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Protocol for evaluating the impact of interventions on the future Burden of Disease in Scotland

Wyper, G^{1*}, Grant, I², Fletcher, E³, Anand, N¹, Craig, N¹, McCartney, G¹, and Stockton, D¹

¹NHS Health Scotland

²Information and Services Division

³Information Services Division

Background

Recent evidence shows that after several decades of gains in life expectancy, Scotland has firmly entered a period of slow-down. Trend data show that the prevalence of morbidity continues to increase resulting in a frailer and more vulnerable population. Burden of Disease (BOD) studies measure the causes of health loss and their attribution to risk factor exposure and are essential to tackling current and future population needs for care workforce and services in an efficient manner.

interventions and policies with the most potential to reduce disease burdens and improve population health. Results will be disseminated through pre-print publications, scientific publications, grey literature, social media and conference or workshop presentations both nationally and internationally throughout the European Burden of Disease Network and associated events.

Aim

To assess the current and projected health loss in Scotland between 2019 and 2040, based on different scenarios for change in risk factors and the impact and cost-effectiveness of evidence-based interventions on those risk factors.

Methods and Analysis

Estimates of Years Lived with Disability (YLD), Years of Life Lost (YLL) and DALYs (Disability-adjusted Life Years) will be developed for 132 conditions for Scotland using routine data sources and linkage techniques. These estimates will be linked to risk factors using attributable fractions from the Global Burden of Disease (GBD) 2017 study. Scenario-modelling will be carried out based on three scenarios: continuation; worsening; and improvements of secular trends. Cost-effective interventions will be identified and their results will be assessed in the context of Scottish BOD estimates (current & projected) and evidence on the costs and potential impact of those interventions.

Dissemination

Findings from Scottish BOD estimates along with information on costs and effectiveness will help direct resources to

*Corresponding Author:

Email Address: gwyper@nhs.net (G Wyper)