Edinburgh Mental Wellbeing Scale (SWEMWBS). Secondary outcome measures were BMI, fruit and vegetable intake, physical activity, alcohol consumption, smoking and self-efficacy.

Results Clients reported positive experiences of engaging with the service and described making lifestyle changes, such as reducing portion sizes or trying new activities. Many would have liked a longer intervention (usually 8–12 weeks) and staff agreed that the duration was often insufficient for those with more complex physical, mental and/or social needs. Pre/post analysis of the intervention data revealed significant improvements across all outcome measures, with the largest changes observed in clients with the least positive results at baseline. These changes were largely maintained at both follow-up periods. Furthermore, reductions in the differences in EQ-5D and SWEMWBS scores between clients from the 30% most deprived communities and all other clients at the six-month follow-up stage implied that inequalities had narrowed over time. The value for money assessment indicated an estimated cost per quality-adjusted life year (QALY) of £3900 and a social return on investment of around £3.59 for every £1 spent on WFL.

Discussion An integrated health and wellbeing approach can be acceptable to members of the target communities, encourage them to make and maintain lifestyle changes, and potentially reduce health inequalities. The WFL service appeared to represent good value for money, although the reliance on self-report data and lack of a control group were limitations of the study design. Further research is needed to establish the effectiveness of this approach over other intervention models.

Life course later life

**OP08 EXPLAINING TRENDS IN CORONARY HEART DISEASE MORTALITY AND SOCIOECONOMIC INEQUALITIES IN DENMARK 1991–2007: IMPACTSEC MODEL ANALYSIS USING ROUTINE DATA**

1AM Joensen*, 2,3,4T Joergensen, 5S Lundbye-Christensen, 6MB Johansen, 7MG ü z m á n -Flaherty.

Background Coronary heart disease (CHD) mortality has declined substantially during recent decades but is still one of the leading causes of death, morbidity and healthcare costs in Denmark. Furthermore, socioeconomic inequalities persist. Quantifying the contributions of prevention and treatment to these recent declines might help to identify the most successful health policies, particularly for reducing inequalities.

Methods We used IMPACTSEC, a previously validated policy model, to apportion the recent decline in Danish CHD mortality to changes in major cardiovascular risk factors, and to increases in treatments in nine non-overlapping patient groups. Participants: All Danish adults aged 25–84 years, stratified by gender, age group and quintiles of financial income. Main outcome measure: Deaths prevented or postponed (DPP), stratified by socio-economic circumstance (SEC).

Results There were 11 110 fewer CHD deaths in 2007 than would be expected if the 1991 mortality rates had persisted. This reflected a dramatic 74% fall in CHD mortality rates (from 433 to 113 deaths per 100,000). Improved treatments accounted for approximately 24% (95% confidence interval=21%–28%). This contribution was higher in more affluent quintiles (approximately 26%) and least in the most deprived group (19%). The biggest contributions came from the treatment of congestive heart failure in the community (630 DPPs=5.7% of all DPPs) and in hospital (410 DPPs=3.7%).

Risk factor improvements accounted for approximately 40% (37%–44%) of the mortality fall. This contribution was higher in the central quintiles -approximately 51% (47%–58%) and least in the most deprived quintile – approximately 36% (29%–39%). The largest contribution came from population falls in cholesterol levels approximately 24% (22.7%–25.4%) of all DPPs; and decreases in smoking, some 10% (8.4%–12.2%).

Overall, the IMPACTSEC model could explain two thirds of the mortality fall. The 36% gap most likely reflects deficiencies in data, notably in population blood pressure and income.

Conclusion Denmark has benefited from one of biggest falls in CHD mortality in high income countries. The treatment uptake rate in Denmark was comparable with that in other countries and treatments accounted for approximately one third of the total mortality fall, much in other, comparable populations. The largest contributions came from population-wide, non-pharmacological reductions in major risk factors, notably cholesterol and smoking. Future strategies should therefore prioritise population-wide prevention policies.