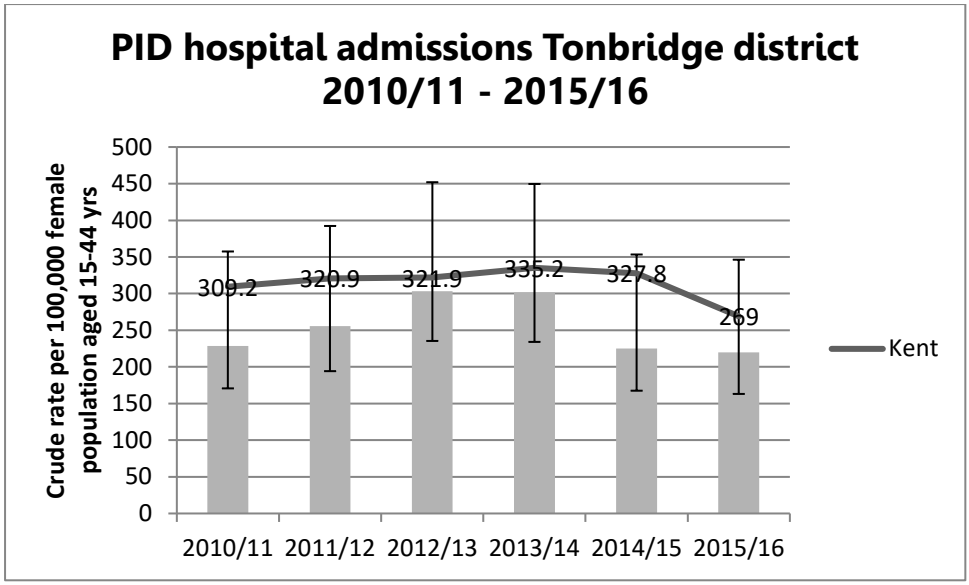
3.22 Crude rate of PID hospital admissions by district



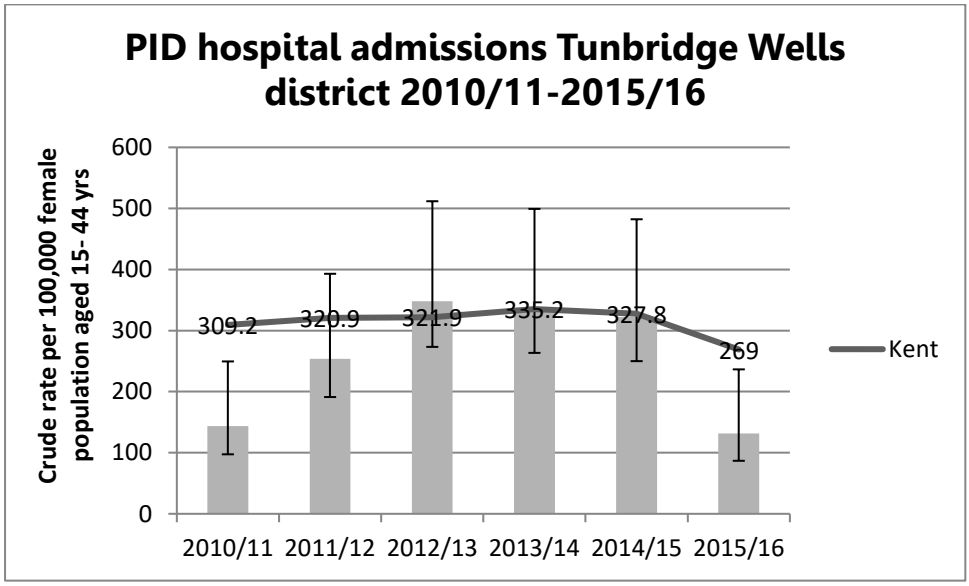
Source: PHE fingertips



Source: PHE fingertips



Source: PHE fingertips

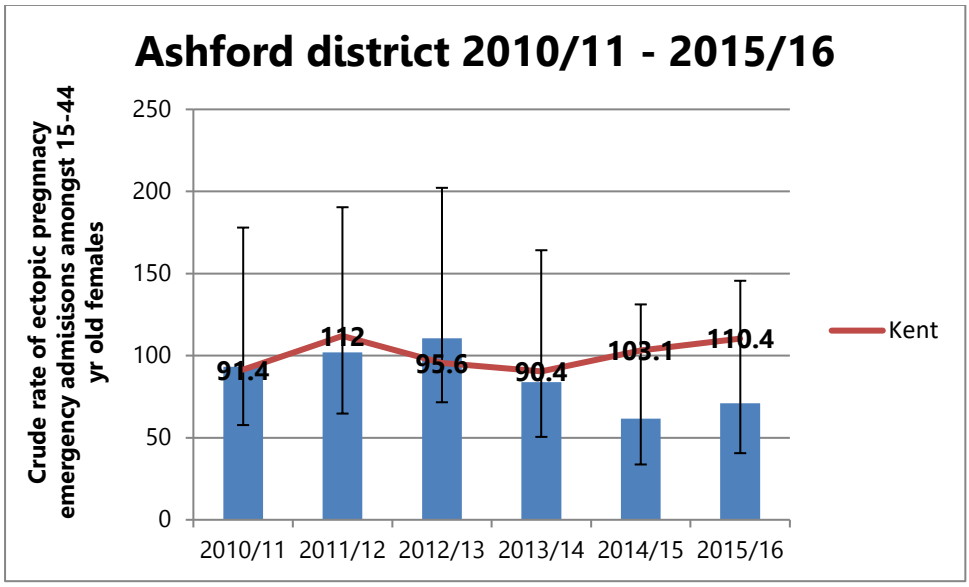


Source: PHE fingertips

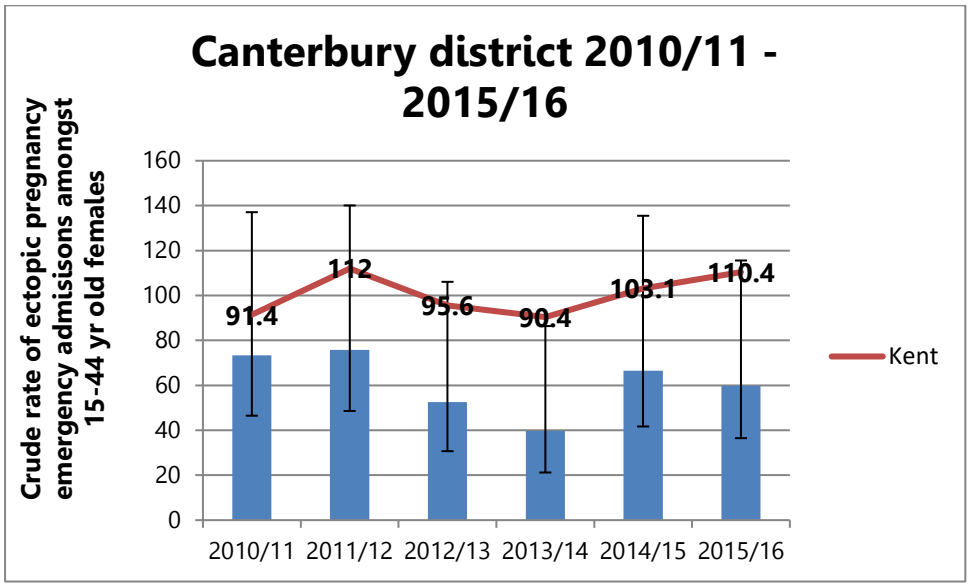
Levels of hospital admissions for PID in West Kent have fluctuated between 2010/11 – 2015/16 than the Kent average which is worse than the England average

8.6.7 Presentation of Ectopic pregnancy and PID in East Kent

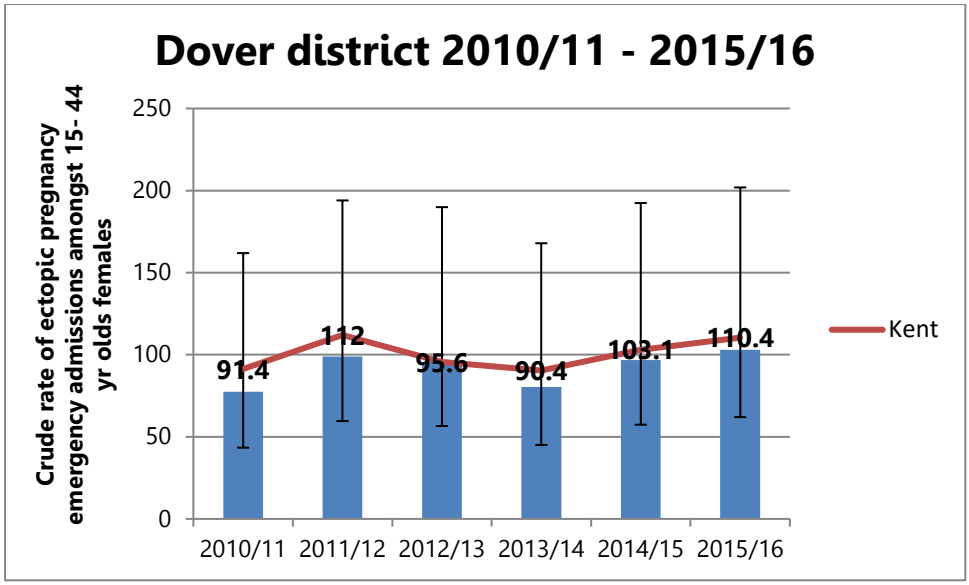
Ectopic pregnancies amongst 15- 44 yr olds by districts in East Kent 2010/11 – 2015/16



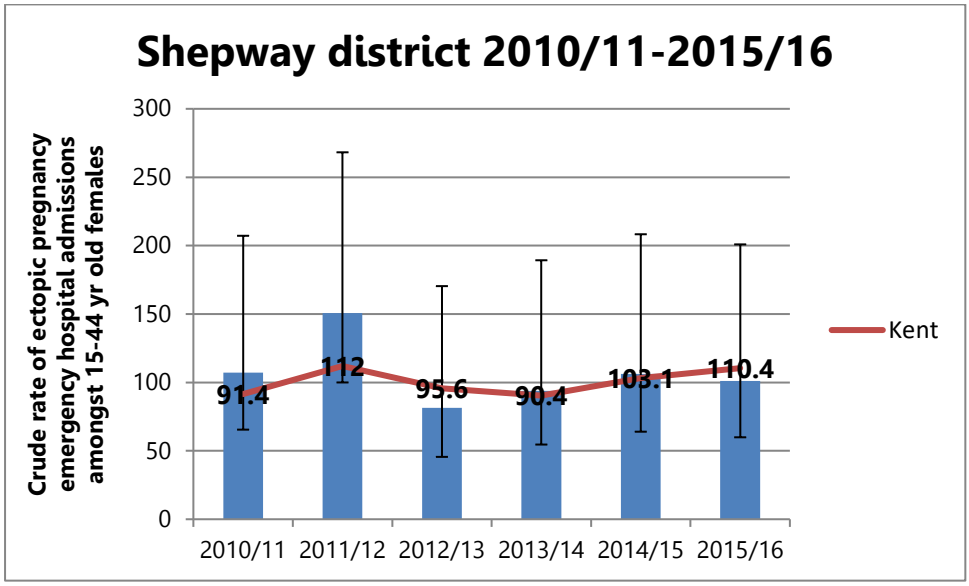
Source: PHE fingertips



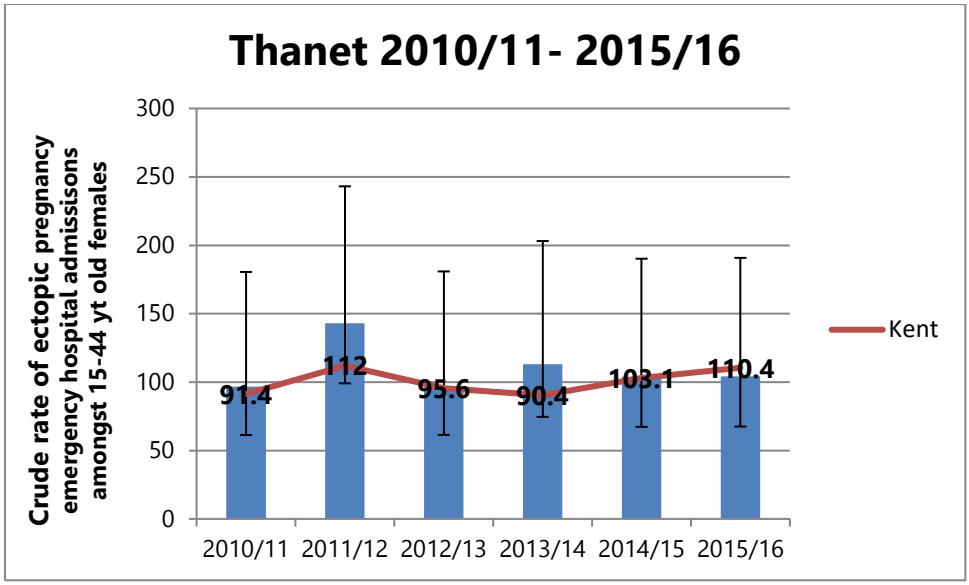
Source: PHE fingertips



Source: PHE fingertips



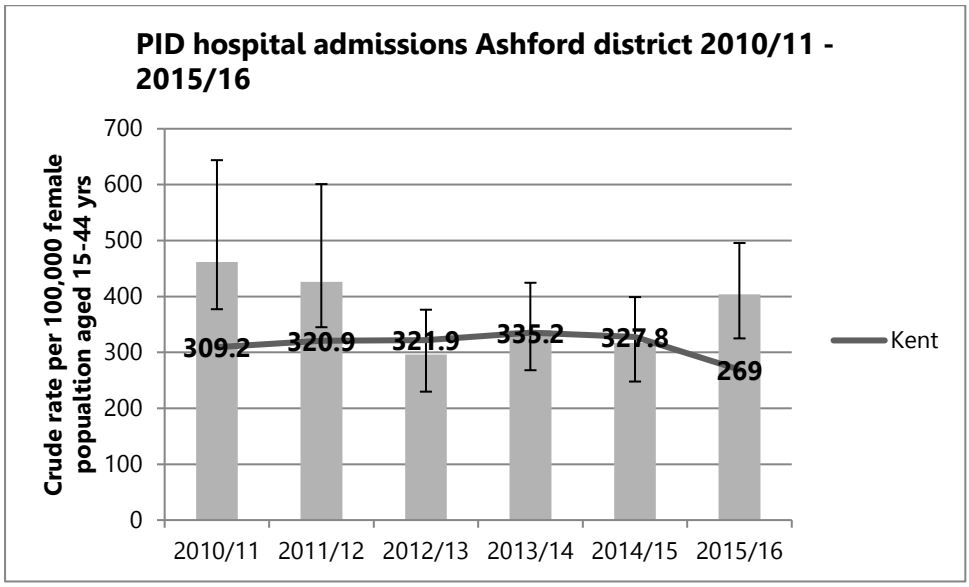
Source: PHE fingertips



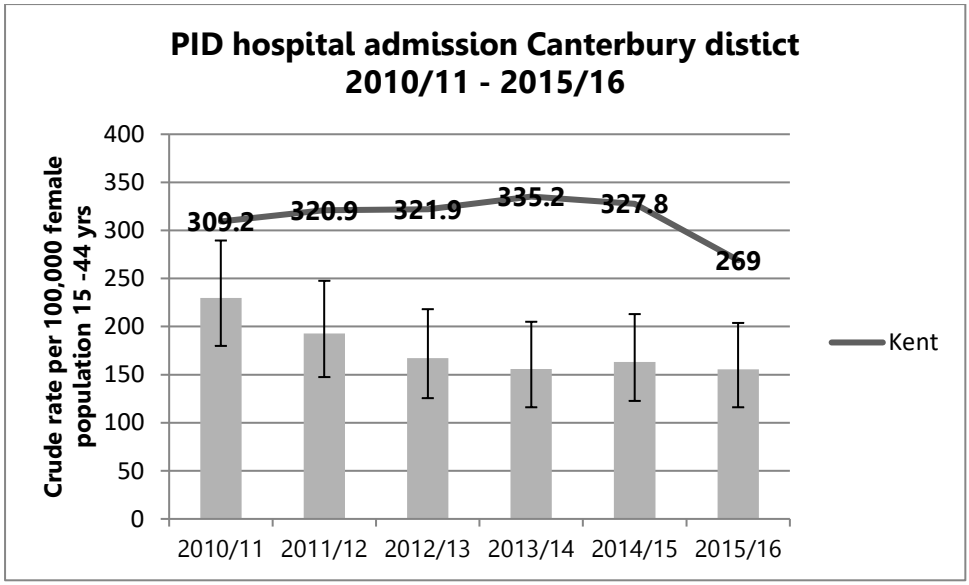
Source: PHE fingertips

Of interest is the contrast in the rates of ectopic pregnancy emergency hospital admissions in East Kent which are similar to or lower than the Kent average.

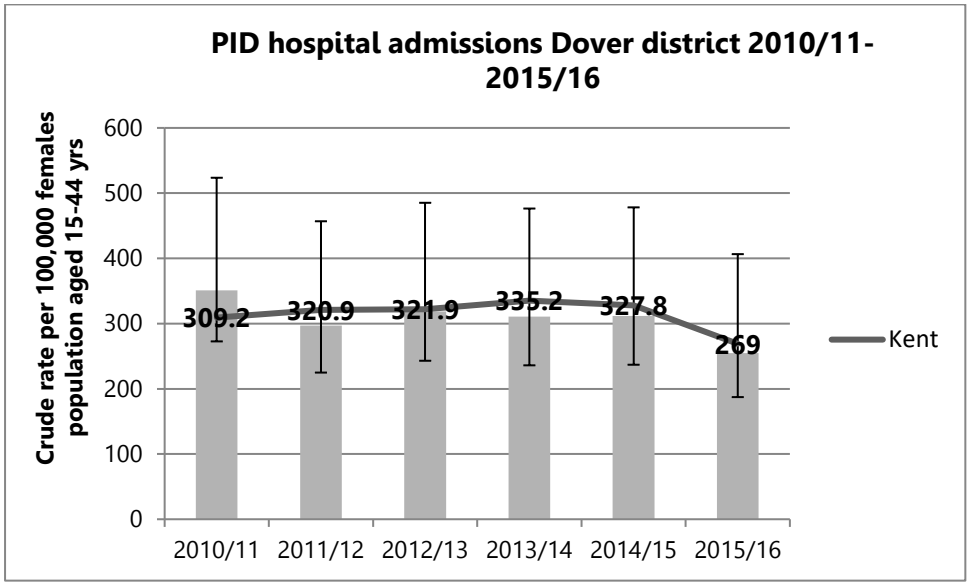
Crude rate of PID hospital admissions by district



Source: PHE fingertips



Source: PHE fingertips



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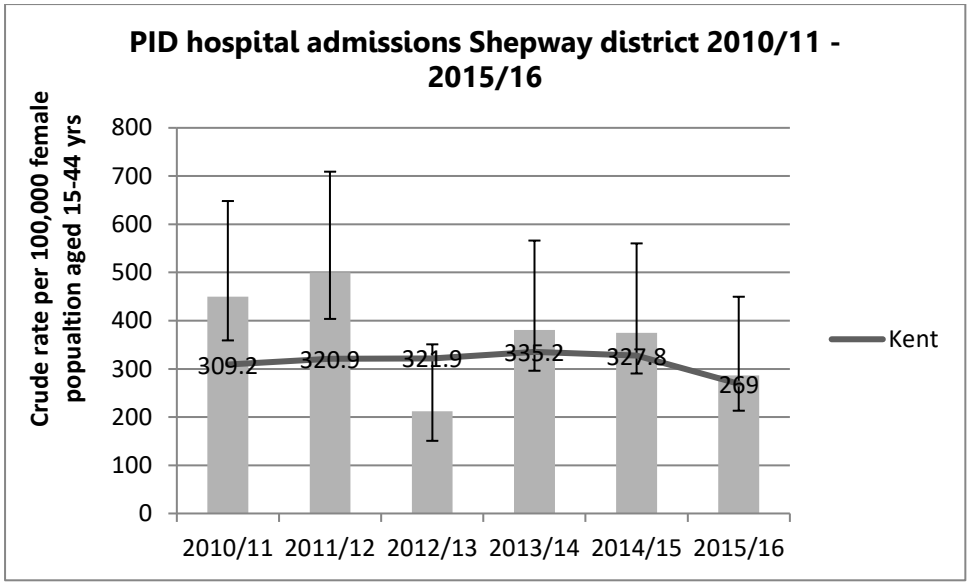
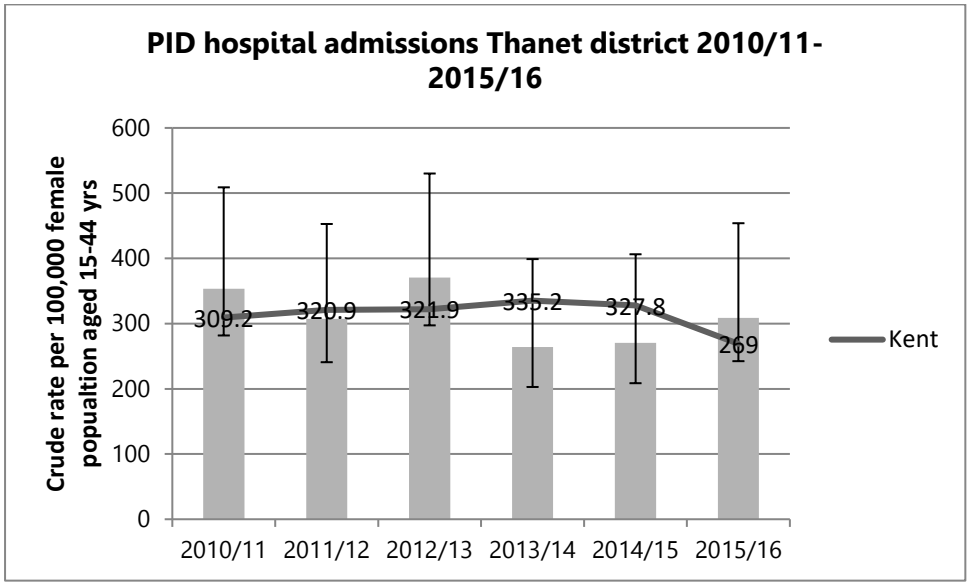


Source: PHE fingertips



Source: PHE fingertips

There is a marked difference in the crude rates of PID hospital admissions in Canterbury district which are consistently lower than the Kent average from 2010/11 – 2015/16. Other districts show fluctuating rates though the same timeframe often above the Kent average.

8.6.8 Contributing factors

The rates of detected gonorrhoea and chlamydia amongst females aged 15-44 years do not explain the continual higher crude rate of hospital admissions for PID in Kent than the England average. These STIs are known factors.[134] Another modifiable risk factor[135] known to increase risk of PID is cigarette smoking.

Similarly ectopic pregnancy is associated with the same STIs and PID. More clearly associated with ectopic pregnancy is cigarette smoking, both exposure to second hand smoke and smoking status[136] This same study highlighted insertion of intra-uterine device as another significant risk factor. However the overall percentage of prescribed LARC excluding injections in sexual health services and general practice in Kent is comparable to England[137].

Nationally and locally the prevalence of smoking has reduced with the exception of smoking in pregnancy. This is measured by smoking status at time of delivery which locally at 13% is higher than the England average of 10.6% in 2015/16.[138]

Audit of the process for partner notification following detection of chlamydia amongst 15-24 year olds in Kent from January 2017 found highest detection was amongst heterosexual females. However there was no standardised documentation of the partner notification with most being agreed by the client that they would undertake this themselves. Chlamydia screens undertaken as part of partner notification are lower than would be expected. Reinfection of clients [identified at a three month follow up test] is observed to be 1 in 4, however the number retesting is low.

8.6.9 Conclusions

The impact of untreated chlamydia or gonorrhoea on general health and fertility needs to be clearly articulated. There are opportunities available through the Kent sexual health website and through client consultations. In these clinicians can give evidence-based rationale for having a chlamydia screen which enable clients to make an informed and well understood choice.

Audit of client notes will help identify differences and similarities in the diagnosis and management of care.

Exploring the history taking, diagnostic pathway and management of care from the services in areas where rates of PID are lower will increase learning.

Introducing improved and quality assured process for partner notification.

9 References

[1] Cawson, P., Wattam, C., Brooker, S. and Kelly, G. Child maltreatment in the United Kingdom. NSPCC. 2000

[2] Hackett, S., Holmes, D. and Branigan, P. (2016) Operational framework for children and young people displaying harmful sexual behaviours. London: NSPCC.

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