

Health Indicators in East Dunbartonshire Health and Social Care Partnership

Introduction: Under the Public Bodies (Scotland) Act, NHS Health Boards and Local Authorities will become jointly responsible for nationally agreed outcomes in health and social care. To carry out this role, a detailed understanding of the health of their populations will be required. Health may be defined as complete physical, mental and social health rather than merely the absence of disease. The task of needs assessment may be approached by developing health indicators that reflect physical, mental and social determinants of health. In this paper, a range of indicators will be described for the population of East Dunbartonshire Health and Social Care Partnership (HSCP).

Models of Health: Most of the indicators described in this paper are measures of population health. In older medical models of health, health was identified with absence of disease and emphasis was placed on the importance of health services in maintaining health. There was no place in this model for wider social influences, for example, economic determinants of health.

Medical models have largely been superseded by social models of health in which the importance of wider social and economic determinants is recognised, for example, the Evans and Stoddart model (Appendix 1). The indicators described in this paper may be related to the Evans and Stoddart model and this will be indicated in the text by a relevant domain number.

Demographic Indicators: Demographic indicators reflect the structure of the local population. These indicators are among the most fundamental measures because the patterns of morbidity in the population are determined in large part by demographic structure. Many demographic indicators also reflect to a greater or lesser extent the degree of social exclusion. Demographic indicators include the following:

- **Population of East Dunbartonshire:** *Rationale:* The size of the population is the most fundamental demographic indicator because demographic structure

largely determines local patterns of health and the local incidence of disease.

Definition: The indicator is defined as the total size of the population. *Value:* The estimated population of East Dunbartonshire HSCP in 2014 was one hundred and five thousand, eight hundred and sixty (105,860) persons. *Interpretation:* The population of East Dunbartonshire HSCP comprised about nine point three percent (9.3%) of the total population of NHS Greater Glasgow and Clyde (NHSGGC) Health Board.

- **Ethnicity:** *Rationale:* Ethnicity is an important aspect of population structure because ethnic groups may have different types of behaviour and risks of morbidity than the general population and may require different services. *Definition:* The indicator is defined as the proportion of the population made up by people belonging to an ethnic minority. *Value:* In the year 2011, about four point two percent (4.2%) of residents of East Dunbartonshire HSCP belonged to an ethnic minority, compared to about seven point three percent (7.2%) in the population of NHSGGC. *Interpretation:* The level of ethnic diversity in the population of East Dunbartonshire HSCP was less than in the overall population of NHSGGC.
- **Single-parent households:** *Rationale:* Single parenthood is a risk factor for several adverse outcomes in children related to mental health, behaviour and educational attainment. *Definition:* The indicator is defined as the proportion of households with dependent children in which there is only one parent, aged sixteen to seventy-four years (16-74 years). *Value:* In East Dunbartonshire HSCP, in 2011, six percent (6%) of households were single parent households. The overall rate in NHSGGC was eight point six percent (8.6%), and in Scotland, seven point two percent (7.2%). *Interpretation:* The level of single parenthood in East Dunbartonshire HSCP was similar to that in the overall population of NHSGGC.
- **Elderly people living alone:** *Rationale:* There is evidence that elderly persons who live alone are at risk of social isolation and exclusion from local social networks. *Definition:* The rate of one-person households is defined as the proportion of persons aged over sixty-four years who live alone. *Value:* In East Dunbartonshire HSCP, in 2011, twenty-nine point nine percent (29.9%) of people aged more than 64 years lived alone. The rate in NHSGGC was thirty-nine point

four percent (39.4%). *Interpretation:* This represents a high level of social isolation both in East Dunbartonshire and in NHSGGC.

- **Proficiency in English:** *Rationale:* Members of immigrant ethnic minorities who have poor proficiency in English are at risk of wider social isolation. *Definition:* This indicator is defined as the proportion of people aged sixteen years or more who spoke English either not well or not at all. *Value:* In East Dunbartonshire HSCP, in 2011, the proportion of people who did not speak English well or not at all was point six percent (0.6%), less than the rate in the population of NHSGGC overall, one point seven percent (1.7%). The rate in Scotland was one point three percent (1.3%). *Interpretation:* A smaller proportion of people resident in East Dunbartonshire HSCP have poor proficiency in English compared with the overall population of NHSGGC. This probably reflects, in part, the relatively small proportion of the population that belongs to an ethnic minority.
- **Unpaid care:** *Rationale:* Informal, or unpaid, care represents an important form of health care provision which constitutes care provided to dependent patients outside the framework of organised, professional care. Informal care is usually provided in the community by family members or friends. *Definition:* The indicator is defined as the proportion of people who provide care of this kind. *Value:* In East Dunbartonshire HSCP, in 2011, eight thousand eight hundred and seventy three persons of any age, or eight point four percent (8.4%) of the population, provided less than fifty hours per week of informal care. The overall rate in NHSGGC was six point nine percent (6.9%). An additional two thousand five hundred and one residents (2,501) in East Dunbartonshire Council, provided more than fifty hours per week of informal care. These accounted for two point four percent (2.4%) of the population. The overall rate in NHSGGC was two point eight percent (2.8%). *Interpretation:* The proportions of residents of East Dunbartonshire HSCP who provided unpaid care were similar those of the overall population of NHSGGC.

Social Capital (Indicators Related to Neighbourhood and Local Geography):

Social capital reflects the social cohesiveness of an area. It includes elements of civic engagement, trust in neighbours, social networks and support and perception of local area. Indicators of social capital include the following:

- **Rating of local neighbourhood (Domain 1):** *Rationale:* Perception of local neighbourhood of residence is an important measure of social capital. *Definition:* It is defined as the proportion of residents aged more than fifteen years who had a positive perception of the local neighbourhood, for example, perceiving it to be safe to walk there in the dark. *Value:* In East Dunbartonshire HSCP in 2014, seventy-six percent (76.0%) of the population had a positive perception of the area. The value of the indicator was sixty-six point seven percent (66.7%) in the population of NHSGGC Health Board overall. *Interpretation:* The proportion of residents with a positive view of the area was greater than that in residents of NHSGGC overall.
- **Social isolation (Domain 1):** *Rationale:* The inclusion of social well-being as well as physical and mental well-being in the definition of health underlines the need of most individuals for adequate levels of social interaction. Social isolation is more common in older people and is an important factor in undermining health status. *Definition:* It is defined as the proportion of residents aged more than sixty-four years who report social isolation from friends and family. *Value:* In East Dunbartonshire HSCP in 2014, eight point seven percent (8.7%) of the population reported social isolation. The value of the indicator was eight point four percent (8.4%) in the population of NHSGGC Health Board overall. *Interpretation:* The proportion of older residents of East Dunbartonshire HSCP who reported social isolation was similar to that in residents of NHSGGC overall.
- **Value as community member (Domain 1):** *Rationale:* Self-perceived value as a membership of the community is an important reflection of social capital. *Definition:* It is defined as self-reported feelings of self-worth in people aged more than sixty-four years. *Value:* In East Dunbartonshire HSCP in 2014, eighty percent (80%) of the population reported positive feelings. The value of the indicator was seventy-nine point seven percent (79.7%) in the population of NHSGGC Health Board overall. *Interpretation:* The proportion of older residents of East Dunbartonshire HSCP who felt valued as members of their communities was similar to that in residents of NHSGGC overall.

Economic indicators: These indicators reflect the economic status of the population. Economic indicators include the following:

- **Educational achievement (Domain 9):** *Rationale:* Educational attainment is an important determinant of health. *Definition:* The indicator is defined as the proportion of residents in an area aged more than fifteen years who had no educational qualifications. *Value:* In East Dunbartonshire HSCP in 2014, ten point seven percent (10.7%) of the population had no qualifications. In NHSGGC generally, seventeen point two percent (17.2%) of the population had no educational qualifications. *Interpretation:* The level of educational attainment in East Dunbartonshire HSCP was greater than that in the population of NHSGGC Health Board overall.
- **Unemployment (Domain 9):** *Rationale:* There is abundant evidence for a relationship between long-term unemployment and health. *Definition:* The indicator is defined as the proportion of residents aged sixteen to seventy-four years who described themselves as unemployed. *Value:* In East Dunbartonshire HSCP in 2011, four point one percent (4.1%) of the population was unemployed. In NHSGGC overall, the rate of unemployment was six point seven percent (6.7%), and in Scotland, five point six percent (5.6%). *Interpretation:* The level of unemployment overall was similar in East Dunbartonshire HSCP and in NHSGGC and Scotland overall.
- **Fuel poverty (Domain 9):** *Rationale:* Adequate supplies of fuel are a prerequisite for a safe indoors environment. Fuel poverty is a major risk factor for hypothermia, especially in elderly people. *Definition:* Fuel poverty is usually defined as the need for ten percent or more of total household income to be spent to adequately heat the home. In this paper, it will be defined as the proportion of respondents who reported ever having had difficulty in meeting fuel bills. *Value:* In East Dunbartonshire HSCP in 2011, thirteen point seven percent (13.7%) of the population reported difficulty in sometimes meeting fuel costs. In NHSGGC, the value of the indicator was nineteen point two percent (19.2%). *Interpretation:* The level of fuel poverty in East Dunbartonshire HSCP was less than in NHSGGC overall.
- **Health Indicators:** General health status of populations may be measured by a number of objective and subjective indicators. These include the Standardised

Mortality Ratio (SMR) for all causes, the life expectancy and self-reported health status.

- **All cause SMR (Domain 5):** *Rationale:* The overall level of mortality for all causes is accepted as a broad indicator of health in a population. *Definition:* Mortality may be expressed as the Standardised Mortality Ratio (SMR). This is the ratio of actual mortality and the mortality that would be expected in the area if a standard pattern of mortality by age-group and sex were assumed. *Value:* The SMR in East Dunbartonshire HSCP was seventy-one point two percent (71.2%) assuming a NHSGGC standard. *Interpretation:* In East Dunbartonshire HSCP, the level of mortality was about twenty-nine percent less than in the population of NHSGGC taking account of the different demography of the two populations. This suggests that the health of the local population is better than that in NHSGGC.
- **Life expectancy (Domain 5):** *Rationale:* Life expectancy is a summary measure of mortality that may be used as an indicator of overall health status in a population. *Definition:* Life expectancy is defined as the average number of years that a member of a population would be expected to live given a particular pattern of mortality. *Value:* The life expectancy for residents of East Dunbartonshire HSCP was eighty point five (80.5) years in males and seventy-four point nine (74.9) years in females. The life expectancy values in NHSGGC overall were seventy-four point nine (74.9) years in males and eighty (80) years in females and in Scotland, seventy-six point nine (76.9) years in males and eighty-one (81) years in females. *Interpretation:* Life expectancy in East Dunbartonshire was greater than in NHSGGC and Scotland.
- **Self-reported health (Domain 5):** *Rationale:* Self-reported health status is a commonly-used subjective measure in population health surveys. The measure encompasses physical, emotional and social aspects of health and may be considered to complement objective measures, for example, life-expectancy. There is some evidence that self-reported health status accurately predicts other more objective measures, for example, mortality rate. *Definition:* The indicator is defined as the proportion of respondents who reported their health status to be “bad” or “very bad.” *Value:* Overall, four point one percent (4.1%) of respondents in East Dunbartonshire reported that their health status was “bad” or “very bad.” In the population of NHSGGC, the overall prevalence of “bad” or “very bad” self-

reported health status was seven point seven percent (7.7%). *Interpretation:* This indicates that the overall health status of the population was less than that in NHSGGC overall.

- **Excess winter mortality (Domain 5):** *Rationale:* Mortality is greater in the winter than in the non-winter months especially in the older population. *Definition:* The indicator is defined as the Excess Winter Mortality index, an expression of winter, compared to non-winter, mortality in the population aged more than sixty-four years. *Value:* In East Dunbartonshire HSCP in the year 2013-2014, the index was 110.8%. This shows that the level of mortality was about twelve percent greater than would have been expected according to the mortality rates in the rest of the year. In NHSGGC, the value of the index in the same period was 110.1%. *Interpretation:* The excess mortality in winter was approximately equal to that in NHSGGC overall.

Disease Specific Health Indicators: Disease-specific health indicators are more specific indicators that are related to the most important health problems in the population. These include vascular disease and certain forms of cancer.

- **Lung cancer (Domain 6):** *Rationale:* Lung cancer is the most common form of cancer in western populations. Most cases are attributable to smoking but other risk factors include air pollution, asbestos, passive smoking and radon. *Definition:* The indicator is defined as the Standardised Incidence ratio (SIR) percent. This is the ratio of the actual number of cases in a population and the number that would be expected if the incidence rates by age-group and sex in a standard population (NHSGGC) applied in East Dunbartonshire. *Value:* The SIR in East Dunbartonshire HSCP for lung cancer was sixty eight point one percent (68.1%) and this was significant. *Interpretation:* The incidence of lung cancer in East Dunbartonshire HSCP was more than thirty percent less than would have been expected assuming the pattern of incidence in the population of NHSGGC overall.
- **Colorectal cancer (Domain 6):** *Rationale:* Colorectal cancer is a common form of cancer in western populations. *Definition:* The indicator is defined as the Standardised Incidence ratio (SIR) percent, calculated as described in the previous paragraph. *Value:* The SIR in East Dunbartonshire HSCP for colorectal cancer was ninety-one point two percent (91.2%) but this was not significant.

Interpretation: The incidence of colorectal cancer in East Dunbartonshire HSCP was approximately the same as in the population of NHSGGC overall.

- **Breast cancer (Domain 6):** *Rationale:* Breast cancer is a common form of cancer in western populations. *Definition:* The indicator is defined as the Standardised Incidence ratio (SIR) percent, calculated as described above. *Value:* The SIR in East Dunbartonshire HSCP for breast cancer was one hundred and one percent (101%) but this was not significant. *Interpretation:* The incidence of breast cancer in East Dunbartonshire HSCP did not differ significantly from that in the population of NHSGGC.
- **Ischaemic heart disease (Domain 6):** *Rationale:* Ischaemic heart disease is one of the most important causes of morbidity in western populations. *Definition:* The mortality is expressed as the Standardised Mortality Ratio (SMR) for ischaemic heart disease in East Dunbartonshire. *Value:* The SMR in East Dunbartonshire HSCP was sixty-two percent (62%) assuming a NHSGGC standard and this was significant. *Interpretation:* In East Dunbartonshire HSCP, the incidence of ischaemic heart disease was almost forty percent less than in the population of NHSGGC overall.
- **Stroke (Domain 6):** *Rationale:* Stroke is a major cause of morbidity in the elderly population. *Definition:* The indicator is defined as the Standardised Mortality Ratio (SMR) for stroke. *Value:* The SMR in East Dunbartonshire HSCP was sixty-four point six percent (64.6%) assuming a NHSGGC standard and this was significant. *Interpretation:* The incidence of stroke in East Dunbartonshire HSCP was about thirty-six percent less than in the population of NHSGGC overall.
- **Fractured neck of femur (Domain 6):** *Rationale:* Fractured neck of femur is a major cause of morbidity in the elderly population. *Definition:* The indicator is defined as the crude rate of admission for fractured neck of femur in people aged more than 64 years. *Value:* The rate in East Dunbartonshire HSCP was 5.8 per 1,000. The rate in NHSGGC was 7.2 per 1,000. *Interpretation:* The crude incidence of fractured neck of femur in East Dunbartonshire HSCP was less than that in the population of NHSGGC.
- **Falls (Domain 6):** *Rationale:* Falls are also a major cause of morbidity in the elderly population. *Definition:* The indicator is defined as the crude rate of admissions for fractured neck of femur in people aged more than 64 years. *Value:*

The rate in East Dunbartonshire HSCP was 25.7 per 1,000. The incidence of falls in NHSGGC was 36.6 per 1,000. *Interpretation:* The incidence of falls in East Dunbartonshire HSCP was less than that in the population of NHSGGC.

Indicators related to disability: Disability may be defined as physical or mental impairments that have substantial and long-term negative effects on the ability to carry out do normal activities of daily living. Disability may result from a wide range of pathological processes in the neurological, musculoskeletal, cardiovascular and other systems, for example, stroke, arthritis and ischaemic heart disease. Disability may affect particular functions, for example, visual or auditory function or affect physical function more generally. Disability of any kind impairs personal health status and affects ability to participate in social and other activities. The prevalence of disability is a direct measure of need for services of different kinds.

- **Visual impairment (Domain 5):** *Rationale:* Visual impairment is an important cause of disability. Causes of impaired vision include age-related macular degeneration, cataract, glaucoma and diabetes. *Definition:* The indicator is defined as the prevalence of total or partial loss of sight in the population aged more than sixty four years. *Value:* The prevalence of visual impairment in this population of East Dunbartonshire HSCP was seven point three percent (7.3%), and in NHSGGC, nine point six percent (9.6%). In Scotland, the prevalence was nine percent (9.0%). *Interpretation:* The level of visual impairment in East Dunbartonshire HSCP was less than in NHSGGC and in Scotland.
- **Auditory impairment (Domain 5):** *Rationale:* Auditory impairment is an important cause of disability which may cause social isolation. The causes of impaired hearing include disease of the inner ear and of the sensorineural system. *Definition:* The indicator is defined as the prevalence of hearing loss in the population aged more than sixty four years. *Value:* In East Dunbartonshire HSCP, the prevalence was twenty-three point five percent (23.5%), approximately the same level of auditory impairment in NHSGGC, twenty-six point three percent (26.3%) and in Scotland, twenty-five point four (25.4%). *Interpretation:* The level of auditory impairment in East Dunbartonshire HSCP was approximately the same as in NHSGGC.

- Physical disability (Domain 5):** *Rationale:* Physical disability is an important cause of impaired general health. Common causes of physical disability include stroke, Parkinson's disease, arthritis, ischaemic heart disease and head injury. *Definition:* The indicator is defined as the prevalence of physical disability in the population aged more than sixty four years. *Value:* The prevalence of physical disability in the population of East Dunbartonshire HSCP was seventeen percent (17.0%) and in NHSGGC, twenty-two point seven percent (22.7%) and in Scotland, twenty point six (20.6%). *Interpretation:* The level of physical impairment in East Dunbartonshire HSCP was approximately the same as in NHSGGC.

Indicators Related to Child and Maternal Health: A range of indicators reflect health of mothers and children.

- Infant Mortality Rate (Domain 5):** *Rationale:* As well as reflecting health in young children, the Infant Mortality Rate is considered to be a proxy measure of health in the entire population. According to one author, the causes of infant mortality are "strongly correlated to those structural factors, like economic development, general living conditions, social wellbeing and the quality of the environment, that affect the health of entire populations. *Definition:* The Infant Mortality Rate is the mortality rate in children aged less than one year. *Value:* The level of infant mortality in East Dunbartonshire in the year 2013 was one point zero eight per thousand (1.08 per 1,000). The rate in NHSGGC was three point two per thousand (3.2 per 1,000). *Interpretation:* The level of infant mortality in East Dunbartonshire HSCP was less than that in NHSGGC.
- Low birthweight (Domain 4):** *Rationale:* Birthweight is an important prognostic factor for neonatal outcomes, including neonatal mortality. *Definition:* The indicator is defined as the proportion of live singleton births with birthweight of less than two point five kilograms (2.5 kg). *Value:* In East Dunbartonshire HSCP, the proportion of low birth-weight babies was four point two percent (4.2%), less than the overall value for NHSGGC, five point nine percent (5.9%). *Interpretation:* The low birth weight rate in East Dunbartonshire HSCP was less than that in NHSGGC and in Scotland.

- **Smoking in pregnancy (Domain 4):** *Rationale:* Maternal smoking is an important risk factor for a range of adverse foetal outcomes in pregnancy. *Definition:* The rate is defined as the proportion of mothers known to have smoked during pregnancy. *Value:* In East Dunbartonshire HSCP, the rate of smoking in pregnancy in year October 2012 to September 2013 was six point six percent (6.6%). The overall value for NHSGGC was thirteen point three percent (13.3%). *Interpretation:* The prevalence of maternal smoking in East Dunbartonshire HSCP was less than in NHSGGC.
- **Breast-feeding rate (Domain 4):** *Rationale:* Breast-feeding is associated with a range of beneficial outcomes in infants. *Definition:* The indicator is defined as the proportion of mothers breast-feeding at about six to eight weeks after birth. *Value:* In East Dunbartonshire HSCP, the breast-feeding rate in year April 2013 to March 2014 was thirty-five point four percent (35.4%). The rate in NHSGGC was twenty-four point five percent (24.5%). *Interpretation:* The prevalence of breast-feeding was greater in East Dunbartonshire HSCP than in NHSGGC.
- **Dental health (Domain 5):** *Rationale:* Dental health is an important aspect of overall health in children. *Definition:* The indicator is defined as the proportion of children in classes Primary one (P1) or Primary seven (P7) who had no evidence of dental decay on examination. *Value:* In East Dunbartonshire HSCP, in P7 children, seventy seven percent (77.0%) of children had no evidence of dental decay on examination in 2012. In NHSGGC, sixty seven point eight percent (67.8%), and in Scotland, seventy-two point eight percent (72.8%) had no evidence of dental decay. In Primary 1 children, seventy eight point nine percent (78.9%) of children had no evidence of dental decay on examination in 2012. In NHSGGC, sixty three point two percent (63.2%), and in Scotland, sixty seven percent (67%) had no evidence of dental decay. *Interpretation:* The levels of dental health in Primary one and seven children were better in East Dunbartonshire than in NHSGGC.
- **Unintentional injuries (Domain 5):** *Rationale:* Unintentional injury is an important cause of morbidity in children. *Definition:* The indicator is defined as the rate of admission to hospital (per thousand) in children aged less than fifteen years because of an unintentional injury. *Value:* In East Dunbartonshire HSCP, the incidence of unintentional injury in the year 2013/14 was seven point seven

per thousand (7.7 per 1,000). The rate in NHSGGC was nine point five per thousand (9.5 per 1,000). *Interpretation:* The risk of unintentional injury in East Dunbartonshire HSCP was less than in NHSGGC overall.

- **Maternal obesity (Domain 5):** *Rationale:* Maternal obesity is a recognised risk factor for a range of adverse maternal and foetal outcomes of pregnancy. *Definition:* The indicator is defined as the proportion of females with Body Mass Index (BMI) in excess of 30 kg/metre squared attending for the first antenatal appointment. *Value:* In East Dunbartonshire HSCP in year 2013/2014, nineteen percent (19%) of pregnant females were obese. In NHSGGC, twenty-two point two percent (22.2%) of pregnant females were obese. *Interpretation:* The prevalence of maternal obesity in East Dunbartonshire was less than that in NHSGGC.
- **Childhood obesity (Domain 5):** *Rationale:* Childhood obesity is a recognised risk factor for Type two diabetes mellitus, asthma, obstructive sleep apnoea, eating disorders and psychological disturbances. The importance of childhood obesity as a risk factor for cardiovascular disease in adulthood is uncertain. *Definition:* The indicator is defined as the proportion of children in Primary one who had a Body Mass Index (BMI) in excess of 30 kg/metre squared. *Value:* In East Dunbartonshire HSCP in year 2013/2014, three percent (3%) of primary one children were obese. In NHSGGC, five point eight percent (5.8%) were obese. *Interpretation:* The prevalence of childhood obesity in East Dunbartonshire was less than that in NHSGGC.

Indicators Related to Health in Teenagers: A range of indicators reflect health of teenage children.

- **Drug use in teenagers (Domain 5):** *Rationale:* Use of illicit drugs is a well-recognised health issue in teenage children. Associations have been documented between drug use and several adverse health outcomes including road traffic accidents, suicide and mental health problems. *Definition:* The indicator is defined as the proportion of children aged thirteen to fifteen years who reported illicit use of drugs in the last month. *Value:* In East Dunbartonshire HSCP, the prevalence of recent drug misuse was four point five percent (4.5%). The prevalence in teenagers in NHSGGC was six point one percent (6.1%).

Interpretation: The level of drug abuse in teenagers in East Dunbartonshire HSCP was less than that in NHSGGC.

- **Educational attainment (Domain 4):** *Rationale:* There is evidence that level of educational attainment is positively related to positive self-reported health status. *Definition:* The indicator is defined as the proportion of children leaving school each year without any formal educational qualifications. *Value:* In East Dunbartonshire HSCP in 2012/2013, one point six percent (1.6%). of school leavers had no qualifications. The rate in NHSGGC was one point six percent (1.6%). *Interpretation:* The level of educational attainment in school-leavers in East Dunbartonshire HSCP was equal to that in NHSGGC.
- **Aspirations for future (Domain 4):** *Rationale:* This is a measure of the expectations and ambitions of young people for their future lives. *Definition:* It may be measured in different ways but the indicator that has been agreed in this exercise is defined as the proportion of school-leavers who go on to have some form of higher education. *Value:* In East Dunbartonshire HSCP in 2012/2013, fifty-seven point four percent (57.4%) of school leavers went on to higher education. The rate in NHSGGC was forty percent (40.0%). *Interpretation:* The level of positive aspiration in school-leavers in East Dunbartonshire HSCP was greater than in NHSGGC.
- **Participation in anti-social behaviour (Domain 4):** *Rationale:* There is evidence that participation on antisocial behaviour in young people is a risk factor for some adverse health outcomes, including injury and psychological disorders. *Definition:* The indicator may be defined as the proportion of young people aged eleven to eighteen years who reported having committed any of certain behaviours in the last year. *Value:* Information about this indicator was not available for East Dunbartonshire HSCP in 2013.
- **Teenage pregnancy rate (Domain 4):** *Rationale:* Most teenage pregnancies are unintended and reflect lack of knowledge about methods of preventing pregnancy. Teenage pregnancy is usually associated with negative outcomes for both the mother and also for the child in cases in which the pregnancy is carried to term. *Definition:* The indicator may be defined as the rate of pregnancy in girls aged thirteen to nineteen years. *Value:* In the year October 2012 to September 2013 in East Dunbartonshire HSCP, the teenage pregnancy rate was twenty point three

per thousand (20.3 per 1,000) girls aged fifteen to nineteen years. The rate in the population of NHSGGC overall was thirty-seven point nine per thousand (37.9 per 1,000). The rate in Scotland in year January 2012 to December 2012 was 41.5 per 1,000. *Interpretation:* The teenage pregnancy rate in East Dunbartonshire HSCP was less than that in the population of NHSGGC overall.

Risk factors for health: The indicators described in this section reflect behaviours that are important determinants of health in the population.

- **Smoking (Domain 4):** *Rationale:* Tobacco smoking is recognised to be the single most important modifiable risk factor for ill-health in the population. Smoking is a major risk factor for degenerative arterial disease of all kinds, chronic pulmonary disease, lung cancer and a range of other neoplastic and non-neoplastic diseases. *Definition:* The indicator is defined as the proportion of people in the population who smoke on at least some days. *Value:* In East Dunbartonshire HSCP in 2011, the prevalence rate of smoking was fourteen point eight percent (14.8%) in residents aged more than fifteen years. The overall value for NHSGGC was twenty-four point nine percent (24.9%). *Interpretation:* The prevalence of smoking in East Dunbartonshire HSCP was less than in the population of NHSGGC overall. This means that the incidence of morbidity for which smoking is a risk factor would also be expected to be less in East Dunbartonshire HSCP than in the population of NHSGGC overall.
- **Cervical screening (Domain 4):** *Rationale:* Programmes of cervical screening are important in the secondary prevention of cervical cancer. *Definition:* The indicator is defined as the proportion of females aged twenty-one to sixty years who have undergone screening. *Value:* At September of 2014, eighty point six percent (80.6%) of eligible females resident in East Dunbartonshire HSCP had undergone screening. In the population of NHSGGC, the proportion of females who had undergone screening was seventy-three percent (73.0%). *Interpretation:* The level of acceptance of cervical screening in East Dunbartonshire HSCP was greater than in the population of NHSGGC overall.
- **Fruit and vegetable consumption (Domain 4):** *Rationale:* The importance of daily consumption of fruit and vegetables for health is recognised in the recommended daily intake of five portions of these foods. *Definition:* The

indicator is defined as the proportion of the population aged over sixteen years who report consumption of fruit and vegetables at this level. *Value:* In East Dunbartonshire HSCP in 2014, the proportion was fifty-one point four percent (51.4%). The value in NHSGGC was thirty-nine point five percent (39.5%). *Interpretation:* The level of consumption of fresh fruit and vegetables in East Dunbartonshire HSCP was greater than that in the population of NHSGGC overall.

- **Alcohol (Domain 4):** *Rationale:* Excessive alcohol consumption is a major risk factor for mental and physical ill-health. This is reflected in the daily or weekly limits that have been set for consumption, twenty-one units weekly for males and fourteen units for females. *Definition:* The indicator is defined as the proportion of those who reported taking alcohol in excess of these limits. *Value:* In East Dunbartonshire HSCP in 2014, the proportion was twelve point six percent (12.6%). The overall value for NHSGGC was eighteen point nine percent (18.9%). *Interpretation:* The level of alcohol abuse was less in East Dunbartonshire HSCP than in the population of NHSGGC overall.
- **Physical activity (Domain 4):** *Rationale:* Regular physical activity has been shown to be protective for cardiovascular disease and to have a beneficial effect on other cardiovascular risk factors. *Definition:* The indicator is defined as the proportion of adults aged fifteen years or more who reported taking the recommended levels of physical exercise each week. *Value:* In East Dunbartonshire HSCP, forty-two (42%) percent of adults reported adequate levels of exercise. The proportion in NHSGGC was forty-five point nine percent (45.9%). *Interpretation:* The overall level of participation in physical exercise in East Dunbartonshire HSCP was similar to that in NHSGGC.
- **Passive smoking (Domain 1):** *Rationale:* Passive smoking is recognised as an important environmental risk factor for lung cancer and vascular disease. *Definition:* The indicator is defined as the proportion of people aged more than fifteen years who report spending any time in environments in which they are exposed to other people's tobacco smoke. *Value:* In East Dunbartonshire HSCP in year 2014, twenty-five point three percent (25.3%) of people reported exposure to other people's tobacco smoke. In NHSGGC, thirty-four point eight percent

(34.8%) were exposed. *Interpretation:* The prevalence of passive smoking was less in East Dunbartonshire than in NHSGGC as a whole.

- **Obesity (Domain 4):** *Rationale:* Obesity is a major risk factor for a range of diseases, including cardiovascular disease, hypertension, type two diabetes mellitus, some forms of cancer and osteoarthritis. *Definition:* The indicator is defined as the proportion of people aged more than fifteen years with a Body Mass Index of more than thirty based on self-reported weight and height. *Value:* In East Dunbartonshire HSCP in year 2014, fifteen percent (15%) of respondents reported obesity. In NHSGGC, sixteen point four percent (16.4%) reported obesity. *Interpretation:* The prevalence of obesity was similar in East Dunbartonshire to that in NHSGGC as a whole.
- **Alcohol-related admissions to hospital (Domain 4):** *Rationale:* Alcohol is a major cause of morbidity in the population. The number of alcohol-related admissions to hospital may be considered a measure of the extent of alcohol-related morbidity. *Definition:* The indicator is defined as the crude rate of emergency alcohol-related admission per thousand population aged more than fifteen years. *Value:* In the year July 2013 to June 2014, the rate of admission in East Dunbartonshire HSCP was four point seven per thousand population (4.7 per 100,000). The rate in the population of NHSGGC was ten point four admissions per thousand population (10.4 per 100,000). *Interpretation:* The incidence of admission to hospital because of alcohol abuse was less in East Dunbartonshire to that in NHSGGC as a whole.

Indicators Related to Mental Health: A range of indicators reflect mental health in the population.

- **Self-reported depression (Domain 5):** *Rationale:* Depression is one of the most common and debilitating forms of mental illness. This measure gives a measure of prevalence of depression in the community. *Definition:* The indicator is defined as the proportion of respondents aged over fifteen years who reported treatment for depression in 2011. *Value:* In East Dunbartonshire HSCP, the proportion who reported depression was twenty-two point five percent (22.5%). The proportion in NHSGGC was fourteen point nine percent (14.9%).

Interpretation: The prevalence of clinical depression was greater in East Dunbartonshire HSCP than in NHSGGC overall.

- **Admission rate for depression (Domain 5):** *Rationale:* Depression accounts for a large number of admissions to, and occupied bed-days in, secondary care. *Definition:* The indicator is defined as the admission rate to an in-patient psychiatric facility because of depression. *Value:* In East Dunbartonshire HSCP, the admission rate in 2013/2014 was point four four per thousand (0.44 per 1,000). The overall value for NHSGGC was point five six per thousand (0.56 per 1,000). *Interpretation:* The admission rate in East Dunbartonshire HSCP related to depressive illness was less than in NHSGGC overall.
- **Suicide rate in young adults (Domain 5):** *Rationale:* Suicide may be associated with mental illness or with psychological distress and is a major public health problem in young adults. Suicide rates have been shown to be related to unemployment rate. *Definition:* The indicator is defined as the crude suicide rate in three years in young adults aged sixteen to twenty-nine (16-29) years. *Value:* The three year incidence of suicide in residents of East Dunbartonshire HSCP was eighteen point four per hundred thousand (18.4 per 100,000). In NHSGGC, the rate was thirty-five point one per hundred thousand (35.1/100,000). *Interpretation:* The suicide rate in young adults in East Dunbartonshire HSCP was less than in NHSGGC overall.
- **Suicide rate in middle-aged adults (Domain 5):** *Rationale:* Suicide is a marker of psychological distress and is a major public health problem in middle-aged adults. *Definition:* The indicator is defined as the crude suicide rate in adults aged thirty to sixty-four (30-64) years. *Value:* The three year incidence of suicide in residents of East Dunbartonshire HSCP was forty point three per hundred thousand (40.3 per 100,000). The overall value for NHSGGC was fifty-four point four per hundred thousand (54.4 per 100,000). *Interpretation:* The suicide rate in middle-aged adults in East Dunbartonshire HSCP was less than in NHSGGC overall.
- **Self-reported mental health status (Domain 5):** *Rationale:* Good mental health status is an essential component of good health overall. Self-reported mental health status is regarded as a valid measure of mental health. *Definition:* The indicator is defined as the proportion of respondents aged fifteen years or more

who reported their mental health status as “good.” *Value:* In East Dunbartonshire HSCP, ninety point one percent (90.1%) of respondents reported good mental health status. The overall value for NHSGGC was eighty-six point three percent (86.3%). *Interpretation:* The prevalence of self-reported good mental health was similar in East Dunbartonshire HSCP to that in NHSGGC overall.

Indicators Related to Access to Services: A range of indicators reflect ease of access to health services:

- **Access to primary care (Domain 7):** *Rationale:* The importance of access to primary care is that primary care physicians are regarded as gate-keepers to other health services in the UK. *Definition:* The indicator is defined as proportion of respondents who reported difficulty in obtaining an appointment in primary care. *Value:* In East Dunbartonshire HSCP, the proportion who reported difficulty was seventeen point four percent (17.4%). The proportion in NHSGGC was nineteen percent (19%). *Interpretation:* The extent of difficulty in access to primary care was approximately the same in East Dunbartonshire HSCP as in NHSGGC overall.
- **Access to dental care (Domain 7):** *Rationale:* There is evidence that dental health is important for general physical health as well as for oral hygiene *per se*. *Definition:* The indicator is defined as the proportion of respondents who reported difficulty in obtaining an appointment with a dentist. *Value:* In East Dunbartonshire HSCP, the proportion who reported difficulty was eight point six percent (6.3%). The proportion in NHSGGC was six point nine percent (6.9%). *Interpretation:* The extent of difficulty in access to dental care was approximately the same in East Dunbartonshire HSCP as in NHSGGC overall.
- **Primary hip arthroplasty (Domain 7):** *Rationale:* Primary arthroplasty is an effective surgical treatment of arthritis of the hip. Most operations are carried out in patients with degenerative osteoarthritis. This indicator is a measure of the supply of primary hip arthroplasty in a population. *Definition:* The indicator is defined as the standardised arthroplasty ratio. *Value:* In East Dunbartonshire HSCP, the standardised ratio was one hundred and nine percent (109.0%) and the result was not significant. *Interpretation:* The levels of supply were similar in East Dunbartonshire HSCP and NHSGGC overall.

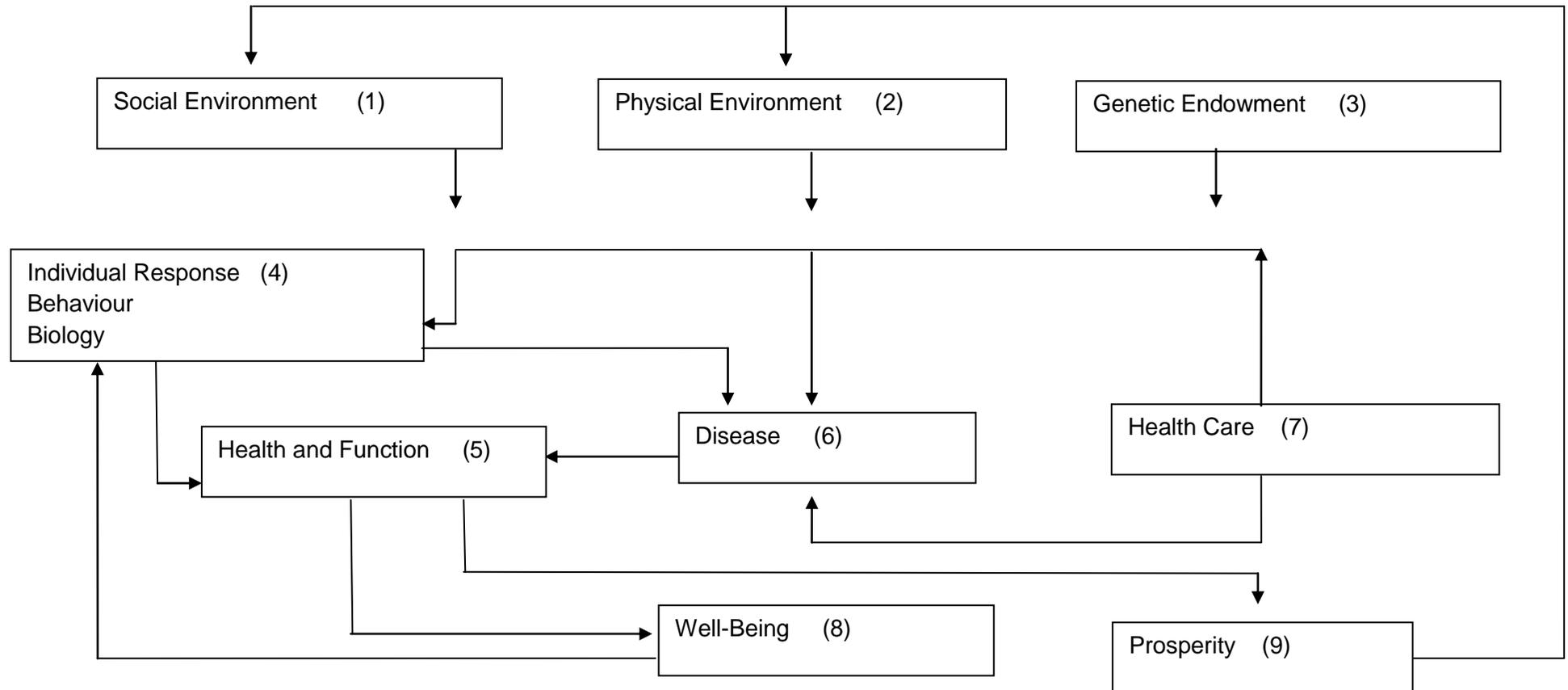
- **Primary knee arthroplasty (Domain 7):** *Rationale:* Primary arthroplasty is an effective surgical treatment of arthritis of the knee. Most operations are carried out in patients with degenerative osteoarthritis. This indicator is a measure of the supply of primary knee arthroplasty in a population. *Definition:* The indicator is defined as the standardised arthroplasty ratio. *Value:* In East Dunbartonshire HSCP, the standardised ratio was one hundred and seven point two percent (107.2%) and the result was not significant. *Interpretation:* The levels of supply were similar in East Dunbartonshire HSCP and NHSGGC overall.
- **Coronary artery revascularisation (Domain 7):** *Rationale:* Revascularisation of the coronary arteries is an effective surgical treatment of ischaemic heart disease, one of the main public health issues in western populations. This indicator is a measure of the population supply of coronary artery revascularisation. *Definition:* The indicator is defined as the standardised revascularisation ratio. *Value:* In East Dunbartonshire HSCP, the standardised ratio was ninety-seven point seven percent (97.7%) and the result was not significant. *Interpretation:* The levels of supply were similar in East Dunbartonshire HSCP and NHSGGC overall.
- **Cataract surgery (Domain 7):** *Rationale:* Cataract surgery is an effective form of management of cataract of the visual lens. This indicator is a measure of the population supply of cataract surgery. *Definition:* The indicator is defined as the standardised cataract ratio. *Value:* In East Dunbartonshire HSCP, the standardised ratio was ninety-seven point six percent (97.6%) and the result was not significant. *Interpretation:* The levels of supply were similar in East Dunbartonshire HSCP and NHSGGC overall.

Summary: The health status indicators in East Dunbartonshire can be summarised as follows:

- **Demography:** A smaller proportion of the population in East Dunbartonshire HSCP belonged to an ethnic minority than in NHSGGC. The proportion of residents of East Dunbartonshire HSCP also reported less proficiency in speaking English was also smaller than in NHSGGC.
- **Social capital:** The level of social capital in East Dunbartonshire HSCP was broadly similar to, or greater than, that in NHSGGC.

- **Economic indicators:** Most indicators showed a more favourable economic environment in East Dunbartonshire HSCP than in NHSGGC.
- **General Health:** The more objective measures of general health in the population of East Dunbartonshire showed a greater level of general population health than in NHSGGC. The other indicators showed a level similar to that of
- **Disease-specific health:** The indicators of disease-specific health status showed that the incidences of the most important causes of mortality, including ischaemic heart disease, stroke and lung cancer, were less in East Dunbartonshire HSCP than in NHSGGC.
- **Disability:** The overall levels of disability were broadly similar in East Dunbartonshire HSCP and NHSGGC.
- **Child and Maternal Health:** Almost all of the indicators of child and maternal health showed more favourable levels of health in East Dunbartonshire than in NHSGGC.
- **Health in Teenagers:** The indicators of health in teenagers showed more favourable levels of health in East Dunbartonshire than in NHSGGC or levels comparable to those in NHSGGC.
- **Risk factors:** Most of the indicators of population risk for health were more favourable in East Dunbartonshire HSCP were adverse, compared with the levels in NHSGGC. These included major risk factors for vascular disease and many cancers, including smoking, alcohol and obesity. One indicator, for the level of physical activity in the population, showed an adverse value compared with NHSGGC.
- **Mental health:** The indicators for suicide and positive mental health were favourable compared to NHSGGC. The prevalence of self-reported depression was greater in East Dunbartonshire HSCP than in NHSGGC.
- **Access to services:** The values of the indicators for most services and interventions were similar to those for NHSGGC.

Appendix 1: Evans & Stoddart Field Model of Health



Appendix 2

* Calculation is: (Numerator/Denominator) x 100

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	East Dun	NHSGGC	Scotland
1	Population of East Dunbartonshire	Population (number)	MYE, 2014	Not applicable	Not applicable	Not applicable	105,860	1,137,930	
2	Ethnicity	Number of residents belonging to an ethnic minority	MYE, 2014	Total number of residents	MYE, 2014	Crude rate Expressed percent population	4.2%	7.3%	
3	Proportion of single parent households	Number of households with single parent aged 16-74 years and dependent children	Census (2011)	Total number of households	Census (2011)	Crude rate Expressed percent population	6%	8.6%	7.2%

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	East Dun	NHSGGC	Scotland
4	Proportion of elderly people living alone	Number of respondents (aged more than 64 years) living alone	Census (2011)	Total number of adults (aged more than 64 years) in area	Census (2011)	Number Rate expressed as percentage	29.9%	39.4%	
5	Proficiency in English	Number of adults aged 16 years or more unable to speak English well or not at all	Census (2011)	Total number of adults in area	Census (2011)	Crude rate Expressed percent population	0.6%	1.7%	1.3%
6	Informal care	Number of persons providing informal care (50 hours per week or less)	Census (2011)	Total number of people in area	Census (2011)	Crude rate Expressed percent population Rate for HSCP and NHSGGC	8.4%	6.9%	6.8%
7	Rating of local neighbourhood	Number aged >15 years providing positive perception of neighbourhood	Health and Wellbeing Survey (2015)	Total population of area aged >15 years	Health and Wellbeing Survey (2015)	Crude rate Expressed percent population	76%	66.7%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	East Dun	NHSGGC	Scotland
8	Social isolation	Number of respondents (aged more than 64 years) reporting isolation from family and friends	Health and Wellbeing Survey (2015)	Total number of respondents (aged more than 64 years) in area	Health and Wellbeing Survey (2015)	Rate expressed as percentage	8.7%	8.4%	
9	Self assessed value as community member	Number of respondents (aged more than 64 years) reporting feelings of value	Health and Wellbeing Survey (2015)	Total number of respondents (aged more than 64 years) in area	Health and Wellbeing Survey (2015)	Rate expressed as percentage	80%	79.7%	
10	Educational achievement	Number of respondents aged more than 15 years who hold no educational qualifications	Health and Wellbeing Survey (2015)	Total number of respondents aged more than 15 years	Health and Wellbeing Survey (2015)	Crude rate expressed percent population	10.7%	17.2%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	East Dun	NHSGGC	Scotland
11	Unemployment	Number adults (aged 16-74) long-term unemployed	Census (2011)	Total number of adults in area (aged 16-74)	Census (2011)	Crude rate expressed percent population	4.1%	6.7%	5.6%
12	Fuel poverty	Number of respondents (aged over 15 years or more reporting difficulty in meeting fuel costs)	Health and Wellbeing Survey (2015)	Total number of respondents households in area	Health and Wellbeing Survey (2015)	Rate expressed as percentage	13.7%	19.2%	
13	Standardised Mortality Ratio (SMR) for all causes	Number of observed deaths in area from any cause	GRO	Expected number of deaths in area from any cause. calculated from age-sex specific rates in standard populations	GRO	Standardised ratio as percentage	71.2%	100%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	East Dun	NHSGGC	Scotland
14	Life expectancy	Life expectancies in residents of East Dunbartonshire	GRO	Not relevant	Not applicable	Number of expected life years	Male 80.5 years Female 83.9 years	Male 74.9 years Female 80.0 years	Male 76.9 years Female 81.0 years
15	Self-reported health status	Numbers of respondents aged more than 15 years reporting 'bad' or 'very bad' health	Health and Wellbeing Survey (2015)	Total numbers of respondents in area	Health and Wellbeing Survey (2015)	Number Rate expressed percent	4.1%	7.7%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	East Dun	NHSGGC	Scotland
16	Excess winter mortality	Average mortality by month (all causes) in people aged more than 64 years in winter months (December to March) in year 2013-2014	GRO	Average mortality by month (all causes) in non-winter months (December to March) in year 2013-2014	GRO	Excess Winter Mortality Index (Ratio %) Ratio of monthly mortality in winter months to that in non-winter	110.8%	110.1%	
17	Lung cancer	Incident cases in most recent available year	Cancer registry data	Population of area	Mid Year Estimate	Standardised ratio as percentage Indirect standardisation for age and sex	68.1%	100%	
18	Colorectal cancer	Incident cases in most recent available year	Cancer registry data	Population of area	Mid Year Estimate	Standardised ratio as percentage Indirect standardisation for age and sex	91.2%	100%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	East Dun	NHSGGC	Scotland
19	Breast cancer	Incident cases in most recent available year	Cancer registry data	Population of area	Mid Year Estimate	Standardised ratio as percentage Indirect standardisation for age and sex	101.0%	100%	
20	Ischaemic heart disease	Number of observed deaths in area from ischaemic heart disease in 2013/2014	GRO	Expected number of deaths in area from ischaemic heart disease calculated from age-sex specific rates in standard population.	GRO	Standardised Mortality Ratio (SMR) Indirect standardisation for age and sex ICD 10 codes: 20-125; in any position.	62%	100%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	East Dun	NHSGGC	Scotland
21	Stroke	Number of observed deaths in area from stroke in 2013/2014	GRO	Expected number of deaths in area from stroke calculated from age-sex specific rates in standard population.	GRO	Standardised Mortality Ratio (SMR) Indirect standardisation for age and sex ICD 10 codes: in any position.	64.6%	100%	
22	Fractured neck femur	Number of emergency admissions for fractured neck of femur	SMR 01	Population aged more than 64 years	Mid Year Estimate	Crude rate per 1,000 ICD 10 codes: S720-S722. Code in any position in any position in first episode of a spell	5.8 per 1,000	7.2 per 1,000	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	East Dun	NHSGGC	Scotland
23	Falls	Number of emergency admissions for falls	SMR 01	Population aged more than 64 years	Mid Year Estimate	Crude rate per 1,000 ICD 10 codes: W00-W19 in any position in first episode of a spell	25.7 per 1,000	36.6 per 1,000	
24	Visual impairment	Number of people with visual deficit Aged more than 64 years	Census 2011	Population of area Aged more than 64 years	Mid Year Estimate	Prevalence expressed per cent	7.3%	9.6%	9.0%
25	Auditory impairment	Number of people with hearing deficit Aged more than 64 years	Census 2011	Population of area Aged more than 64 years	Mid Year Estimate	Prevalence expressed per cent	23.5%	26.3%	25.4%

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	East Dun	NHSGGC	Scotland
26	Self-reported physical disability	Numbers of people with physical disability Aged more than 64 years	Census (2011)	Total numbers of respondents in area Aged more than 64 years	Census (2011)	Prevalence expressed per cent	17%	22.7%	20.6%
27	Infant mortality	Amount of mortality in children aged less than one year in year 2013	GRO	Number of live births in population in year 2013	Mid Year Estimate	Rate expressed per 1,000 live births in same period	1.08 per 1,000	3.18 per 1,000	
28	Prevalence Low Birth Weight	Number of live births with weight less than 2,500 g	SMR 02	Total number of live births (July 2013 – June 2014)	SMR 02	Crude rate (expressed percent)	4.2%	5.9%	
29	Prevalence of maternal smoking	Numbers of women who smoke during pregnancy	PNBS	Total numbers of pregnancies (Oct 2013 – Sep 2014)	PNBS	Prevalence rate expressed percent	6.6%	13.3%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	East Dun	NHSGGC	Scotland
30	Breast feeding rates at 6-8 weeks	Number of mothers recorded as breast-feeding (July 13-June 14)	SIRS	Total number of mothers in cohort feeding (July 2013 – June 2014)	SIRS	Prevalence rate expressed percent	35.4%	24.5%	
31	Dental health	Number of children without evidence of dental decay in primary one or primary seven children	National Dental Inspection Programme (NDIP)	Total numbers of primary one or seven children in sample P1 2012 P7 2013	National Dental Inspection Programme (NDIP)	Prevalence rate expressed percent	77.0% (P7) 78.9% (P1)	67.8% (P7) 63.2% (P1)	72.8% (P7) 67.0% (P1)

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	East Dun	NHSGGC	Scotland
32	Unintentional injury	Number of admissions for unintentional injuries in age-group 0-14 years in year 2013/2014.	SMR 01 data	Population of area aged 0-14 years.	Mid Year Estimate in year 2013/2014.	Rates expressed per 1,000 in age-groups: 0-14 years. Codes: Cause of injury codes V01-X59 Year 2013-2014	7.7 per 1,000	9.5 per 1,000	
33	Maternal obesity at booking	Numbers of ladies with BMI > 30 at booking (2013-2014)	PNBS	Total numbers of pregnancies (2013-2014)	PNBS	Prevalence rate expressed percent	19%	22.2%	
34	Childhood overweight	Numbers of P1 children with BMI > 30	CHSP System	Total numbers P1 children	CHSP System	Prevalence rate expressed percent	3%	5.8%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	East Dun	NHSGGC	Scotland
35	Use of recreational drugs	Numbers of respondents aged 13 to 15 years reporting use of recreational drugs in last year in 2013	SALSUS	Total numbers of respondents aged 13 to 15 years in area in 2013	SALSUS	Rate expressed as percentage	4.5%	6.1%	5.8%
36	Educational attainment	Number of school-leavers with no formal educational qualifications in 2012/2013	Health and Wellbeing Survey (2015)	Total number of school-leavers in 2012/2013	Health and Wellbeing Survey (2015)	Rate expressed as percentage	Information not available	1.6%	1.5%
37	Aspirations for future	Number of school-leavers who go on to have higher education	Schools survey	Total number of school-leavers	Schools survey	Rate expressed as percentage	57.4%	40%	36.3%

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	East Dun	NHSGGC	Scotland
38	Participation in antisocial behaviour	Numbers of respondents less than 16 years reporting antisocial behaviour	Schools survey	Total numbers of respondents aged less than 16 years in area	Schools survey	Rate expressed as percentage	Information not available	None available for NHSGGC	
39	Teenage pregnancy rate	Number of pregnancies (live births, stillbirths, and therapeutic abortions) per 1,000 females aged 13-19 years.	SMR 01 and SMR 02	Number of girls in population aged 13-19 years	Mid-year Estimate (NRS)	Crude rates per 1,000 population in year Oct 2012-Sep 2013 in HSCP and NHSGGC.	20.3 per 1,000	37.9 per 1,000	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	East Dun	NHSGGC	Scotland
40	Smoking	Numbers of respondents aged more than 16 years who report current smoking	Health and Wellbeing Survey (2015)	Total numbers of respondents aged more than 16 years	Health and Wellbeing Survey (2015)	Crude prevalence rate expressed as percentage	14.8%	24.9%	
41	Cervical screening uptake	Ladies aged 20-60 years who have had cervical smear within last five years	SIRS system	All ladies aged 20-60 years resident in area	SIRS system	Crude rate expressed percent	80.6%	73%	
42	Prevalence of fruit and vegetable consumption	Numbers of respondents aged more than 15 years reporting adequate levels of consumption	Health and Wellbeing Survey (2015)	Total numbers of respondents aged more than 15 years in area	Health and Wellbeing Survey (2015)	Crude prevalence rate expressed as percentage	51.4%	39.5%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	East Dun	NHSGGC	Scotland
43	Prevalence of hazardous alcohol consumption	Number of respondents aged more than 15 years reporting hazardous levels of consumption	Health and Wellbeing Survey (2015)	Total number of respondents population aged more than 15 years in area	Health and Wellbeing Survey (2015)	Crude prevalence rate expressed as percentage	12.6%	18.9%	
44	Physical activity	Number of respondents (aged more than 15 years) reporting taking 30 minutes or more of moderate activity five or more times per week	Health and Wellbeing Survey (2015)	Total number of respondents (aged more than 15 years) in area	Health and Wellbeing Survey (2015)	Crude prevalence rate expressed as percentage	42%	45.9%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	East Dun	NHSGGC	Scotland
45	Passive smoking	Numbers of respondents (aged more than 15 years) who reported exposure to second-hand smoke	Health and Wellbeing Survey (2015)	Total number of respondents (aged more than 15 years) in area	Health and Wellbeing Survey (2015)	Crude prevalence rate expressed as percentage	25.3%	34.8%	
46	Obesity	Numbers of respondents aged more than 15 years reporting obesity (BMI>30	Health and Wellbeing Survey (2015)	Total number of respondents in area aged over 15 years	Health and Wellbeing Survey (2015)	Crude prevalence rate expressed as percentage	15%	16.4%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	East Dun	NHSGGC	Scotland
47	Alcohol-related admissions	Admissions related to alcohol in population aged more than 15 years (July 2013 – June 2014)	SMR 01 data	Population of area aged more than 15 years	Mid Year Estimate	Crude emergency admission rate expressed per 1,000 ICD 10 codes: F10; K70; K292; E244; G312; G621; G721; I426. Code in any position	4.7 per 1,000	10.4 per 1,000	
48	Depression 1	Numbers of respondents aged more than 15 years reporting depression	Health and Wellbeing Survey (2015)	Total number of respondents in area aged over 15 years	Health and Wellbeing Survey (2015)	Crude prevalence rate expressed percent	22.5%	14.9%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	East Dun	NHSGGC	Scotland
49	Depression 2	Admissions for depression in persons aged more than 15 years in year 2013-2014	SMR 04 data	Population of area aged more than 15 years	Mid Year Estimate	Crude admission rate expressed per 1,000 ICD 10 codes: F204; F32; F33; F341; F313; F314; F315. Code in any position	0.44 per 1,000	0.56 per 1,000	
50	Suicide rate	Mortality for suicide in three years in population aged 16-29 years, 2011-2013.	GRO data	Population of area aged 16-29 years	Mid Year Estimate	Rate expressed per 100,000 in population aged 16-29 years ICD 10 codes: X60-X84; Code in position 2-6.	18.4 per 100,000	35.1 per 100,000	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	East Dun	NHSGGC	Scotland
51	Suicide rate	Mortality for suicide in three years in population aged 30-64 years, 2011-2013.	GRO data	Population of area aged 30-64 years	Mid Year Estimate	Rate expressed per 100,000 in population aged 30-64 years ICD 10 codes: X60-X84; Code in position 2-6.	40.3 per 100,000	54.4 per 100,000	
52	Mental health and wellbeing	Numbers of respondents aged over 15 years reporting 'good' mental health	Health and Wellbeing Survey (2015)	Total number of respondents in area aged over 15 years	Health and Wellbeing Survey (2015)	Crude prevalence rate expressed percent	90.1%	86.3%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	East Dun	NHSGGC	Scotland
53	Access to primary care	Number of respondents aged more than 15 years reporting difficulty in gaining access	Health and Wellbeing Survey (2015)	Number of respondents aged more than 15 years	Health and Wellbeing Survey (2015)	Rate expressed percent	17.4%	19.0%	
54	Access to dental care	Number of persons aged more than 15 years reporting difficulty in gaining access	Health and Wellbeing Survey (2015)	Number of respondents aged more than 15 years	Health and Wellbeing Survey (2015)	Rate expressed per 1,000	6.3%	6.9%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	East Dun	NHSGGC	Scotland
55	Primary hip arthroplasty	Number of primary hip arthroplasties carried out in most recent year	SMR 01	Expected number of arthroplasties in area calculated from age, sex and deprivation specific rates in population of NHSGGC (standard population)	SMR 01	Standardised ratio (for age, sex and deprivation) OPCS codes: W371; W378; W379; W381; W388; W389; W391; W398; W399; W461; W468; W469; W471; W478; W479; W481; W488; W489 Operation code in any position. Exclude records coded for fractured neck of femur: ICD 10 Codes: S720; S721; S722;	109%	100%	-

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	East Dun	NHSGGC	Scotland
56	Primary knee arthroplasty	Number of primary knee arthroplasties carried out in most recent year	SMR 01	Expected number of arthroplasties in area calculated from age, sex and deprivation specific rates in population of NHSGGC (standard population)	SMR 01	Standardised ratio (for age, sex and quintile) OPCS codes: W401; W408; W409; W411; W418; W419; W421; W428; W429	107.2%	100%	-

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	East Dun	NHSGGC	Scotland
57	Coronary artery revascularisation	Number of revascularisations carried out in most recent year in area	SMR 01	Expected number of operations in area calculated from age, sex and deprivation specific rates in population of NHSGGC (standard population)	SMR 01	Standardised ratio (for age, sex and quintile) OPCS codes: K40; K41; K42; K43; K44; K45; K46; K49; K75; K501	97.7%	100%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	East Dun	NHSGGC	Scotland
58	Cataract surgery	Number of cataract operations carried out in most recent year in area	SMR 01	Expected number of operations in area calculated from age, sex and deprivation specific rates in population of NHSGGC (standard population)	SMR 01	Standardised ratio (for age, sex and deprivation) OPCS codes: C71-C77.	97.6%	100%	