For the financial year 2015/16, please list methods for assessing the efficacy of the following non-statutory public health functions of the Director of Public Health, including cost-effectiveness, for each of:

Smoking and tobacco – Stop smoking services and interventions
Physical activity – adults
Obesity – adults
Substance misuse - Alcohol misuse

The evidence of efficacy and cost-effectiveness of public health interventions delivered in 2015/16 was assessed when planning services through a variety of sources in the public domain. These included National Institute for Health and Care Excellence (NICE) guidance, national guidance by Public Health England, and consideration of available scientific evidence. Please refer to www.nice.nhs.uk and www.gov.uk/phe for this information. Our services are all subject to regular reviews to ensure that they provide value for money, meet statutory requirements including compliance with guidance around the use of the public health grant and statutory requirements on local government to improve the health and wellbeing of local people. Decision-making around local priorities and use of the grant is also subject to local democratic processes.
The requested service specific information is provided below; we have assumed, since you requested information for FY 2015/16 in your first question, that the expenditure for 2015/16 was also required. Please note that these figures do not reflect current spend and therefore do not necessarily provide an up to date picture of current priorities, investment and performance.

Each of these should specify:

Smoking and tobacco – Stop smoking services and interventions – net current expenditure by the local authority on public health interventions whose intention is to reduce or stop smoking. As part of this, please list:
Net current expenditure on the intervention
Number of people who accessed the services
Number of people who reduced their smoking or stopped smoking as a result of the intervention

Smoking & Tobacco

Expenditure
The total spend on stop smoking services and interventions for financial year 2015/16 was £871,273.

Stop Smoking Service
The Stop Smoking Service includes a specialist team, provision in primary care and access to smoking cessation medications. The number of people who accessed the service in 2015/16 - 2231

The number of people who accessed the service and were stopped smoking at 4-weeks - 1013

Tobacco Control

NCC is one of twelve local authorities that commissions Fresh, a regional office for tobacco control. Fresh delivers a regional tobacco control program to advocate and implement evidence based tobacco control policy, develop the evidence base and local datasets, carry out research and surveys, deliver joint training and workforce development, social marketing and mass media campaigns. All of these activities are aimed at de-normalising tobacco in the North East and making smoking less desirable, less affordable, less accessible. It is not possible to identify how many people have stopped smoking, or not started smoking, as a result of this intervention as this approach is measured in alternative ways e.g. number of mass media campaigns, value of PR return on investment, the results of public perception campaigns. Smoking prevalence has declined in the North East however and at a faster rate than elsewhere.

Physical activity – adults – net current expenditure by the local authority on public health interventions whose intention is to lead to the taking up of sport on a regular basis. As part of this, please list:
Net current expenditure on the intervention
Number of people who accessed the services
Number of people who took up sport on a regular basis as a result of the intervention

Physical Activity - Adults

Expenditure

The total spend on interventions specifically to promote physical activity for financial year 2015/16 was £233,519.

Exercise on Referral Scheme

Approximately 2000 people were referred to the Northumberland Exercise Referral Scheme (ERS, currently provided by Active Northumberland and commissioned by Northumberland County Council) in 2015/16, of which around 80% commenced a programme. Around 50% of those who started completed a 24-week programme.

It is not known how many people took up sport on a regular basis as a result of the ERS. All participants are assessed on referral and at 3 and 6 months after referral. Various outcomes are measured at these assessments, including physical activity levels, blood pressure, heart rate, body mass index (BMI) and quality of life. Physical activity levels are also measured again at 12 months (6 months after leaving the scheme).

Physical activity levels are measured using the Godin Leisure Time Exercise (GLTE) questionnaire. This is a 3- item self-report measure that assesses the frequency of mild, moderate and vigorous exercise done for at least 20 minutes per session during a typical

week. People are generally considered active if they achieve a score of 24 or more. The median GLTE score of ERS participants at referral is 19. The group with the lowest levels of physical activity at referral are those referred for musculoskeletal conditions, with a median score of 13.5. The ERS increases physical activity levels across all health conditions. At the end of the 6 month scheme the median GLTE score increases to 31, showing that the ERS is effective in moving participants from being inactive to active. 6 months after leaving the scheme (12 months after referral) the median GLTE score drops down to 23, but this is still significantly higher than at the start (p<0.001).

Physical Activity

NCC also commissions physical activity promotion from our Integrated Wellbeing Service and in 2015/16 we commissioned physical activity coordination from Northumberland Sport. These programmes encourage sport and physical activity with partner organisations and communities, and can not collect client specific data regarding uptake of physical activity.

Obesity – adults – net current expenditure by the local authority on public health interventions whose intention is to lead to weight loss. As part of this, please list: Net current expenditure on the intervention Number of people who accessed the services
Number of people who have lost weight as a result of the intervention

Obesity - Adults

Expenditure

The total spend on obesity interventions for financial year 2015/16 was £266,630.

Adult Weight Management

The Food for Thought programme is a combined tier 2 and tier 3 weight management service provided by Northumbria Healthcare NHS Foundation Trust. In 2015/16, this service was commissioned by Northumberland County Council. In 2015/16, 494 people were invited to attend a programme of which 249 (50%) started a programme and 174 people completed a programme.

For the Food for Thought programme in 2015/16:

- *Mean weight loss was 3 kg.*
- *Mean BMI reduction was 1.3 kg/m2.*
- *67 (39%) achieved 5% or more weight loss.*
- *95 (56%) achieved 3% or more weight loss.*
- *Benefits were also shown in improved physical activity levels, quality of life, and depression scores.*

Health Trainer Service

Based on the 2015/16 Annual Report of the Northumberland Specialist Health Improvement Service, the Health Trainer Service (which contributes to the tier 2 weight management

provision) supported 362 adults and 61 children and young people in one-to-one support to make healthier lifestyle behaviour changes which may have included weight loss.
Data on outcomes from the Health Trainer Service are not available for 2015/16 but are being sought as part of a service review.

Substance misuse - Alcohol misuse – adults – net current expenditure by the local authority on public health interventions whose intention is to diminish alcohol consumption. As part of this, please list:
Net current expenditure on the intervention
Number of people who accessed the services
Number of people who have reduced their alcohol intake as a result of the intervention

Substance Misuse & Alcohol Misuse

Expenditure
The total spend on substance misuse services for financial year 2015/16 was £2,232,620. This includes the specialist service (which covers both drug and alcohol).

Specialist Substance Misuse Service
Public Health have moved away from commissioning specific and separate services for different substance misuse issues. We currently commission a specialist substance misuse service who work with individuals misusing a range of substances including opiates, non opiates and alcohol. Also, some of these substances are used in combination, therefore it is not possible to isolate the net expenditure of the service on alcohol specifically.

1004 people accessed the local alcohol treatment system during 2015-16 for support as a result of alcohol misuse only or in combination with other substances.

The service is performance managed on how many people successfully complete treatment and this ranges from between 30-40% depending on the substance combination with alcohol.
At the end of successfully completing treatment 49% were abstinent from alcohol and 21% had halved the numbers of days they drank per month.

Reviews of the evidence have concluded that pharmacological and psychosocial interventions delivered by specialist services are cost effective[1]. For example it has been estimated that for every 100 alcohol dependent people treated, 18 A&E visits and 22 hospital admissions could be prevented. Costs £40,000 Savings £60,000

Alcohol Prevention
Alcohol prevention is delivered as part of an Integrated Wellbeing Service which includes alcohol screening and brief intervention training and delivery, local campaigns, group and

[1] The Public Health Burden of Alcohol and the Effectiveness and Cost-Effectiveness of Alcohol Control Policies An evidence review, Public Health England 2016

one to one support. As the service aims to promote health and wellbeing rather than individual single lifestyle factors and people present with multiple health risk factors is not possible to quantify how much of the overall funding and activity relates to alcohol only.

We are able however to identify that part of this service delivers 6,000 alcohol screens and brief interventions per annum. It is not possible to demonstrate how many people have reduced their consumption as a result of this intervention due to the prohibitive costs of following up people and obtaining this information. However evidence reviews have concluded that alcohol screening brief interventions are effective in reducing hazardous and harmful consumption and are cost effective.

We also contribute £85,000 per annum to a regional alcohol program to advocate and implement evidence based alcohol policy, develop the evidence base and local datasets, carry out research and surveys, deliver joint training and workforce development, social marketing and mass media campaigns. All of these activities are aimed at de-normalising excessive alcohol consumption in the the North East. It is not possible to identify how many people have reduced their consumption as a result of this intervention as this approach is measured in alternative ways e.g. number of mass media campaigns, value of PR return on investment, the results of public perception campaigns.

Please also list the metric used to determine cost-effectiveness for each of the above four interventions. If a cost-effectiveness metric is not used, please list any alternative methods for each of the above four interventions.

Because cost-effectiveness does not permit comparisons of interventions within or between programmes where units of benefit differ, the Public Health team used multi-criteria decision analysis as a tool for prioritisation. This involved agreeing criteria on which to evaluate services/interventions, defining and weighting criteria, agreeing a scoring system for each criterion, evaluating each service/intervention against the criteria, and ranking the services. This was used to inform decision making. One important criterion was 'Benefits in relation to costs and harms' for which we used published evidence on cost-utility (incremental cost-effectiveness ratios, or cost per quality adjusted life year [QALY] gained, for example from NICE full guidance) or cost consequence, and local information on costs and benefits from annual reports, service reviews, performance frameworks and any other sources. Other criteria were:

- *Impact on health inequalities*
- *Number who benefit*
- *Whether national or local priority*
- *Impact on other parts of the system*
- *Whether health promotion and degree of prevention*
- *Strength of evidence*
- *Whether alternatives*
- *Total cost (affordability)*