

Health Indicators in Renfrewshire 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 Renfrewshire Health and Social Care Partnership (HSCP)

Models of Health: Most of the indicators described in this paper are measures of population health. Health may be defined a state of complete physical, mental and social well-being. 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Medical models have largely been superseded by social models of health in which the importance of wider social and economic determinants is recognised, for example, the Evans and Stoddart model (Appendix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 community indicators described in this paper may be related to the Evans and Stoddart model and this will be indicated 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 risk of social exclusion. Demographic indicators include the following:

- **Population of Renfrewshire:** *Rationale:* The size of the population is the most fundamental demographic indicator. Demographic structure determines the local incidence of disease. *Definition:* The indicator is defined as the total size of the population. *Value:* The estimated population of Renfrewshire HSCP in 2013 was one hundred and seventy three thousand and nine hundred (173,900) persons. *Interpretation:* The population of Renfrewshire HSCP comprised fifteen point three percent (15.3%) of the total population on NHS Greater Glasgow and Clyde (NHSGGC) Health Board.
- **Ethnicity:** *Rationale:* Ethnicity is an important aspect of population structure because ethnic groups may have different risks of morbidity than the general population and 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 two point eight percent (2.8%) of residents of Renfrewshire HSCP were members of an ethnic minority. The proportion in the population of NHSGGC was about seven point six percent (7.6%). *Interpretation:* A much smaller proportion of the population of Renfrewshire HSCP belonged to an ethnic minority that of the overall population of NHSGGC.
- **Single-parent households:** *Rationale:* Exposure to single parenthood is a risk factor for several adverse outcomes related to mental health, behaviour and educational attainment. *Definition:* The rate of single-parent households is defined as the proportion of households with dependent children in an area in which there is only one parent, aged sixteen to seventy-four years (16-74 years). *Value:* In Renfrewshire HSCP, in 2011, there were six thousand five hundred and forty-one (6,541), a rate of five percent (5%) of the total number. The overall rate in NHSGGC was five point three percent (5.3%). *Interpretation:* The level of single parenthood in Renfrewshire HSCP was similar to that in the overall population of NHSGGC.
- **One-person households:** *Rationale:* There is evidence that persons who live alone are at risk of social isolation and exclusion from local social networks. This is a particular risk for older people. *Definition:* The rate of one-person households is defined as the proportion of households with only one resident. *Value:* In Renfrewshire HSCP, in 2011, there were thirty-one thousand two hundred and

twenty-six (31,226), single-person households, a rate of eighteen point one percent (18.1%) of the total number. The rate in NHSGGC was eighteen point seven percent (18.7%). *Interpretation:* The level of one-person households in Renfrewshire HSCP was similar to that in the overall population of 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 Renfrewshire HSCP, in 2011, the proportion of people who did not speak English well or not at all was point nine percent (0.9%). This was approximately half 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:* The level of poor proficiency in English in Renfrewshire HSCP is relatively low compared with the overall population of NHSGGC.
- **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 Renfrewshire HSCP, in 2011, twelve thousand and eight hundred and sixty-eight (12,868) persons provided less than fifty hours per week of informal care. These accounted for seven point four percent (7.4%) of the population. The overall rate in NHSGGC was six point seven percent (6.7%). In addition, four thousand five hundred and seventy-six residents (4,576) provided more than fifty hours per week of informal care. These accounted for two point six percent (2.6%) of the population. The overall rate in NHSGGC was two point eight percent (2.8%). *Interpretation:* The proportions of residents of Renfrewshire 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 Renfrewshire HSCP in 2014, sixty-six percent (66.0%) 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 of Renfrewshire HSCP with positive perceptions of their neighbourhood was similar to that in 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 Renfrewshire HSCP in 2014, eight point two percent (8.2%) 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 Renfrewshire 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 Renfrewshire HSCP in 2014, seventy-nine point eight percent (79.8%) 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 Renfrewshire 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 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 Renfrewshire HSCP in 2014, eleven point eight percent (11.8%) 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 Renfrewshire HSCP was greater than in the population 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 in an area aged sixteen to seventy-four years who described themselves as unemployed. *Value:* In Renfrewshire HSCP in 2011, six percent (6.0%) of the population was unemployed. The rate was fourteen point nine percent (14.9%) in the population aged sixteen to twenty-four years and five point one percent (5.1%) in that aged twenty-five to sixty four years. 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 Renfrewshire 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 report difficulty in meeting fuel bills. *Value:* In Renfrewshire HSCP in 2014, twenty point one percent (20.1%) 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:* Fuel poverty was less common in Renfrewshire HSCP 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 Renfrewshire HSCP was ninety-five point six percent (95.6%) assuming a NHSGGC standard and one hundred and six point seven percent (106.7%) assuming a Scottish standard. *Interpretation:* In Renfrewshire HSCP, the level of mortality was about four percent (4%) less than that in the population of NHSGGC and about seven percent greater than that in the Scottish population, and these differences could not be accounted for by demographic factors. This indicates that the health of the local population is marginally better than that in NHSGGC but marginally less than that in Scotland.
- **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 Renfrewshire HSCP was seventy-five point seven (75.7) years in males and eighty point six (80.6) 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 (74.9) years in males and eighty-one (81) years in females. *Interpretation:* Life expectancy in Renfrewshire was approximately equal to that in NHSGGC and Scotland. *Deprivation:* Life expectancy in Renfrewshire in males was 75.1 years in the most affluent population and 65.9 years in the most

deprived population. The corresponding data for females was 79.9 years in the most affluent population and 74.5 years in the most deprived population.

- 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, six point three percent (6.3%) of respondents in Renfrewshire 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:* The overall health status of the population was similar to 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 Renfrewshire HSCP in the year 2013-2014, the index was 106.4%. This shows that the level of mortality was six 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 level of overall health status of the population was better than 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 Renfrewshire. *Value:* The SIR in Renfrewshire HSCP for lung cancer was eighty-five point six percent (85.6%) and this was significant.

Interpretation: The incidence of lung cancer in Renfrewshire HSCP was about fourteen percent less common than in 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 above. *Value:* The SIR in Renfrewshire HSCP for colorectal cancer was about ninety-five percent (95.0%) and this was not significant. *Interpretation:* The incidence of colorectal cancer in Renfrewshire HSCP did not differ significantly from that in the population of NHSGGC.
- **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 Renfrewshire HSCP for breast cancer was about one hundred and twenty-eight percent (128.0%) and was significant. *Interpretation:* The incidence of breast cancer in Renfrewshire HSCP was about twenty-eight percent greater than 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 Renfrewshire. *Value:* The SMR in Renfrewshire HSCP was ninety-nine point five percent (99.5%) assuming a NHSGGC standard and one hundred and five point three percent (105.3%) assuming a Scottish standard. Neither of these was statistically significant. *Interpretation:* In Renfrewshire HSCP, the incidence of ischaemic heart disease did not differ from that in the population of NHSGGC nor of Scotland.
- **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 Renfrewshire HSCP was ninety-nine point two percent (99.2%) assuming a NHSGGC standard and one hundred and eight point two percent (108.2%) assuming a Scottish standard. Neither of these

was statistically significant. *Interpretation:* The incidence of stroke in Renfrewshire HSCP was not significantly different from that in the population of NHSGGC.

- **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 Standardised Admission Ratio (SAR) for fractured neck of femur. *Value:* The Standardised ratio in Renfrewshire HSCP was ninety-two point six percent (92.6%) and this result was not significant. *Interpretation:* The incidence of fractured neck of femur in Renfrewshire HSCP was not significantly different from 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 Standardised Admission Ratio (SAR) for falls. *Value:* The Standardised ratio in Renfrewshire HSCP was ninety-five point eight percent (95.8%) and this result was not significant. *Interpretation:* The incidence of falls in Renfrewshire HSCP was not significantly different from that in the population of NHSGGC.

Indicators related to disability: Disability may be defined as a physical or mental impairment that has a substantial and long-term negative effect on the ability to do normal daily activities. 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 Renfrewshire HSCP was nine point two percent (9.2%), 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 Renfrewshire HSCP was approximately the same as 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 Renfrewshire HSCP, the prevalence was twenty-six point one percent (26.1%), 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 Renfrewshire 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 Renfrewshire HSCP was twenty-one point two percent (21.2%) 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 Renfrewshire 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 in children aged less than one year per thousand live births. *Value:* The Infant Mortality Rate for Renfrewshire in 2013 was two point two per thousand (2.2 per 1,000). The rate in NHSGGC was three point two

per thousand (3.2 per 1,000). *Interpretation:* The Infant Mortality Rate in Renfrewshire HSCP was less than the value 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 Renfrewshire HSCP, the proportion of low birth-weight babies was six point eight percent (6.8%). The overall value for NHSGGC was five point nine percent (5.9%), and in Scotland, six percent (6%). *Interpretation:* The low birth weight rate in Renfrewshire HSCP was greater than the values in NHSGGC and in Scotland. *Interpretation:* The rate increased from five point nine percent (5.9%) in the most affluent population to seven percent (7%) in the most deprived population.
- **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 Renfrewshire HSCP, the rate of smoking in pregnancy in year October 2012 to September 2013 was thirteen point nine percent (13.9%). The overall value for NHSGGC was thirteen point three percent (13.3%). *Interpretation:* There was little difference in the maternal smoking indicator between Renfrewshire HSCP and 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 Renfrewshire HSCP, the breast-feeding rate in year April 2013 to March 2014 was nineteen point one percent (19.1%). The overall value for NHSGGC was twenty three point three percent (23.3%), and for Scotland, twenty seven point one percent (27.1%). *Deprivation:* The breast-feeding rate in the most deprived population of Renfrewshire HSCP was fifteen point one percent (15.1%). *Interpretation:* There was little difference in the prevalence of breast-feeding between Renfrewshire HSCP and 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 Renfrewshire HSCP, seventy-five point four percent (75.4%) of Primary seven children had no evidence of dental decay on examination in 2013. In NHSGGC, sixty-seven point eight percent (67.8%) and in Scotland, seventy-two point eight percent (72.8%) of P7 pupils had no evidence of dental decay. In Primary 1 children, sixty-two point one percent (62.1%) 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:* There was evidence for better levels of dental health in Primary seven children than in NHSGGC but little difference between Primary one children in Renfrewshire HSCP and 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 Renfrewshire HSCP, the incidence of unintentional injury in the year 2013/14 was eight point nine per thousand (8.9 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 Renfrewshire HSCP was less than that 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 Renfrewshire HSCP in year 2013/2014, twenty-five percent (25%) of females were obese. In NHSGGC, twenty-two point two percent (22.2%) of females were obese. *Interpretation:* The prevalence of maternal obesity in Renfrewshire was greater than the average 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

Renfrewshire HSCP in year 2013/2014, five point four percent (5.4%) of primary one children were obese. In NHSGGC, five point eight percent (5.8%) were obese. *Interpretation:* The prevalence of childhood obesity in Renfrewshire was less than the average 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 Renfrewshire 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 Renfrewshire 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 Renfrewshire HSCP in 2012/2013, two point one percent (2.1%) 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 Renfrewshire HSCP was similar 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 Renfrewshire HSCP in 2012/2013, thirty-nine point eight percent (39.8%) 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 Renfrewshire HSCP was similar to that 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:* In Renfrewshire HSCP in 2013, thirty-one percent (31.0%) of young people reported having committed anti-social behaviours. The rate in NHSGGC was forty percent (40.0%). *Interpretation:* The prevalence of antisocial behaviour in young people in Renfrewshire HSCP is less than the rate in the population of NHSGGC overall.
- **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 Renfrewshire HSCP, the teenage pregnancy rate was thirty-nine point two per thousand (39.2 per 1,000) girls aged fifteen to nineteen years. This rate was slightly in excess of the rate in the population of NHSGGC overall, 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 Renfrewshire HSCP is rate was slightly in excess of the rate in the population of NHSGGC overall, but less than the most recent available rate in Scotland. *Trend in Scotland:* The teenage pregnancy rate in Scotland declined from 54.7 per 1,000 1994 to 41.5 per 1,000 in 2012.

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 Renfrewshire HSCP in 2014, the prevalence rate of smoking was eighteen point six percent (18.6%) 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 Renfrewshire HSCP was less than that in excess of the rate in the population of NHSGGC overall. This means that the incidence of morbidity for which smoking is the principal risk factor would also be expected to be less in Renfrewshire 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 March of 2014, seventy-seven point nine percent (77.9%) of eligible females had undergone screening. In the population of NHSGGC, the proportion of females who had undergone screening was seventy-three point eight (73.8%). *Interpretation:* The level of acceptance of cervical screening in Renfrewshire 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 Renfrewshire HSCP in 2014, the proportion was forty point nine percent (40.9%). The overall value for NHSGGC was thirty-nine point five percent (39.5%). *Interpretation:* The level of consumption of fresh fruit and vegetables in Renfrewshire HSCP was broadly similar to 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 a given week in excess of these limits.

Value: In Renfrewshire HSCP in 2014, the proportion was thirteen point two percent (13.2%). The overall value for NHSGGC was eighteen point nine percent (18.9%). *Interpretation:* The level of alcohol abuse was less than that 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 Renfrewshire HSCP, fifty-two point eight (52.8%) percent of adults reported adequate levels of exercise. The proportion in NHSGGC was forty-five point nine percent (45.9%). *Interpretation:* Levels of participation in physical exercise in Renfrewshire HSCP were similar to those 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 Renfrewshire HSCP in year 2014, twenty-five point seven percent (25.7%) 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 Renfrewshire 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 Renfrewshire HSCP in year 2011, sixteen point six percent (16.6%) of people reported obesity. In NHSGGC, sixteen point four percent (16.4%) reported obesity. *Interpretation:* The prevalence of obesity was similar in Renfrewshire 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. *Value:* In the year July 2013 to June 2014, the rate of admission in Renfrewshire HSCP was ten point eight per hundred thousand population (10.8 per 100,000). The rate in the population of NHSGGC was ten point four admissions per hundred thousand population (10.4 per 100,000). *Interpretation:* The incidence of admission to hospital because of alcohol abuse was similar in Renfrewshire to that in NHSGGC as a whole.

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

- Self-reported treatment for 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 Renfrewshire HSCP, the proportion who reported depression was four point six percent (4.6%). The proportion in NHSGGC was fourteen point nine percent (14.9%). *Interpretation:* A much smaller proportion of persons reported depression in Renfrewshire 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 Renfrewshire HSCP, the admission rate in 2013/2014 was point eight per thousand (0.80 per 1,000). The overall value for NHSGGC was point five six per thousand (0.56 per 1,000). *Interpretation:* The admission rate in Renfrewshire HSCP related to depressive illness was greater 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:* In Renfrewshire HSCP, the rate in the three years two thousand and eleven to two thousand and thirteen was thirty-nine point nine per hundred thousand (39.9 per 100,000) and in NHSGGC, thirty-five point one per hundred thousand (35.1/100,000). *Interpretation:* The suicide rate in young adults in Renfrewshire HSCP did not differ significantly from that 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. Suicide rates have been shown to be related to unemployment rate. *Definition:* The indicator is defined as the crude suicide rate in adults aged thirty to sixty-four (30-64) years. *Value:* In Renfrewshire HSCP, the mean annual rate in the three years two thousand and eleven to two thousand and thirteen was sixteen point eight per hundred thousand (16.8) per 100,000). The overall value for NHSGGC was eighteen point one per hundred thousand (18.1 per 100,000). *Interpretation:* The suicide rate in middle-aged adults in Renfrewshire 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 who reported their mental health status as “good.” *Value:* In Renfrewshire HSCP, eighty-nine point six percent (89.6%) 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 Renfrewshire 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 Renfrewshire HSCP, the proportion who reported difficulty was fifteen point one (15.1%). The proportion in NHSGGC was nineteen percent (19%).

Interpretation: Difficulties of access were reported less commonly in Renfrewshire HSCP than 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 Renfrewshire HSCP, the proportion who reported difficulty was six point nine percent (6.9%). The proportion in NHSGGC was five percent (5%). *Interpretation:* The levels of difficulty in access to dental care of access were similar in Renfrewshire HSCP and 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 Renfrewshire HSCP, the standardised ratio was ninety-eight percent (98%) and the result was not significant. *Interpretation:* The levels of supply were similar in Renfrewshire 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 Renfrewshire HSCP, the standardised ratio was ninety-six point nine percent (96.9%) and the result was not significant. *Interpretation:* The levels of supply were similar in Renfrewshire 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 Renfrewshire HSCP, the standardised ratio was ninety-seven point two percent (97.2%) and the result was not significant. *Interpretation:* The levels of supply were similar in Renfrewshire HSCP and NHSGGC overall.

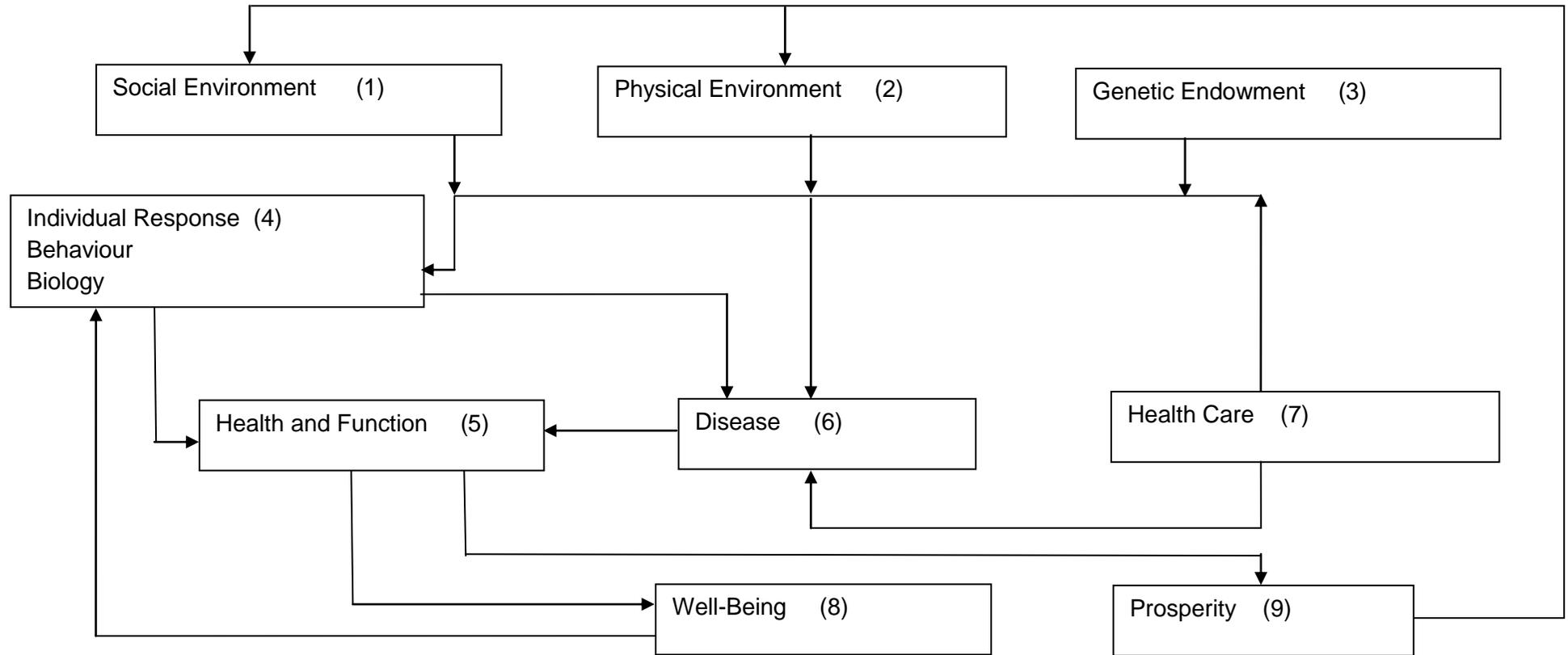
- **Cataract surgery (Domain 7):** *Rationale:* Cataract surgery is an effective form of management of cataract of the visual lens. This indicator is a measure of the population supply of cataract surgery. *Definition:* The indicator is defined as the standardised cataract ratio. *Value:* In Renfrewshire HSCP, the standardised ratio was one hundred and three point five percent (103.5%) and the result was not significant. *Interpretation:* The levels of supply were similar in Renfrewshire HSCP and NHSGGC overall.

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

- **Demography:** The demographic composition of Renfrewshire HSCP is broadly similar to that of NHSGGC. The main difference appears to be the smaller proportion of residents who belong to an ethnic minority.
- **Social capital:** The level of social capital in Renfrewshire HSCP was broadly similar to that of NHSGGC.
- **Economic indicators:** The economic indicators in Renfrewshire HSCP were mixed compared with NHSGGC. The unemployment and fuel poverty indicators in Renfrewshire HSCP were more favourable but the proportion of residents with educational qualifications was less than in NHSGGC.
- **General Health:** The indicators of General Health were either the same in Renfrewshire HSCP and NHSGGC or slightly better in Renfrewshire. The overall distribution of health status is probably similar in the two populations.
- **Disease-specific health:** The indicators of disease-specific health status were either at the level in NHSGGC or slightly better with the exception of the indicator for breast cancer. The incidence of breast cancer was twenty-eight percent (28%) greater in Renfrewshire HSCP than in NHSGGC.
- **Disability:** The level of disability was similar in Renfrewshire HSCP and NHSGGC.

- **Child and Maternal Health:** Most of the indicators were either at the level in NHSGGC or slightly better.
- **Health in Teenagers:** Most of the indicators were either at the level in NHSGGC.
- **Risk factors:** The indicators of risk factors in Renfrewshire HSCP were mixed compared with NHSGGC. The indicators for levels of obesity, exercise and passive smoking were less favourable than in NHSGGC.
- **Mental health:** The indicators of mental health status in Renfrewshire HSCP were also mixed compared with NHSGGC. The prevalence of self-reported good mental health was less than in NHSGGC.
- **Access to services:** The indicators of access to services in Renfrewshire HSCP were either at the level of, or more favourable than, those in 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*	Renfrewshire	NHSGGC	Scotland
1	Population of Renfrewshire	Population (number)	MYE, 2014	Not applicable	Not applicable	Not applicable	173,900		
2	Ethnicity	Number of residents belonging to an ethnic minority	Census (2011)	Total number of residents	Census (2011)	Crude rate Expressed percent population	2.8%	7.6%	
3	Proportion of single parent households	Number of households with single parent	Census (2011)	Total number of households	Census (2011)	Crude rate Expressed percent population	5.0%	5.3%	
4	Proportion 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	18.1%	18.7%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	Renfrewshire	NHSGGC	Scotland
5	Proficiency in English	Number of adults unable to speak English well or not at all	Census (2011)	Total number of adults in area	Census (2011)	Crude rate Expressed percent population	0.9%	1.7%	1.3%
6	Informal care	Number providing informal care (50 hours per week or less)	Census (2011)	Total number of adults in area	Census (2011)	Crude rate Expressed percent population Rate for HSCP and NHSGGC	7.4%	6.7%	
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	66.0%	66.7%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	Renfrewshire	NHSGGC	Scotland
8	Social isolation	Number of respondents (aged more than 64 years) reporting isolation	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	8.2%	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	79.8%	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	11.8%	17.2%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	Renfrewshire	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 as percentage	6.0%	6.7%	5.6%
12	Fuel poverty	Number of respondents reporting fuel poverty	Health and Wellbeing Survey (2015)	Total number of respondents households in area	Health and Wellbeing Survey (2015)	Rate expressed as percentage	20.1%	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	95.6% 106.7%	100% -	- 100%

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	Renfrewshire	NHSGGC	Scotland
14	Life expectancy	Life expectancies in residents of Renfrewshire	GRO	Not relevant	Not applicable	Number of expected life years	Males 75.7 years Females 80.6 years	Males 74.9 years Females 80.0 years	Males 76.9 years Females 81.0 years
15	Self-reported health status	Numbers of respondents 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	6.3%	7.7%	
16	Excess winter mortality	Mortality by month (all causes) in people aged more than 64 years in winter months (December to March)	GRO	Population aged more than 64 years in area	Mid Year Estimate	Excess Winter Mortality Index (Ratio). Application of mortality rates in summer months to population in non-winter months	106.4%	110.1%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	Renfrewshire	NHSGGC	Scotland
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	85.6% (s)	100%	
18	Colorectal cancer	New cases in most recent year	Cancer registry data	Population of area	Mid Year Estimate	Standardised ratio as percentage Indirect standardisation for age and sex	95.0% (ns)	100%	
19	Breast cancer	New cases in most recent year	Cancer registry data	Population of area	Mid Year Estimate	Standardised ratio as percentage Indirect standardisation for age and sex	128.0% (s)	100%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	Renfrewshire	NHSGGC	Scotland
20	Ischaemic heart disease	Number of observed deaths in area from ischaemic heart disease	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-I25; in any position.	99.5% (ns) 105.3% (ns)	100% -	- 100%
21	Stroke	Number of observed deaths in area from stroke	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.	99.2% (ns) 108.2% (ns)	100% -	- 100%

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	Renfrewshire	NHSGGC	Scotland
22	Fractured neck femur	Number of emergency admissions for fractured neck of femur	SMR 01	Expected number of admissions in area for fractured neck of femur calculated from age-sex specific rates in population of NHSGGC (standard population)	SMR01	Standardised Admission Ratio (SAR) Indirect standardisation for age and sex ICD 10 codes: S720-S722. Code in any position in any position in first episode of a spell	92.6% (ns)	100%	-

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	Renfrewshire	NHSGGC	Scotland
23	Falls	Number of emergency admissions for falls	SMR 01	Expected number of admissions in area for falls calculated from age-sex specific rates in population of NHSGGC (standard population)	SMR01	Standardised Admission Ratio (SAR) Indirect standardisation for age and sex ICD 10 codes: W00-W19 in any position in first episode of a spell	95.8% (ns)	100% in standard	
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	9.2%	9.6%	9.0%

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	Renfrewshire	NHSGGC	Scotland
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	26.1%	26.3%	25.4%
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	21.2%	22.7%	20.6%
27	Infant mortality	Amount of mortality in children aged less than one year	GRO	Number of live births in population	Mid Year Estimate	Rate expressed per 1,000 live births in same period	2.2 per 1,000	3.21 per 1,000	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	Renfrewshire	NHSGGC	Scotland
28	Prevalence Low Birth Weight	Number of live births with weight less than 2,500g	SMR 02	Total number of live births	SMR 02	Crude rate (expressed percent)	6.8%	5.9%	6%
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	13.9%	13.3%	
30	Breast feeding rates at 6-8 weeks	Number of mothers recorded as breast-feeding	SIRS	Total number of mothers in cohort	SIRS	Prevalence rate expressed percent	19.1%	23.3%	27.1%

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	Renfrewshire	NHSGGC	Scotland
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	National Dental Inspection Programme (NDIP)	Prevalence rate expressed percent	75.4% (P7) 62.1% (P1)	67.8% (P7) 63.2% (P1)	72.8% (P7) 67.0% (P1)
32	Unintentional injury	Number of unintentional injuries in age-group 0-14 years.	SMR 01 data	Population of area aged 0-14 years.	Mid Year Estimate	Rates expressed per 1,000 in age-groups: 0-14 years. Codes: Cause of injury codes V01-X59	8.9 per 1,000	9.5 per 1,000	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	Renfrewshire	NHSGGC	Scotland
33	Maternal obesity at booking	Numbers of ladies with BMI > 30 at booking	PNBS	Total numbers of pregnancies	PNBS	Prevalence rate expressed percent	25%	22.2%	
34	Childhood obesity	Numbers of P1 children with BMI > 30	CHSP System	Total numbers P1 children	CHSP System	Prevalence rate expressed percent	5.4%	5.8%	
35	Use of recreational drugs	Numbers of respondents aged 13 to 15 years reporting use of recreational drugs 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%	
36	Educational attainment	Number of school-leavers with some formal educational qualifications	Health and Wellbeing Survey (2015)	Total number of school-leavers	Health and Wellbeing Survey (2015)	Rate expressed as percentage	2.1%	1.6%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	Renfrewshire	NHSGGC	Scotland
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	39.8%	40%	
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	31.0%	40%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	Renfrewshire	NHSGGC	Scotland
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.	39.2 / 1,000 (year Oct 2012-Sep 2013)	37.9 / 1,000 (year Oct 2012-Sep 2013)	41.5 / 1,000 (year Jan 2012-Dec 2012)
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	18.6%	24.9%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	Renfrewshire	NHSGGC	Scotland
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	77.9%	73.8%	
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	40.9%	39.5%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	Renfrewshire	NHSGGC	Scotland
43	Prevalence of hazardous alcohol consumption	Numbers 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	13.2%	18.9%	
44	Physical activity	Numbers of respondents (aged more than 15 years) reporting adequate levels for health maintenance	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	52.8%	45.9%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	Renfrewshire	NHSGGC	Scotland
45	Passive smoking	Numbers of respondents (aged more than 15 years) who reported exposure to other people's tobacco 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	25.7%	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	16.6%	16.4%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	Renfrewshire	NHSGGC	Scotland
47	Alcohol-related admissions	Admissions related to alcohol in population aged more than 15 years	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	10.8 per 1,000	10.4 per 1,000	
48	Depression 1	Numbers of respondents aged more than 15 years reporting treatment for 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	4.6%	14.9%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	Renfrewshire	NHSGGC	Scotland
49	Depression 2	Admissions for depression in persons aged more than 15 years	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	0.8 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 1,000 in population aged 16-29 years ICD 10 codes: X60-X84; Code in position 2-6.	39.9 per 100,000 Not significant.	35.1 per 100,000	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	Renfrewshire	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 1,000 in population aged 30-64 years ICD 10 codes: X60-X84; Code in position 2-6.	16.8 per 100,000	18.1 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	89.6%	86.3%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	Renfrewshire	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	15.1%	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	6.9%	5%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	Renfrewshire	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	<p>Standardised ratio (for age, sex and deprivation)</p> <p>OPCS codes: W371; W378; W379; W381; W388; W389; W391; W398; W399; W461; W468; W469; W471; W478; W479; W481; W488; W489;</p> <p>Operation code in any position.</p> <p>Exclude records coded for fractured neck of femur: ICD 10 codes: S720; S721; S722</p>	98%	100%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	Renfrewshire	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	96.9%	100%	
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	97.2%	100%	

No	Indicator	Numerator	Numerator (source)	Denominator	Denominator (source)	Calculation*	Renfrewshire	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.	103.5%	100%	