**NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE**

**NICE indicator validity assessment**

# Assurance date: March 2022

# Review date: March 2025

# Indicator IAP00459

# Health inequalities (area deprivation) - Life expectancy at 75 (see also IAP00016 Life expectancy at 75)

# Validity assessment

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| **Domain** | **Notes** | **Assessment** |
| Importance | Indicator is part of the NHS outcomes framework domain 1 – Preventing people from dying prematurely, though presented as a breakdown of the underlying Life expectancy at 75 indicator.  It adds an additional dimension to Indicator IAP00016 (1b) Life expectancy at 75 to address the issue of changing inequalities in life expectancy.  The Slope index of inequality (SII) and Relative index of inequality (RII) are presented at national level for males and females, with both indicators increasing between 2001-03 to 2017-19 (SII Male: 2.08 to 2.99, Female: 1.58 to 3.13, RII Male: 0.21 to 0.26m, Female: 0.13 to 0.23) showing an increase in inequality of life expectancy. Please note methodology change in Acceptability. | This is a complex indicator which has had several changes made to it over time by both PHE and NHS Digital.  Indicator is based on a recognised dataset.  Indicator shows an increase in inequality in life expectancy by deprivation over the period, though note methodology change in Acceptability. |
| Evidence base | From indicator quality statement[[1]](#footnote-1):  “This indicator is an overarching indicator in domain 1 of the framework. The overarching indicators in domain 1 allow the Secretary of State to review how successful the NHS has been in preventing people from dying prematurely, and in particular, preventing deaths from causes considered ‘amenable’ to healthcare. 'Amenable' in this context relates to premature deaths that should not occur in most cases in the presence of timely and effective healthcare.  While a limited number of conditions for those aged 75 and over are included in the definition of “amenable” used in other domain 1 indicators, these indicators focus on those aged under 75 for the most part. This is largely because of the difficulty of ascribing cause of death in 75+ age groups where there are often multiple morbidities. However many deaths at ages 75 and over could be considered premature. In order to address concerns that the framework neglects premature or avoidable deaths in older people, this indicator, life expectancy at 75, is a companion indicator to amenable mortality”.  From application form provided by NICE:  “The purpose of the indicator is to provide a measure of the inequality related to area deprivation in relation to life expectancy. This can be tracked over time to assess progress in reducing this inequality.  The indicator on which this indicator is based, IAP00016 - 1b Life expectancy at 75, hereafter referred to as the ‘underlying indicator’ is an indicator in domain 1 – Preventing people from dying prematurely. This indicator is measured to ensure that the NHS is held to account for doing all that it can to prevent avoidable deaths in older people. This indicator captures all deaths at ages 75 and over. The health inequality indicator is an indicator which captures high level health inequalities and ensures that the NHS can be held to account for doing all that it can to reduce inequalities in avoidable deaths in older people.  Because of the linear relationship between the underlying indicator value and deprivation the Slope Index of Inequality (SII) has been selected to measure how much life expectancy varies with deprivation. The Relative Index of Inequality (RII) has been selected as this gives context to the SII, indicating whether a change observed in the SII represents an increase or decrease in the extent of inequality relative to overall performance in the indicator, i.e. the SII as proportion of the England indicator value.” | This indicator covers a wide range of conditions where an evidence base exists. |
| Specification | Numerator: Number of deaths aged 75 and over recorded in a year (or group of years for pooled data).  Denominator: Population of people aged 75 and over  Exclusions: None  Methodology: Death rates from a single year (or group of years for pooled data) are applied to estimate life expectancy assuming that those rates apply throughout the remainder of a person’s life.  SII: Population weighted linear regression is applied to life expectancies for each Index of Multiple Deprivation (IMD) deprivation decile to produce a value showing the range from most to least deprived. A positive value indicates longer life expectancy in the least deprived decile.  RII: Divides the RII by the mean weighted indicator value to show the absolute extent of difference between deciles. A reduction in RII over time is desirable.  Geography: England.  Data Source: Office for National Statistics (ONS) mortality data and mid-year population estimates.  Disclosure control: Not required as published at England level only. | The indicator has defined components necessary to construct the indicator. |
| Feasibility | All data from long running data sources. | Data has been flowing for some time and data sources will continue. |
| Acceptability | Care is required in interpretation due to the complex methodology, however the methods are well established. Note that changes to IMD classification happen periodically (last change was IMD 2015 to IMD 2019), therefore data prior to the 2018 update which was the first to use IMD 2019 are not directly comparable to those before. | The indicator assesses performance that is attributable to or within the control of the audience.  The results of the indicator can be used to improve practice. |
| Risk | None identified. Similar indicator (Life expectancy at 65) is published in the Public Health Outcomes Framework. | None |

**Summary:** Indicator to be renewed.

Note that Covid-19 is likely to have an impact on indicator data in at least the next few periods.

**NHS Digital Indicator reference:**

NHS Digital do not publish this as a separate indicator, it appears in the data download for indicator IAP00016 (reference below) as an additional column.

NHS Outcomes Framework – 1b Life expectancy at 75

1. NHS Digital. NHS outcomes framework, Indicator Quality Statement, Domain 1. 1b Life expectancy at 75: i Males ii Females. Version 1.11, May 2020 [↑](#footnote-ref-1)