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A Regional Collaboration of Health (ARCH): Using health survey and linked routine data to understand wellbeing

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Introduction

Monitoring social wellbeing and its relationship to health service utilisation by means of appropriate measurement tools can potentially provide a complementary view for influencing service development. Aspects of wellbeing have been collected in the Welsh Health Survey (WHS) while routine health data captures health service utilisation.

Objectives and Approach

WHS was used to link self-reported wellbeing to health outcomes, prior to linking to routinely collected data. Initially, a measure for personal wellbeing was developed using the four personal wellbeing questions defined by The Office of National Statistics (ONS), included in national surveys from 2011 onward. We conducted regression analysis to identify potential predictors of personal wellbeing scores our model included self-reported lifestyle behaviour, self-reported health, education, work, household and general demographics. Links to primary care, hospital and emergency department datasets are being developed to provide insight into the relationship between wellbeing, multi-morbidity and health service utilisation.

Results

Four wellbeing questions had similar scoring patterns across age groups which is different to most health indicators that tend to show a marked health decline with increasing age. There is a difference between mean wellbeing score for males and females. Our finding showed that self-reported of 'excellent' or 'very good' general health has the largest positive effect on wellbeing while positive viewpoint on self-health has the second largest effect on our model. In addition, being retired from a paid job, eating at least one or 5+ portion of fruit and vegetables and giving up smoking have positive impact on population wellbeing. In contrast, not being able to work, intermediate household occupancy, consuming alcohol in last 12-months, having long-standing illness, showed a

negative impact on wellbeing.

Conclusion/Implications

This project established robust methodology on utilizing survey and routine health data for monitoring and evaluation purposes. We also evaluated the linkability of survey data The latest release of National Survey for Wales (NSW) will cover a combination of self-reported health measures and aims for a higher linkage consent rate.