

PUBLIC HEALTH COMMISSIONING UPDATE BRIEFING

Office of Director of Public Health



BACKGROUND

Public health concerns the health of the population rather than the individual and has a rationale of protecting population health, preventing illness and promoting health and wellbeing. It aims to reduce inequalities in health and to improve health care quality and equity. It uses intelligence at its core to understand the health of populations and the opportunities for improving this using an evidence based approach. At its heart is a prevention approach – preventing people from becoming ill is not only better for people but also makes economic sense. The 5 Year Forward View¹ stated that the future health of the population, the sustainability of the NHS and the economic prosperity of the country all now depend on a radical upgrade of the prevention approach and of public health. This is because the evidence demonstrates that public health interventions are cost saving at a local and national level and offer significant returns on investment in the medium and long term.²

Under the Health and Social Care Act 2012 responsibility for local public health was transitioned from the NHS to local authorities and funding provided for this through an annual Public Health Grant from the Department for Health. The grant allocated to Plymouth, since its introduction, has been below the target allocation to meet the needs of the local population. There was an initial £3million shortfall. The current Public Health Grant for 2022/23 is £15.9 million and 85% of that grant value is spent on services that are commissioned to deliver all the mandated functions of public health in the local authority and to protect and improve the health of the local population.

In 2022 the Government have introduced additional targeted funding for substance misuse treatment through a separate Supplementary Substance Misuse Treatment and Recovery Grant. This amounts to £770,000 for Plymouth in 2022/23 and is due to rise in future years to around £1.2 million.

THE PUBLIC HEALTH COMMISSIONED SERVICES

Sexual and Reproductive Health

Open access sexual and reproductive health services are provided through an integrated service called SHiP [Sexual Health in Plymouth] and through contraception services from GPs and Pharmacies. These services currently cost approximately £2.8 million per year.

SHiP is provided by a collaboration of University Hospitals Plymouth (UHP) NHS Trust, Livewell South West, The Zone and the Eddystone Trust. The service provides sexual health advice and information, testing and treatment for STIs and all forms of contraception. It prioritises prevention and self-management and makes best use of new treatments and technologies. The service operates as part of a broader system of sexual and reproductive healthcare services commissioned by NHS Devon and NHS England that include abortion services, HIV treatment and care services, a Sexual Assault Referral Centre and cervical screening programme.

Rates of sexually transmitted infections (STIs) in Plymouth are high when compared to England averages and rates in nearest neighbour areas. The numbers of recorded infections are likely to be

¹ NHS 5 year forward view. UK Government. October 2014

² Masters R et al. Return on investment of public health interventions: a systematic review. J Epidemiol Community Health 2017;71:827-834

higher than reported as surveillance of STI diagnosis does not provide a full measure of prevalence because many infections are asymptomatic and undiagnosed.

The rate of teenage conceptions in Plymouth has fallen significantly in recent years from 54.7 per 1,000 females aged 15-17 in 1998 to 15.5 in 2020. Rates in Plymouth are slightly above the England average of 13.0.

In 2020 the total abortion rate per 1,000 female population aged 15-44 years was 18.1 which is slightly lower than the England rate of 18.9.

Late diagnosis is the most important predictor of HIV related morbidity and short term mortality. The estimated diagnosed prevalence of HIV in Plymouth is low. However between 2019 and 2021 57.1% of new HIV diagnoses in Plymouth were late diagnoses (8 cases).

Whilst access to contraception in Plymouth is good, there has been disruption to provision during the COVID-19 pandemic. The provision has now returned to pre-COVID levels.

The recent outbreak of Monkeypox in the UK has resulted in increased workload for local sexual health services due to the need to respond to contact tracing and identification and the delivery of vaccinations as determined by national policy.

Sexual ill-health has been estimated to cost the NHS more than £700 million a year.³ The cost of treating STIs in England, Wales, and Northern Ireland has been calculated at approximately £165 million per year.⁴ The lifetime treatment costs for each new case of HIV infection is between £280,000 and £360,000⁵. The cost of HIV care in the first year after diagnosis is twice as much for someone with a late diagnosis.⁶

Investing in sexual health services can deliver significant cost savings for the NHS and local authorities. Quality services and interventions that focus on prevention, screening and prompt treatment and partner notification can control disease, prevent unwanted pregnancies and avoid costly health complications and treatments.



³ HIV and other Sexually Transmitted Infections in the United Kingdom in 2003. Health Protection Agency, 2004.

⁴ Health Protection in the 21st century Understanding the burden of disease: preparing for the future. Health Protection Agency, 2005.

⁵ Health promotion for sexual and reproductive health and HIV: strategic action plan 2016-2019. Public Health England, 2016.

⁶ NICE local government briefings HIV testing. NICE, June 2014. <http://www.nice.org.uk/advice/lgb21/resources/non-guidance-hiv-testing-pdf>

Complex Needs (Substance Misuse Treatment and Support)

Substance misuse has been seen as two separate issues, namely illegal drug misuse, particularly heroin and crack cocaine, and alcohol misuse and Plymouth has higher than national average levels of both categories of misuse. In addition we have seen levels of addiction to prescribed drugs and to drugs sourced on the internet rise to unprecedented levels over the last decade. Whilst drug and alcohol use is seen across the population, drug and alcohol *problem use* is concentrated in our deprived neighbourhoods and our most vulnerable population groups and as such is a driver of health inequalities. It is important to view substance misuse as part of a complex needs system, because it is closely related to adverse childhood experiences (ACE) and should be seen more as a means of coping with psychological distress, rather than as an illness in and of itself. Substance misuse is also strongly associated with homelessness, mental illness, domestic violence, child protection, acquisitive crime (drugs), violent crime (alcohol), unemployment, anti-social behaviour and early disease and premature death.

Of note relating to our local context;

- Plymouth has higher rates of opiate and crack use than national average.
- Plymouth has higher rates of drug poisoning admissions to hospital than national average
- Plymouth has higher rate of drug related deaths than national average.
- Plymouth treats a higher percentage of opiate and crack users than the national average [61% compared to 50%] and has 98% compliance with waiting time
- Our services are efficient, effective and amongst the lowest unit cost in the region.
- Plymouth's treatment cohort tends to be older, sicker, more likely to be injecting and have more complex needs than the average and rates of discharge are therefore lower than the national average [proportion in treatment for more than 6 years 35% compared to 27%].
- Patterns of addiction are changing in recent years drug markets have changed with increased internet access driving a rise in 'grey' markets for prescription drugs such as valium and strong pain killers. We have a larger proportion of prescription (POM) only and over the counter (OTC) addicts in treatment than the national average.
- Plymouth has seen levels of chronic pain and mental illness rise over the last 10 years and we are now an outlier for pain prescribing and anti-depressant prescribing. We are seeing increasing numbers of people addicted to prescribed drugs in Primary Care and specialist pain services.
- Substance misuse is also a significant driver of demand for Children's Social Care with estimates of between 35% and 40% of all cases being related to substance misuse.

Our Public Health investment for substance misuse treatment and support is all provided within the Plymouth Alliance for Complex Needs contract. The services provided include community based drug and alcohol treatment services, detox provision, day services, support and recovery services along with additional prescribing from GPs and supervised consumption from Pharmacies. The current level of investment for this is approximately £4.5 million (covering adults and young people). The Substance Misuse Treatment and Recovery Grant is providing an additional £770,000 of investment in 2022/23 to increase community treatment capacity and to work to reduce the record numbers of drug related deaths. This funding will be used to provide additional capacity within the existing Plymouth Alliance partners.

It is estimated that every £1.00 spent on drug treatment saves £2.50 in costs - principally in criminal justice cost savings through reduced offending (without methadone treatment the average heroin user spends £1400 per month on drugs, mainly funded through acquisitive crime, sex working and drug dealing); through reduced demand on childrens services; reduced costs to hospitals through

reductions in ED attendance, infectious diseases due to blood borne viruses, liver and lung disease, overdoses and early deaths.

In addition around 44% of people in mental health services also have substance misuse problems [dual diagnosis] which delays recovery and leads to frequent relapse and around 70% to 80% of people in substance misuse issues also have mental health problems (European Monitoring Centre for Drugs and Drug Addiction (EMCDDA)). A Joseph Rowntree Foundation report found 70% of the homeless population suffer from substance misuse.

Apart from the primary purpose of treating some of our most marginal and deprived people, substance misuse services also underpin delivery of childrens social care, homelessness services, offender services and a range of health services.



Health Improvement

The opportunity and challenge to improve health in the Plymouth population is great. Life Expectancy in Plymouth is consistently below the England average for both males and females. This is closely associated with levels of deprivation, which for the most part explains the well documented and long standing health inequalities that exist amongst our local population. Our data demonstrates that local people in our most deprived neighbourhoods not only live shorter lives, but they also live more of their lives in poor health.

Thrive Plymouth is our city wide initiative to create a social movement to work collaboratively to reduce health inequalities and improve the health of local people. We know that 4 lifestyle behaviours [smoking, diet, alcohol and physical inactivity] are key drivers of more than half of the premature deaths in the city and that these lifestyle behaviours are modifiable. We also know that to enable people to adopt healthier lifestyles is a very complex issue, influenced by social determinants, including environments, education, income, people's own sense of wellbeing and emerging evidence is now demonstrating the lifelong impacts of adverse childhood experiences.

As is detailed in the Life Expectancy and Public Health Indicator reports, in terms of the 4 lifestyle behaviours, our local position is worse than England average in relation to the prevalence of smoking tobacco and of being overweight or obese. It is in line with the England average in terms levels of physical activity in adults and is better than England average for hospital admissions for certain alcohol specific conditions.

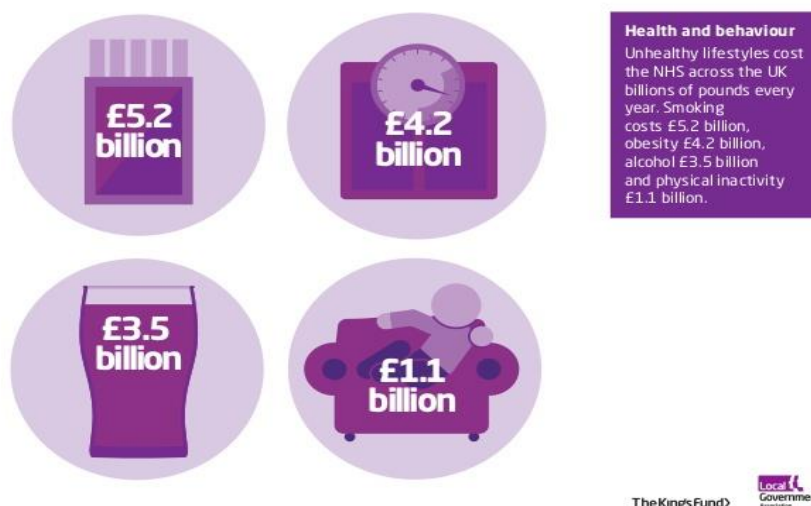
Current services commissioned for general health improvement include an integrated health improvement service delivered by Livewell Southwest and called One You Plymouth. This service is provided for the whole local population and delivers a person-centred and holistic offer. It is structured to inform, enable and support people, according to their needs and preferences, to make lifestyle improvements and includes smoking cessation, tier 1 and 2 weight management, physical activity interventions and brief interventions for alcohol. It also includes capacity building by the provision of training to local people and organisations, for example Make Every Contact Count [MECC] training and mental health awareness and prevention training. The service targets face to face

support within the most deprived neighbourhoods of the city and is aligning delivery to be present in the wellbeing hubs. In a year the service provides advice to around 5,500 individuals. 1,500 receive face to face interventions and around 1,000 people receive training of one type.

Additionally there are investments in Primary Care [GPs and Pharmacies] to support smoking cessation and to deliver NHS Healthchecks to the eligible population. There are also small investments with VCSE providers to support health improvement in some groups with additional needs.

Current investment is approximately £1.33 million per year.

The costs to the NHS of unhealthy lifestyles is considerable and so the opportunities are not only in improving health but also in reducing health-care costs.



There is a wide range of evidence on the effectiveness and cost effectiveness of public health interventions. Of the public health interventions considered by NICE, 30 are cost saving, 141 were estimated to cost less than the £20,000 per quality-adjusted life year [QALY]⁷ threshold and of those 69 cost less than £1,000 per QALY.⁸ As an example, for every £1 invested in stop smoking services £2.37 will be saved on treating smoking-related diseases and reduced productivity and £12.87 would be saved overall if QALY gains are valued at £20,000 per QALY.⁹ Generally health improvement and promotion interventions have been found to have a median return on investment of 2.2 and a median cost-benefit ratio of 14.4.¹⁰ Analysis of the NHS Health Checks programme identifies a cost per QALY of £3,000. Healthcare system savings are identified through the prevention of heart attacks and strokes and the early detection and treatment of disease.

The investment made in our health improvement services is therefore impactful not only on individuals, but on our health and care system as a whole.

⁷ The quality-adjusted life year is a generic measure of disease burden, including both the quality and the quantity of life lived. It is used in economic evaluation to assess the value for money of medical interventions. One QALY equates to one year in perfect health.

⁸ Owen L et al : The cost-effectiveness of public health interventions. Journal of Public Health 2011 Vol 34 No1 pp 37-45

⁹ Pokhrel S, Owen L et al : Cost of disinvesting from stop smoking services : an economic evaluation based on the NICE Tobacco Return on Investment model. The Lancet 2016. Published online 25/11/16

¹⁰ Masters R et al. Return on investment of public health interventions: a systematic review. J Epidemiol Community Health 2017;71:827-834

Public Health Nursing (Children and Young People)

Children and young people's health, wellbeing and development can be affected in many ways and by many factors in the period between conception and adulthood. The Child Health Profile shows that the picture for child health in Plymouth is mixed.¹¹

Children in Plymouth are more likely to be exposed to smoking in pregnancy and thereafter, less likely to be breastfed or achieve a good level of development at school entry than England. About a fifth of families with children aged under 5 are considered vulnerable due to multiple risk factors including parental mental health and substance misuse, dependence on benefits, social isolation, violence in the home and parents or children identified with special needs. Our obesity figures are mixed compared to England, but with nearly 1 in 5 children being obese by year 6, it is a significant health problem.

An estimated 10% of children aged 5-16 years have a clinically diagnosable mental health disorder and about 1 in 10 young people will self-harm. About half of adults with life-time mental health illness (excluding dementia) present by age 14 years. We have seen the impacts of the COVID-19 pandemic on children and young people manifest in many ways, including increasing levels of self-reported anxiety and isolation, a drop in school readiness and as yet an uncertain picture in terms of risk taking behaviours around substance misuse [drugs and alcohol].

There is an abundance of evidence that now describes the impact that adverse childhood experiences [ACE's] can have on lifelong health and wellbeing outcomes. These experiences range from suffering verbal, mental, sexual and physical abuse, to being raised in a household where domestic violence, alcohol abuse, parental separation or drug abuse is present. Studies estimate that 47% of individuals (adults) experienced at least one ACE and 9% had experienced four or more.

The Public Health Nursing Service is commissioned by Public Health and provided by Livewell Southwest and consists of health visiting, family nurse partnership and school nursing. The service leads on the delivery of the Healthy Child Programme 0-19 to ensure a healthy start for every child.¹² They provide care across four levels covering universal through to targeted and underpinned by their role in safeguarding:

Health Visitors provide a range of services to support parents with pre-school aged children. Health visitors are trained nurses or midwives with specialist training in family and community health. They deliver 5 mandated checks (which means reach across the whole of the child population in the crucial first 1000 days) and deliver against 6 impact changes (transition to parenthood, maternal mental health, breastfeeding, healthy weight; managing minor illness / accidents; healthy 2 year old and school readiness. They also support families with additional needs through targeted interventions including support for breastfeeding and nutrition, maternal low mood, developmental problems and in partnership to families with higher levels of need including safeguarding.

The Family Nurse Partnership, is a specific intensive home visiting programme for first-time young mums and families because teenage parents and their children are at risk of a range of poor outcomes.

The School Nursing Service works to improve the health and wellbeing of school aged children and young people to reduce health inequalities and so also maximise learning and achievement. The six school aged years high impact areas are: resilience and emotional wellbeing; keeping safe: managing risk and reducing harm; improving lifestyles; maximising learning and achievement; supporting complex and additional health and wellbeing needs and seamless transition and preparation for adulthood. The school nursing service also delivers the mandated National Child Measurement Programme.

Current annual investment in these services is approximately £5.1 million.

¹¹ [Child and Maternal Health - Data - OHID \(phe.org.uk\)](https://www.phe.org.uk)

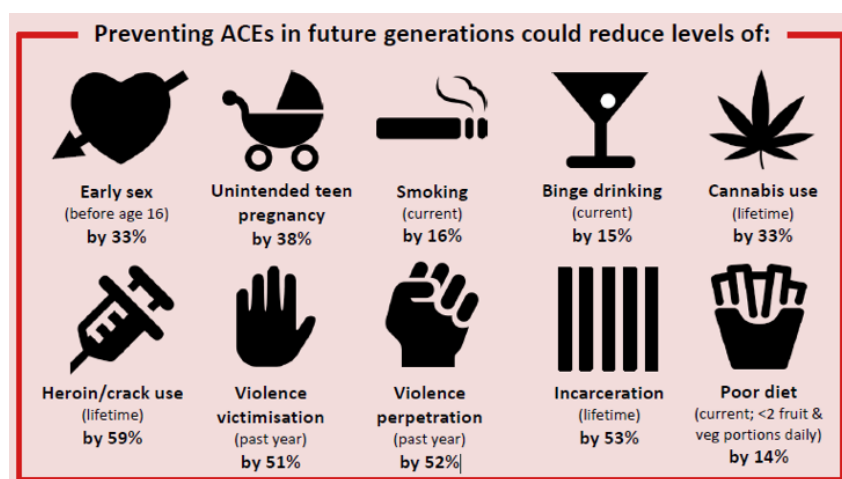
¹² <https://www.gov.uk/government/publications/healthy-child-programme-0-to-19-health-visitor-and-school-nurse-commissioning>

As with health improvement interventions for adults, interventions can be very cost effective to the health and care system as well as beneficial to individual children, young people and families. The evidence shows that intervening early in the life is cost-effective across the life course. Social Return on Investment studies show returns of between £1.37 and £9.20 for every £1 invested in the early years.¹³

Perinatal mental health problems are estimated to cost the UK £8.1bn each year and a single case of perinatal depression is estimated at around £74,000. The high prevalence of this condition means that, even when averaged over all births, the cost is still nearly £7,000 for every woman giving birth in any one year. Nearly three-quarters (72%) of this cost relates to adverse impacts on the child rather than the mother. The Health Visitor's universal mandated checks identify women who may be experiencing mental health issues, providing early intervention and also mitigating this effect for children¹⁴

Mental health excess costs are estimated at between £11,030 and £59,130 annually per child. The annual costs of hospital self-harm admissions in England & Wales was £40 million (2014/15). Public Health Nursing supports the development of protective factors including secure attachment, developing communication skills, supportive parenting, positive school climate and whole school approaches. Early intervention avoids children and young people falling into crisis and avoids expensive and long-term interventions as adults.¹⁵

Investment in Public Health Nursing is demonstrated to provide immediate and lifelong benefits.



Source: <http://www.cph.org.uk/wp-content/uploads/2014/05/ACE-infographics-BMC-Medicine-FINAL-3.pdf>

¹³ <https://www.gov.uk/government/publications/health-matters-giving-every-child-the-best-start-in-life/health-matters-giving-every-child-the-best-start-in-life>

¹⁴ http://eprints.lse.ac.uk/59885/1/_lse.ac.uk_storage_LIBRARY_Secondary_libfile_shared_repository_Content_Bauer%20C%20M_Bauer_Costs_perinatal_%20mental_2014_Bauer_Costs_perinatal_mental_2014_autho.pdf

¹⁵ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/575632/Mental_health_of_children_in_England.pdf