INFORMATION ANALYSIS DIRECTORATE

Health Inequalities

Annual Report 2022

A product of the NI Health and Social Care Inequalities Monitoring System

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Health Inequalities

Annual Report 2022

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Information Analysis Directorate (IAD) sits within the **Department of Health (DoH)** and carries out various statistical work and research on behalf of the department. It comprises four statistical areas: Hospital Information, Community Information, Public Health Information & Research and Project Support Analysis.

IAD is responsible for compiling, processing, analysing, interpreting and disseminating a wide range of statistics covering health and social care.

The statisticians within IAD are out-posted from the Northern Ireland Statistics & Research Agency (NISRA) and our statistics are produced in accordance with the principles and protocols set out in the UK Code of Practice for Official Statistics.

About Public Health Information and Research Branch

The role of Public Health Information and Research Branch (PHIRB) is to support public health policy development through managing the public health survey function while also providing analysis and monitoring data. The head of the branch is the Principal Statistician, Mr. Bill Stewart.

In support of the public health survey function, PHIRB is involved in the commissioning, managing and publishing of results from departmental funded surveys, such as the Health Survey Northern Ireland, All Ireland Drug Prevalence Survey, Young Persons Behaviour & Attitudes Survey, Patient Experience Surveys and the Adult Drinking Patterns Survey.

The branch also houses the NI Health and Social Care Inequalities Monitoring System which covers a range of different health inequality/equality based projects conducted for both the region as well as for more localised area levels. In addition, PHIRB is responsible for the production of official life expectancy estimates for NI, and areas within the region.

PHIRB provides support to a range of key DoH NI strategies including Making Life Better, a 10 year cross-departmental public health strategic framework as well as a range of other departmental strategies such as those dealing with suicide, sexual health, breastfeeding, tobacco control and obesity prevention. It also has a key role in supporting the Departmental Alcohol and Drug Strategy, by maintaining and developing key departmental databases such as, the Substance Misuse Database, Impact Measurement Tool and the Census of Drug & Alcohol Treatment Services, which are all used to monitor drug misuse and treatments across Northern Ireland. In addition to Departmental functions, PHIRB also support the executive level Programme for Government and its strategic outcomes through a series of performance indicators.

CONTENTS

KEY FINDINGS – REGIONAL (NI)

- In 2018-20, male and female life expectancy at birth showed no notable change in NI and its most and least deprived areas. While the male deprivation gap (6.9 years) showed no notable change since 2014-16, the female deprivation gap (5.0 years) widened over the same period.

- Between 2014-16 and 2018-20 there was no change in male healthy life expectancy in NI and the least deprived areas, however there was an improvement in the most deprived areas. Over the same period, there was no change in female healthy life expectancy across all areas. Disability-free life expectancy increased in NI for both males and females, though there was no notable change in most and least deprived areas or the deprivation gap for either gender.

- For indicators of premature mortality, rates either decreased over the period in NI and its most and least deprived areas or showed no notable change. The exception to this was preventable mortality, which increased in NI. However, large inequality gaps continue to persist, with the rate of respiratory mortality among under 75s in the most deprived areas over three and a half times that in the least deprived. Across indicators of premature mortality, the inequality gaps remained fairly static, with a few exceptions where gaps narrowed, most notably treatable mortality.

- The inequality gap for the self-harm admission rate narrowed with decreased rates in the most and least deprived areas, however the rate remains high with self-harm admissions in the most deprived areas almost treble that in the least deprived areas.

- Alcohol and drug related indicators continue to show some of the largest health inequalities monitored in NI, with rates in the most deprived areas over four and a half times that in the least deprived for drug related mortality and four times that for alcohol specific mortality.

- In 2020, within the most deprived areas the proportion of births where the mother reported smoking during pregnancy in the most deprived areas was over four and a half times the rate in the least deprived areas.

- For dental indicators, the largest inequality gap was seen for total extractions where the rate in the most deprived areas was almost double that in the least deprived areas.

Most Notable Inequality Gaps	
Female HLE	14.9 years
Male HLE	11.8 years
Teenage Birth Rate (U20)	611%
SDR - Drug Misuse	409%
SDR – Drug Related	366%

Most Notable Narrowing of Gaps
SAR - Self-Harm
SAR - Day Case
SDR - Alcohol Specific
SAR - Circulatory
SAR - All Admissions

Most Notable Widening of Gaps
Teenage Birth Rate (U20)
Primary 1 BMI: Obese
Low Birth Weight

KEY FINDINGS – SUB-REGIONAL (HSC TRUST & LGD)

- Male life expectancy generally remained similar between 2014-16 and 2018-20 in all Trusts and Local Government Districts (LGDs) and their most deprived areas. There were some exceptions, such as a decrease in the most deprived areas of the Belfast LGD and increases in the most deprived areas of Fermanagh & Omagh, Lisburn & Castlereagh and Mid Ulster average.
- The inequality gap for male life expectancy between the 20% most deprived areas and the area average widened in the Belfast and Mid & East Antrim LGDs. The Fermanagh & Omagh, Lisburn & Castlereagh and Mid Ulster LGDs experienced a narrowing of the inequality gap.
- Female life expectancy either increased or remained similar across the period in all Trusts and LGDs, and their most deprived areas. The exception to this was the Belfast Trust average and most deprived areas, and most deprived areas of the Ards & North Down, Belfast and Causeway Coast & Glens LGDs, where it declined.
- The inequality gap for female life expectancy between the 20% most deprived areas and the area average widened in Belfast Trust and the Ards & North Down, Belfast and Causeway Coast & Glens LGDs. Conversely, Western Trust and the Antrim & Newtownabbey, Mid Ulster and Newry, Mourne & Down LGDs experienced a narrowing of their respective inequality gaps.
- Similar to the regional picture, deprivation related inequality was most prominent in indicators relating to alcohol, drugs, self-harm, smoking during pregnancy and teenage births, which were among the five largest inequality gaps for the majority of Trusts and LGDs.
- Drug related mortality was the largest inequality gap in two of the five HSC Trusts and four of the eleven LGDs. In the South Eastern Trust, the rate in its most deprived areas was more than double (129%) the Trust average. Similarly, in the Mid & East Antrim LGD the rate in the most deprived areas was more than three times (209%) the LGD average.
- Large inequality gaps for alcohol related admissions also exist in the majority of Trusts and LGDs. The rate in their most deprived areas was more than double the Trust/LGD average for both the Western Trust (121%) and Mid & East Antrim LGD (137%).
- Alcohol specific mortality showed the largest gap in the Ards & North Down LGD (103%), whilst alcohol related admissions showed the largest gap in the Belfast LGD (100%).
- Deaths due to drug misuse was the largest inequality gap in the Northern (153%) and Western Trusts (197%), with the teenage birth rate showing the largest inequality gap in the Southern Trust (109%).
- The teenage birth rate was the largest inequality gap in four LGDs: Antrim & Newtownabbey (155%), Armagh City, Banbridge & Craigavon (129%), Fermanagh & Omagh (121%) and Mid Ulster (73%).
- Smoking during pregnancy was the largest inequality gap in the Lisburn & Castlereagh LGD (148%).

INTRODUCTION

This annual publication is one of a series of reports produced as part of the NI Health & Social Care Inequalities Monitoring System (HSCIMS) and presents a comprehensive analysis of health inequality gaps between the most and least deprived areas of NI, and within Health & Social Care (HSC) Trust and Local Government District (LGD) areas across a range of indicators. This report is an update of the Health Inequalities Annual Report 2021. The report is accompanied by downloadable data tables[1], which contain all figures, including urban and rural breakdowns.

The most recent figures reported in this release typically include data from 2020 and 2021, and therefore reflect to an extent, the impact of the coronavirus (COVID-19) pandemic. In particular, figures related to hospital admissions, dental indicators and childhood obesity have been significantly impacted due to service restrictions. Further details have been provided where relevant and are included in Appendix E: Technical Notes & Definitions.

FORMAT OF THE REPORT

This report is separated into two sections, the first focusing on regional health inequalities and the second presenting sub-regional analysis. The regional section contains separate chapters for each theme/topic area, with each section containing a summary of the key findings, followed by individual indicator analysis. For each indicator two charts are displayed.

ASSESSMENT OF CHANGE OVER TIME

In addition to the two charts, various symbols are provided that depict changes in the rates in the most deprived and least deprived areas, and in the most-least deprived inequality gap (see below). An indication of the changes observed at the NI level has also been provided for each health outcome. An improvement or decline in the rate is only indicated when the change is statistically significant, or where there is a clear and consistent trend observed over the series. For a notable change in the inequality gap to have occurred, a significant change in at least one of the areas (most/least deprived) has to have been observed, or, where no statistically significant change is apparent then a change in the gap will have deemed to have occurred if there is a clear and consistent trend in both the outcome and the gap over the analysed period. Table 3 overleaf can be used as a reference to aid the reader in understanding how the symbols indicate a change in both the health outcome over time and the resultant inequality gap determination.[2]

Table 1: Indication of change to Indicator Rate

Changes to indicator rate	
MD / LD	Most Deprived Areas / Least Deprived Areas
	Positive Change
	No Notable Change
	Negative Change

Table 2: Indication of change in Inequality Gap over time

Changes in inequality gaps	
⟨ ⟩	Widening of the gaps
⟩ ⟨	Narrowing of the gaps
—	No notable change in the gap

The sub-regional section presents a condensed summary of findings for each HSC Trust and LGD accompanied by downloadable data tables[2] which contain all figures and an indication of changes to rates and gaps.

[1] https://www.health-ni.gov.uk/publications/health-inequalities-annual-report-2022
[2] Indicated changes are based on a subjective assessment of the available data.

It should be noted that inequality gaps for indicators can exist in either direction; however health outcomes generally tend to be worse in the most deprived areas than in the least deprived. For the purposes of this report, a positive value for the gap means that the health outcomes experienced in the most deprived areas were worse than in the least deprived.

Table 3: Understanding changes in the inequality gap

	Change in Health Outcome		Inequality Gap
	Most Deprived Areas	**Least Deprived Areas**	**Symbol**
Gap Widens	Small Positive Change	Large Positive Change	
	Negative Change	Positive Change	
	Negative Change	No Notable Change	
	Large Negative Change	Small Negative Change	
	No Notable Change	Positive Change	
Gap Narrows	Large Positive Change	Small Positive Change	
	Positive Change	Negative Change	
	Positive Change	No Notable Change	
	Small Negative Change	Large Negative Change	
	No Notable Change	Negative Change	
No Notable Change	Positive Change	Positive Change	
	Negative Change	Negative Change	
	No Notable Change	No Notable Change	
	Small Negative Change (Red)/ Positive Change/(Green)	No Notable Change	
	No Notable Change	Small Negative Change (Red)/ Positive Change/(Green)	

Observed differences in the most and least deprived areas, as indicated by the symbol, does not always lead to a change in the gap. Where this has occurred an explanation has been provided where appropriate.

NOTES FOR USER

- **Regional Inequality Gaps** refer to the difference in health outcomes between the 20% most deprived and 20% least deprived areas of Northern Ireland.
- **Sub-regional Inequality Gaps** refer to the difference between health outcomes for
    - The 20% most deprived areas of an area (LGD/Trust) and the area's average
    - The Trust/LGD and the regional average.
- **Deprivation Measure:** the 20% most and least deprived areas are defined according to the Northern Ireland Multiple Deprivation Measure (NIMDM) 2017.[3]
- **Rounded Figures:** some individual figures have been rounded to either zero or one decimal place independently. As a result, the sum of component items may not therefore always add to the totals shown.
- **New Indicators:** data for 12 new indicators related to dental health are included in this report for the first time. These include standardised rates for dental fillings, extractions and crownings, as well as rates of individuals registered with a dentist. In addition, a new standardised death rate for COVID-19 has been included. Full details can be found in Appendix E: Technical Notes & Definitions.
- **Additional Indicators:** figures relating to eight additional indicators such as Median Fire Response Times and Median Ambulance Response Times, which form part of the HSCIMS but are not contained in the main body of the report, can be found in Appendix C.
- **Avoidable Mortality Definitions:** following an Office for National Statistics (ONS) consultation,[4] on a new definition of avoidable mortality as proposed by the Organisation for Economic Co-operation and Development (OECD),[5] a new definition was implemented. Figures based on the old definition have been included in Appendix C: Additional Indicators. Full details can be found in Appendix E: Technical Notes & Definitions.
- **Further Analysis:** The appendix section included at the back of the report provides **further analysis** regarding the Social Gradient of Health (Appendix A) and the Population Attributable Risk (PAR) of Deprivation (Appendix B).
- **Urban/Rural Analysis** In addition urban and rural figures for each indicator have been included within the accompanying downloadable tables, and a summary assessment of Rural-NI gaps has been provided in Appendix D.
- **District Electoral Areas** (DEAs) analysis is included within the accompanying downloadable tables. The most recent available health outcomes within each DEA are compared and contrasted with those in the surrounding LGD and notable differences are highlighted.
- **Data limitations** mean that not all 61 health indicators analysed at a regional level can be analysed at Trust, LGD or DEA level. In this report, 54 health indicators have been presented at Trust and 52 at LGD level, with 43 reported at DEA level. A full list can be found in Table 5.
- For **further information** regarding the methodologies, indicator descriptions and sources of data used to produce the analyses throughout this report, please refer to Appendix E: Technical Notes & Definitions.

[3] https://www.nisra.gov.uk/statistics/deprivation/northern-ireland-multiple-deprivation-measure-2017-nimdm2017
[4] https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/methodologies/avoidablemortalityinenglandandwalesqmi#important-points
[5] http://www.oecd.org/health/health-systems/Avoidable-mortality-2019-Joint-OECD-Eurostat-List-preventable-treatable-causes-of-death.pdf

Review of suicide statistics in Northern Ireland

Please note that in light of an on-going review by NISRA and the Coroners' Service into the classification of undetermined deaths, this publication does not report on suicide. In addition, the sub series relating to self-inflicted injury/intentional self-harm has not been updated to reflect deaths registered in 2020. The inequality analysis of suicide deaths will be published as an addendum to this report shortly after the review has been concluded later in the year. Full details on this change and further information on the review can be found in Appendix E: Technical Notes & Definitions.

Understanding Gaps

Regional Level:
A positive inequality gap means that the health outcomes in the most deprived areas are worse than in the least deprived areas.

Sub-regional Level:
A positive inequality gap between the Trust or LGD and its most deprived areas means that the health outcomes in the most deprived areas are worse than the Trust or LGD average.

Similarly, a positive inequality gap between the Trust or LGD and NI means that the health outcomes in the Trust or LGD are worse than the NI average.

A negative inequality gap that is widening indicates that the health outcome is experiencing a better change over time within the Trust or LGD than that seen regionally.

Other routine reports in the HSCIMS series include:

Life Expectancy in Northern Ireland – presenting the latest official estimates of life expectancy in Northern Ireland and an examination of the causes that contribute to the change in life expectancy over time, as well as the differentials between genders and across Local Government Districts. The latest figures for life expectancy at 65, healthy life expectancy and disability-free life expectancy are also included. https://www.health-ni.gov.uk/articles/life-expectancy-northern-ireland

Making life better: monitoring the wider social determinants of health & wellbeing - key indicators – monitoring report for the key indicators of the wider social determinants of health & wellbeing, contained in the Making Life Better, [6] the public health strategic framework for NI. https://www.health-ni.gov.uk/articles/social-determinants-health-statistics.

[6] www.health-ni.gov.uk/topics/public-health-policy-and-advice/making-life-better-whole-system-strategic-framework-public

Regional Health Inequalities

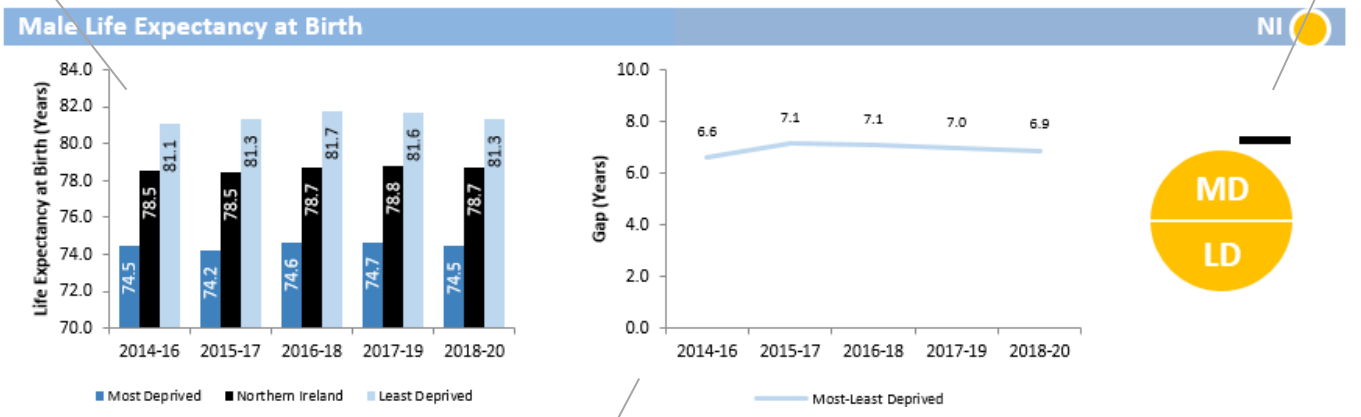
Regional health inequalities refer to the difference in health outcomes between the 20% most deprived and 20% least deprived areas of Northern Ireland according to the Northern Ireland Multiple Deprivation Measure. This section contains separate chapters for each theme/topic area, with each chapter containing a summary of the key findings, followed by individual indicator analysis.

For each indicator two charts and two symbols are displayed. For ease of understanding, each theme is assigned a separate colour (for example blue is used for 'Life Expectancy and General Health'), with a deeper tone representing the 20% most deprived areas and a lighter tone the 20% least deprived.

An example of the indicator analysis, with guidance, can be seen below:

This chart shows trends in rates over time for **Northern Ireland**, the **20% most deprived areas** and **20% least deprived areas**.

This symbol for assessment of change over time is explained on pages 7 and 8 of this report. Also shown is an indication of change at the Northern Ireland (NI) level.



This chart shows the trend for the most-least deprived inequality gap over the same period. The gap between most-least deprived may be displayed as a discrete value, e.g. years for life expectancies or as a relative percentage difference.

SUMMARY OF CHANGES IN REGIONAL INEQUALITY GAPS OVER THE LAST 5 YEARS[7]

Most-Least Deprived Inequality Gaps that Widened over the Analysed Period

8 indicators had inequality gaps that **widened** over the period analysed

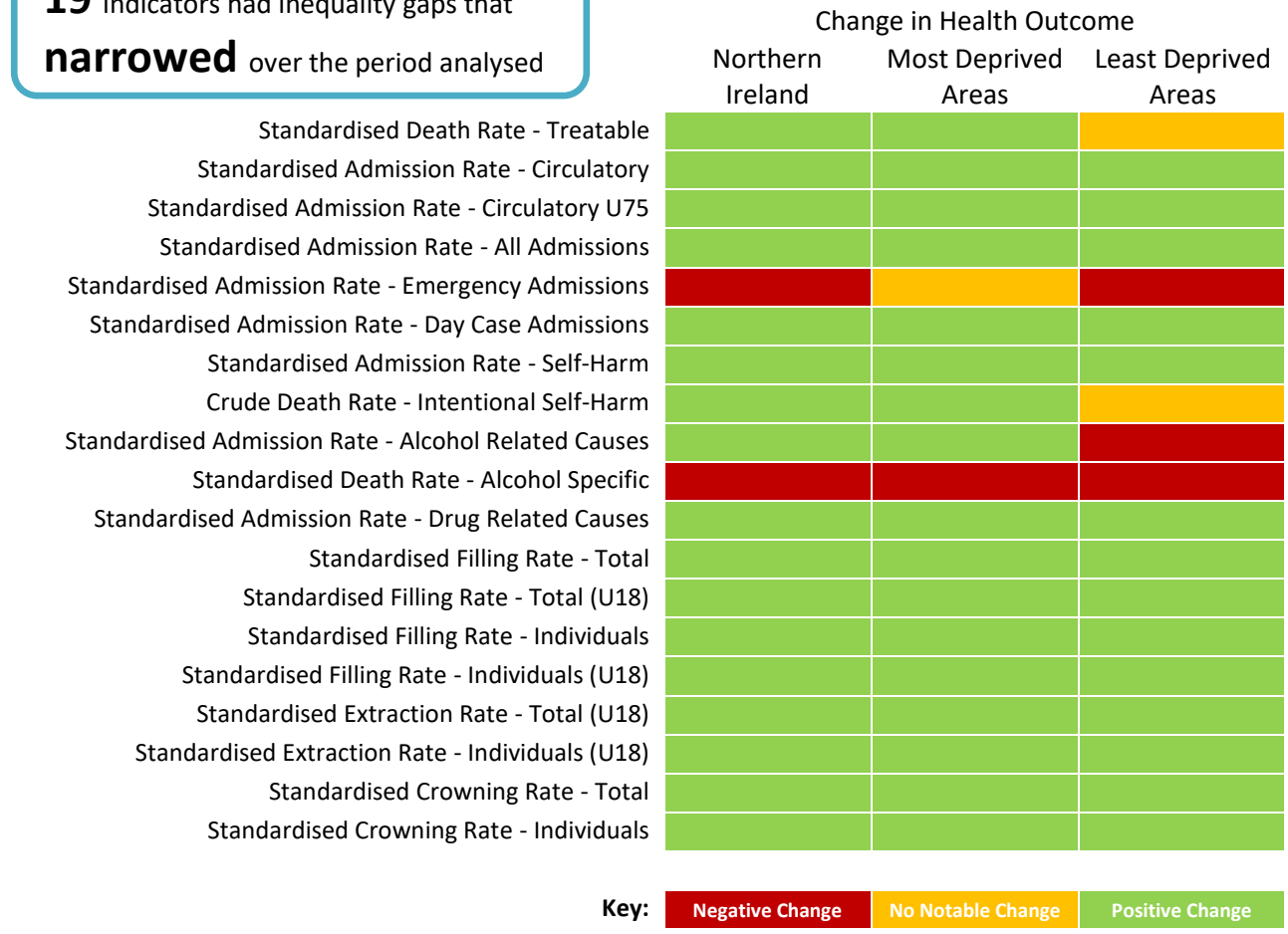
	Change in Health Outcome		
	Northern Ireland	Most Deprived Areas	Least Deprived Areas
Female Life Expectancy at Birth			
Standardised Prescription Rate - Statin			
Infant Mortality Rate			
Teenage Birth Rate U20			
Low Birth Weight			
Primary 1 BMI: Obese			
Primary 1 BMI: Overweight or Obese			
Standardised Extraction Rate - Individuals			

Key: Negative Change | No Notable Change | Positive Change

[7] There are two indicators, Small for Gestational Age and SDR – COVID-19, for which a regional assessment of change has not been carried out. This is due to an absence of data for previous years, meaning a full time series is not available.

Most-Least Deprived Inequality Gaps that Narrowed over the Analysed Period

19 indicators had inequality gaps that **narrowed** over the period analysed



Most-Least Deprived Inequality Gaps that Showed No Notable Change over the Analysed Period

32 indicators had inequality gaps that **showed no notable change** over the period analysed

Life Expectancy & General Health

In 2018-20 there was little change across health expectancy indicators or the associated inequality gaps. The female life expectancy deprivation gap widened from 4.5 to 5.0 years, however there were no changes observed to gaps across the other indicators. While there was an improvement in male healthy life expectancy in the most deprived areas of NI, the inequality gap remained similar over the period. Disability free life expectancy improved for both males and females in NI, however there was no change in the inequality gaps.

Key: Northern Ireland: NI

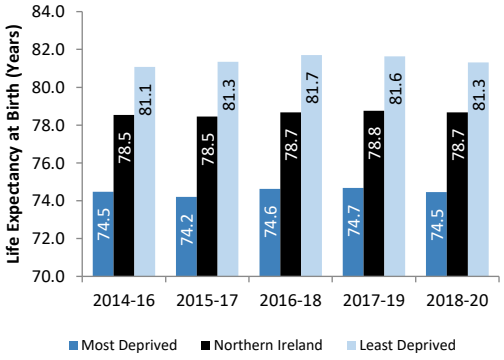
MD — Most Deprived Areas

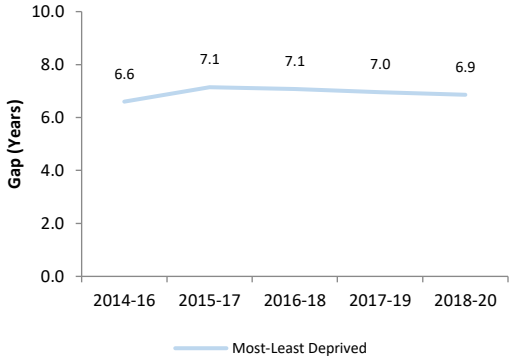
LD — Least Deprived Areas

- Positive Change
- No Notable Change
- Negative Change
- Narrowing of the Gap
- No Notable Change in the Gap
- Widening of the Gap

Male Life Expectancy at Birth

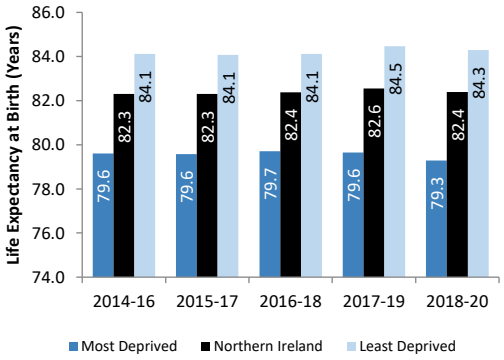
NI

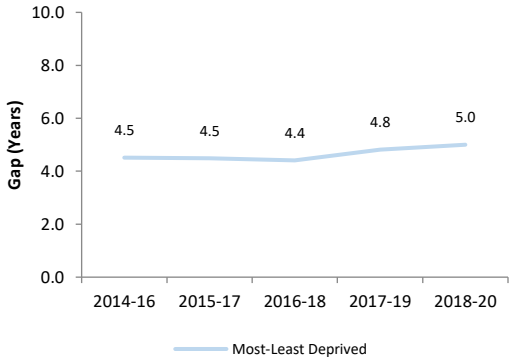




Female Life Expectancy at Birth[8]

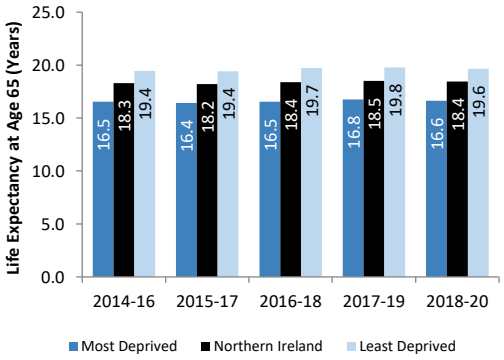
NI

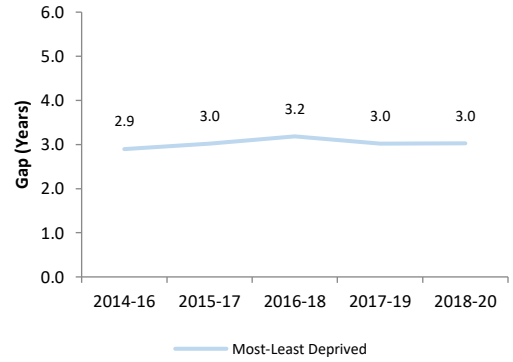




Male Life Expectancy at Age 65

NI

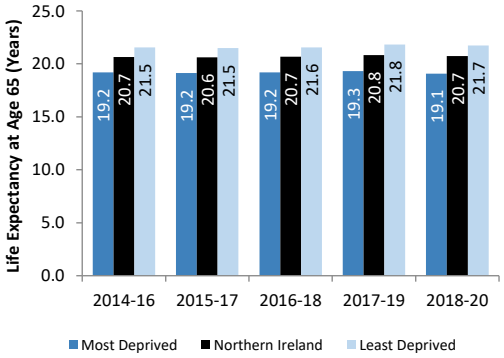


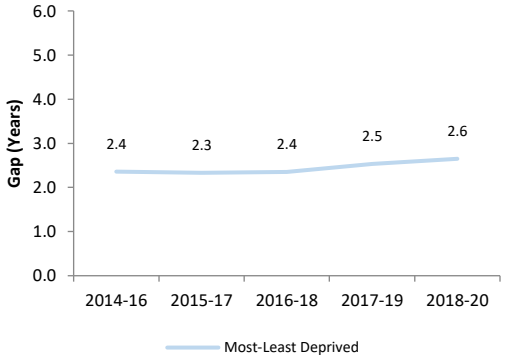


[8] Although there was no change in either the most or least deprived areas, the change in the gap from 4.5 to 5.0 years is notable and has therefore been deemed a widening.

Female Life Expectancy at Age 65

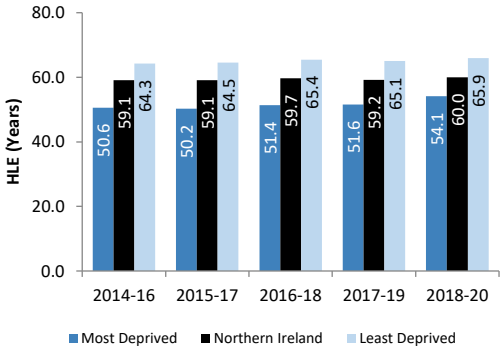
NI

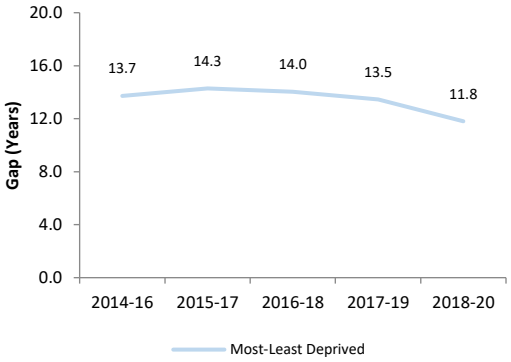




Male Healthy Life Expectancy[9]

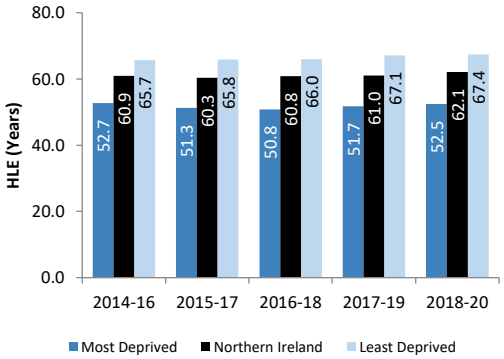
NI

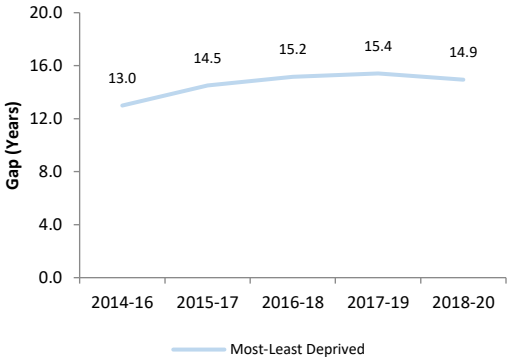




Female Healthy Life Expectancy[9]

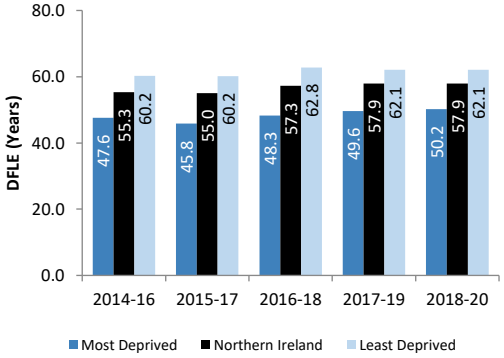
NI

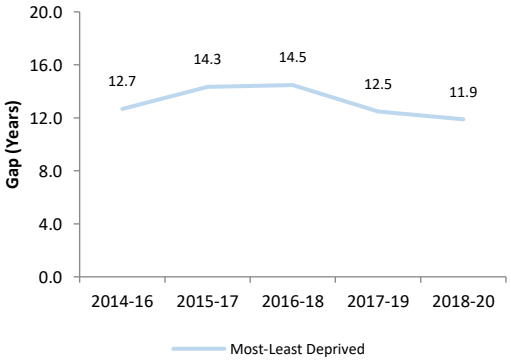




Male Disability Free Life Expectancy[9]

NI

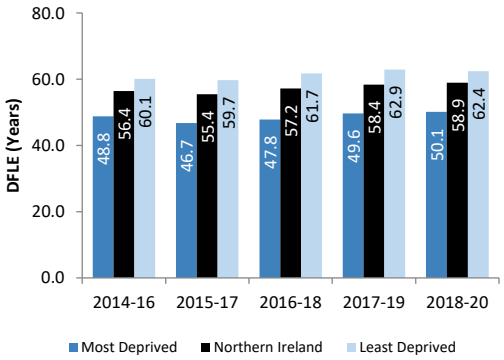


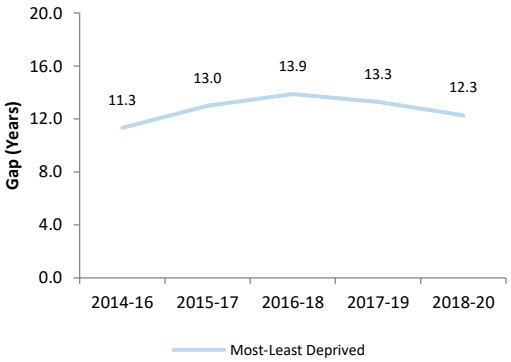


[9] The 2020/21 Health Survey NI, from which HLE and DFLE estimates for 2020 were produced, was telephone based using a smaller sample size and has not included children. Please see Appendix E for more detail.

Female Disability Free Life Expectancy[10]

NI





[10] The 2020/21 Health Survey NI, from which HLE and DFLE estimates for 2020 were produced, was telephone based using a smaller sample size and has not included children. Please see Appendix E for more detail.

Premature Mortality[11]

Rates of premature mortality improved or remained similar over the period in NI and its most and least deprived areas, with the exception of Preventable mortality where negative changes were observed at the regional level. Large inequality gaps persist as the most deprived areas continue to experience markedly higher mortality rates, however the gap in mortality from treatable causes narrowed due to decreased mortality in the most deprived areas. For respiratory mortality among under 75s, the rate in the most deprived areas was over three and a half times that seen in the least deprived.

Key: Northern Ireland: NI

MD Most Deprived Areas

LD Least Deprived Areas

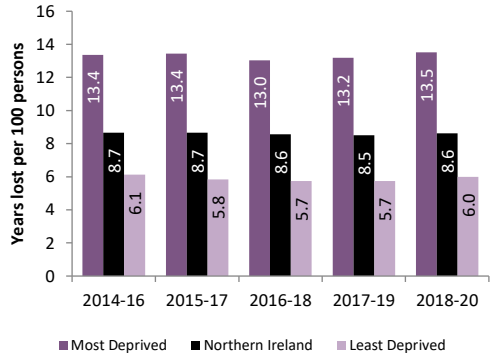
Positive Change — Narrowing of the Gap

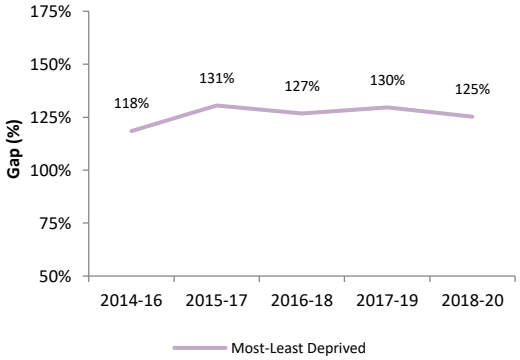
No Notable Change — No Notable Change in the Gap

Negative Change — Widening of the Gap

Potential Years of Life Lost

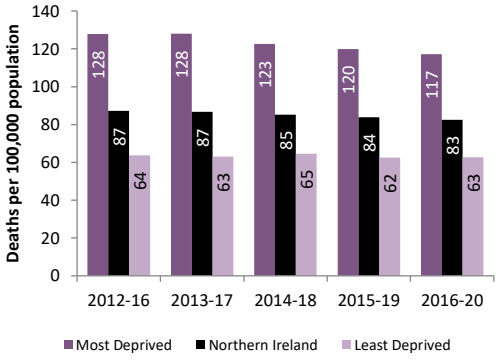
NI

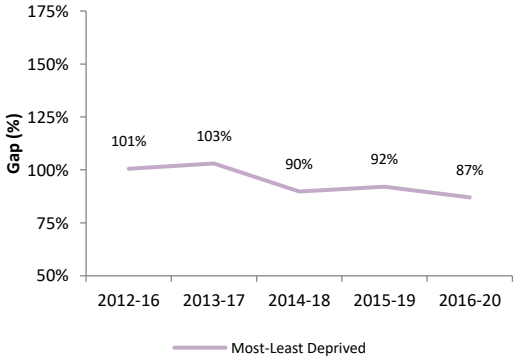


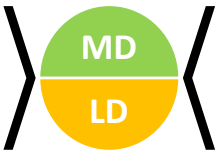


Standardised Death Rate – Treatable[11]

NI

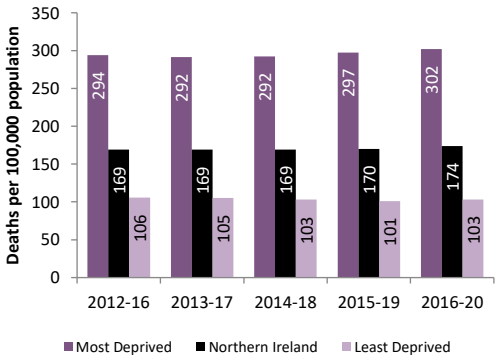


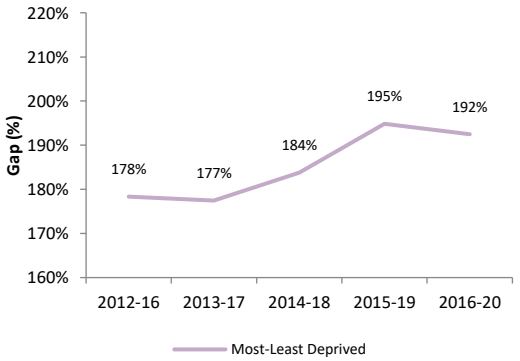




Standardised Death Rate – Preventable[11]

NI

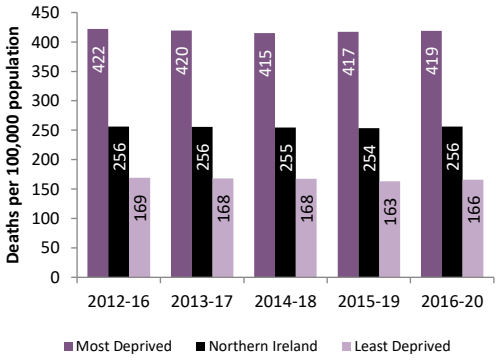


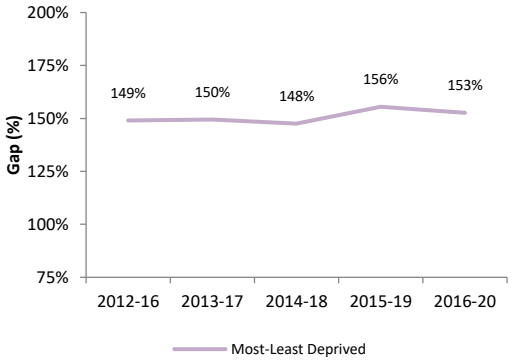


[11] Based on the current OECD and ONS definition of avoidable mortality. The previous ONS definition for preventable mortality will continue to be calculated and is published in Appendix C. A full explanation, including indicator definitions, can be found in Appendix E.

Standardised Death Rate – Avoidable[12]

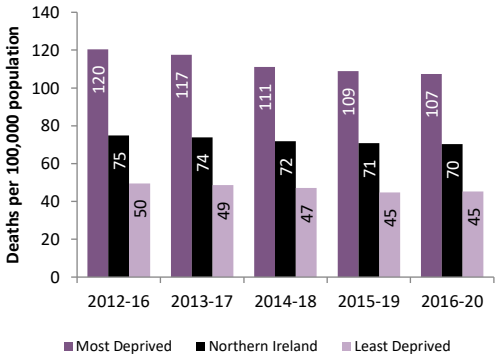
NI

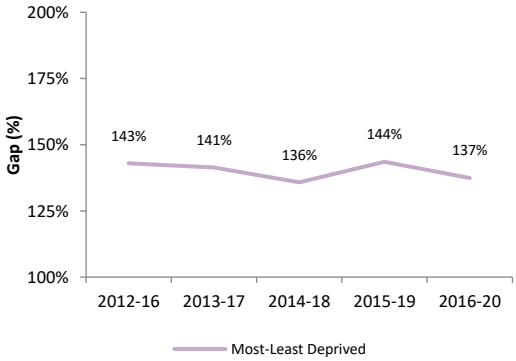




Standardised Death Rate – Circulatory U75

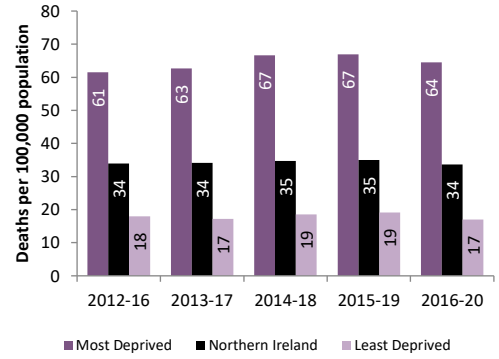
NI

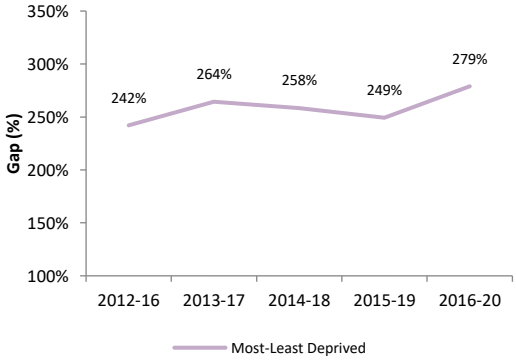




Standardised Death Rate – Respiratory U75

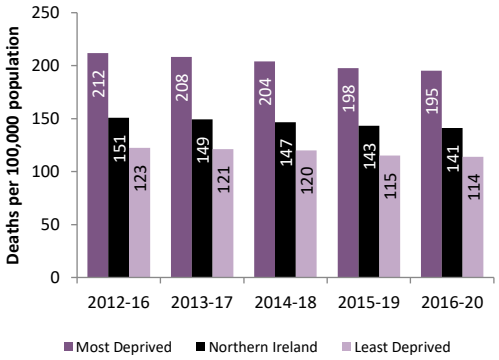
NI

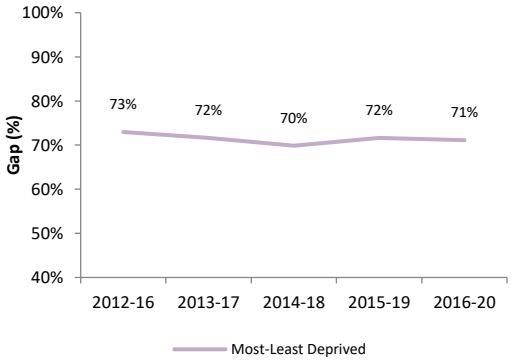




Standardised Death Rate – Cancer U75

NI

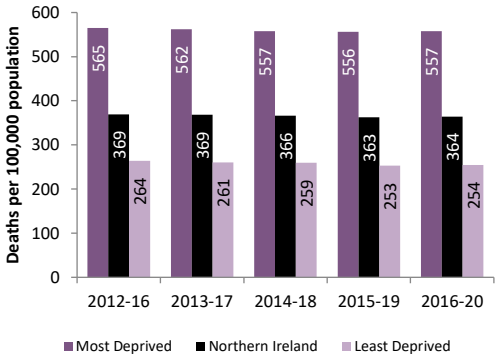


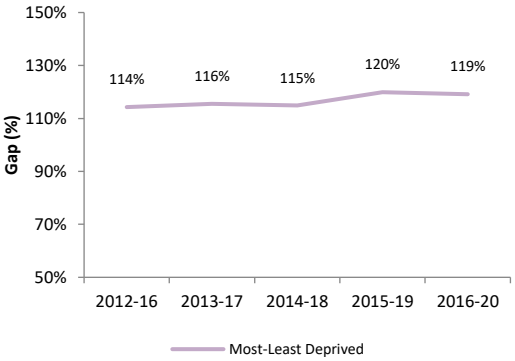


[12] Based on the current OECD and ONS definition of avoidable mortality. The previous ONS definition for preventable mortality will continue to be calculated and is published in Appendix C. A full explanation, including indicator definitions, can be found in Appendix E.

Standardised Death Rate – All Cause U75

NI





Major Diseases[13]

The inequality gap between the most and least deprived areas remained similar or narrowed for all indicators, with the exception of the statin prescription rate which widened. There were improvements in all indicators at a regional level, with the exception of cancer incidence, which increased both regionally, and in the least deprived areas. The largest inequality gap was observed for admissions due to respiratory diseases, with the rate in the most deprived areas more than double that of the least deprived, for all ages and for those aged under 75 years. Deaths due to COVID-19 in the most deprived areas were 25% higher than in the least deprived areas.

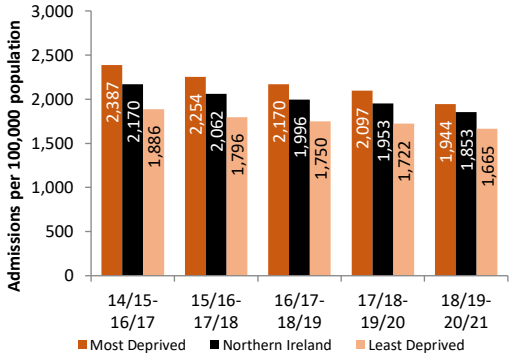
Key: Northern Ireland: NI

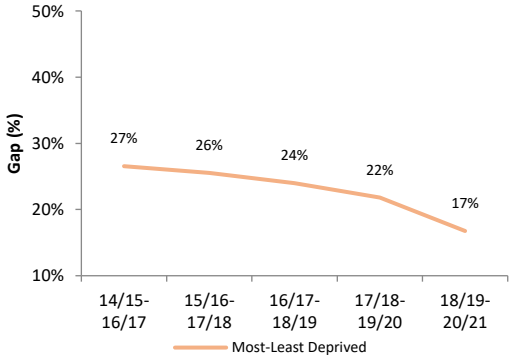
MD Most Deprived Areas

LD Least Deprived Areas

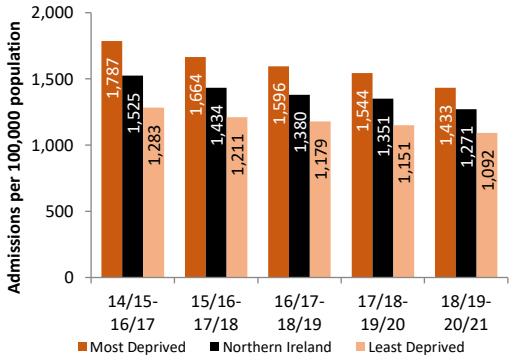
- Positive Change
- No Notable Change
- Negative Change
- Narrowing of the Gap
- No Notable Change in the Gap
- Widening of the Gap

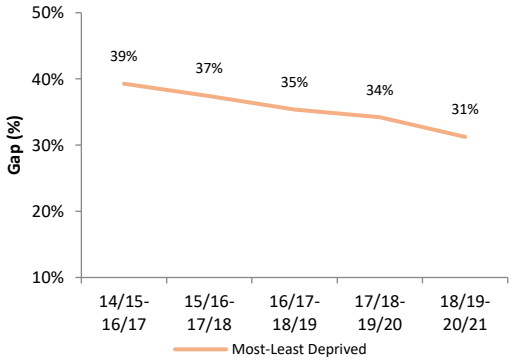
Standardised Admission Rate – Circulatory[14] NI



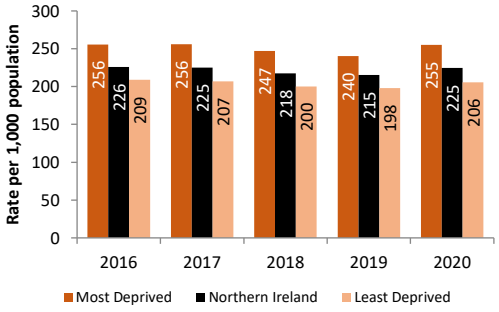


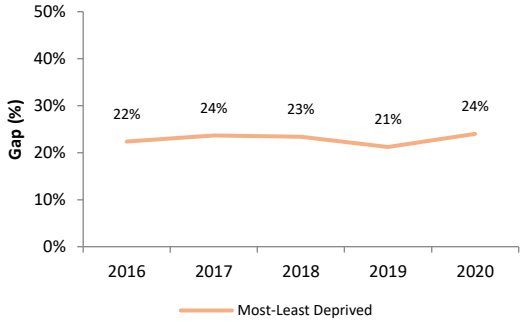
Standardised Admission Rate – Circulatory U75[14] NI





Standardised Prescription Rate – Antihypertensive NI



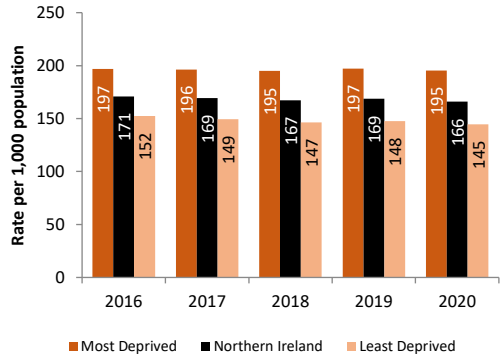


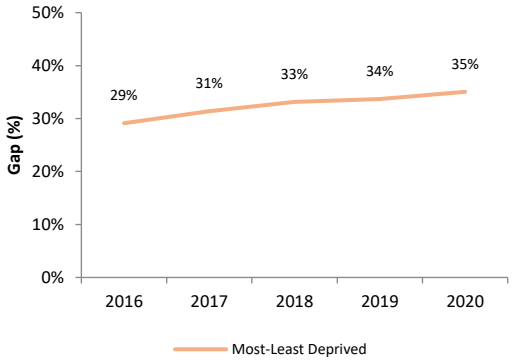
[13] Mental health related conditions and alcohol and drug related conditions, are considered in separate chapters.

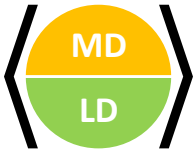
[14] Due to the impact of the COVID-19 pandemic on hospital services any changes in 2020/21 should be interpreted with caution. Further detail can be found in Appendix E: Technical Notes & Definitions.

Standardised Prescription Rate – Statin

NI

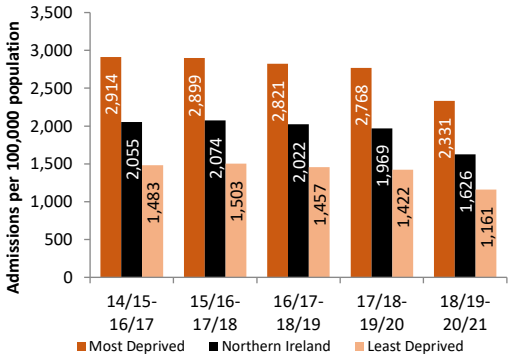


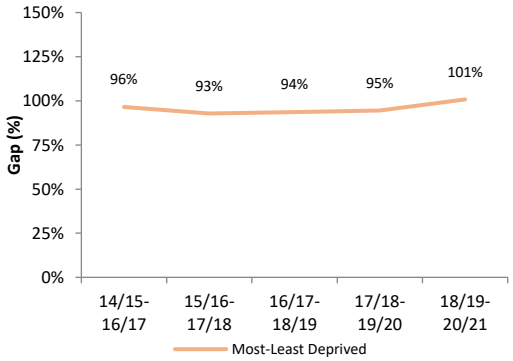




Standardised Admission Rate – Respiratory[15]

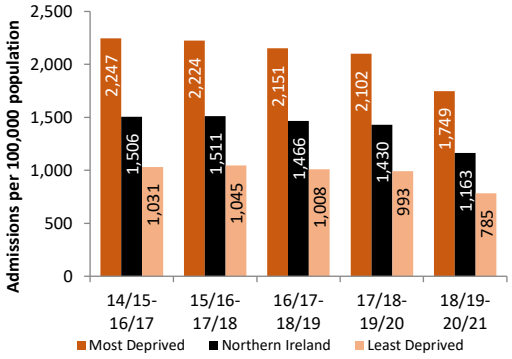
NI

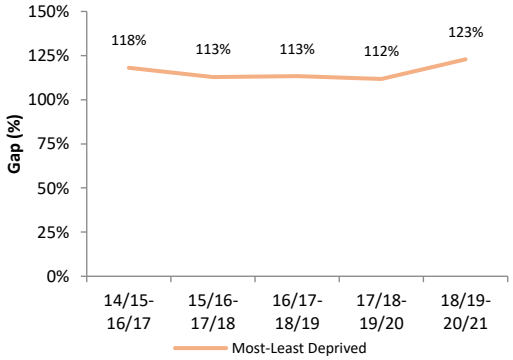




Standardised Admission Rate – Respiratory U75[15]

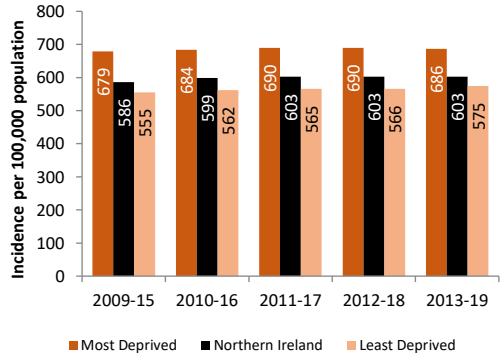
NI

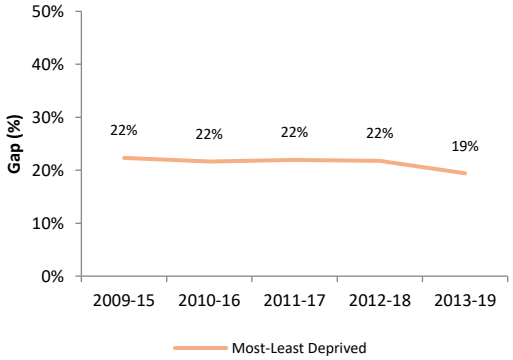


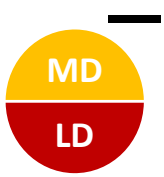


Standardised Incidence Rate – Cancer

NI

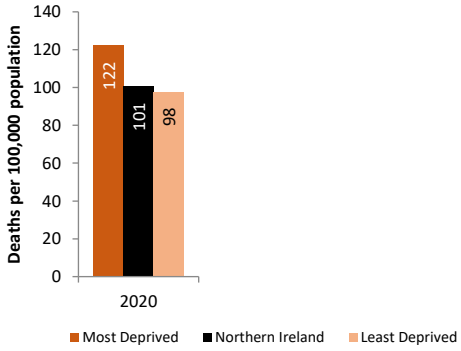






[15] Due to the impact of the COVID-19 pandemic on hospital services any changes in 2020/21 should be interpreted with caution. Further detail can be found in Appendix E: Technical Notes & Definitions.

Standardised Death Rate – COVID-19[16]



Most-Least deprived inequality gap:

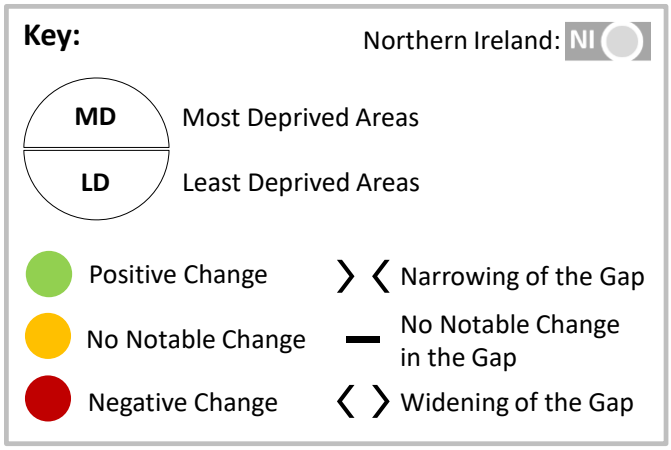
25%

The information presented above for 'Standardised Death Rate – COVID-19' is based on deaths due to COVID-19 that have been have been registered with the General Register Office (GRO). It does not include deaths reported to the PHA where the deceased has had a positive test for COVID-19 and died within 28 days, where subsequently COVID-19 was not registered on the death certificate as the cause of death.

[16] As COVID-19 is an emergent disease, data is only available for 2020 and therefore to time series is available.

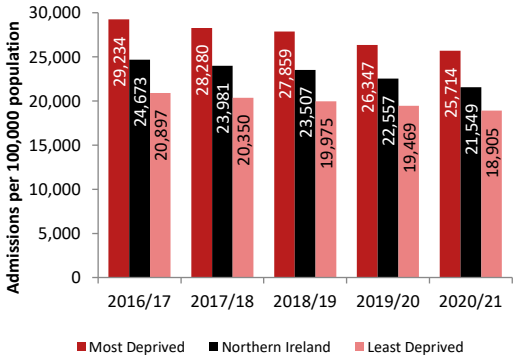
Hospital Activity[17]

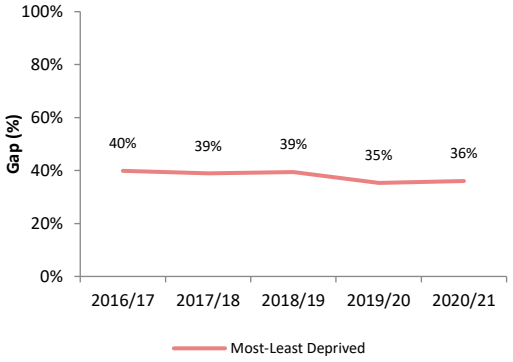
Inequality gaps for all indicators remained similar or narrowed over the analysed period. Emergency care admissions was the only indicator to see a negative change where rates increased for NI and its least deprived areas. All other hospital activity indicators improved across NI and in its most and least deprived areas[17]. Although the emergency admissions inequality gap narrowed from 73% to 62% over the five year period, it remained the largest gap of the hospital activity indicators.



Standardised Admission Rate – All Admissions

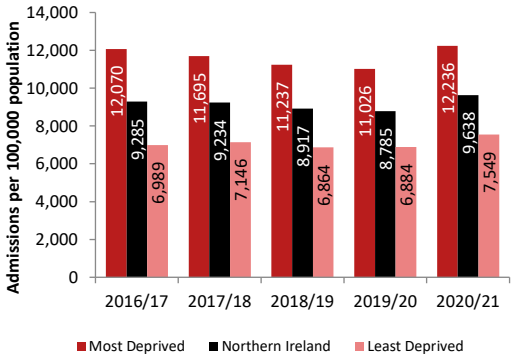
NI

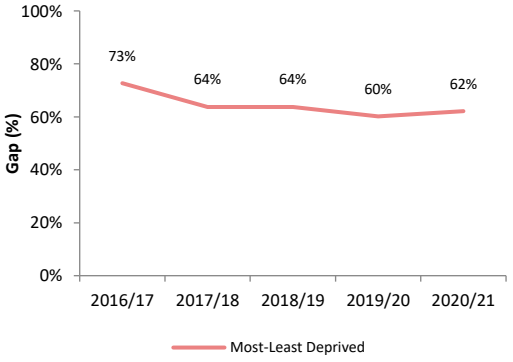


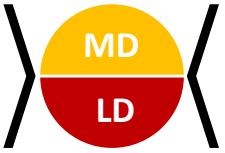


Standardised Admission Rate – Emergency Admissions

NI

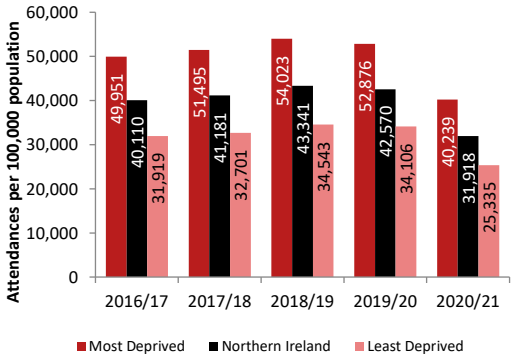


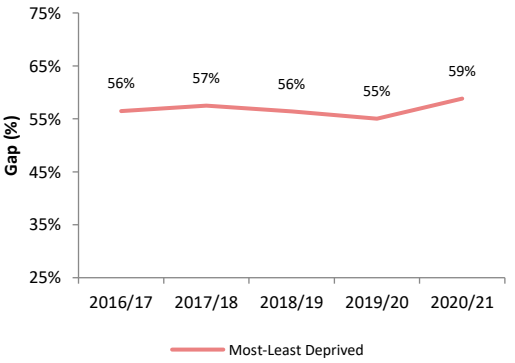




Standardised Attendance Rate – Emergency Care[18]

NI



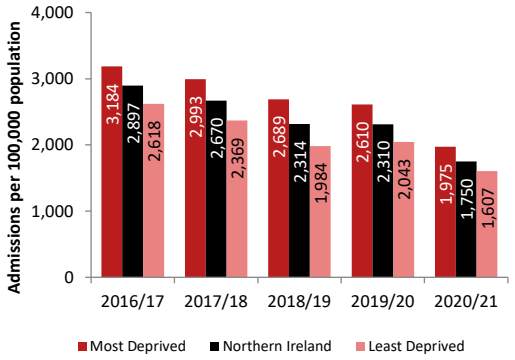


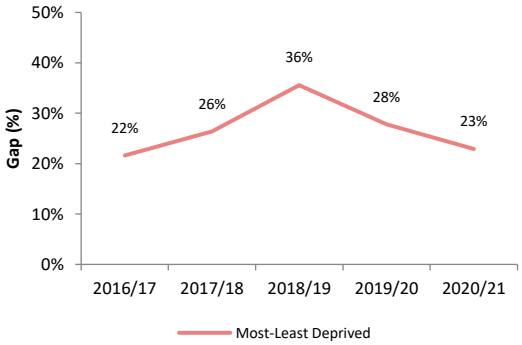
[17] Due to the impact of the COVID-19 pandemic on hospital services any changes in 2020/21 should be interpreted with caution. Further detail can be found in Appendix E: Technical Notes & Definitions.

[18] Figures have been revised from the previous publication.

Standardised Admission Rate – Elective Inpatient Admissions[19]

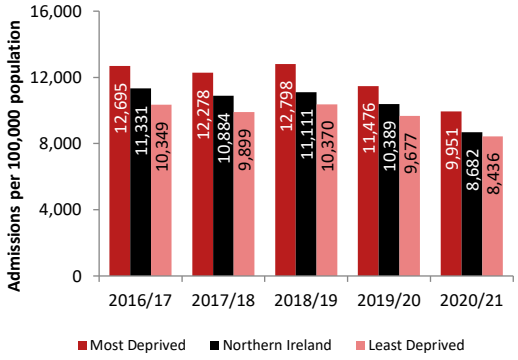
NI

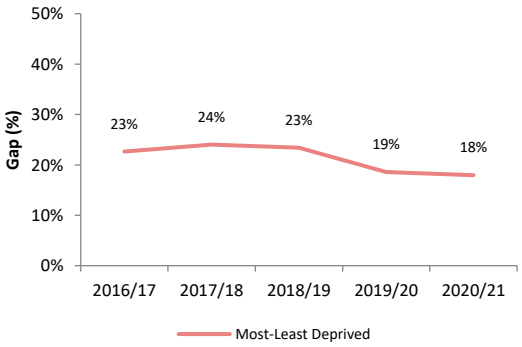




Standardised Admission Rate – Day Case Admissions

NI





[19] Please note that some of the observed decreases in the admission rate across all areas may be explained by a service reconfiguration. For further information, see indicator definitions in Appendix E: Technical Notes & Definitions.

Mental Health

Large inequality gaps continue to exist for mental health indicators, however there was positive change regionally and in the most and least deprived areas for admissions due to self-harm, and a narrowing of the inequality gap from 255% to 186%. Prescription rates for mood and anxiety disorders remained the same regionally and in the least deprived areas, whereas in the most deprived areas there was a negative change over the period. In 2017-19 the intentional self-harm mortality rate in the most deprived areas was double that observed in the least deprived areas.[20]

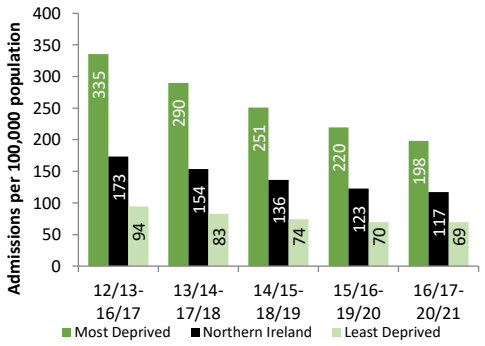
Key: Northern Ireland: NI

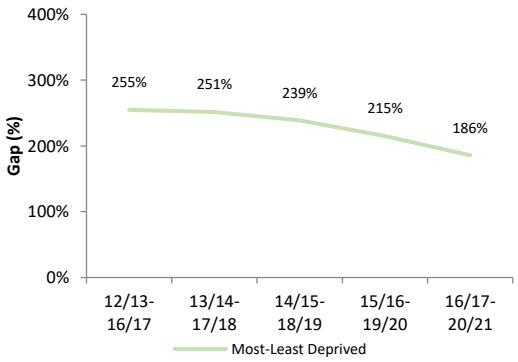
MD — Most Deprived Areas

LD — Least Deprived Areas

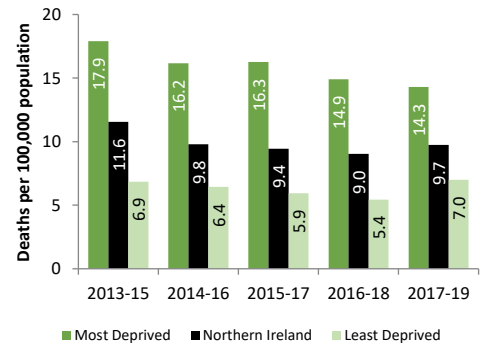
- Positive Change
- No Notable Change
- Negative Change
- Narrowing of the Gap
- No Notable Change in the Gap
- Widening of the Gap

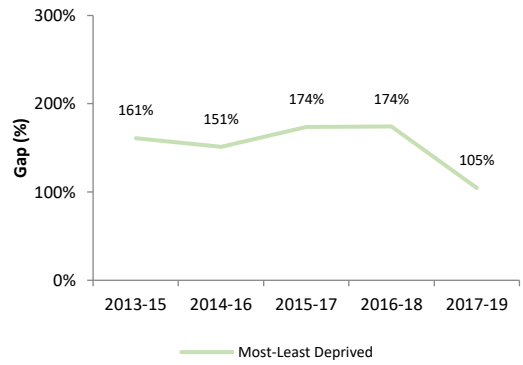
Standardised Admission Rate – Self-Harm[21] NI



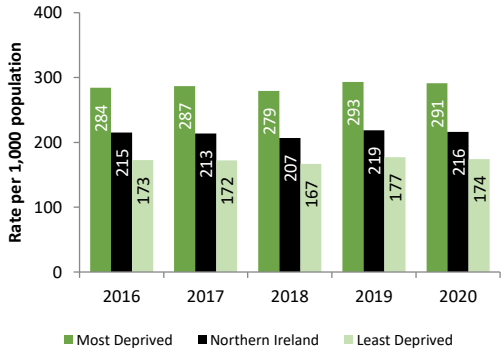


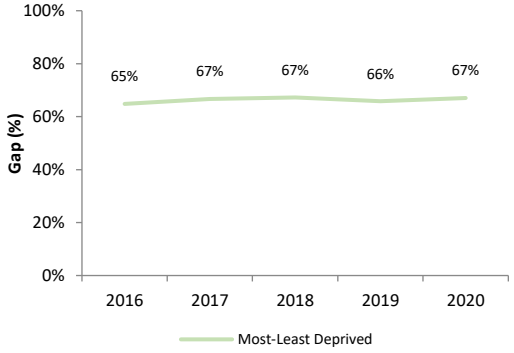
Crude Death Rate – Intentional Self-Harm[20] NI

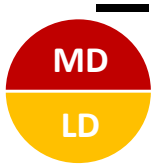




Standardised Prescription Rate – Mood & Anxiety NI





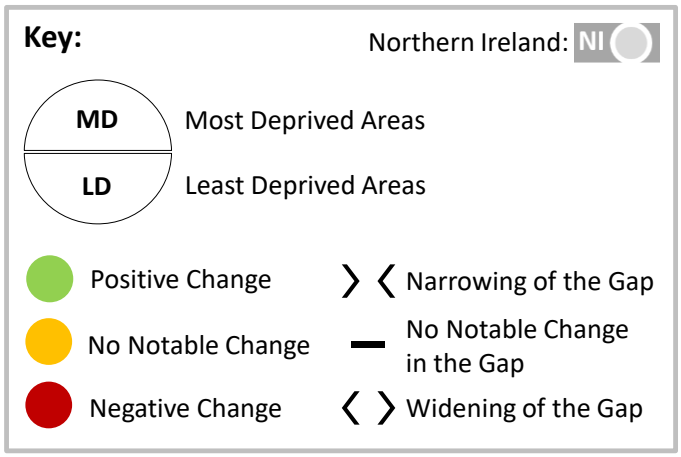


[20] Figures have not been updated for 2020 due to ongoing suicide review. Further detail can be found in Appendix E.

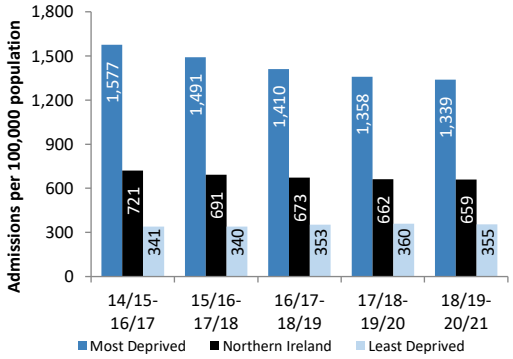
[21] Due to the impact of the COVID-19 pandemic on hospital services any changes in 2020/21 should be interpreted with caution. Further detail can be found in Appendix E: Technical Notes & Definitions.

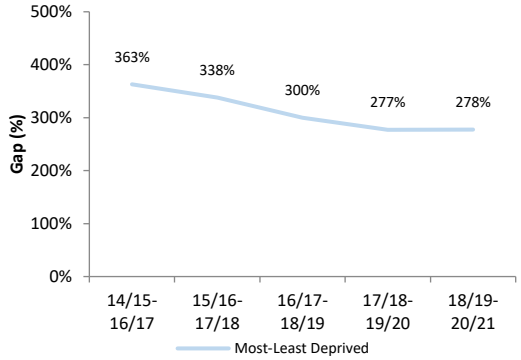
Alcohol, Smoking & Drugs

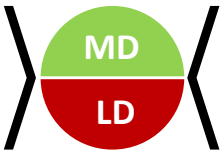
Alcohol, smoking and drug related indicators continued to have some of the largest health inequalities in NI. The inequality gaps for alcohol related and drug related admissions, in addition to alcohol specific mortality, narrowed over the observed period. However alcohol specific mortality in the most deprived areas remained around four times that in the least deprived areas and drug related mortality was over four and half times that in the least deprived areas. While alcohol and drug related admission rates fell at the regional level, the opposite was true for alcohol specific, drug related and drug misuse death rates.[22]



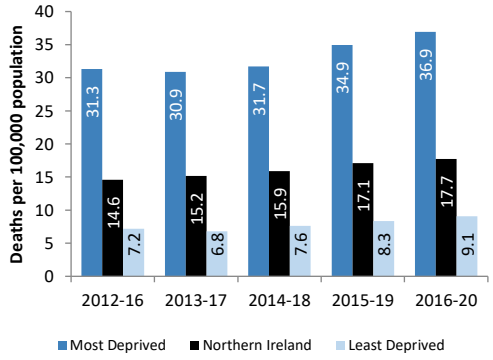
Standardised Admission Rate – Alcohol Related Causes

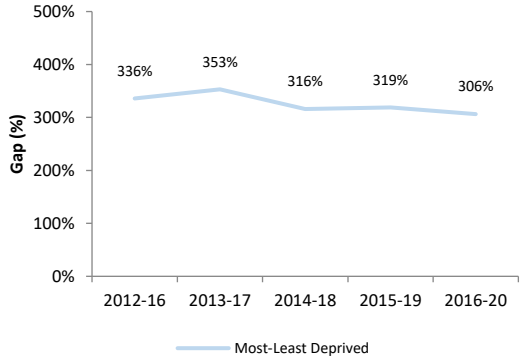


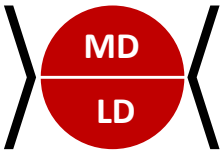




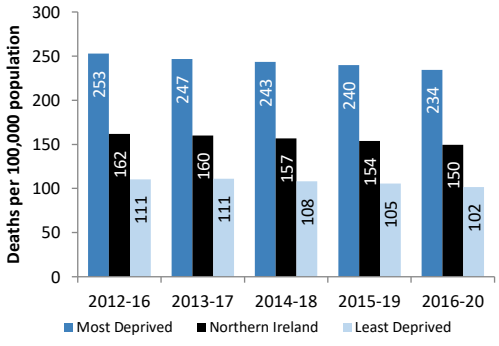
Standardised Death Rate – Alcohol Specific

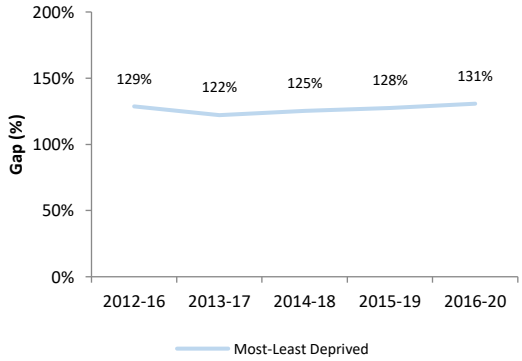






Standardised Death Rate – Smoking Related Causes

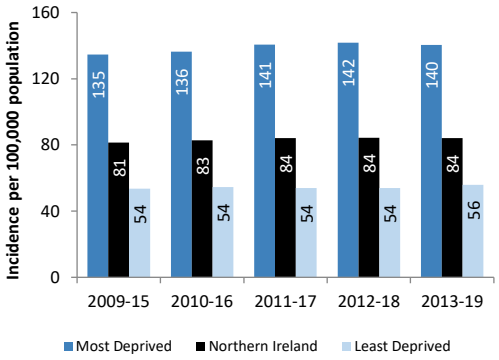


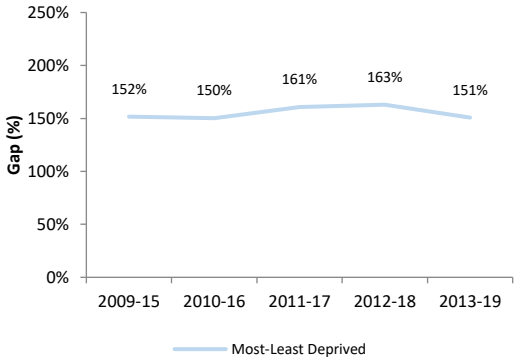


[22] Please note that some observations may be due to changes in drug misuse behaviours among the population. For more information see Appendix E: Technical Notes & Definitions.

Standardised Incidence Rate – Lung Cancer

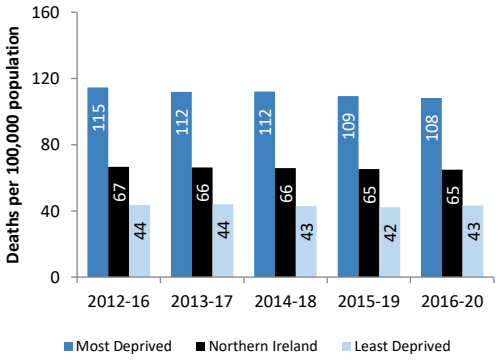
NI

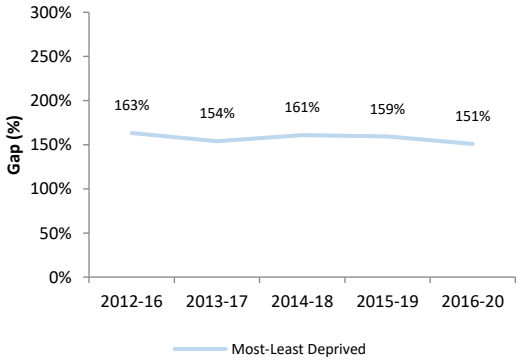




Standardised Death Rate – Lung Cancer

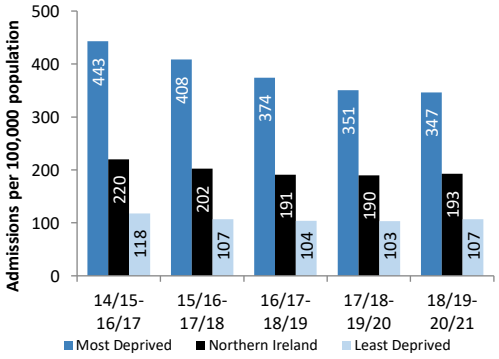
NI

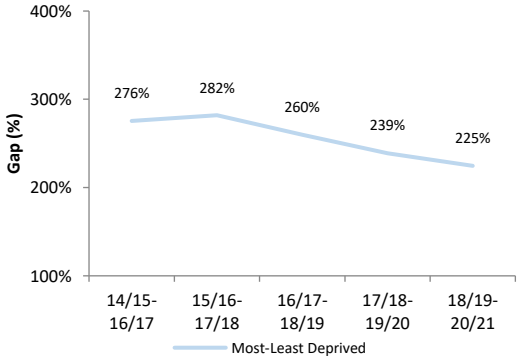




Standardised Admission Rate – Drug Related Causes

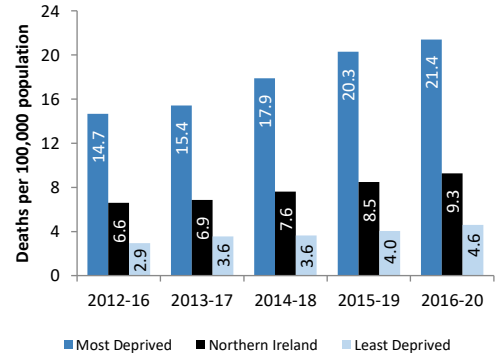
NI

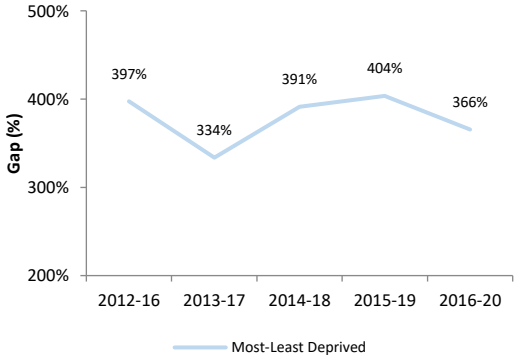


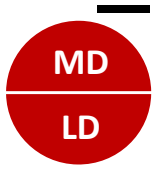


Standardised Death Rate – Drug Related Causes

NI

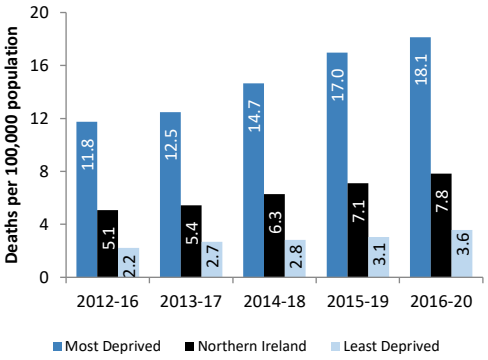


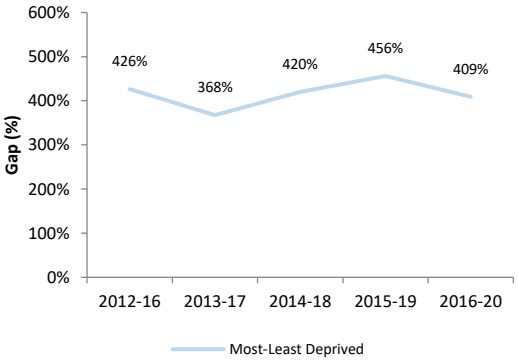




Standardised Death Rate – Drug Misuse

NI





Pregnancy & Early Years

Inequality gaps for all indicators remained similar or widened over the analysed period. The low birth weight gap widened, due to improvements in the least deprived areas coinciding with a negative change in the most deprived. The overall inequality gap for both the teenage birth rate and the proportion of mothers reporting smoking during pregnancy still remain very large; with the teenage birth rate in the most deprived areas being seven times that in the least deprived areas, and the proportion of births where the mother reported smoking during pregnancy in the most deprived areas was over four and a half times the rate in the least deprived areas.

Key:

Northern Ireland: NI

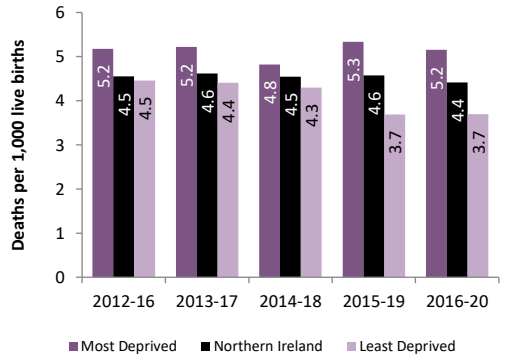
MD – Most Deprived Areas

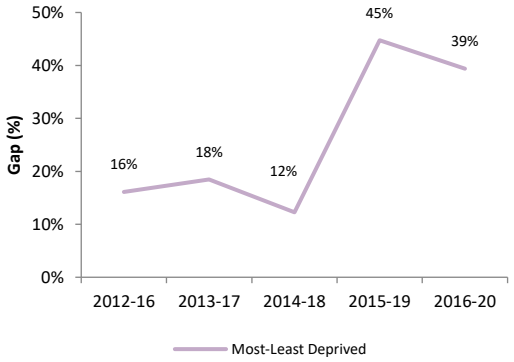
LD – Least Deprived Areas

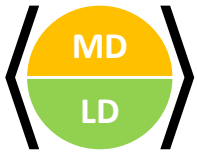
- Positive Change
- No Notable Change
- Negative Change
- Narrowing of the Gap
- No Notable Change in the Gap
- Widening of the Gap

Infant Mortality Rate[23]

NI

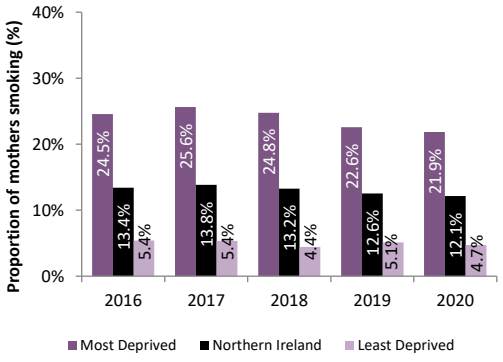


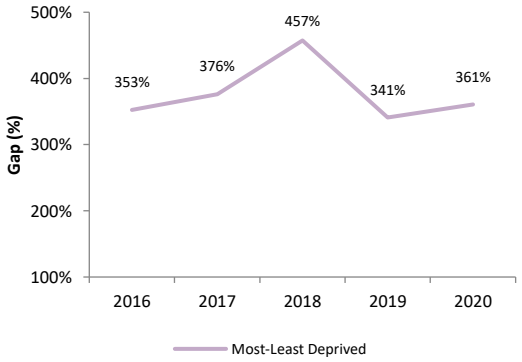




Smoking During Pregnancy

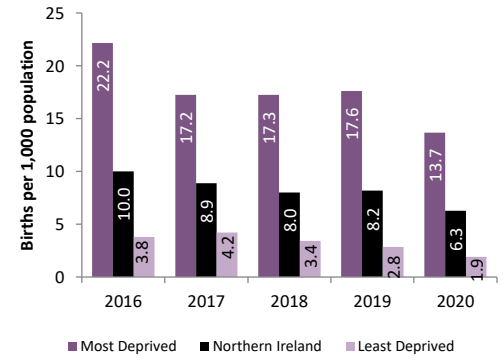
NI

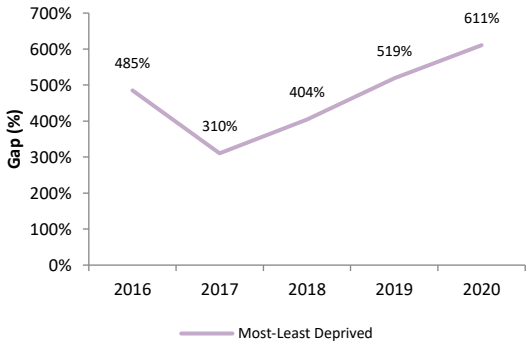




Teenage Birth Rate U20

NI

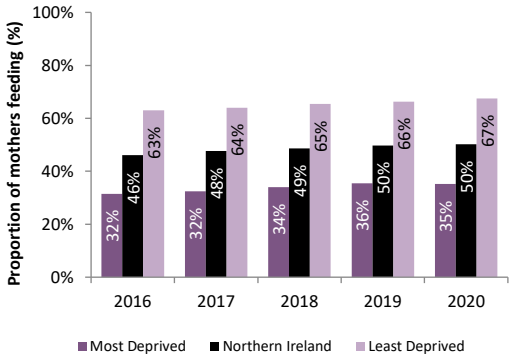


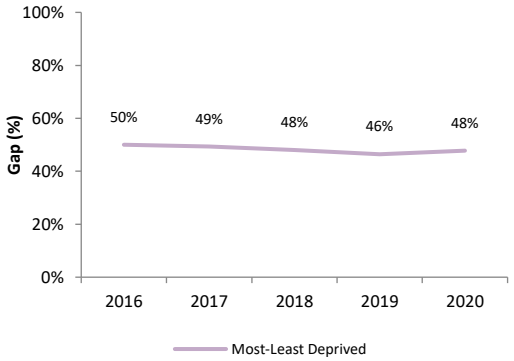


[23] As the underlying rates are relatively low (typically below 6 deaths per 1,000 live births), small annual changes can have a large impact on the resulting inequality gap.

Breastfeeding on Discharge

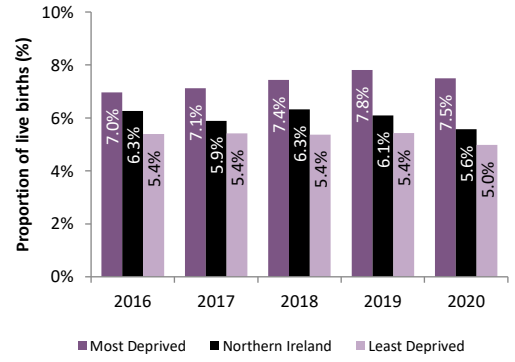
NI

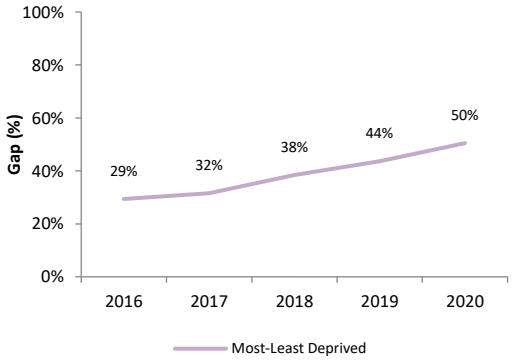




Low Birth Weight

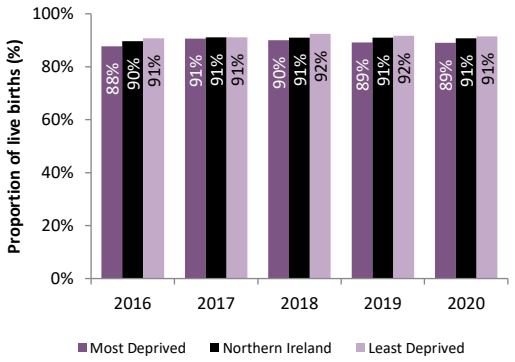
NI

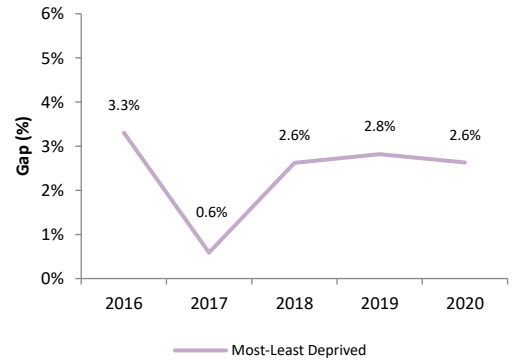




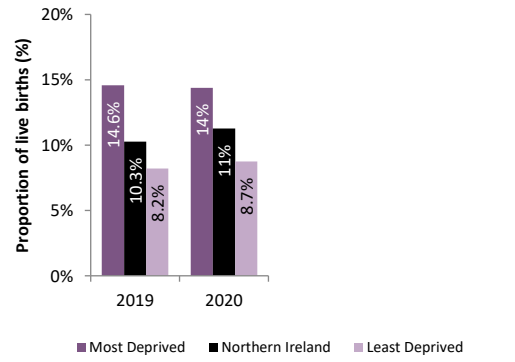
Healthy Birth Weight

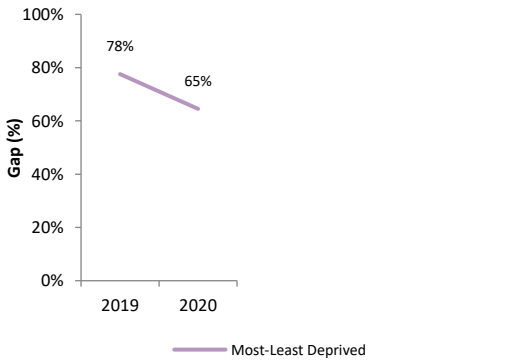
NI





Small for Gestational Age[24]





[24] No assessment of the inequality gap trend will be made until 5 years of data are available. Data is only presented for 2019 and 2020, due to insufficient recording levels prior to 2019. For further detail, please see Appendix E: Technical Notes & Definitions.

Diet & Dental Health

Over the period analysed the inequality gap in the proportion of Primary 1 children reported as obese or overweight widened.[25] There were increases in the percentage of Primary 1 children with a BMI classification of obese in NI and in the most deprived areas. The picture was similar for the proportion of children with a BMI classification of overweight and above. The inequality gaps for most of the dental indicators showed a narrowing of the gap over the analysed period.[26]

Key:

Northern Ireland: NI

MD – Most Deprived Areas

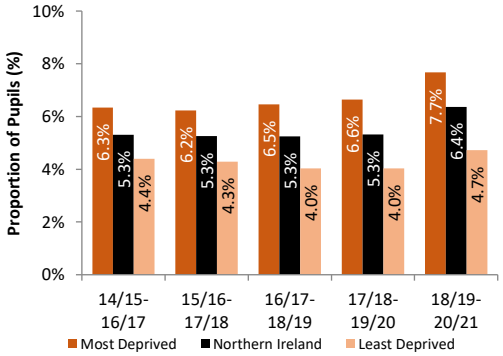
LD – Least Deprived Areas

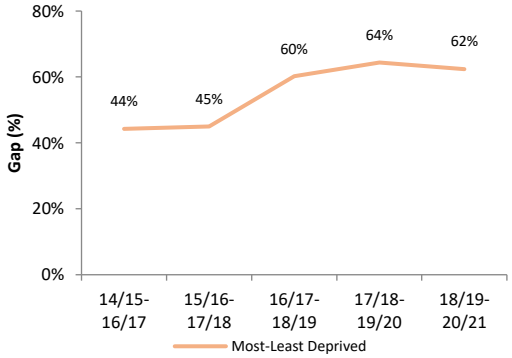
- Positive Change
- No Notable Change
- Negative Change
- Narrowing of the Gap
- No Notable Change in the Gap
- Widening of the Gap

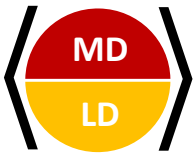
Please note that Year 8 BMI assessments have been temporarily removed from this report. As a result of school closures during the pandemic, year 8 data from 2018/19 to 2020/21 does not include measurements across all HSC Trusts and as a result, a regional assessment cannot be produced. In addition, Primary 1 figures combine 3 years of data, as the number of measurements recorded in 2019/20 and 2020/21 was impacted by school closures due to the COVID-19 pandemic.

Primary 1 BMI: Obese[25]

NI

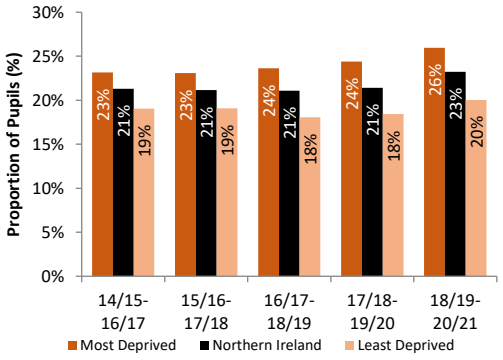


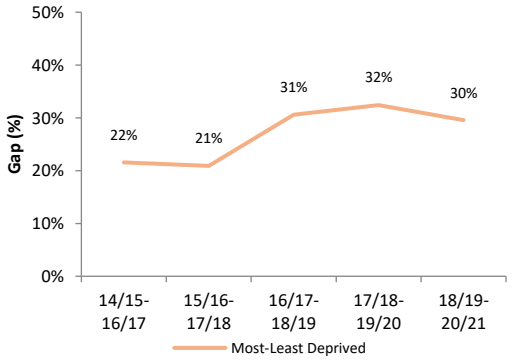


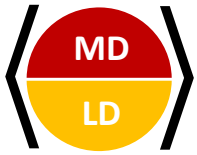


Primary 1 BMI: Overweight or Obese[25]

NI





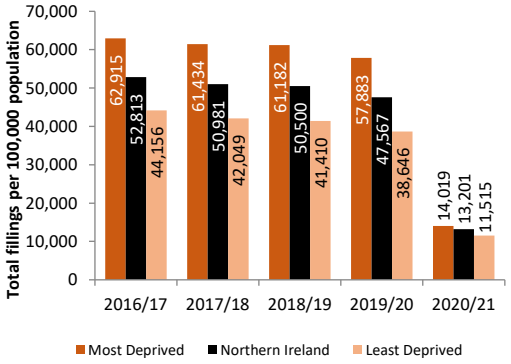


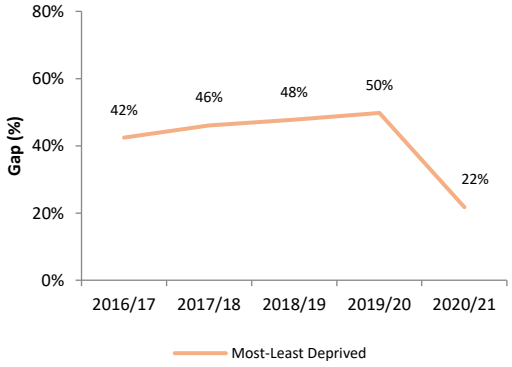
[25] Figures and assessments of change should be treated with caution due to excessively low BMI recording levels as a result of the pandemic.

[26] Due to the major impact of the COVID-19 pandemic on dental services any changes in 2020/21 should be interpreted with caution. It is also important to note that data does not include those who have paid privately for treatment.

Standardised Filling Rate - Total[27]

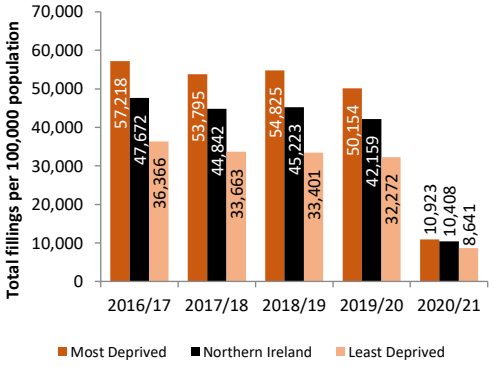
NI

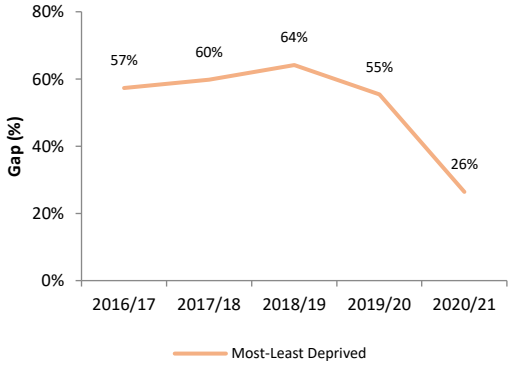




Standardised Filling Rate – Total (U18)[27]

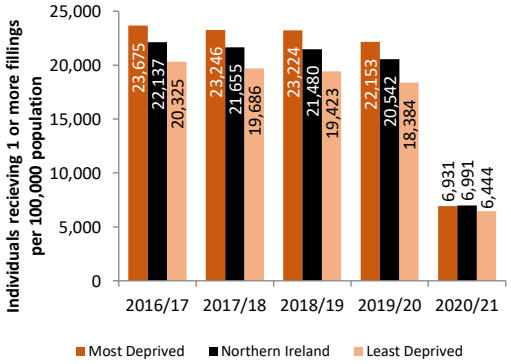
NI

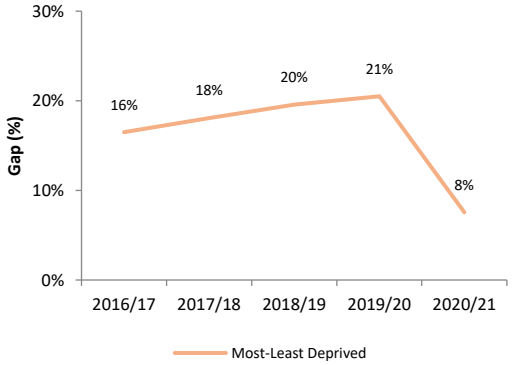




Standardised Filling Rate – Individuals[27]

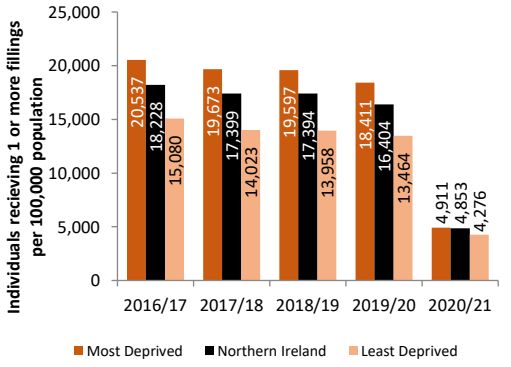
NI

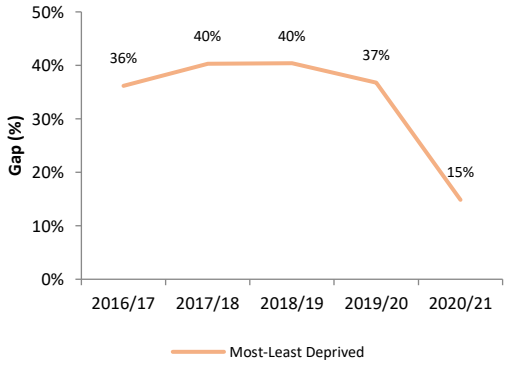




Standardised Filling Rate – Individuals (U18)[27]

NI

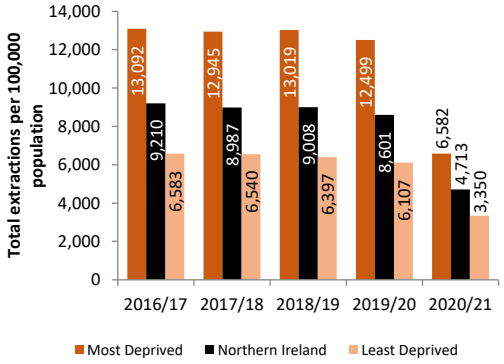


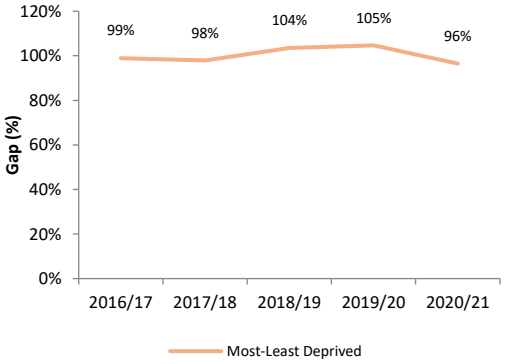


[27] Due to the major impact of the COVID-19 pandemic on dental services any changes in 2020/21 should be interpreted with caution. It is also important to note that data does not include those who have paid privately for treatment.

Standardised Extraction Rate - Total[28]

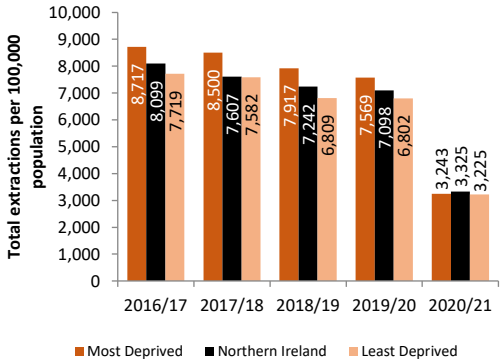
NI

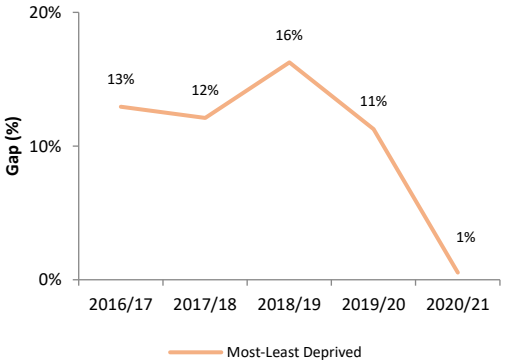




Standardised Extraction Rate – Total (U18)[28]

NI





Standardised Extraction Rate – Individuals[28]

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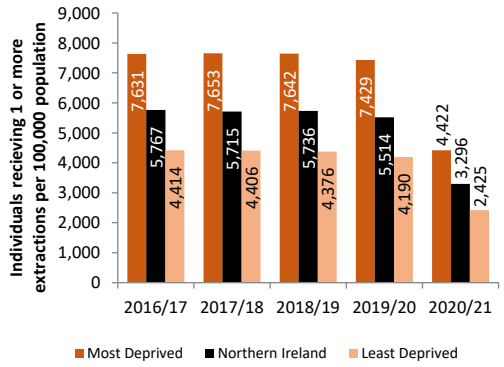
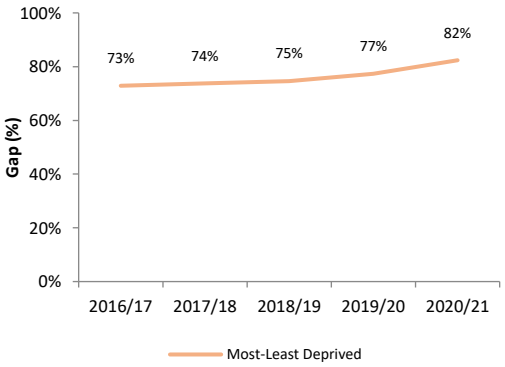
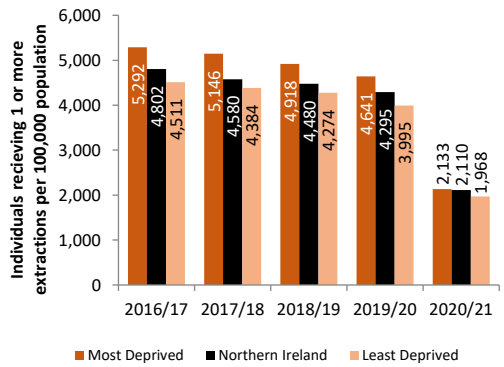
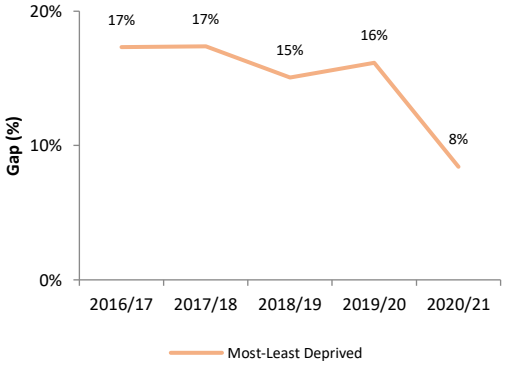




Standardised Extraction Rate – Individuals (U18)[28]

NI

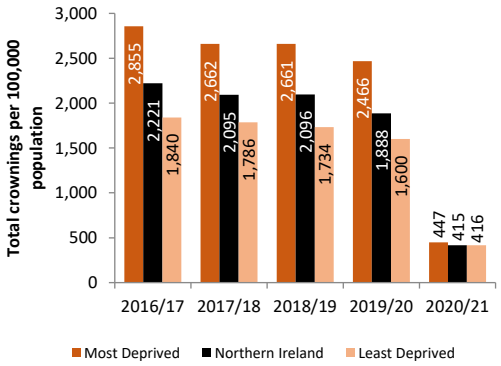


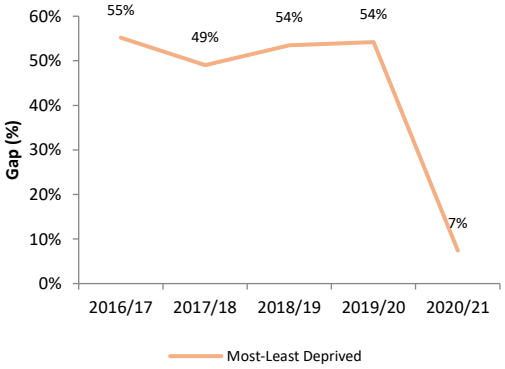


[28] Due to the major impact of the COVID-19 pandemic on dental services any changes in 2020/21 should be interpreted with caution. It is also important to note that data does not include those who have paid privately for treatment.

Standardised Crowning Rate – Total[29]

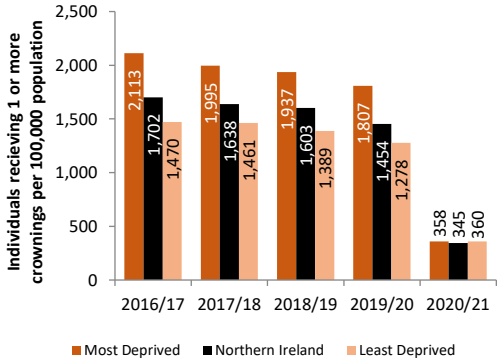
NI

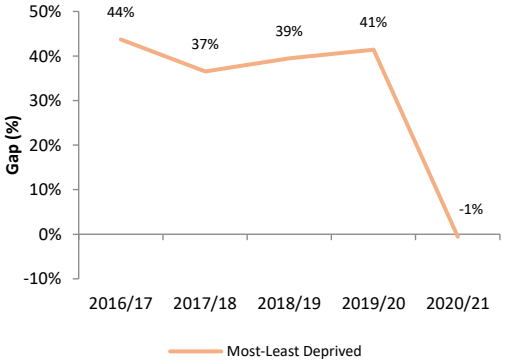




Standardised Crowning Rate – Individuals[29]

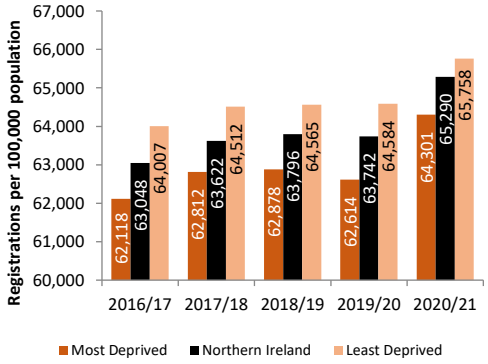
NI

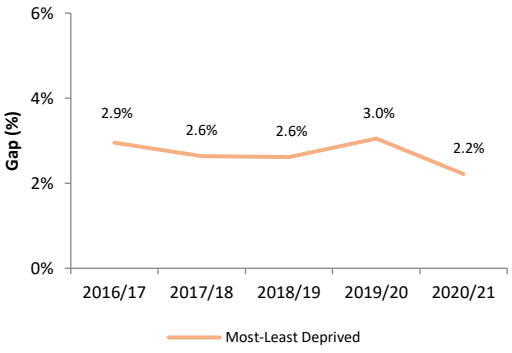




Standardised Dental Registration Rate[29]

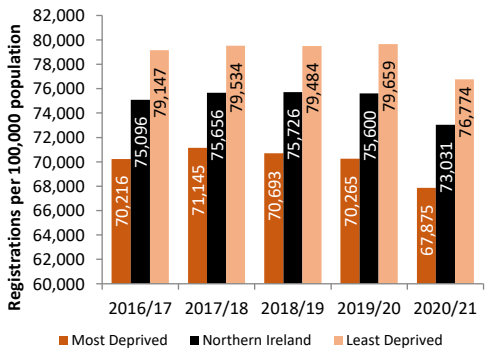
NI

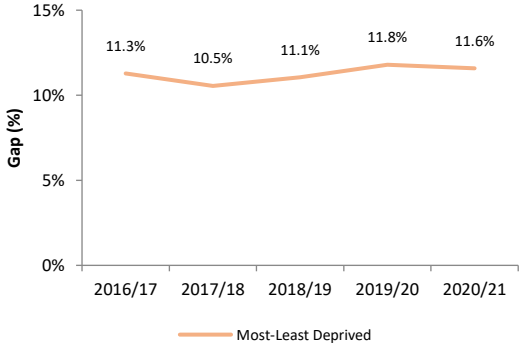




Standardised Dental Registration Rate (U18)[29]

NI





[29] Due to the major impact of the COVID-19 pandemic on dental services any changes in 2020/21 should be interpreted with caution. It is also important to note that data does not include those who have paid privately for treatment.

Sub-regional Health Inequalities

There are two aspects to the analysis of sub-regional health inequalities in this section. The analysis for each sub-regional area includes both the difference in health outcomes between the **Trust or LGD and the regional (NI) average** and the **20% most deprived areas within an area and the area's average**.

Each chapter is a summary of findings only. For a full assessment of the HSC Trust and LGD figures, including a range of indicators that are also available at District Electoral Area (DEA), see downloadable tables at:

https://www.health-ni.gov.uk/articles/health-inequalities-statistics

An example of a sub-regional analysis, with guidance, can be seen below:

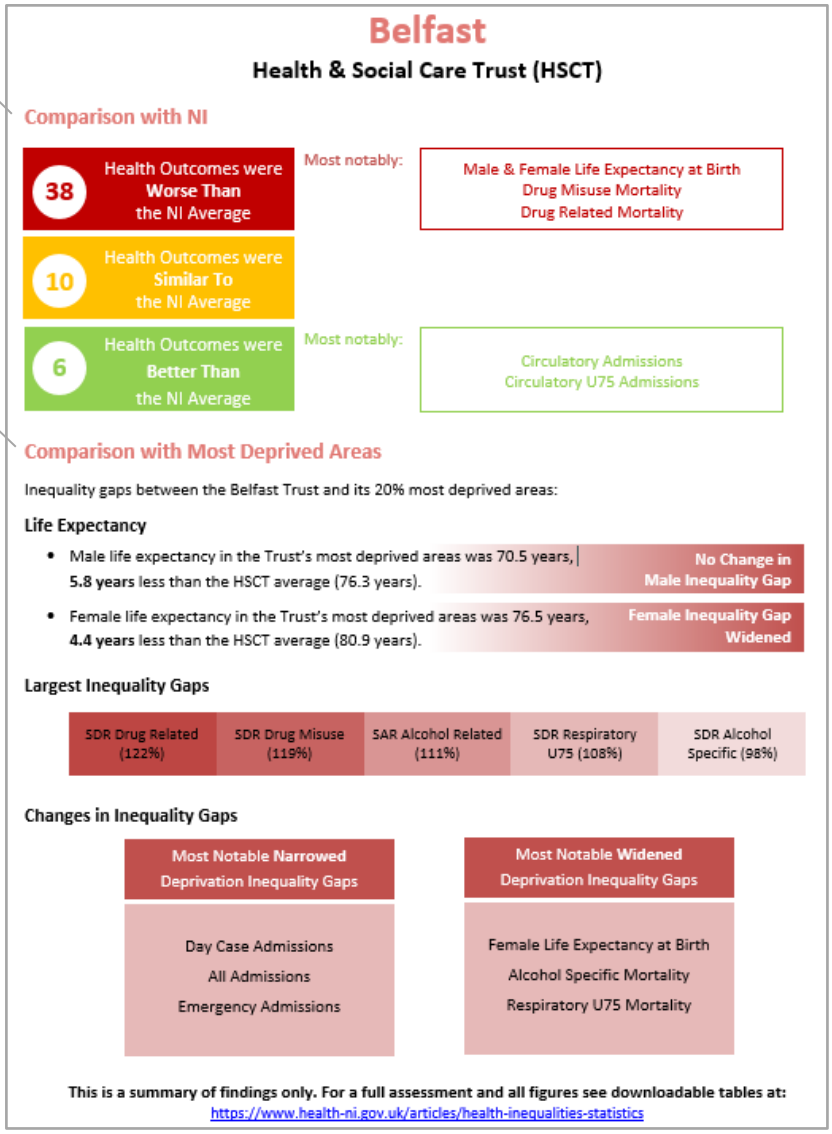
Each chapter contains a comparison of the area's health outcomes against the regional average including a summary of the most notable indicators that were better or worse.

There is also a comparison of the Inequality Gap between the area average and its most deprived areas in respect of:

Life Expectancy
Analysis of the male and female life expectancy gap within the area and if this gap has changed.

Largest Inequality Gaps
The five largest inequality gaps in the area.

Changes in Inequality Gaps
A summary of the most notable indicators that have either narrowed or widened across the analysed period.

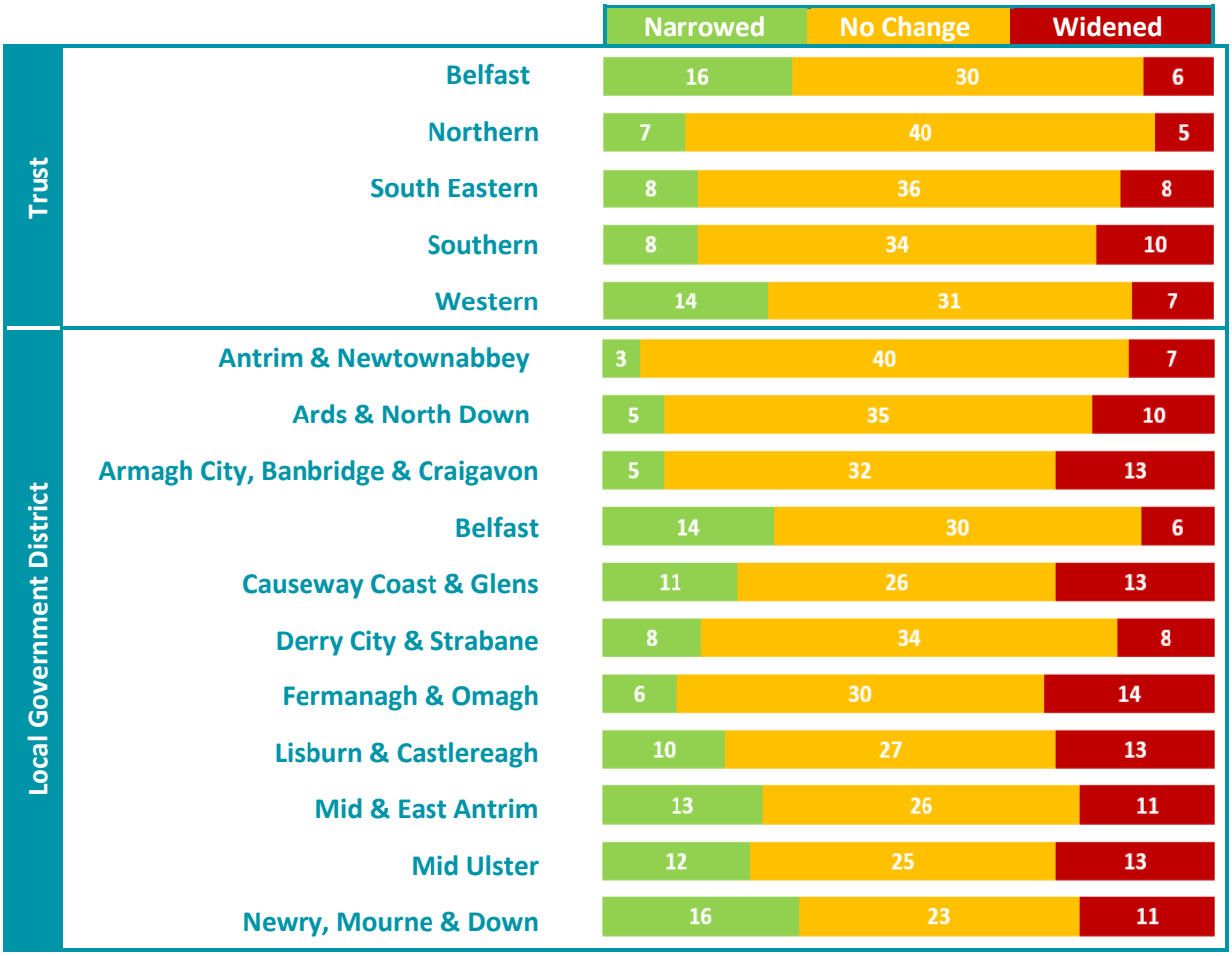


SUMMARY OF CHANGES IN SUB-REGIONAL INEQUALITY GAPS OVER THE LAST 5 YEARS

Changes in Deprivation Related Inequality Gaps

Over the period analysed, there were more inequality gaps that widened than narrowed in the Southern HSC Trust, whilst the opposite was true in the Belfast, Northern & Western HSC Trusts. Changes in the inequality gaps varied across LGDs with 14 indicators widening in Fermanagh & Omagh, whilst 16 indicators narrowed in Newry, Mourne and Down.

For each area analysed, the chart below shows the number of indicators that widened, narrowed or did not show a notable change across the period.



* For the purposes of this graphic, gaps which reversed direction, but remained similar in magnitude have been included in the “No Change” category.

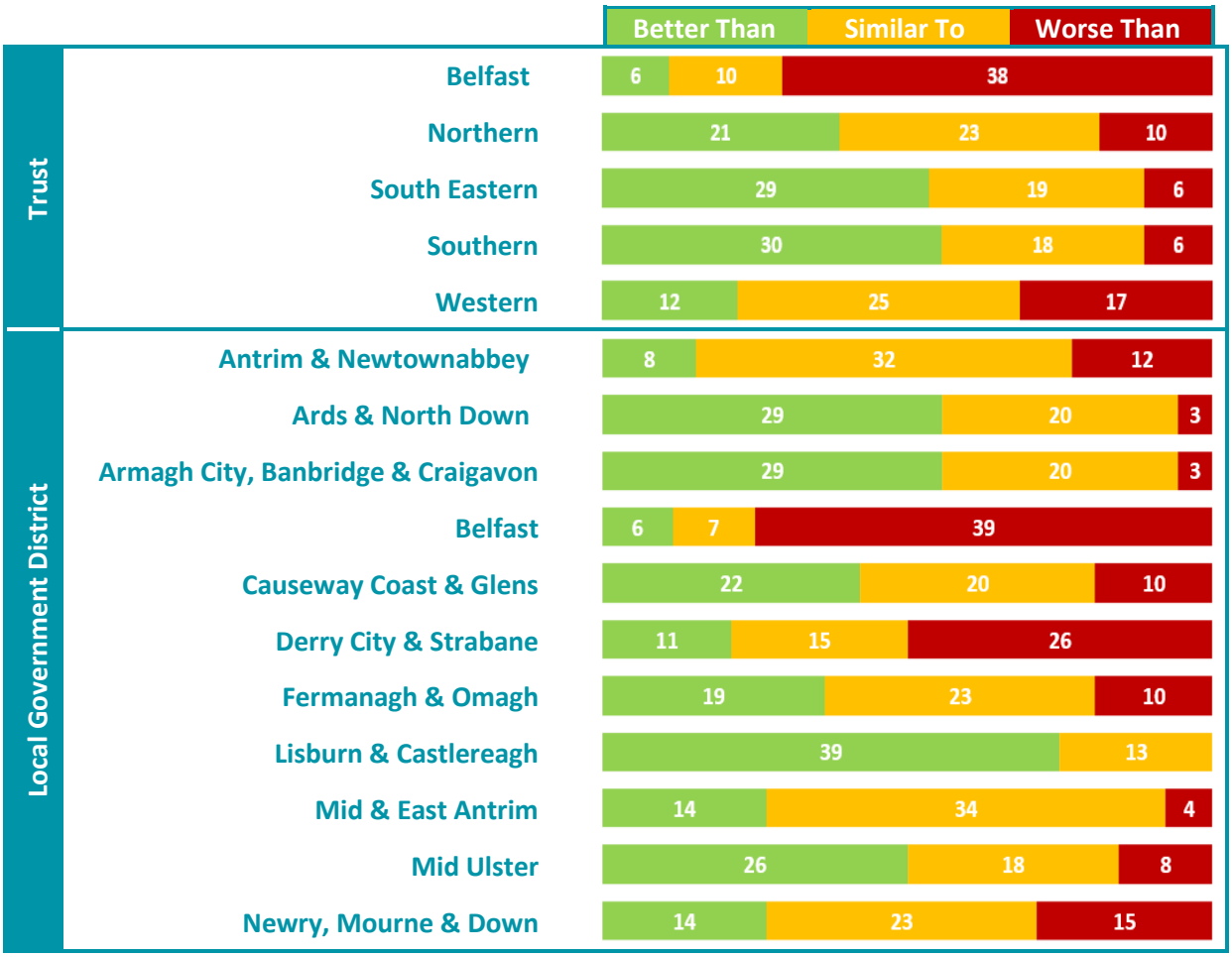
COMPARISON OF SUB-REGIONAL HEALTH OUTCOMES AGAINST THE REGIONAL AVERAGE

The following areas had a majority of health outcomes that were better than the NI average[30]:

- South Eastern HSC Trust
- Southern HSC Trust
- Ards & North Down LGD
- Armagh City, Banbridge & Craigavon LGD
- Lisburn & Castlereagh LGD

The following areas had a majority of health outcomes that were worse than the NI average[30]:

- Belfast HSC Trust
- Belfast LGD



[30] Mid Ulster LGD had 50% of health outcomes better than the NI average (with 'better than' the largest overall group when compared with 'worse than' and 'similar to'), whilst conversely the Derry City & Strabane LGD had 50% of health outcomes worse than the NI average (with 'worse than' the largest grouping when compared with 'better than' and 'similar to').

Largest Deprivation Inequality Gaps in Each Area

The table below indicates the five largest deprivation inequality gaps in each Health & Social Care Trust (HSCT) and Local Government District (LGD).

Belfast HSCT	SDR Drug Related (122%)	SDR Drug Misuse (119%)	SAR Alcohol Related (111%)	SDR Respiratory U75 (108%)	SDR Alcohol Specific (98%)
Northern HSCT	SDR Drug Misuse (153%)	SDR Drug Related (149%)	SDR Alcohol Specific (110%)	Teenage Birth Rate U20 (106%)	SAR Drug Related (103%)
South Eastern HSCT	SDR Drug Related (129%)	SDR Drug Misuse (122%)	Teenage Birth Rate (U20) (99%)	SDR Alcohol Specific (97%)	SAR Alcohol Related (95%)
Southern HSCT	Teenage Birth Rate (U20) (109%)	SAR Alcohol Related (102%)	SDR Alcohol Specific (94%)	SAR Drug Related (93%)	SAR Self-Harm (84%)
Western HSCT	SDR Drug Misuse (197%)	SDR Drug Related (188%)	SAR Alcohol Related (121%)	SDR Alcohol Specific (107%)	SAR Drug Related (93%)
Antrim & Newtownabbey LGD	Teenage Birth Rate (U20) (155%)	SDR Alcohol Specific (141%)	SDR Drug Related (135%)	SAR Drug Related (100%)	SAR Alcohol Related (95%)
Ards & North Down LGD	SDR Alcohol Specific (103%)	SDR Drug Related (102%)	Smoking During Pregnancy (100%)	Teenage Birth Rate (U20) (94%)	CDR Intentional Self-Harm (86%)
Armagh City, Banbridge & Craigavon LGD	Teenage Birth Rate (U20) (129%)	SAR Drug Related (113%)	SAR Alcohol Related (113%)	SAR Self-Harm (94%)	SDR Alcohol Specific (83%)
Belfast LGD	SAR Alcohol Related (100%)	SDR Drug Related (92%)	Teenage Birth Rate (U20) (91%)	SDR Alcohol Specific (85%)	SAR Drug Related (83%)
Causeway Coast & Glens LGD	SDR Drug Related (163%)	SDR Alcohol Specific (128%)	SAR Alcohol Related (112%)	Smoking During Pregnancy (102%)	CDR Intentional Self-Harm (76%)
Derry City & Strabane LGD	SDR Drug Related (156%)	SDR Alcohol Specific (132%)	SAR Alcohol Related (131%)	Teenage Birth Rate (U20) (126%)	SAR Drug Related (99%)
Fermanagh & Omagh LGD	Teenage Birth Rate (U20) (121%)	SAR Drug Related (79%)	SAR Self-Harm (74%)	SDR Lung Cancer (66%)	Smoking During Pregnancy (65%)
Lisburn & Castlereagh LGD	Smoking During Pregnancy (148%)	Teenage Birth Rate (U20) (144%)	SDR Alcohol Specific (90%)	SAR Alcohol Related (89%)	SAR Self-Harm (88%)
Mid & East Antrim LGD	SDR Drug Related (209%)	SAR Drug Related (152%)	SAR Alcohol Related (137%)	SAR Self-Harm (135%)	Teenage Birth Rate (U20) (134%)
Mid Ulster LGD	Teenage Birth Rate (U20) (73%)	SDR Drug Related (67%)	SDR Alcohol Specific (57%)	SAR Alcohol Related (56%)	SAR Drug Related (48%)
Newry, Mourne & Down LGD	SDR Drug Related (86%)	SDR Alcohol Specific (73%)	Teenage Birth Rate (U20) (71%)	SAR Alcohol Related (59%)	SAR Self-Harm (55%)

Belfast

Health & Social Care Trust (HSCT)

Comparison with NI

38 Health Outcomes were **Worse Than** the NI Average

Most notably:

Male & Female Life Expectancy at Birth
Drug Misuse Mortality
Drug Related Mortality

10 Health Outcomes were **Similar To** the NI Average

6 Health Outcomes were **Better Than** the NI Average

Most notably:

Circulatory Admissions
Circulatory U75 Admissions

Comparison with Most Deprived Areas

Inequality gaps between the Belfast Trust and its 20% most deprived areas:

Life Expectancy

- Male life expectancy in the Trust's most deprived areas was 70.5 years, **5.8 years** less than the HSCT average (76.3 years). **No Change in Male Inequality Gap**
- Female life expectancy in the Trust's most deprived areas was 76.5 years, **4.4 years** less than the HSCT average (80.9 years). **Female Inequality Gap Widened**

Largest Inequality Gaps

SDR Drug Related (122%)	SDR Drug Misuse (119%)	SAR Alcohol Related (111%)	SDR Respiratory U75 (108%)	SDR Alcohol Specific (98%)

Changes in Inequality Gaps

Most Notable **Narrowed** Deprivation Inequality Gaps	Most Notable **Widened** Deprivation Inequality Gaps
Day Case Admissions	Female Life Expectancy at Birth
All Admissions	Alcohol Specific Mortality
Emergency Admissions	Respiratory U75 Mortality

This is a summary of findings only. For a full assessment and all figures see downloadable tables at:
https://www.health-ni.gov.uk/articles/health-inequalities-statistics

Northern

Health & Social Care Trust (HSCT)

Comparison with NI

10	Health Outcomes were **Worse Than** the NI Average	Most notably: Self-Harm Admissions, Drug Related Admissions, Circulatory Admissions
23	Health Outcomes were **Similar To** the NI Average	
21	Health Outcomes were **Better Than** the NI Average	Most notably: Alcohol Specific Mortality, Day Case Admissions, Alcohol Related Admissions

Comparison with Most Deprived Areas

Inequality gaps between the Northern Trust and its 20% most deprived areas:

Life Expectancy

- Male life expectancy in the Trust's most deprived areas was 75.9 years, **3.4 years** less than the HSCT average (79.4 years). **No Change in Male Inequality Gap**
- Female life expectancy in the Trust's most deprived areas was 80.1 years, **2.6 years** less than the HSCT average (82.7 years). **No Change in Female Inequality Gap**

Largest Inequality Gaps

SDR Drug Misuse (153%)	SDR Drug Related (149%)	SDR Alcohol Specific (110%)	Teenage Birth Rate U20 (106%)	SAR Drug Related (103%)

Changes in Inequality Gaps

Most Notable **Narrowed** Deprivation Inequality Gaps	Most Notable **Widened** Deprivation Inequality Gaps
Smoking During Pregnancy	Low Birth Rate
Lung Cancer Mortality	Alcohol Specific Mortality
Alcohol Related Admissions	Teenage Birth Rate U20

This is a summary of findings only. For a full assessment and all figures see downloadable tables at:
https://www.health-ni.gov.uk/articles/health-inequalities-statistics

South Eastern
Health & Social Care Trust (HSCT)

Comparison with NI

6 Health Outcomes were **Worse Than** the NI Average

Most notably:

Circulatory Admissions
Circulatory U75 Admissions

19 Health Outcomes were **Similar To** the NI Average

29 Health Outcomes were **Better Than** the NI Average

Most notably:

Alcohol Specific Mortality
Lung Cancer Incidence
Lung Cancer Mortality

Comparison with Most Deprived Areas

Inequality gaps between the South Eastern Trust and its 20% most deprived areas:

Life Expectancy

- Male life expectancy in the Trust's most deprived areas was 75.7 years, **3.7 years** less than the HSCT average (79.4 years). **No Change in Male Inequality Gap**
- Female life expectancy in the Trust's most deprived areas was 80.7 years, **2.2 years** less than the HSCT average (82.9 years). **No Change in Female Inequality Gap**

Largest Inequality Gaps

SDR Drug Related (129%)	SDR Drug Misuse (122%)	Teenage Birth Rate (U20) (99%)	SDR Alcohol Specific (97%)	SAR Alcohol Related (95%)

Changes in Inequality Gaps

Most Notable **Narrowed** Deprivation Inequality Gaps	Most Notable **Widened** Deprivation Inequality Gaps
Alcohol Specific Mortality	Low Birth Weight
Lung Cancer Mortality	All Admissions
Self-Harm Admissions	Teenage Birth Rate U20

This is a summary of findings only. For a full assessment and all figures see downloadable tables at:
https://www.health-ni.gov.uk/articles/health-inequalities-statistics

Southern

Health & Social Care Trust (HSCT)

Comparison with NI

6	Health Outcomes were **Worse Than** the NI Average	Most notably: Emergency Admissions, Circulatory Admissions, Circulatory U75 Admissions
18	Health Outcomes were **Similar To** the NI Average	
30	Health Outcomes were **Better Than** the NI Average	Most notably: Drug Misuse Mortality, Drug Related Mortality, Elective Inpatient Admissions

Comparison with Most Deprived Areas

Inequality gaps between the Southern Trust and its 20% most deprived areas:

Life Expectancy

- Male life expectancy in the Trust's most deprived areas was 76.5 years, **2.7 years** less than the HSCT average (79.3 years). **No Change in Male Inequality Gap**
- Female life expectancy in the Trust's most deprived areas was 82.0 years, **1.1 years** less than the HSCT average (83.1 years). **No Change in Female Inequality Gap**

Largest Inequality Gaps

Teenage Birth Rate (U20) (109%)	SAR Alcohol Related (102%)	SDR Alcohol Specific (94%)	SAR Drug Related (93%)	SAR Self-Harm (84%)

Changes in Inequality Gaps

Most Notable **Narrowed** Deprivation Inequality Gaps	Most Notable **Widened** Deprivation Inequality Gaps
Drug Misuse Mortality	Low Birth Weight
Lung Cancer Mortality	Circulatory U75 Admissions
Self-Harm Admissions	Male Life Expectancy at Age 65

This is a summary of findings only. For a full assessment and all figures see downloadable tables at:
https://www.health-ni.gov.uk/articles/health-inequalities-statistics

Western

Health & Social Care Trust (HSCT)

Comparison with NI

17 Health Outcomes were **Worse Than** the NI Average

Most notably:

Elective Inpatient Admissions
Day Case Admissions
All Admissions

25 Health Outcomes were **Similar To** the NI Average

12 Health Outcomes were **Better Than** the NI Average

Most notably:

Teenage Birth Rate U20
Drug Related Admissions
COVID-19 Mortality

Comparison with Most Deprived Areas

Inequality gaps between the Western Trust and its 20% most deprived areas:

Life Expectancy

- Male life expectancy in the Trust's most deprived areas was 74.1 years, **4.4 years** less than the HSCT average (78.6 years). **No Change in Male Inequality Gap**
- Female life expectancy in the Trust's most deprived areas was 79.4 years, **2.8 years** less than the HSCT average (82.2 years). **Female Inequality Gap Narrowed**

Largest Inequality Gaps

SDR Drug Misuse (197%)	SDR Drug Related (188%)	SAR Alcohol Related (121%)	SDR Alcohol Specific (107%)	SAR Drug Related (93%)

Changes in Inequality Gaps

Most Notable **Narrowed** Deprivation Inequality Gaps	Most Notable **Widened** Deprivation Inequality Gaps
Female Life Expectancy at Birth and at 65	Drug Related Mortality
Circulatory Admissions	Lung Cancer Incidence
Drug Related Admissions	Statin Prescription Rate

This is a summary of findings only. For a full assessment and all figures see downloadable tables at:
https://www.health-ni.gov.uk/articles/health-inequalities-statistics

Antrim & Newtownabbey

Local Government District (LGD)

Comparison with NI

12 Health Outcomes were **Worse Than** the NI Average	Most notably:	Self-Harm Admissions Drug Related Admissions COVID-19 Mortality
32 Health Outcomes were **Similar To** the NI Average		
8 Health Outcomes were **Better Than** the NI Average	Most notably:	Emergency Care Attendances Day Case Admissions Statin Prescription Rate

Comparison with Most Deprived Areas

Inequality gaps between the Antrim & Newtownabbey LGD and its 20% most deprived areas:

Life Expectancy

- Male life expectancy in the LGD's most deprived areas was 74.5 years, **4.3 years** less than the LGD average (78.8 years). **No Change in Male Inequality Gap**
- Female life expectancy in the LGD's most deprived areas was 79.3 years, **3.2 years** less than the LGD average (82.6 years). **Female Inequality Gap Narrowed**

Largest Inequality Gaps

Teenage Birth Rate (U20) (155%)	SDR Alcohol Specific (141%)	SDR Drug Related (135%)	SAR Drug Related (100%)	SAR Alcohol Related (95%)

Changes in Inequality Gaps

Most Notable **Narrowed** Deprivation Inequality Gaps	Most Notable **Widened** Deprivation Inequality Gaps
Female Life Expectancy at Birth	Elective Inpatient Admissions Alcohol Specific Mortality Teenage Birth Rate U20

This is a summary of findings only. For a full assessment and all figures see downloadable tables at:
https://www.health-ni.gov.uk/articles/health-inequalities-statistics

Ards & North Down

Local Government District (LGD)

Comparison with NI

3	Health Outcomes were **Worse Than** the NI Average	Most notably: Low Birth Weight, Circulatory Admissions, Circulatory U75 Admissions
20	Health Outcomes were **Similar To** the NI Average	
29	Health Outcomes were **Better Than** the NI Average	Most notably: Intentional Self-Harm Mortality, COVID-19 Mortality, Lung Cancer Incidence

Comparison with Most Deprived Areas

Inequality gaps between the Ards & North Down LGD and its 20% most deprived areas:

Life Expectancy

- Male life expectancy in the LGD's most deprived areas was 76.2 years, **3.3 years** less than the LGD average (79.6 years). **No Change in Male Inequality Gap**
- Female life expectancy in the LGD's most deprived areas was 79.7 years, **3.0 years** less than the LGD average (82.7 years). **Female Inequality Gap Widened**

Largest Inequality Gaps

SDR Alcohol Specific (103%)	SDR Drug Related (102%)	Smoking During Pregnancy (100%)	Teenage Birth Rate (U20) (94%)	CDR Intentional Self-Harm (86%)

Changes in Inequality Gaps

Most Notable **Narrowed** Deprivation Inequality Gaps	Most Notable **Widened** Deprivation Inequality Gaps
Circulatory U75 Mortality	Day Case Admissions
Alcohol Related Admissions	Female Life Expectancy at Birth
Self-Harm Admissions	All Admissions

This is a summary of findings only. For a full assessment and all figures see downloadable tables at:
https://www.health-ni.gov.uk/articles/health-inequalities-statistics

Armagh City, Banbridge & Craigavon

Local Government District (LGD)

Comparison with NI

3	Health Outcomes were **Worse Than** the NI Average	Most notably: Emergency Admissions; Statin and Antihypertensive Prescription Rates
20	Health Outcomes were **Similar To** the NI Average	
29	Health Outcomes were **Better Than** the NI Average	Most notably: Drug Related Mortality; Elective Inpatient Admissions; Intentional Self-Harm Mortality

Comparison with Most Deprived Areas

Inequality gaps between the Armagh City, Banbridge & Craigavon LGD and its 20% most deprived areas:

Life Expectancy

- Male life expectancy in the LGD's most deprived areas was 76.4 years, **2.9 years** less than the LGD average (79.3 years). **No Change in Male Inequality Gap**
- Female life expectancy in the LGD's most deprived areas was 82.4 years, **0.8 years** less than the LGD average (83.2 years). **No Change in Female Inequality Gap**

Largest Inequality Gaps

Teenage Birth Rate (U20) (129%)	SAR Drug Related (113%)	SAR Alcohol Related (113%)	SAR Self-Harm (94%)	SDR Alcohol Specific (83%)

Changes in Inequality Gaps

Most Notable **Narrowed** Deprivation Inequality Gaps	Most Notable **Widened** Deprivation Inequality Gaps
	Low Birth Weight Cancer Incidence All Admissions

This is a summary of findings only. For a full assessment and all figures see downloadable tables at:
https://www.health-ni.gov.uk/articles/health-inequalities-statistics

Belfast

Local Government District (LGD)

Comparison with NI

39 Health Outcomes were **Worse Than** the NI Average	Most notably:	Male & Female Life Expectancy at Birth Drug Related Mortality Alcohol Specific Mortality
7 Health Outcomes were **Similar To** the NI Average		
6 Health Outcomes were **Better Than** the NI Average	Most notably:	. Circulatory Admissions Circulatory U75 Admissions

Comparison with Most Deprived Areas

Inequality gaps between the Belfast LGD and its 20% most deprived areas:

Life Expectancy

- Male life expectancy in the LGD's most deprived areas was 70.6 years, **5.2 years** less than the LGD average (75.8 years). **Male Inequality Gap Widened**
- Female life expectancy in the LGD's most deprived areas was 76.6 years, **3.9 years** less than the LGD average (80.5 years). **Female Inequality Gap Widened**

Largest Inequality Gaps

SAR Alcohol Related (100%)	SDR Drug Related (92%)	Teenage Birth Rate (U20) (91%)	SDR Alcohol Specific (85%)	SAR Drug Related (83%)

Changes in Inequality Gaps

Most Notable **Narrowed** Deprivation Inequality Gaps	Most Notable **Widened** Deprivation Inequality Gaps
Day Case Admissions Drug Related Admissions All Admissions	Alcohol Specific Mortality Male & Female Life Expectancy at Birth

This is a summary of findings only. For a full assessment and all figures see downloadable tables at:
https://www.health-ni.gov.uk/articles/health-inequalities-statistics

Causeway Coast & Glens

Local Government District (LGD)

Comparison with NI

10 Health Outcomes were **Worse Than** the NI Average	Most notably:	Elective Admissions
20 Health Outcomes were **Similar To** the NI Average		
22 Health Outcomes were **Better Than** the NI Average	Most notably:	Alcohol Related Admissions Drug Related Admissions Alcohol Specific Mortality

Comparison with Most Deprived Areas

Inequality gaps between the Causeway Coast & Glens LGD and its 20% most deprived areas:

Life Expectancy

- Male life expectancy in the LGD's most deprived areas was 77.3 years, **2.4 years** less than the LGD average (79.7 years). **No Change in Male Inequality Gap**
- Female life expectancy in the LGD's most deprived areas was 80.1 years, **2.5 years** less than the LGD average (82.6 years). **Female Inequality Gap Widened**

Largest Inequality Gaps

SDR Drug Related (163%)	SDR Alcohol Specific (128%)	SAR Alcohol Related (112%)	Smoking During Pregnancy (102%)	CDR Intentional Self-Harm (76%)

Changes in Inequality Gaps

Most Notable **Narrowed** Deprivation Inequality Gaps	Most Notable **Widened** Deprivation Inequality Gaps
Day Case Admissions	Female Life Expectancy at Birth
Circulatory U75 Mortality	Respiratory Admissions
Treatable Mortality	Alcohol Specific Mortality

This is a summary of findings only. For a full assessment and all figures see downloadable tables at:
https://www.health-ni.gov.uk/articles/health-inequalities-statistics

Derry City & Strabane

Local Government District (LGD)

Comparison with NI

26 Health Outcomes were **Worse Than** the NI Average	Most notably:	Elective Inpatient Admissions Alcohol Specific Mortality Day Case Admissions
15 Health Outcomes were **Similar To** the NI Average		
11 Health Outcomes were **Better Than** the NI Average	Most notably:	Circulatory Admissions Circulatory U75 Admissions Teenage Birth Rate U20

Comparison with Most Deprived Areas

Inequality gaps between the Derry City & Strabane LGD and its 20% most deprived areas:

Life Expectancy

- Male life expectancy in the LGD's most deprived areas was 72.3 years, **5.7 years** less than the LGD average (78.0 years). **No Change in Male Inequality Gap**
- Female life expectancy in the LGD's most deprived areas was 78.7 years, **2.8 years** less than the LGD average (81.6 years). **No Change in Female Inequality Gap**

Largest Inequality Gaps

SDR Drug Related (156%)	SDR Alcohol Specific (132%)	SAR Alcohol Related (131%)	Teenage Birth Rate (U20) (126%)	SAR Drug Related (99%)

Changes in Inequality Gaps

Most Notable **Narrowed** Deprivation Inequality Gaps	Most Notable **Widened** Deprivation Inequality Gaps
Female Life Expectancy at 65	Drug Related Mortality
Circulatory Admissions	Teenage Birth Rate U20
Drug Related Admissions	Circulatory U75 Admissions

This is a summary of findings only. For a full assessment and all figures see downloadable tables at:
https://www.health-ni.gov.uk/articles/health-inequalities-statistics

Fermanagh & Omagh

Local Government District (LGD)

Comparison with NI

10 Health Outcomes were **Worse Than** the NI Average	Most notably:	Elective Inpatient Admissions Emergency Admissions All Admissions
23 Health Outcomes were **Similar To** the NI Average		
19 Health Outcomes were **Better Than** the NI Average	Most notably:	Female Life Expectancy at Birth COVID-19 Mortality Drug Related Mortality

Comparison with Most Deprived Areas

Inequality gaps between the Fermanagh & Omagh LGD and its 20% most deprived areas:

Life Expectancy

- Male life expectancy in the LGD's most deprived areas was 78.0 years, **1.1 years** less than the LGD average (79.2 years). **Male Inequality Gap Narrowed**
- Female life expectancy in the LGD's most deprived areas was 80.8 years, **2.5 years** less than the LGD average (83.2 years). **No Change in Female Inequality Gap**

Largest Inequality Gaps

Teenage Birth Rate (U20) (121%)	SAR Drug Related (79%)	SAR Self-Harm (74%)	SDR Lung Cancer (66%)	Smoking During Pregnancy (65%)

Changes in Inequality Gaps

Most Notable **Narrowed** Deprivation Inequality Gaps	Most Notable **Widened** Deprivation Inequality Gaps
Male Life Expectancy at 65	Teenage Birth Rate U20
Elective Inpatient Admissions	Respiratory U75 Admissions
Male Life Expectancy at Birth	Statin Prescriptions

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Lisburn & Castlereagh

Local Government District (LGD)

Comparison with NI

0	Health Outcomes were **Worse Than** the NI Average
13	Health Outcomes were **Similar To** the NI Average
39	Health Outcomes were **Better Than** the NI Average

Most notably:

Male & Female Life Expectancy at Birth
Self-Harm Admissions
Smoking During Pregnancy

Comparison with Most Deprived Areas

Inequality gaps between the Lisburn & Castlereagh LGD and its 20% most deprived areas:

Life Expectancy

- Male life expectancy in the LGD's most deprived areas was 77.1 years, **3.1 years** less than the LGD average (80.3 years). **Male Inequality Gap Narrowed**
- Female life expectancy in the LGD's most deprived areas was 80.8 years, **2.4 years** less than the LGD average (83.3 years). **No Change in Female Inequality Gap**

Largest Inequality Gaps

Smoking During Pregnancy (148%)	Teenage Birth Rate (U20) (144%)	SDR Alcohol Specific (90%)	SAR Alcohol Related (89%)	SAR Self-Harm (88%)

Changes in Inequality Gaps

Most Notable **Narrowed** Deprivation Inequality Gaps	Most Notable **Widened** Deprivation Inequality Gaps
Drug Related Mortality	Elective Inpatient Admissions
Cancer Incidence	Day Case Admissions
Circulatory U75 Mortality	All Admissions

This is a summary of findings only. For a full assessment and all figures see downloadable tables at:
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Mid and East Antrim

Local Government District (LGD)

Comparison with NI

4	Health Outcomes were **Worse Than** the NI Average	Most notably: Drug Related Admissions, Self-Harm Admissions
34	Health Outcomes were **Similar To** the NI Average	
14	Health Outcomes were **Better Than** the NI Average	Most notably: Small for Gestational Age, Emergency Care Attendances, Day Case Admissions

Comparison with Most Deprived Areas

Inequality gaps between the Mid and East Antrim LGD and its 20% most deprived areas:

Life Expectancy

- Male life expectancy in the LGD's most deprived areas was 73.9 years, **5.1 years** less than the LGD average (79.0 years). **Male Inequality Gap Widened**
- Female life expectancy in the LGD's most deprived areas was 78.5 years, **3.9 years** less than the LGD average (82.3 years). **No Change in Female Inequality Gap**

Largest Inequality Gaps

SDR Drug Related (209%)	SAR Drug Related (152%)	SAR Alcohol Related (137%)	SAR Self-Harm (135%)	Teenage Birth Rate (U20) (134%)

Changes in Inequality Gaps

Most Notable **Narrowed** Deprivation Inequality Gaps	Most Notable **Widened** Deprivation Inequality Gaps
Cancer U75 Mortality	Low Birth Weight
Lung Cancer Mortality	Elective Inpatient Admissions
Lung Cancer Incidence	Circulatory U75 Mortality

This is a summary of findings only. For a full assessment and all figures see downloadable tables at:
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Mid Ulster

Local Government District (LGD)

Comparison with NI

8	Health Outcomes were **Worse Than** the NI Average	Most notably: Emergency Care Attendances, Statin Prescriptions
18	Health Outcomes were **Similar To** the NI Average	
26	Health Outcomes were **Better Than** the NI Average	Most notably: Drug Related Mortality, Teenage Birth Rate U20, Alcohol Specific Mortality

Comparison with Most Deprived Areas

Inequality gaps between the Mid Ulster LGD and its 20% most deprived areas:

Life Expectancy

- Male life expectancy in the LGD's most deprived areas was 79.1 years, **0.5 years** less than the LGD average (79.6 years). **Male Inequality Gap Narrowed**
- Female life expectancy in the LGD's most deprived areas was 82.8 years, **0.3 years** less than the LGD average (83.1 years). **Female Inequality Gap Narrowed**

Largest Inequality Gaps

Teenage Birth Rate (U20) (73%)	SDR Drug Related (67%)	SDR Alcohol Specific (57%)	SAR Alcohol Related (56%)	SAR Drug Related (48%)

Changes in Inequality Gaps

Most Notable **Narrowed** Deprivation Inequality Gaps	Most Notable **Widened** Deprivation Inequality Gaps
Female Life Expectancy at 65	Elective Inpatient Admissions
Male & Female Life Expectancy at Birth	Low Birth Weight
Potential Years of Life Lost	Day Case Admissions

This is a summary of findings only. For a full assessment and all figures see downloadable tables at:
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Newry, Mourne and Down

Local Government District (LGD)

Comparison with NI

15 Health Outcomes were **Worse Than** the NI Average	Most notably:	Respiratory Admissions Respiratory U75 Admissions Circulatory Admissions Circulatory U75 Admissions
23 Health Outcomes were **Similar To** the NI Average		
14 Health Outcomes were **Better Than** the NI Average	Most notably:	Drug Related Mortality COVID-19 Mortality Drug Related Admissions

Comparison with Most Deprived Areas

Inequality gaps between the Newry, Mourne & Down LGD and its 20% most deprived areas:

Life Expectancy

- Male life expectancy in the LGD's most deprived areas was 77.6 years, **1.8 years** less than the LGD average (79.3 years). **No Change in Male Inequality Gap**
- Female life expectancy in the LGD's most deprived areas was 82.3 years, **0.8 years** less than the LGD average (83.2 years). **Female Inequality Gap Narrowed**

Largest Inequality Gaps

SDR Drug Related (86%)	SDR Alcohol Specific (73%)	Teenage Birth Rate (U20) (71%)	SAR Alcohol Related (59%)	SAR Self-Harm (55%)

Changes in Inequality Gaps

Most Notable **Narrowed** Deprivation Inequality Gaps	Most Notable **Widened** Deprivation Inequality Gaps
Day Case Admissions	Alcohol Related Admissions
Cancer U75 Mortality	Statin Prescriptions
Preventable Mortality	Teenage Birth Rate U20

This is a summary of findings only. For a full assessment and all figures see downloadable tables at:
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APPENDICES

APPENDIX A: SOCIAL GRADIENT OF HEALTH

Health inequalities are often considered in terms of the gap between the most and least deprived quintiles of the population. However this does not account for those areas of intermediate levels of deprivation that may also be relatively disadvantaged in terms of their health status. The Marmot Review[31] demonstrated that there is a social gradient in health that runs from top to bottom of the socioeconomic spectrum, meaning that health inequalities affect everyone. There is consistent evidence from throughout the world that people at a socioeconomic disadvantage suffer a heavier burden of illness and have higher mortality rates than their better off counterparts.

Different inequality measures can give information about different aspects of inequalities. Some measures concentrate on the extremes of deprivation such as the most-least deprived (*or absolute*) gap analysis presented in the main body of this report, whilst others include relative inequality gaps across the socioeconomic scale – taking into account the whole population - and can give quite different interpretations of inequalities. Therefore, in addition to the most-least deprived *(or absolute*) gap analysis presented in this report, a social gradient analysis using the Relative Index of Inequalities (RII) has been undertaken to provide a fuller assessment of inequalities.

Absolute gap (most-least deprived gap): This measure describes the absolute difference between the extremes of deprivation. It has the advantage that it is intuitive and straightforward to explain, but the disadvantage that, because it focuses only on the extremes of deprivation, it does not take account of patterns of inequalities observed across the intermediate groups.

Slope Index of Inequality (SII): SII describes the gradient of health observed across the deprivation scale. While the absolute gap shows the difference between two large groups, SII measures the difference in health outcomes between the theoretical most and least deprived individuals, according to linear regression across health outcomes for all deprivation deciles. SII therefore has the advantage of being sensitive to the experience of the entire population, rather than just the extremes of deprivation.

Relative Index of Inequality (RII): The RII describes the gradient of health observed across the deprivation scale, relative to the average for the observed population (by dividing the Slope of Index of Inequality (SII) by the mean). The value of RII tells you the magnitude of inequality in relation to the mean thus representing the proportionate change in the health outcome across the population. It allows inequalities to be compared and contrasted across a number of different health indicators, and also to be monitored over time.

For further information regarding the RII methodology, including how it is calculated, please refer to the NI Health & Social Care Inequalities Monitoring System – Regional 2014 report: https://www.health-ni.gov.uk/publications/ni-health-and-social-care-inequalities-monitoring-system-hscims-regional-2014

[31] *Fair Society, Healthy Lives: The Marmot Review* can be accessed at http://www.instituteofhealthequity.org/resources-reports/fair-society-healthy-lives-the-marmot-review

RESULTS

Social gradient analyses were carried out for the majority of indicators included in the HSCIMS. For some indicators this analysis could not be performed due to limitations on the level of data available. An explanatory interpretation of RII results is provided for life expectancy at birth below, with a time series for the Absolute Gap (most-least deprived) and Relative Index of Inequality (RII) for all other indicators provided in Table 4. It should be noted that in this report the SII value tends to be larger when compared with the absolute gap. This is due to the SII calculating across deprivation deciles whereas the absolute gap is calculated across deprivation quintiles.

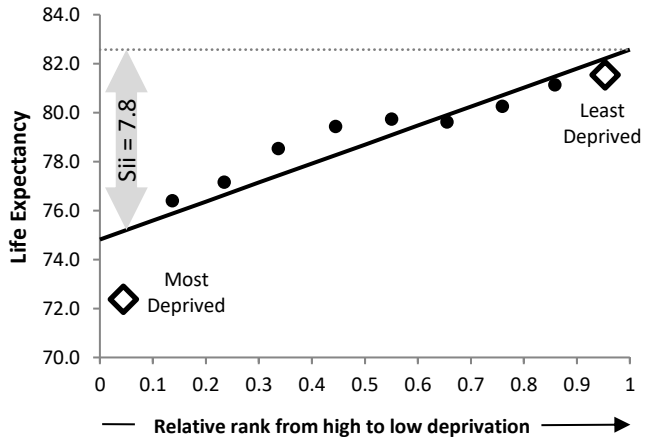
The symbols used in the main body of the report to show the change in the inequality gap indicated by the absolute gap analysis, have also been included in the table for each indicator.

Worked examples are shown below for SII and RII.[32]

Male Life Expectancy at Birth – SII

Year	2014-16	2015-17	2016-18	2017-19	2018-20
Absolute Gap (Most-Least Deprived)	6.6	7.1	7.1	7.0	6.9
Slope Index of Inequality (SII)	7.8	8.2	8.1	8.0	7.8

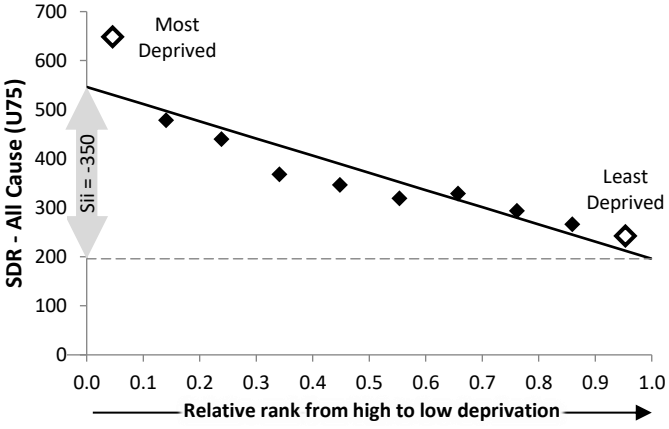
For life expectancy values, the Slope Index of Inequality (SII) indicates the absolute gap across the deprivation scale, represented by the gradient of the linear best fit line shown. In 2018-20, male life expectancy at birth indicates a SII gap of 7.8 years. This is higher than that indicated by the absolute gap between the most and least deprived quintiles (6.9 years). Both the absolute gap and SII showed no change in the male life expectancy deprivation gap between 2014-16 and 2018-20.



SDR – All Cause Mortality (U75) - RII

Year	2012-16	2013-17	2014-18	2015-19	2016-20
Absolute Gap (Most-Least Deprived)	114%	116%	115%	120%	119%
Relative Index of Inequality (RII)	-0.95	-0.95	-0.95	-0.96	-0.96

The Relative Index of Inequality (RII) indicates the relative gap across the deprivation scale. In 2016-20, mortality rates among those aged below 75 years indicated a deprivation gap of -0.96, meaning that the SII value of -350 deaths per 100,000 population is equivalent to 96% of the average mortality rate across NI. Both the RII and the absolute gap showed that the deprivation gap remained similar across the analysed period.



[32] Calculation is deprivation quintile based i.e. difference between 20% most and least deprived areas.

Table 4: Social Gradient Analysis of Indicators

A comparison of the inequality gaps provided in the main body of the report with social gradient results are presented in the table below:

Indicator		Time Series				
Male Life Expectancy at Birth		2014-16	2015-17	2016-18	2017-19	2018-20
Absolute Gap (Most–Least Deprived)	—	6.6	7.1	7.1	7.0	6.9
Slope Index of Inequality (SII)	—	7.8	8.2	8.1	8.0	7.8
Female Life Expectancy at Birth		2014-16	2015-17	2016-18	2017-19	2018-20
Absolute Gap (Most–Least Deprived)	◄►	4.5	4.5	4.4	4.8	5.0
Slope Index of Inequality (SII)	—	5.2	5.3	5.1	5.5	5.5
Male Life Expectancy at Age 65		2014-16	2015-17	2016-18	2017-19	2018-20
Absolute Gap (Most–Least Deprived)	—	2.9	3.0	3.2	3.0	3.0
Slope Index of Inequality (SII)	—	3.3	3.3	3.5	3.3	3.2
Female Life Expectancy at Age 65		2014-16	2015-17	2016-18	2017-19	2018-20
Absolute Gap (Most–Least Deprived)	—	2.4	2.3	2.4	2.5	2.6
Slope Index of Inequality (SII)	—	2.7	2.6	2.6	2.7	2.6
Potential Years of Life Lost		2014-16	2015-17	2016-18	2017-19	2018-20
Absolute Gap (Most–Least Deprived)	—	118%	131%	127%	130%	125%
Relative Index of Inequality (RII)	—	-0.98	-1.01	-0.99	-1.01	-1.00
SDR- Treatable		2012-16	2013-17	2014-18	2015-19	2016-20
Absolute Gap (Most–Least Deprived)	►◄	101%	103%	90%	92%	87%
Relative Index of Inequality (RII)	►◄	-0.82	-0.85	-0.78	-0.78	-0.76
SDR – Preventable		2012-16	2013-17	2014-18	2015-19	2016-20
Absolute Gap (Most–Least Deprived)	—	178%	177%	184%	195%	192%
Relative Index of Inequality (RII)	—	-1.28	-1.27	-1.28	-1.31	-1.30
SDR – Avoidable		2012-16	2013-17	2014-18	2015-19	2016-20
Absolute Gap (Most–Least Deprived)	—	149%	150%	148%	156%	153%
Relative Index of Inequality (RII)	—	-1.13	-1.13	-1.12	-1.14	-1.13
SDR - Circulatory (U75)		2012-16	2013-17	2014-18	2015-19	2016-20
Absolute Gap (Most–Least Deprived)	—	143%	141%	136%	144%	137%
Relative Index of Inequality (RII)	—	-1.08	-1.06	-1.01	-1.04	-1.03
SDR - Respiratory (U75)		2012-16	2013-17	2014-18	2015-19	2016-20
Absolute Gap (Most–Least Deprived)	—	242%	264%	258%	249%	279%
Relative Index of Inequality (RII)	◄►	-1.47	-1.49	-1.53	-1.52	-1.53
SDR - Cancer (U75)		2012-16	2013-17	2014-18	2015-19	2016-20
Absolute Gap (Most–Least Deprived)	—	73%	72%	70%	72%	71%
Relative Index of Inequality (RII)	—	-0.72	-0.70	-0.68	-0.66	-0.66
SDR - All Cause Mortality (U75)		2012-16	2013-17	2014-18	2015-19	2016-20
Absolute Gap (Most–Least Deprived)	—	114%	116%	115%	120%	119%
Relative Index of Inequality (RII)	—	-0.95	-0.95	-0.95	-0.96	-0.96
SAR - Circulatory		2014/15-16/17	2015/16-17/18	2016/17-18/19	2017/18-19/20	2018/19-20/21
Absolute Gap (Most–Least Deprived)	►◄	27%	26%	24%	22%	17%
Relative Index of Inequality (RII)	►◄	-0.27	-0.25	-0.24	-0.22	-0.18
SAR - Circulatory (U75)		2014/15-16/17	2015/16-17/18	2016/17-18/19	2017/18-19/20	2018/19-20/21
Absolute Gap (Most–Least Deprived)	►◄	39%	37%	35%	34%	31%
Relative Index of Inequality (RII)	►◄	-0.40	-0.39	-0.37	-0.36	-0.33
SPR - Antihypertensive		2016	2017	2018	2019	2020
Absolute Gap (Most–Least Deprived)	—	22%	24%	23%	21%	24%
Relative Index of Inequality (RII)	—	-0.24	-0.25	-0.25	-0.23	-0.26
SPR - Statin		2016	2017	2018	2019	2020
Absolute Gap (Most–Least Deprived)	◄►	29%	31%	33%	34%	35%
Relative Index of Inequality (RII)	◄►	-0.32	-0.34	-0.35	-0.36	-0.37
SAR - Respiratory		2014/15-16/17	2015/16-17/18	2016/17-18/19	2017/18-19/20	2018/19-20/21
Absolute Gap (Most–Least Deprived)	—	96%	93%	94%	95%	101%
Relative Index of Inequality (RII)	—	-0.78	-0.75	-0.75	-0.76	-0.81
SAR - Respiratory (U75)		2014/15-16/17	2015/16-17/18	2016/17-18/19	2017/18-19/20	2018/19-20/21
Absolute Gap (Most–Least Deprived)	—	118%	113%	113%	112%	123%
Relative Index of Inequality (RII)	—	-0.91	-0.88	-0.89	-0.88	-0.95
SIR - Cancer		2009-15	2010-16	2011-17	2012-18	2013-19
Absolute Gap (Most–Least Deprived)	—	22%	22%	22%	22%	19%
Relative Index of Inequality (RII)	—	-0.23	-0.23	-0.23	-0.23	-0.22
SDR - COVID-19						2020
Absolute Gap (Most–Least Deprived)						25%
Relative Index of Inequality (RII)						-0.23

SAR - All Admissions		2016/17	2017/18	2018/19	2019/20	2020/21
Absolute Gap (Most–Least Deprived)	▶◀	40%	39%	39%	35%	36%
Relative Index of Inequality (RII)	—	-0.39	-0.38	-0.39	-0.37	-0.39
SAR - Emergency Admissions		2016/17	2017/18	2018/19	2019/20	2020/21
Absolute Gap (Most–Least Deprived)	▶◀	73%	64%	64%	60%	62%
Relative Index of Inequality (RII)	—	-0.63	-0.57	-0.58	-0.56	-0.59
SAtR - Emergency Care Attendances		2016/17	2017/18	2018/19	2019/20	2020/21
Absolute Gap (Most–Least Deprived)	—	56%	57%	56%	55%	59%
Relative Index of Inequality (RII)	—	-0.51	-0.52	-0.51	-0.50	-0.54
SAR - Elective Inpatient Admissions		2016/17	2017/18	2018/19	2019/20	2020/21
Absolute Gap (Most–Least Deprived)	—	22%	26%	36%	28%	23%
Relative Index of Inequality (RII)	—	-0.23	-0.26	-0.36	-0.30	-0.27
SAR - Day Case Admissions		2016/17	2017/18	2018/19	2019/20	2020/21
Absolute Gap (Most–Least Deprived)	▶◀	23%	24%	23%	19%	18%
Relative Index of Inequality (RII)	—	-0.24	-0.26	-0.26	-0.22	-0.24
SAR – Self-Harm Admissions		2012/13-16/17	2013/14-17/18	2014/15-18/19	2015/16-19/20	2016/17-20/21
Absolute Gap (Most–Least Deprived)	▶◀	255%	251%	239%	215%	186%
Relative Index of Inequality (RII)	▶◀	-1.59	-1.56	-1.51	-1.43	-1.30
Crude Int. Self-Harm Rate		2013-15	2014-16	2015-17	2016-18	2017-19
Absolute Gap (Most–Least Deprived)	▶◀	161%	151%	174%	174%	105%
Relative Index of Inequality (RII)	—	-1.00	-1.09	-1.17	-1.18	-0.92
SPR - Mood & Anxiety		2016	2017	2018	2019	2020
Absolute Gap (Most–Least Deprived)	—	65%	67%	67%	66%	67%
Relative Index of Inequality (RII)	—	-0.60	-0.62	-0.62	-0.62	-0.63
SAR - Alcohol Related Causes		2014/15-16/17	2015/16-17/18	2016/17-18/19	2017/18-19/20	2018/19-20/21
Absolute Gap (Most–Least Deprived)	▶◀	363%	338%	300%	277%	278%
Relative Index of Inequality (RII)	▶◀	-2.0	-1.9	-1.8	-1.7	-1.7
SDR - Alcohol Specific		2012-16	2013-17	2014-18	2015-19	2016-20
Absolute Gap (Most–Least Deprived)	▶◀	336%	353%	316%	319%	306%
Relative Index of Inequality (RII)	—	-1.87	-1.85	-1.83	-1.84	-1.86
SDR - Smoking Related Causes		2012-16	2013-17	2014-18	2015-19	2016-20
Absolute Gap (Most–Least Deprived)	—	129%	122%	125%	128%	131%
Relative Index of Inequality (RII)	—	-1.00	-0.97	-0.99	-0.99	-1.00
SIR - Lung Cancer		2009-15	2010-16	2011-17	2012-18	2013-19
Absolute Gap (Most–Least Deprived)	—	152%	150%	161%	163%	151%
Relative Index of Inequality (RII)	—	-1.10	-1.12	-1.16	-1.18	-1.16
SDR - Lung Cancer		2012-16	2013-17	2014-18	2015-19	2016-20
Absolute Gap (Most–Least Deprived)	—	163%	154%	161%	159%	151%
Relative Index of Inequality (RII)	—	-1.20	-1.19	-1.22	-1.18	-1.16
SAR - Drug Related Causes		2014/15-16/17	2015/16-17/18	2016/17-18/19	2017/18-19/20	2018/19-20/21
Absolute Gap (Most–Least Deprived)	▶◀	276%	282%	260%	239%	225%
Relative Index of Inequality (RII)	▶◀	-1.66	-1.66	-1.60	-1.50	-1.44
SDR - Drug Related Causes		2012-16	2013-17	2014-18	2015-19	2016-20
Absolute Gap (Most–Least Deprived)	—	397%	334%	391%	404%	366%
Relative Index of Inequality (RII)	—	-2.00	-2.00	-2.13	-2.10	-2.03
SDR - Drug Misuse		2012-16	2013-17	2014-18	2015-19	2015-19
Absolute Gap (Most–Least Deprived)	—	426%	368%	420%	456%	409%
Relative Index of Inequality (RII)	—	-2.05	-2.03	-2.12	-2.14	-2.09
Smoking During Pregnancy		2016	2017	2018	2019	2020
Absolute Gap (Most–Least Deprived)	—	353%	376%	457%	341%	361%
Relative Index of Inequality (RII)	—	-1.71	-1.75	-1.79	-1.68	-1.67
Teenage Birth Rate (U20)		2016	2017	2018	2019	2020
Absolute Gap (Most–Least Deprived)	◀▶	485%	310%	404%	519%	611%
Relative Index of Inequality (RII)	—	-2.06	-1.67	-1.97	-1.99	-2.04
Breastfeeding on Discharge		2016	2017	2018	2019	2020
Absolute Gap (Most–Least Deprived)	—	50%	49%	48%	46%	48%
Relative Index of Inequality (RII)	▶◀	0.78	0.76	0.73	0.73	0.73
Low Birth Weight		2016	2017	2018	2019	2020
Absolute Gap (Most–Least Deprived)	◀▶	29%	32%	38%	44%	50%
Relative Index of Inequality (RII)	◀▶	-0.26	-0.33	-0.42	-0.53	-0.62
Small for Gestational Age					2019	2020
Absolute Gap (Most–Least Deprived)					78%	65%
Relative Index of Inequality (RII)					-0.74	-0.63

Primary 1 BMI: Obese		2014/15-16/17	2015/16-17/18	2016/17-18/19	2017/18-19/20	2018/19-20/21
Absolute Gap (Most–Least Deprived)	◄►	44%	45%	60%	64%	62%
Relative Index of Inequality (RII)	—	-0.47	-0.43	-0.50	-0.56	-0.56
Primary 1 BMI: Overweight or Obese		2014/15-16/17	2015/16-17/18	2016/17-18/19	2017/18-19/20	2018/19-20/21
Absolute Gap (Most–Least Deprived)	◄►	22%	21%	31%	32%	30%
Relative Index of Inequality (RII)	—	-0.93	-0.89	-1.17	-1.42	-1.17
Standardised Filling Rate - Total		2016/17	2017/18	2018/19	2019/20	2020/21
Absolute Gap (Most–Least Deprived)	►◄	42%	46%	48%	50%	22%
Relative Index of Inequality (RII)	►◄	-0.39	-0.44	-0.44	-0.46	-0.23
Standardised Filling Rate - Total (U18)		2016/17	2017/18	2018/19	2019/20	2020/21
Absolute Gap (Most–Least Deprived)	►◄	57%	60%	64%	55%	26%
Relative Index of Inequality (RII)	►◄	-0.48	-0.53	-0.55	-0.49	-0.23
Standardised Filling Rate - Individuals		2016/17	2017/18	2018/19	2019/20	2020/21
Absolute Gap (Most–Least Deprived)	►◄	16%	18%	20%	21%	8%
Relative Index of Inequality (RII)	►◄	-0.15	-0.18	-0.19	-0.20	-0.08
Standardised Filling Rate - Individuals(U18)		2016/17	2017/18	2018/19	2019/20	2020/21
Absolute Gap (Most–Least Deprived)	►◄	36%	40%	40%	37%	15%
Relative Index of Inequality (RII)	►◄	-0.31	-0.36	-0.36	-0.33	-0.11
Standardised Extraction Rate - Total		2016/17	2017/18	2018/19	2019/20	2020/21
Absolute Gap (Most–Least Deprived)	—	99%	98%	104%	105%	96%
Relative Index of Inequality (RII)	—	-0.80	-0.82	-0.82	-0.83	-0.78
Standardised Extraction Rate - Total (U18)		2016/17	2017/18	2018/19	2019/20	2020/21
Absolute Gap (Most–Least Deprived)	►◄	13%	12%	16%	11%	1%
Relative Index of Inequality (RII)	►◄	-0.13	-0.17	-0.20	-0.10	0.05
Standardised Extraction Rate - Individuals		2016/17	2017/18	2018/19	2019/20	2020/21
Absolute Gap (Most–Least Deprived)	◄►	73%	74%	75%	77%	82%
Relative Index of Inequality (RII)	◄►	-0.63	-0.64	-0.64	-0.66	-0.69
Standardised Extraction Rate- Individuals (U18)		2016/17	2017/18	2018/19	2019/20	2020/21
Absolute Gap (Most–Least Deprived)	►◄	17%	17%	15%	16%	8%
Relative Index of Inequality (RII)	►◄	-0.17	-0.20	-0.18	-0.13	-0.04
Standardised Crowning Rate - Total		2016/17	2017/18	2018/19	2019/20	2020/21
Absolute Gap (Most–Least Deprived)	►◄	55%	49%	54%	54%	7%
Relative Index of Inequality (RII)	►◄	-0.47	-0.43	-0.45	-0.48	-0.09
Standardised Crowning Rate - Individuals		2016/17	2017/18	2018/19	2019/20	2020/21
Absolute Gap (Most–Least Deprived)	►◄	44%	37%	39%	41%	-1%
Relative Index of Inequality (RII)	►◄	-0.37	-0.33	-0.34	-0.37	-0.01
Standardised Dental Registration Rate		2016/17	2017/18	2018/19	2019/20	2020/21
Absolute Gap (Most–Least Deprived)	—	2.9%	2.6%	2.6%	3.0%	2.2%
Relative Index of Inequality (RII)	—	0.05	0.05	0.05	0.05	0.04
Standardised Dental Registration Rate (U18)		2016/17	2017/18	2018/19	2019/20	2020/21
Absolute Gap (Most–Least Deprived)	—	11.3%	10.5%	11.1%	11.8%	11.6%
Relative Index of Inequality (RII)	—	0.15	0.14	0.15	0.16	0.16

Changes in Inequality Gaps

In the majority of indicators, there was an agreement in the assessment of change between the absolute gap and the slope index of inequality or relative index of inequality.

The absolute deprivation gap of the following indicators widened while the social gradient analysis showed that the inequality remained constant:

- Female Life Expectancy at Birth
- Teenage Birth Rate (U20)
- Primary 1 BMI: Obese
- Primary 1 BMI: Overweight or Obese

The absolute deprivation gap of the following indicators narrowed while the social gradient analysis showed that the inequality remained constant:

- SAR – All Admissions
- SAR – Emergency Admissions
- SAR – Day Case Admissions
- CDR – Intentional Self Harm
- SDR – Alcohol Specific

The absolute deprivation gap of the following indicators remained constant while the social gradient analysis showed that the inequality widened:

- SDR – Respiratory (U75)

The absolute deprivation gap of the following indicators remained constant while the social gradient analysis showed that the inequality narrowed:

- Breastfeeding on Discharge

Ranking of Inequality Gaps

The table below displays, in rank order from largest to smallest, the ten indicators with the largest inequality gaps as identified by RII and absolute gap analysis. As can be seen, four of the ten indicators identified in each analysis were the same, with a few differences in the rank order of these inequality gaps.

Rank	Absolute Gap	RII	Rank Change
1	Teenage Birth Rate (U20)	SDR - Drug Misuse	1 ^
2	SDR - Drug Misuse	Teenage Birth Rate (U20)	1 v
3	SDR - Drug Related Causes	SDR - Drug Related Causes	
4	Smoking During Pregnancy	SDR - Alcohol Specific	1 ^
5	SDR - Alcohol Specific	SAR - Alcohol Related Causes	2 ^
6	SDR - Respiratory (U75)	Smoking During Pregnancy	2 v
7	SAR - Alcohol Related Causes	SDR - Respiratory (U75)	1 v
8	SAR - Drug Related Causes	SAR - Drug Related Causes	
9	SDR – Preventable	SDR – Preventable	
10	SAR – Self-Harm Admissions	SAR – Self-Harm Admissions	

It should be noted that life expectancy gaps have not been included in the ranking of inequality gaps above. This is because proportionately, life expectancy gaps are comparatively lower to those ranking highest in the table above. However, as the gap refers to years of life, and as life expectancy is an overarching indicator of health status it is a vital statistic of high importance and reducing this gap is considered a high priority.[33]

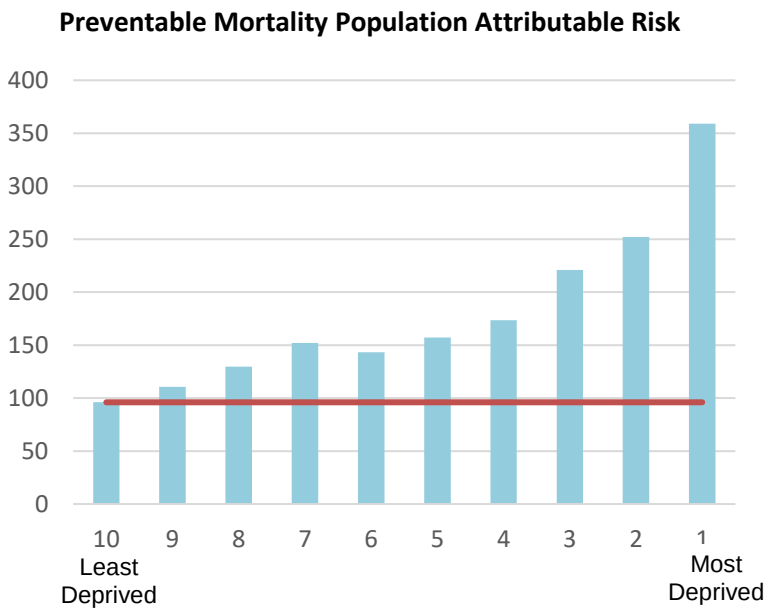
[33] Life expectancy inequality gaps are included as key overarching indicators of the public health strategic framework 'Making Life Better' www.health-ni.gov.uk/articles/making-life-better-strategic-framework-public-health

APPENDIX B: POPULATION ATTRIBUTABLE RISK (PAR) OF DEPRIVATION

Population Attributable Risk (PAR) measures the proportion of a disease/outcome (i.e. prevalence, mortality, admissions etc.) in the population that is attributable to deprivation and thus could be eliminated if deprivation were eliminated. This allows us to determine the proportional decrease in alcohol-related admissions in the population for example, in the hypothetical situation that all individuals had the same rate of alcohol-related admission as those in the highest socioeconomic category (least deprived deprivation decile). The PAR is calculated as the rate of disease in the overall population minus the rate in the unexposed group (least deprived).

PAR has been calculated in the table below for a number of health outcomes. As can be seen, the PAR percentage for preventable mortality in 2016-20 was 46% which indicates that almost half of preventable deaths in Northern Ireland were attributable to deprivation. This is reflected in the chart below showing the standardised death rate for preventable mortality by deprivation decile, with the proportion of deaths above the red line totalling the 46% of preventable deaths attributable to deprivation.

Indicator	%PAR
Teenage Birth Rate (U20)	78%
SDR - Alcohol Related Causes (U75)	53%
SAR - Alcohol Related Causes	50%
SAR - Self Harm Admissions	50%
SDR - Respiratory (U75)	49%
SDR - Preventable	46%
SDR - Avoidable	40%
SIR – Lung Cancer	40%
SDR – Circulatory (U75)	40%
SAR – Emergency	26%
SDR - Cancer (U75)	25%



APPENDIX C: ADDITIONAL INDICATORS

The tables below refer to additional indicators which form part of the HSCIMS that have not been included in the main body of the report. For each indicator the figures are presented for NI, the 20% most deprived areas, the 20% least deprived areas and the most-least deprived inequality gap. In addition the RII is provided, where appropriate.

Median Fire Response Times[34]	2016/17	2017/18	2018/19	2019/20	2020/21
Time (Minutes: Seconds)	All	All	All	All	All
NI	00:08:02	00:08:11	00:08:23	00:08:15	00:08:39
Most Deprived	00:06:30	00:06:38	00:06:40	00:06:42	00:07:00
Least Deprived	00:07:58	00:08:07	00:08:13	00:08:09	00:08:32
Most-Least Deprived	-18%	-18%	-19%	-18%	-18%

Median Ambulance Response Times[34,35,36]	2017	2018	2019	2020	2021
Time (Minutes: Seconds)	All	All	All	All	All
NI	00:10:36	00:13:36	00:15:36	00:17:14	00:24:37
Most Deprived	00:07:38	00:09:41	00:12:11	00:14:26	00:21:17
Least Deprived	00:12:58	00:14:48	00:16:21	00:17:51	00:27:33
Most-Least Deprived	-41%	-35%	-25%	-19%	-23%

SDR - All Age All Cause Mortality	2012-16	2013-17	2014-18	2015-19	2016-20
Deaths per 100,000 population	All	All	All	All	All
NI	1,036	1,032	1,023	1,016	1,023
Most Deprived	1,250	1,241	1,246	1,253	1,257
Least Deprived	900	901	887	879	889
Most-Least Deprived	39%	38%	40%	43%	41%
RII	- 0.39	- 0.38	- 0.40	- 0.42	-0.40

Looked After Children	2015	2016	2017	2018	2019
Rate per 1,000 population under 18 years	All	All	All	All	All
NI	5.0	5.1	5.3	5.5	6.0
Most Deprived	10.0	10.5	10.8	11.3	10.8
Least Deprived	1.7	1.5	1.6	1.8	1.6
Most-Least Deprived	482%	582%	555%	530%	581%

Autism Prevalence in School Age Children	2016/17	2017/18	2018/19	2019/20	2020/21
Rate per 100,000 population	All	All	All	All	All
NI	2,509	2,909	3,331	4,237	4,490
Most Deprived	3,207	3,598	4,321	5,515	5,890
Least Deprived	2,332	2,861	3,223	4,154	4,399
Most-Least Deprived	37%	26%	34%	33%	34%

[34] Evidence shows that emergency times are correlated more with location such as urban/rural than deprivation.
[35] In 2019/20, a new Clinical Response Model (CRM) programme was introduced along with a new set of ambulance categories in line with the national Ambulance Response Programme (ARP). Therefore, information from 2019/20 onwards is calculated differently and cannot be directly compared with previous years.
[36] COVID-19 surges may have influenced response times in 2021, through increased calls and/or greater staff absences rates.

Changes to Avoidable Mortality Definitions: following an Office for National Statistics (ONS) consultation,[37] on a new definition of avoidable mortality as proposed by the Organisation for Economic Co-operation and Development (OECD),[38] a new definition was implemented in 2020. The tables below provide figures based on the previous ONS definition, the full definition of which can be found in Table 13 within Appendix E.

SDR Amenable Mortality (Previous ONS Definition) Rate per 100,000 population	2012/16 All	2013/17 All	2014/16 All	2015/19 All	2016/20 All
NI	127	124	123	122	119
Most Deprived	199	196	193	189	185
Least Deprived	88	86	87	83	80
Most-Least Deprived	127%	128%	121%	128%	130%

SDR Preventable Mortality (Previous ONS Definition) Rate per 100,000 population	2012/16 All	2013/17 All	2014/18 All	2015/19 All	2016/20 All
NI	205	207	207	208	208
Most Deprived	335	335	333	336	336
Least Deprived	139	142	141	141	143
Most-Least Deprived	141%	135%	136%	138%	136%

SDR Avoidable Mortality (Previous ONS Definition) Rate per 100,000 population	2012/16 All	2013/17 All	2014/18 All	2015/19 All	2016/20 All
NI	242	244	244	244	243
Most Deprived	391	390	388	391	388
Least Deprived	166	168	169	167	168
Most-Least Deprived	136%	132%	130%	135%	131%

[37] https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/methodologies/avoidablemortalityinenglandandwalesqmi#important-points

[38] http://www.oecd.org/health/health-systems/Avoidable-mortality-2019-Joint-OECD-Eurostat-List-preventable-treatable-causes-of-death.pdf

APPENDIX D: URBAN-RURAL ANALYSIS

Urban-Rural analysis included below is based on the 2015 NISRA Urban-Rural classification, with the exception of Healthy Life Expectancy and Disability Free Life Expectancy which use the 2005 urban rural classification for all years up to and including 2015, due to data limitations. Further information regarding urban-rural classification can be found on the NISRA webpage at https://www.nisra.gov.uk/support/geography/urban-rural-classification.

A positive inequality gap means that the health outcomes in Northern Ireland are worse than in the rural areas.

Summary of findings

Compared with the regional average, rural areas experienced better outcomes across the majority of indicators analysed, however fire and ambulance response times continue to remain higher in rural areas.

Outcomes that were significantly better in rural areas than the NI average

Male Life Expectancy at Birth	SPR Antihypertensive	SIR Lung Cancer
Female Life Expectancy at Birth	SPR Statin	SDR Lung Cancer
Male Healthy Life Expectancy	SAR Respiratory	SAR Drug Related
Female Healthy Life Expectancy	SAR Respiratory (U75)	SDR Drug Related
Male Disability Free Life Expectancy	SIR Cancer	SDR Drug Misuse
Female Disability Free Life Expectancy	SDR – COVID-19	Infant Mortality
Male Life Expectancy at 65	SAR All	Smoking During Pregnancy
Female Life Expectancy at 65	SAR Emergency	Teenage Birth Rate
PYLL	SAtR Emergency Care	Low Birth Weight
SDR Treatable	SAR Day Case	Small for Gestational Age
SDR Preventable	SAR Self Harm	P1 Obese
SDR Avoidable	CDR Intentional Self-Harm	Dental Extractions – Total
SDR Circulatory (U75)	SPR Mood & Anxiety	Dental Extractions – Individuals
SDR Respiratory (U75)	SAR Alcohol Related	Dental Crownings –Total
SDR Cancer (U75)	SDR Alcohol Specific	Dental Crownings – Individuals
SDR All Cause (U75)	SDR Smoking Related	Dental Registrations (U18)

Outcomes that were significantly worse in rural areas than the NI average

Ambulance Response Times	Dental Fillings – Total (U18)	Dental Fillings – Individuals (U18)
Fire Response Times	Dental Fillings – Individuals	Dental Extractions – Total (U18)
		Dental Extractions - Individuals (U18)

Outcomes that were similar (or not significantly different) in Rural areas and the NI average

SAR Circulatory	Breastfeeding on Discharge	Dental Fillings – Total
SAR Circulatory (U75)	Healthy Birth Weight	Dental Registrations
SAR Elective Inpatient Admissions	P1 Overweight or Obese	

Figures for each indicator for NI, Rural areas, Urban areas, Mixed Urban-Rural areas and the NI-Rural Gap, are provided within the accompanying downloadable tables:

https://www.health-ni.gov.uk/articles/health-inequalities-statistics

APPENDIX E: TECHNICAL NOTES & DEFINITIONS

Indicators

There are 61 indicators included in the Northern Ireland analyses for the current report. Not all indicators are assessed at each level of geography (see Table 5), and dependent on the number of years data available, or any potential quality issues, assessments may not be made on all aspects of an indicator.

Due to random fluctuations in events over time, it is often necessary to aggregate more than one year of data for indicators, in order to ensure stability. The number of years of information that are required to aggregate for each indicator is informed by both the number of events and also an assessment of its annual variability.

Standardisation Methods

A number of indicators included in this report have been age standardised to allow the comparison of rates between populations with different age structures by relating them to a standard population, in this case the 2013 European Standard Population (90+ version). In most circumstances direct standardisation is used which not only allows the comparison of disease and death rates across both areas and time, but also to assess the relative burden of disease in a population.

Indicator Stability/Confidence Intervals

Indicator stability at the regional level does not mean that an indicator is also stable at the lower geographic levels of HSC Trust, LGD or DEA. To ensure robustness of the data, confidence intervals were calculated for rates for the most recent year at each geographic level, including the 20% most deprived Trust and LGD areas. The confidence interval for each standardised rate was assessed, in terms of its size and in relation to other comparable rates for other geographical areas, i.e. the Belfast Trust average and its 20% most deprived Trust areas. As a result of these assessments not all of the 61 indicators examined at the regional level were deemed robust enough to be presented at the sub-regional level, of these 61 indicators; 54 were found suitable to be published at the HSC Trust level, 52 at the LGD level and 43 at the DEA level. A full list of indicators and the level analysed can be found in Table 5.

Confidence intervals are used to quantify the imprecision in the estimate of a particular value. Specifically it quantifies the imprecision that results from random variation in the estimation of the value. In many cases the source of this random variation is sampling, for example in Healthy Life Expectancy, as any measurement taken from a sample provides an imprecise estimate of the true population value. In public health many indicators are based on what can be considered to be complete data sets and not samples, e.g. age standardised mortality rates based on death registers. In these instances the imprecision arises not as a result of sampling variation but of ‘natural’ variation. The indicator is considered to be the outcome of a stochastic process, i.e. one which can be influenced by the random occurrences that are inherent in the world around us. In such instances the value actually observed is only one of the set that could occur under the same circumstances. Generally in public health, it is the underlying circumstances or process that is of interest and the actual value observed gives only an imprecise estimate of this ‘underlying risk’.

Review of Suicide Statistics in Northern Ireland

Suicide deaths in Northern Ireland are defined as deaths from Self-inflicted Injury (also referred to as intentional self-harm) as well as Events of Undetermined Intent. This is consistent with the UK National Statistics definition. A death which is suspected to be suicide must be referred to the Coroner with the information provided by coroners at registration of the death is used to code the underlying cause of death. In some instances, it can be difficult to establish whether the cause of death was suicide. If it is not clear, or the Coroner has not specifically stated that it is a suicide, these are coded as 'Undetermined'.

Following a quality exercise between NISRA Vital Statistics Unit and the Coroners' Service, to better understand drug related deaths and intent, improvements are being made in order to reduce the number of deaths coded as 'Undetermined'. This process highlighted that some deaths coded as 'Undetermined' would be better classified as 'Drug-related', 'Accidental' or 'Intentional self-harm and event of undetermined intent (Suicide)'. The review of suicide statistics should be completed in spring 2022. It is envisaged that the review will create a statistical discontinuity for these categories from 2015 onwards, and figures will therefore be updated in future releases of this report. Further information on this review and detailed statistics on the number of suicides registered each year in Northern Ireland can be accessed at the link below.

https://www.nisra.gov.uk/publications/suicide-statistics

Use of Suicide Statistics in this Publication

In previous iterations of this report, and other reports produced by PHIRB, mortality from suicide is calculated according to the UK National Statistics definition shown in the table below.

ICD-10 Underlying Cause Code	Description
X60-84, Y87.0	Self-inflicted Injury (Intentional self-harm)
Y10-Y34, Y87.2	Events of Undetermined Intent

In line with the review and advice from Vital Statistics Unit this definition has not been used in this publication. The sub-series relating to self-inflicted injury/intentional self-harm has been used in its place in order to ensure comparability across years. As such, the crude death rate indicator for suicide has been replaced by a crude deaths rate indicator for intentional self-harm. In addition, there has been no 2020 update to the intentional self-harm mortality indicator. It is envisaged that following the completion of the review subsequent editions of this publication will revert to original UK National Statistics definition for suicide.

Table 5: HSCIMS Indicators Analysed at Northern Ireland (NI), HSC Trust, LGD and DEA level

INDICATOR	NI	Trust	LGD	DEA
Male Life Expectancy at Birth	●	●	●	●
Female Life Expectancy at Birth	●	●	●	●
Male Life Expectancy at Age 65	●	●	●	●
Female Life Expectancy at Age 65	●	●	●	●
Male Healthy Life Expectancy	●			
Female Healthy Life Expectancy	●			
Male Disability Free Life Expectancy	●			
Female Disability Free Life Expectancy	●			
Potential Years of Life Lost –All	●	●	●	●
Standardised Death Rate – Treatable	●	●	●	●
Standardised Death Rate – Preventable	●	●	●	●
Standardised Death Rate – Avoidable	●	●	●	●
Standardised Death Rate - Circulatory (U75)	●	●	●	
Standardised Death Rate - Respiratory (U75)	●	●		
Standardised Death Rate - Cancer (U75)	●	●	●	
Standardised Death Rate - All Cause Mortality (U75)	●	●	●	
Standardised Admission Rate –Circulatory	●	●	●	●
Standardised Admission Rate - Circulatory (U75)	●	●	●	●
Standardised Prescription Rate – Antihypertensive	●	●	●	●
Standardised Prescription Rate – Statin	●	●	●	●
Standardised Admission Rate – Respiratory	●	●	●	●
Standardised Admission Rate - Respiratory (U75)	●	●	●	●
Standardised Incidence Rate – Cancer	●	●	●	●
Standardised Death Rate – COVID-19	●	●	●	●
Standardised Admission Rate - All Admissions	●	●	●	●
Standardised Admission Rate - Emergency Admissions	●	●	●	●
Standardised Attendance Rate - Emergency Care	●	●	●	
Standardised Admission Rate - Elective Inpatient Admissions	●	●	●	●
Standardised Admission Rate - Day Case Admissions	●	●	●	●
Standardised Admission Rate – Self-Harm Admissions	●	●	●	
Crude Suicide Rate – Intentional Self Harm	●	●	●	●
Standardised Prescription Rate - Mood & Anxiety	●	●	●	●
Standardised Admission Rate - Alcohol Related Causes	●	●	●	●
Standardised Death Rate - Alcohol Specific Causes	●	●	●	
Standardised Death Rate - Smoking Related Causes	●	●	●	●
Standardised Incidence Rate - Lung Cancer	●	●	●	●
Standardised Death Rate - Lung Cancer	●	●	●	
Standardised Admission Rate - Drug Related Causes	●	●	●	●
Standardised Death Rate - Drug Related Causes	●	●	●	
Standardised Death Rate - Drug Misuse	●	●		
Infant Mortality Rate	●			
Smoking During Pregnancy	●	●	●	●
Teenage Birth Rate (U20)	●	●	●	
Breastfeeding on Discharge	●	●	●	●
Low Birth Weight	●	●	●	●
Healthy Birth Weight	●	●	●	●
Small for Gestational Age	●	●	●	●
Primary 1 BMI: Obese	●			
Primary 1 BMI: Obese & Overweight	●			
Standardised Filling Rate - Total	●	●	●	●
Standardised Filling Rate – Total (U18)	●	●	●	●
Standardised Filling Rate - Individuals	●	●	●	●
Standardised Filling Rate – Individuals (U18)	●	●	●	●
Standardised Extraction Rate – Total	●	●	●	●

INDICATOR	NI	Trust	LGD	DEA
Standardised Extraction Rate – Total (U18)	●	●	●	●
Standardised Extraction Rate - Individuals	●	●	●	●
Standardised Extraction Rate – Individuals (U18)	●	●	●	●
Standardised Crowning Rate - Total	●	●	●	●
Standardised Crowning Rate – Individuals	●	●	●	●
Standardised Dental Registration Rate	●	●	●	●
Standardised Dental Registration Rate (U18)	●	●	●	●

Methodology for Assessing Health Outcomes

In order to provide an assessment of the LGD to NI inequality gaps for the most recent year, analysis was performed to indicate whether the LGD average was better than, similar to, or worse than the NI average. If the LGD average of the health outcome had overlapping confidence intervals with the NI average, then the health outcome was reported as being similar to the NI average. Where confidence intervals did not overlap, the LGD average of the health outcome was reported as being either better or worse than the NI average. This methodology was employed for all standardised rates (i.e. death, admission, incidence, and prescription rates). For those health outcomes which did not have confidence intervals associated with them, such as teenage birth rate, a range of +/- 5% was calculated for each health outcome value and if the NI average fell within this range the health outcome was considered to be similar to the NI average. It should be noted that given the particular sensitivity around the health outcome 'crude intentional self-harm rate' and the relatively small numbers involved a range of +/- 2.5% was employed. This methodology allowed us to identify any health outcomes which were notably worse or better than the NI average and was used to provide an assessment of the health outcomes at DEA level, compared with the LGD average. As with all of our observations of differences between areas and assessments of changes over time, conclusions are open to interpretation.

Mortality Rates

For simplicity of understanding, mortality figures are based on the single main underlying cause of death classification, but a death can be due to a variety of different causes. This can lead to an underestimation of the impact of common conditions associated with multiple causes of death (e.g. diabetes, influenza and pneumonia). All death figures used in the HSCIMS are based on the year that the death was registered and not necessarily the year in which the death occurred. While the vast majority of deaths are registered shortly after death, there may be a delay in registering some deaths. Events such as infant death or suicide are usually referred to a coroner and this legal process can take some time.

Population

Population is a vital part of rate calculations; a change to the size of a population or its age distribution will impact on rates and subsequently inequality gaps. For instance, overall yearly deaths in Northern Ireland remained between 14,204 and 17,614 from the turn of the century up to 2020, yet mortality rates have been falling – this can be partially explaining by the growing and ageing Northern Ireland population. Between 2008 and 2020 for example, the population grew from 1,779,152 to 1,895,510; an increase of 116,358 persons (6.5%). During this time the proportion of the population aged 65 and over increased from 13.9% (247,500 persons) in 2008 to 16.9% (319,949 persons) in 2020.

Small Area Population Estimates

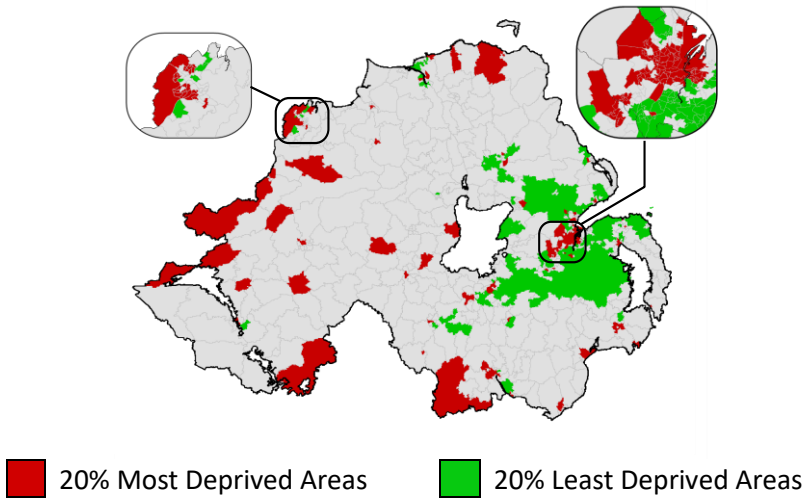
Population estimates disaggregated to a relatively small geographic area level (i.e. Super Output Area (SOA) and Small Area (SA)), by age and gender, are used to calculate many of the HSCIMS indicators for deprived and rural areas. However, as population estimates produced for NI are not available to the required level of detail, it is necessary to rework these estimates by proportioning out aggregated small area population estimates by gender and single year of age breakdowns from NISRA mid-year estimates. These reworked estimates are validated by a process of integrity checks with higher level age and geography population totals published by NISRA. Reworked estimates are calculated from unrounded population breakdown figures which may not match exactly with some of the population breakdowns published by NISRA which have been rounded to the nearest person.

Deprivation Classification

The deprivation classification used in this report is based on the Northern Ireland Multiple Deprivation Measure (NIMDM) produced by NISRA. The 20% most and least deprived areas are defined according to the NIMDM 2017.[39]

Although the 2017 NIMDM is available at small area level it was decided to continue using the SOA classification within the HSCIMS to ensure continuity and comparability with the back series of data and across indicators. In addition, all analysis presented is based on multiple deprivation rather than any specific deprivation domain.

Chart 1 – 20% Most and least deprived areas in Northern Ireland according to the 2017 NIMDM



Drug Related Admissions and Mortality

Please note that some observations may be due to changes in drug misuse behaviours among the population. There are ongoing concerns about polydrug misuse and the misuse of prescription drugs and new psychoactive substances. It appears that a significant cohort are engaging in increasingly risky behaviours, with an acute increase in related harms.

Childhood Obesity

The data cleansing parameters applied to the calculation of childhood obesity figures has been refined from 2017/18 onwards. Therefore figures should be treated with caution when making comparisons.

Year 8 BMI assessments have been temporarily removed from this report as year 8 data from 2018/19 to 2020/21 does not include measurements across all HSC Trusts and as a result, a regional assessment cannot be produced. In addition, sub-regional analysis for year 8 has also been removed as it is not possible to analyse all HSC Trust and LGD areas, nor can any comparison be made of sub-regional areas with the NI average. In addition, Primary 1 figures combine 3 years of data and are analysed at the regional level only. This is due to the school closures resulting from the COVID-19 pandemic which led to a reduction in the number of records in 2019/20 and 2020/21. As a result figures and assessments of change should be treated with caution due to excessively low BMI recording levels as a result of the pandemic.

[39] https://www.nisra.gov.uk/statistics/deprivation/northern-ireland-multiple-deprivation-measure-2017-nimdm2017

Sources of Information

Table 6: Indicators and Supplementary Information

Information	Source
Deaths and births	General Register Office, Vital Statistics & Administrative Research and Support Branch (VARS), NI Statistics and Research Agency (NISRA)
Hospital Admissions & Attendances	Hospital Information Branch, Information Analysis Directorate, DoH
Prescriptions	Business Services Organisation
Cancer Incidence	NI Cancer Registry
Smoking during pregnancy, breastfeeding, low birth weight, small for gestational age, healthy birth weight	NI Maternity System[40]
Childhood overweight/obesity	Child Health System
Dental Indicators	Business Services Organisation
Fire response times	NI Fire and Rescue Service
Ambulance response times	NI Ambulance Service
NI Health Survey	Public Health Information & Research Branch, Information Analysis Directorate, DoH
NI Small Area Population Estimates	NI Statistics and Research Agency (NISRA)
European Standard Population (ESP) 2013	Eurostat
Deprivation classification	NI Multiple Deprivation Measure 2017 (NISRA)
Urban-rural classification	NI Statistics and Research Agency (NISRA)
Looked after Children	Community Information Branch, Information Analysis Directorate, DoH
Children with Autism	Community Information Branch, Information Analysis Directorate, DoH

[40] Please note that prior to 2017, data used in the production of low birth weight statistics, as well as healthy birth weight, smoking during pregnancy and breastfeeding, were provided from each of the HSC Trust Child Health Systems (CHS). From 2017 onwards figures are produced directly from the Northern Ireland Maternity System (NIMATS) by Information & Analysis Directorate (IAD). Low birth weight data from NIMATs data is used to populate the Trust CHS so data from the two systems should be consistent. IAD have investigated historic data to ensure that previously published data obtained through CHS was wholly consistent with that held on NIMATS.

Indicator Definitions

Disease Classification - The indicators making up the HSCIMS are classified using the International Classification of Disease, 10th revision (ICD-10). This is the standard diagnostic tool for epidemiology, health management and clinical purposes, including the analysis of the general health situation of population groups.

A complete listing of ICD-10 codes can be found at the following web link:
www.who.int/classifications/apps/icd/icd10online/

LIFE EXPECTANCY	
Life Expectancy Estimates	NISRA publish the official life expectancy estimates at NI, Local Government District and Parliamentary Constituency level. The HSCIMS publishes at further levels to allow for assessment of inequality gaps between different areas/population groups, including deprivation analysis.
Life Expectancy at Birth	The expected years of life at time of birth based on mortality patterns in the period in question. It is based on the average death rates over a three year period. Presented separately for males and females.
Life Expectancy at Age 65	The expected years of life at age 65 based on mortality patterns in the period in question. It is based on the average death rates over a three year period. Presented separately for males and females.
Healthy Life Expectancy (HLE)	This is the average number of years a person can expect to live in good health. HLE provides an estimate of lifetime spent in 'Very Good' or 'Good' health, calculated using respondents' perception of their own health according to the Health Survey Northern Ireland (HSNI). HLE excludes communal establishments. All urban/rural analysis prior to 2016 is based on the 2005 urban-rural classification. Please note that due to the influence of the pandemic the HSNI has been conducted over the phone in 2020/21, as opposed to in person. This may have influenced the responses given by respondents. In addition, the sample size was lower as a result and children were not included in the survey.
Disability Free Life Expectancy (DFLE)	This is the average number of years a person can expect to live disability free. DFLE provides an estimate of lifetime spent free from a limiting persistent (twelve months or more) illness or disability, based upon a self-rated functional assessment of health recorded in the HSNI. DFLE excludes communal establishments. All urban/rural analysis prior to 2016 is based on the 2005 urban-rural classification. It should be noted that the health survey question used to determine longstanding illness changed from 2012/13 onward by making specific reference to mental health conditions in addition to physical. The new question is based on the UK harmonised principle for long-lasting health conditions and illness. This change may have affected responses to the question and subsequently impacted on DFLE figures. For further information contact PHIRB (details on reverse of publication). Please note that due to the influence of the pandemic the HSNI was conducted over the phone in 2020/21, as opposed to in person. This may have influenced the responses given by respondents. In addition, the sample size was lower as a result and children were not included in the survey.

Pregnancy & Early Years	
Teenage Birth Rate (U20)	The number of births in an area to teenage mothers (i.e. Between 13 and 19 years of age) expressed per 1,000 females.
Smoking during Pregnancy	The proportion of all live births, where the Health and Care Number (HCN) of the mother is recorded, that were to mothers that reported smoking during pregnancy. Information is gathered at the 'booking in' appointment and therefore represents mothers at the end of the first trimester. As this indicator is self-reported, it may be subject to a degree of under-reporting. Due to a change in the methodology for recording smoking status on the NIMATS system, figures for 2019 in this report are slightly changed from previously reported values.
Low Birth Weight	The proportion of all live births where the HCN of the mother is recorded and the birth weight of the child was less than 2,500g.
Healthy Birth Weight	The proportion of all live births, where the HCN of the mother is recorded, with a birth weight within a range appropriate for their gestational age and gender.
Breastfeeding on Discharge	The proportion of all live births, where the HCN of the mother is recorded, that were being breastfed on discharge from hospital. Figures include mothers' breastfeeding their child as well as using complementary feeding.
Small for Gestational Age	The proportion of all live births, where the HCN of the mother is recorded, that were small-for-gestational age (SGA). This is when an infant is born with a birth weight less than the 10th percentile, on a chart customised for maternal characteristics, for gestational age in body weight. Birth weight percentile is only available from 2019 onwards due to insufficient recording levels prior to 2019.

ADMISSIONS	
Hospital Information System (HIS)	Admissions data used to calculate rates are provided by the Hospital Information Branch and are extracted from the Hospital Information System (HIS). All mental health specialities have been excluded from the data. Figures are based on number of admissions and not individuals. Further information and definition on inpatient and day case activity is available at https://www.health-ni.gov.uk/articles/inpatient-and-day-case-activity.
Standardised Admission Rate (SAR)	This is calculated by standardising (using the direct method) the average admission rate in NI (over a predefined period) due to specified ICD-10 classification codes (may also be age specific) to the 2013 European Standard Population (ESP).
Indicator Name	
- All Admissions	Includes all acute inpatient and day case admissions (excluding regular day and night attenders, hospital transfers and other (maternity/delivery episodes)). Deaths and discharges have been used as an approximation for admissions.
- Emergency Admissions	A patient for whom admission is unpredictable and at short notice because of clinical need. All non-elective acute admissions excluding maternity, other and not known.
- Elective Inpatient Admissions	A patient for whom the decision to admit could be separated in time from the actual admission. Does not include day cases, not to be confused with elective admissions (which include day cases)
- Day Case Admissions	A patient admitted electively during the course of a day with the intention of receiving care who does not require the use of a hospital bed overnight and who returns home as scheduled. If this original intention is not fulfilled and the patient stays overnight, such a patient should be counted as an inpatient and is not counted as a day case admission.

- Circulatory	Selected according to International Classification of Disease (ICD-10) codes I00-I99.[41]
- Circulatory U75	ICD-10 codes I00-I99, under 75 years of age.
- Respiratory	ICD-10 codes J00-J99.
- Respiratory U75	ICD-10 codes J00-J99, under 75 years of age.
- Alcohol Related Causes	Alcohol related causes included in Table 8.
- Drug Related Causes	Drug related causes included in Table 10.
- Self-Harm Admissions	ICD-10 codes X60-84 and Y87.0. This indicator was developed to complement the suicide information, however it does not provide a complete picture of the problem of self-harm (or parasuicide) as in many instances, self-harm does not result in an acute admission to hospital. It should be noted that there have been a range of additional infrastructure provided to support people presenting with self-harm. These programmes may be contributing to the decrease in self-harm admissions.

ATTENDANCES	
SYMPHONY & EEMS	Attendance data used to calculate rates are provided by the Hospital Information Branch and are from the two administrative systems used by emergency departments in Northern Ireland (SYMPHONY & EEMS). Figures are based on number of attendances and not individuals. Further information on emergency care activity is available at https://www.health-ni.gov.uk/articles/emergency-care-and-ambulance-statistics.
Indicator Name	
- Emergency Care Attendances	New and unplanned review attendances at all Emergency Departments (Types 1 - 3). Data for RVH-RAES (Eye Casualty) not included prior to 2018/19. This relates to any patient who presents without appointment to an emergency care department. This differs from an emergency admission where a patient is admitted to an acute hospital by various routes, including through an emergency care department or via a General Practitioner. Rates for the Standardised Attendance Rate – Emergency Care have been revised in the current publication as a result of a quality assurance exercise. Values for previous years may therefore not match with earlier versions of the Health Inequalities Annual Report.

MORTALITY	
Infant Mortality Rate	The number of infant deaths per 1,000 live births. Infant deaths refer to all deaths in the first year of life.
Potential Years of Life Lost (PYLL)	This is calculated by summing the deaths occurring at each age and multiplying this with the number of years a person of that age could have been expected to live. It is a summary measure of premature mortality, weighting deaths occurring at younger ages, which are, a priori, preventable. It uses the average age-specific life expectancy for each five year age band as the age to which a person in that age band might be expected to live.

[41] For a listing and explanation of topology or site codes see: International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, World Health Organisation, Geneva. Or view online at: http://apps.who.int/classifications/icd10/browse/2019/en#/II

Intentional Self-Harm (CDR) *Not age standardised as it was found to make little or no difference whilst introducing a new confidence interval*	The number of deaths by intentional self-harm per 100,000 population ICD-10 codes X60-X84, Y87.0.
Standardised Death Rate (SDR)	This is calculated by directly age standardising the average death rate in NI over a given period, due to specific causes of death (selected according to ICD-10 classification) to the 2013 European Standard Population (ESP). Some death rates relate to those under the age of 75 as indicators of premature mortality for specific diseases.
Indicator Name	
- All Cause U75	All causes, under 75 year of age
- All Age All Cause	All causes
- Treatable	Causes of death that can be mainly avoided through timely and effective health care interventions, including secondary prevention and treatment (i.e. after the onset of disease, to reduce case-fatality) – see Table 7 for full list of causes.
- Preventable	Causes of death that can be mainly avoided through effective public health and primary prevention interventions (i.e. before the onset of diseases/injuries, to reduce incidence) – see Table 7 for full list of causes.
- Avoidable	Avoidable deaths are all those defined as preventable and treatable – see Table 7 for full list of causes.
- Circulatory U75	ICD-10 codes I00-I99, under 75 year of age.
- Respiratory U75	ICD-10 codes J00-J99, under 75 year of age.
- Cancer U75	ICD-10 codes C00-C97, under 75 year of age.
- Lung Cancer	ICD-10 codes C33-C34.
- COVID-19	In this report deaths due to COVID-19 are defined as 'deaths due to COVID-19' and use the same International Classification of Disease Tenth Revision (ICD-10) codes as reported by NISRA within the Registrar General Annual Report i.e. ICD-10 codes U07.1 and U07.2. U10.9 was introduced in 2021 as a new code for 'deaths due to COVID-19'. As the analysis in this report includes deaths up to 2020 only, no cases of U10.9 are included.
- Alcohol Specific	Alcohol Specific causes – see Table 9 for full list of causes.
- Drug Related Causes	Drug related causes – see Table 10 for full list of causes.
- Drug Misuse	Deaths related to drug misuse – see Table 11 for full list of causes.
- Smoking Related Causes	Deaths due to Smoking related causes– see Table 12 for full list of causes.

Cancer Incidence	
Northern Ireland Cancer Registry (NICR)	Cancer incidence numbers are extracted from the NICR's "live" database, and hence are continuously updated. As a result, an earlier extract taken at a later date may supply slightly different results. Therefore, although the overall trend will be the same, previously published data and data published elsewhere may have rates that vary slightly to what is published is here.
Northern Ireland Cancer Registry (NICR) Standardised Incidence Rate (SIR)	NICR publish official Standardised Incidence Rates (SIRs), however the HSCIMS publishes at further levels to allow for assessment of inequality gaps between different areas/population groups, including deprivation analysis. This is calculated by standardising (using the direct method) the average incidence rate in NI (over seven years) due to specified ICD-10 classification codes to the 2013 European Standard Population (ESP). As data is sourced from a live dataset that is subject to change, NICR annually provides the latest ten years of data to provide the latest picture. As a result, historical figures within this report are subject to change.

Indicator Name	ICD-10 Classification
- Cancer	ICD-10 codes C00-C97, excluding C44 (non-melanoma skin cancer which is quite common, in most cases easily treated and rarely fatal).
- Lung Cancer	ICD-10 codes C33 and C34.

Prescriptions	
Electronic Prescribing Eligibility System (EPES)	Prescription data is extracted from the EPES which is maintained by Business Services Organisation (BSO). The data provided covers drugs dispensed in primary care only, and includes prescriptions issued by all types of prescribers including doctors, nurses and dentists, and all those issued and dispensed by pharmacists, dispensing doctors and appliance suppliers. Drugs prescribed and dispensed in hospital cannot be captured centrally due to the use of different IT systems.
Standardised Prescription Rate (SPR)	This is calculated by standardising (using the direct method) the average prescription rate (over one year) in NI for people dispensed predefined prescription drugs, to the 2013 European Standard Population (ESP). Rates refer to number of persons prescribed a drug and does not include multiple prescription.

Indicator Name	British National Formulary (BNF) code
- Antihypertensive	Drugs included are those with a BNF code of 2.2.1, 2.4, 2.5.5.1, 2.5.5.2 and 2.6.2
- Statin	Drugs included are those with a BNF code of 2.12
- Mood & Anxiety Disorders	Drugs included are those with a BNF code of 4.1.2 and 4.3

Diet and Dental Health	
Childhood Overweight and Obese	Height and weight information is extracted from the Child Health System (CHS) and converted into a Body Mass Index (BMI) score for each pupil. The BMI can be categorized using International Growth Charts as determined by the International Obesity Taskforce (IOTF) which consider age and gender, allowing the identification of those who are overweight or obese. Records are analysed based on two criteria: Date of Exam within the Primary 1 or Year 8 school year: 01/09/XX-31/08/XX Date of Birth for Primary 1 or Year 8 pupils: 02/07/XX - 01/07/XX For data since 2017/18, additional data cleansing parameters have been applied.
Dental indicators	Data on the number of fillings, extractions, crownings and individuals registered with a dentist are supplied by Business Services Organisation (BSO). Dental indicators are age standardised using population data sourced from NISRA, as with the majority of other indicators used in this publication. Dental indicators for fillings, extractions and crownings only includes paid treatments carried out by General Dental Service (GDS) dentists. These indicators do not include private work or secondary care activity, including work carried out by the Community Dental Service. Please note that for each dental indicator there is a possibility that individuals may be counted in two age groups, if they had a birthday between two or more separate procedures within the same year. This occurs in only a small number of cases (typically around 2% or less), but should be considered when interpreting data.

Standardised dental indicator rate	This is calculated by standardising (using the direct method) the indicator value in NI (over a predefined period) to the 2013 ESP.
Indicator Name	**CHS Data**
- Primary 1 BMI: Obese	The proportion of children in Primary 1 classified as obese.
- Primary 1 BMI: Overweight or Obese	The proportion of children in Primary 1 classified as overweight or obese.
Indicator Name	**BSO Data**
- Standardised Filling Rate – Total	Total number of fillings per 100,000 population.
- Standardised Filling Rate – Total (U18)	Total number of fillings in under 18s per 100,000 population.
- Standardised Filling Rate – Individuals	Individuals receiving one or more fillings per 100,000 population.
- Standardised Filling Rate – Individuals (U18)	Individuals aged under 18 receiving one or more fillings per 100,000 population.
- Standardised Extraction Rate – Total	Total number of extractions per 100,000 population.
- Standardised Extraction Rate – Total (U18)	Total number of extractions in under 18s per 100,000 population.
- Standardised Extraction Rate – Individuals	Individuals receiving one or more extractions per 100,000 population.
- Standardised Extraction Rate – Individuals (U18)	Individuals aged under 18 receiving one or more extractions per 100,000 population.
- Standardised Crowning Rate – Total	Total number of crownings per 100,000 population.
- Standardised Crowning Rate – Individuals	Individuals receiving one or more crownings per 100,000 population.
- Standardised Dental Registration Rate	Individuals registered with a dentist per 100,000 population
- Standardised Dental Registration Rate (U18)	Individuals aged under 18 registered with a dentist per 100,000 population

Additional Indicators	
Median Fire Response Time	The median response time taken by the Northern Ireland Fire and Rescue Service (NIFRS) to respond to an incident. The 'response time' is measured as the 'time of the call to NIFRS Regional Control Centre' to 'the time the 1st Appliance books in attendance' at the incident. Calculations are based on the time taken for NIFRS to respond to each incident within a one year time period. The median i.e. midpoint value is reported rather than the simple average as it is unaffected by atypically long or short response times. For consistency the methodology used in this report is the one used in previous years. However the measuring of response times has been revised for internal reports. When measuring performance internally the Data Hub removes any incidents were the response time is less than one minute or greater than one hour to avoid outliers skewing performance.

Median Ambulance Response Time	The median time taken by the appropriate response vehicle to respond to an incident. Calculations are based on the time taken to respond to each incident within a one month time period (August). This data refers to CAT1, CAT1(T) and CAT2 emergency responses, excluding Healthcare Professionals (HCP) calls. The median i.e. midpoint value is reported rather than the simple average as it is unaffected by atypically long or short response times.
Looked after Children	The number of looked after children per 100,000 population (under 18 years of age) by location prior to last entering care. Data was extracted from the annual OC2 Community Information Return, which includes children who have been in care continuously for twelve months or longer at 30th September.
Autism Prevalence in School Age Children	The number of children with Autism or Asperger Syndrome per 100,000 children in compulsory grant-aided education. Data extracted from the NI School Census.

ICD-10 Classification Tables

The table below lists the revised ICD-10 classification codes of all causes of death considered avoidable, with indication as to which are considered treatable, preventable or both. This definition was implemented following an Office for National Statistics (ONS) consultation,[42] on a new definition of avoidable mortality as proposed by the Organisation for Economic Co-operation and Development (OECD).[43] All avoidable mortality indicators, including the back series, are based on the new definition. The previous definition, for use with the additional indicators in Appendix C, can be found in Table 13. Within the OECD definition, recently COVID-19 has been added to the definition in the new category "Provisional assignment of new diseases".

Table 7: Treatable, Preventable & Avoidable Causes

Condition Group & Cause	ICD-10 Codes	Age	Treatable	Preventable
Infectious Diseases				
Intestinal Diseases	A00-A09	0-74		•
Diphtheria, Tetanus, Poliomyelitis	A35, A36, A80	0-74		•
Whooping cough	A37	0-74		•
Meningococcal infection	A39	0-74		•
Sepsis due to streptococcus pneumonia and sepsis due to haemophilus influenza	A40.3, A41.3	0-74		•
Haemophilus influenza infections	A49.2	0-74		•
Sexually transmitted infections (except HIV/AIDS)	A50-A60, A63, A64	0-74		•
Varicella	B01	0-74		•
Measles	B05	0-74		•
Rubella	B06	0-74		•
Viral Hepatitis	B15-B19	0-74		•
HIV/AIDS	B20-B24	0-74		•
Malaria	B50-B54	0-74		•
Haemophilus and pneumococcal meningitis	G00.0, G00.1	0-74		•
Tuberculosis	A15-A19, B90, J65	0-74	• (50%)	• (50%)
Scarlet fever	A38	0-74	•	
Sepsis	A40 (excl. A40.3),A41 (excl. A41.3)	0-74	•	
Cellulitis	A46, L03	0-74	•	
Legionnaires disease	A48.1	0-74	•	
Streptococcal and enterococci infection	A49.1	0-74	•	
Other meningitis	G00.2, G00.3, G00.8, G00.9	0-74	•	
Meningitis due to other and unspecified causes	G03	0-74	•	

[42] https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/methodologies/avoidablemortalityinenglandandwalesqmi#important-points

[43] http://www.oecd.org/health/health-systems/Avoidable-mortality-2019-Joint-OECD-Eurostat-List-preventable-treatable-causes-of-death.pdf

Condition Group & Cause	ICD-10 Codes	Age	Treatable	Preventable
Cancer				
Lip, oral cavity and pharynx cancer	C00-C14	0-74		•
Oesophageal cancer	C15	0-74		•
Stomach cancer	C16	0-74		•
Liver cancer	C22	0-74		•
Lung cancer	C33-C34	0-74		•
Mesothelioma	C45	0-74		•
Skin (melanoma) cancer	C43	0-74		•
Bladder cancer	C67	0-74		•
Cervical cancer	C53	0-74	• (50%)	• (50%)
Colorectal cancer	C18-C21	0-74	•	
Breast cancer (Female only)	C50	0-74	•	
Uterus cancer	C54,C55	0-74	•	
Testicular cancer	C62	0-74	•	
Thyroid cancer	C73	0-74	•	
Hodgkin's disease	C81	0-74	•	
Lymphoid leukaemia	C91.0, C91.1	0-74	•	
Benign neoplasm	D10-D36	0-74	•	
Endocrine and metabolic diseases				
Nutritional deficiency anaemia	D50-D53	0-74		•
Diabetes mellitus	E10-E14	0-74	• (50%)	• (50%)
Thyroid disorders	E00-E07	0-74	•	
Adrenal disorders	E24-E25 (except E24.4), E27	0-74	•	
Diseases of the nervous system				
Epilepsy	G40,G41	0-74	•	
Diseases of the circulatory system				
Aortic aneurysm	I71	0-74	• (50%)	• (50%)
Hypertensive diseases	I10-I13, I15	0-74	• (50%)	• (50%)
Ischaemic heart diseases	I20-I25	0-74	• (50%)	• (50%)
Cerebrovascular diseases	I60-I69	0-74	• (50%)	• (50%)
Other atherosclerosis	I70, I73.9	0-74	• (50%)	• (50%)
Rheumatic and other heart diseases	I00-I09	0-74	•	
Venous thromboembolism	I26, I80, I82.9	0-74	•	

Condition Group & Cause	ICD-10 Codes	Age	Treatable	Preventable
Diseases of the respiratory system				
Influenza	J09-J11	0-74		•
Pneumonia due to Streptococcus pneumonia or Haemophilus influenza	J13-J14	0-74		•
Chronic lower respiratory diseases	J40-J44	0-74		•
Lung diseases due to external agents	J60-J64, J66-J70, J82, J92	0-74		•
Upper respiratory infections	J00-J06, J30-J39	0-74	•	
Pneumonia, not elsewhere classified or organism unspecified	J12, J15, J16- J18	0-74	•	
Acute lower respiratory infections	J20-J22	0-74	•	
Asthma and bronchiectasis	J45-J47	0-74	•	
Adult respiratory distress syndrome	J80	0-74	•	
Pulmonary oedema	J81	0-74	•	
Abscess of lung and mediastinum pyothorax	J85, J86	0-74	•	
Other pleural disorders	J90, J93, J94	0-74	•	
Diseases of the digestive system				
Gastric and duodenal ulcer	K25-K28	0-74	•	
Appendicitis	K35-K38	0-74	•	
Abdominal hernia	K40-K46	0-74	•	
Cholelithiasis and cholecystitis	K80-K81	0-74	•	
Other diseases of gallbladder or biliary tract	K82-K83	0-74	•	
Acute pancreatitis	K85.0, K85.1, K85.3, K85.8, K85.9	0-74	•	
Other diseases of pancreas	K86.1, K86.2, K86.3, K86.8, K86.9	0-74	•	
Diseases of the genitourinary system				
Nephritis and nephrosis	N00-N07	0-74	•	
Obstructive uropathy	N13, N20-N21, N35	0-74	•	
Renal failure	N17-N19	0-74	•	
Renal colic	N23	0-74	•	
Disorders resulting from renal tubular dysfunction	N25	0-74	•	
Unspecified contracted kidney, small kidney of unknown cause	N26-N27	0-74	•	
Inflammatory diseases of genitourinary system	N34.1, N70-N73, N75.0, N75.1, N76.4, N76.6	0-74	•	
Prostatic hyperplasia	N40	0-74	•	

Condition Group & Cause	ICD-10 Codes	Age	Treatable	Preventable
Pregnancy, childbirth and perinatal period				
Tetanus neonatorum	A33	0-74		•
Obstetrical tetanus	A34	0-74		•
Pregnancy, childbirth and the puerperium	O00-O99	0-74	•	
Certain conditions originating in the perinatal period	P00-P96	0-74	•	
Congenital malformations				
Certain congenital malformations (neural tube defects)	Q00, Q01, Q05	0-74		•
Congenital malformations of the circulatory system (heart defects)	Q20-Q28	0-74	•	
Adverse effects of medical and surgical care				
Drugs, medicaments and biological substances causing adverse effects in therapeutic use	Y40-Y59	0-74	•	
Misadventures to patients during surgical and medical care	Y60-Y69,Y83-Y84	0-74	•	
Medical devices associated with adverse incidents in diagnostic and therapeutic use	Y70-Y82	0-74	•	
Injuries				
Transport Accidents	V01-V99	0-74		•
Accidental Injuries	W00-X39, X46-59	0-74		•
Intentional self-harm	X66-X84	0-74		•
Event of undetermined intent	Y16-Y34	0-74		•
Assault	X86-Y09	0-74		•
Alcohol related and drug-related deaths				
Alcohol specific disorders and poisonings	E24.4, F10, G31.2, G62.1, G72.1, I42.6, K29.2, K70, K85.2, K86.0, Q86.0, R78.0, X45, X65, Y15	0-74		•
Other alcohol related disorders	K73, K74.0-K74.2, K74.6	0-74		•
Drug disorders and poisonings	F11-F16, F18-F19, X40-X44, X85, Y10-Y14	0-74		•
Intentional self-poisoning by drugs	X60-X64	0-74		•
Provisional assignment of new diseases				
COVID-19	U07.1 - U07.2	0-74		•

Table 8: Admissions – Alcohol Related Causes[44]

ICD-10 code	Description
E24.4	Alcohol induced Pseudo-Cushing's syndrome
E51.2	Wernicke's Encephalopathy
F10	Mental and Behavioural disorders due to use of alcohol
G31.2	Degeneration of the nervous system due to alcohol
G62.1	Alcoholic polyneuropathy
G72.1	Alcoholic myopathy
I42.6	Alcoholic cardiomyopathy
K29.2	Alcoholic gastritis
K70	Alcoholic liver disease
K85.2	Alcohol-induced acute pancreatitis
K86.0	Alcohol-induced chronic pancreatitis
O35.4	Maternal care for (suspected) damage to foetus from alcohol
P04.3	Foetus and newborn affected by maternal use of alcohol
Q86.0	Foetal alcohol syndrome (dysmorphic)
T51.0	Toxic effect of ethanol
T51.1	Toxic effect of methanol
T51.9	Toxic effect of alcohol, unspecified
X45	Accidental poisoning by and exposure to alcohol
X65	Intentional self-poisoning by and exposure to alcohol
Y15	Poisoning by and exposure to alcohol, undetermined intent
Y57.3	Alcohol deterrents
Y90	Evidence of alcohol involvement determined by blood alcohol level
Y91	Evidence of alcohol involvement determined by level intoxication
Z50.2	Alcohol rehabilitation
Z71.4	Alcohol abuse counselling and surveillance
Z72.1	Alcohol use

[44] The definition for admissions due to alcohol related causes was updated for 2017/18 to include ICD Code K85.2: alcohol-induced chronic pancreatitis.

Table 9: Deaths – Alcohol Specific Causes

ICD-10 code	Description
E24.4	Alcohol-induced pseudo-Cushing's syndrome
F10	Mental and Behavioural disorders due to use of alcohol
G31.2	Degeneration of the nervous system due to alcohol
G62.1	Alcoholic polyneuropathy
G72.1	Alcohol myopathy
I42.6	Alcoholic cardiomyopathy
K29.2	Alcoholic gastritis
K70	Alcoholic liver disease
K85.2	Alcohol-induced acute pancreatitis
K86.0	Alcohol induced chronic pancreatitis
Q86.0	Fetal alcohol syndrome (dysmorphic)
R78.0	Excess alcohol blood levels
X45	Accidental poisoning by and exposure to alcohol
X65	Intentional self-poisoning by and exposure to alcohol
Y15	Poisoning by and exposure to alcohol, undetermined intent

Table 10: Admissions and Deaths – Drug Related Causes

ICD-10 code	Description
F11-16, F18-F19	Mental and Behavioural disorders due to drug use (excluding alcohol and tobacco)
X40-44	Accidental poisoning by drugs, medicaments and biological substances
X60-X64	Intentional self-poisoning by drugs, medicaments and biological substances
X85	Assault by drugs, medicaments and biological substances
Y10-14	Poisoning by drugs, medicaments and biological substances, undetermined intent

Table 11: Deaths – Drugs Misuse

ICD-10 code	Description
F11-16, F18-F19	Mental and Behavioural disorders due to drug use (excluding alcohol, tobacco and volatile substances)
Deaths due to the following categories *and* where a drug controlled under the Misuse of Drugs Act 1971 was mentioned;	
X40-44	Accidental poisoning by drugs, medicaments and biological substances
X60-X64	Intentional self-poisoning by drugs, medicaments and biological substances
X85	Assault by drugs, medicaments and biological substances
Y10-14	Poisoning by drugs, medicaments and biological substances, undetermined intent

Table 12: Deaths – Smoking Related Causes[45]

Cause of Death	ICD-10 code	Attributable Percentage Men	Women
Cancer			
Lung	C33 – C34	90%	79%
Upper respiratory	C32, C14.0	77%	58%
Oesophagus	C15	70%	72%
Bladder	C67	49%	20%
Kidney	C64	41%	7%
Stomach	C16	35%	10%
Pancreas	C25	26%	30%
Unspecified site	C80	33%	7%
Myeloid Leukaemia	C92	19%	10%
Respiratory			
Chronic obstructive lung disease	J44	87%	83%
Pneumonia 35-64	J18	33%	53%
Pneumonia 65+	J18	23%	13%
Circulatory			
Ischaemic heart disease 35-54	I20-I25	55%	63%
Ischaemic heart disease 55-64	I20-I25	41%	36%
Ischaemic heart disease 65-74	I20-I25	25%	18%
Ischaemic heart disease 75+	I20-I25	9%	5%
Cerebrovascular disease 35-54	I60-I69	56%	53%
Cerebrovascular disease 55-64	I60-I69	33%	38%
Cerebrovascular disease 65-74	I60-I69	16%	31%
Cerebrovascular disease 75+	I60-I69	4%	2%
Aortic Aneurysm	I71	64%	66%
Myocardial Degeneration	I51.5	27%	18%
Atherosclerosis	I70	21%	21%
Digestive			
Stomach/Duodenum Ulcer	K25-K26	53%	59%
Disease Prevented by Smoking			
Parkinson's Disease	G20	-51%	-30%
Endometrial Cancer	C54	N/A	-16%

[45]It should be noted that this definition is specific to the death rates in NI and therefore differs from those used in other parts of the UK and other countries, meaning it is not directly comparable.

The table below lists the previous definition for all causes of death considered avoidable, with indication as to which are considered amenable, preventable or both. This list is for use with the additional indicators in Appendix C.

Table 13: Amenable, Preventable and Avoidable Mortality (Previous ONS Definition).

Condition Group & Cause	ICD-10 Codes	Age	Amenable	Preventable
Infections				
Tuberculosis	A15-A19, B90	0-74	•	•
Selected invasive bacterial and protozoal infections	A38-A41, A46, A48.1, B50-B54, G00, G03, J02, L03	0-74	•	
Hepatitis C	B17.1, B18.2	0-74	•	•
Pertussis (whooping cough)	A37	0-14	•	•
Measles	B05	1-14	•	•
Rubella	B06	0-14		•
Other infections (Diphtheria, Tetanus, Poliomyelitis and Varicella)	A35, A36, A80, B01	0-19	•	•
Intestinal infections	A00-A09	0-14	•	
HIV/AIDS	B20-B24	All	•	•
Neoplasms				
Malignant neoplasm of lip, oral cavity and pharynx	C00-C14	0-74		•
Malignant neoplasm of oesophagus	C15	0-74		•
Malignant neoplasm of stomach	C16	0-74		•
Malignant neoplasm of colon and rectum	C18-C21	0-74	•	•
Malignant neoplasm of liver	C22	0-74		•
Malignant neoplasm of trachea, bronchus and lung	C33-C34	0-74		•
Malignant melanoma of skin	C43	0-74	•	•
Mesothelioma	C45	0-74		•
Malignant neoplasm of breast	C50	0-74	•	•
Malignant neoplasm of cervix uteri	C53	0-74	•	•
Malignant neoplasm of bladder	C67	0-74	•	
Malignant neoplasm of thyroid gland	C73	0-74	•	
Hodgkin's disease	C81	0-74	•	
Leukaemia	C91, C92.0	0-44	•	
Malignant neoplasm of testis	C62	0-74	•	
Malignant neoplasm of unspecified parts of uterus and body of uterus	C54-C55	0-44	•	
Benign neoplasms	D10-D36	0-74	•	
Nutritional, endocrine and metabolic				
Diabetes mellitus	E10-E14	0-74	•	•
Diseases of Thyroid	E00-E07	0-74	•	
Addison's Disease	E27.1	0-74	•	

Condition Group & Cause	ICD-10 Codes	Age	Amenable	Preventable
Drug use disorders				
Alcohol related diseases, excluding external causes	F10, G31.2, G62.1, I42.6, K29.2, K70, K73, K74 (excl. K74.3-K74.5), K86.0	0-74		•
Illicit drug use disorders	F11-F16, F18-F19	0-74		•
Neurological disorders				
Epilepsy and status epilepticus	G40-G41	0-74	•	
Cardiovascular diseases				
Rheumatic and other valvular heart disease	I01-I09	0-74	•	
Hypertensive diseases	I10-I15	0-74	•	
Ischaemic heart disease	I20-I25	0-74	•	•
DVT with pulmonary embolism	I26, I80.1-I80.3, I80.9, I82.9	0-74		•
Cerebrovascular diseases	I60-I69	0-74	•	
Aortic aneurysm and dissection	I71	0-74		•
Respiratory diseases				
Influenza (including swine flu)	J09-J11	0-74	•	•
Pneumonia	J12-J18	0-74	•	
Chronic obstructive pulmonary disorder	J40-J44	0-74	•	•
Asthma	J45-J46	0-74	•	
Selected respiratory diseases	J00-J06, J20-J22, J30-J39	1-14	•	
Digestive disorders				
Gastric and duodenal ulcer	K25-K28	0-74	•	
Acute abdomen, appendicitis, intestinal obstruction, cholecystitis/lithiasis, pancreatitis, hernia	K35-K38, K40-K46, K80-K83, K85, K86.1-K86.9, K91.5	0-74	•	
Genitourinary disorders				
Nephritis and nephrosis	N00-N07, N17-N19, N25-N27	0-74	•	
Obstructive uropathy and prostatic hyperplasia	N13, N20-N21, N35, N40, N99.1	0-74	•	
Maternal and infant				
Complications of perinatal period	P00-P96, A33	All	•	
Congenital malformations of the circulatory system	Q20-Q28	0-74	•	
Spina Bifida	Q05	0-74		•
Unintentional injuries				
Transport Accidents	V01-V99	All		•
Accidental Injury	W00-X59	All		•
Intentional injuries				
Suicide and self inflicted injuries	X60-X84, Y10-Y34	All		•
Homicide/Assault	X85-Y09, U50.9	All		•
Misadventures to patients during surgical and medical care	Y60-Y69, Y83-Y84	All	•	•

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Life Expectancy in Northern Ireland

Presenting the latest official estimates of life expectancy in Northern Ireland and an examination of the causes that contribute to the change in life expectancy over time, as well as the differentials between gender and deprivation classification and across HSC Trusts and Local Government Districts. The latest figures for life expectancy at 65, healthy life expectancy and disability-free life expectancy are also included.
https://www.health-ni.gov.uk/articles/life-expectancy-northern-ireland

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Key Indicators

Monitoring of the key indicators of the wider social determinant of health & wellbeing set out against each of the themes contained in the making life better strategic framework (Annual).
http://www.health-ni.gov.uk/articles/social-determinants-health-statistics

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