Northern Ireland
Statistics &
Research
agency

Consultation Document

Proposals for the updated NI Multiple Deprivation Measure (NIMDM 2017)

Date of Issue: 21 November 2016

Responses required by: 15 January 2017

Contents

Executive Summary

i. As part of its work to update the current Northern Ireland Multiple Deprivation Measure (NIMDM 2010), NISRA is consulting users about the proposed indicators to be included in the updated measures, referred to as NIMDM 2017.

ii. The key consultation questions along with relevant considerations are contained in Sections 9 to 15 of the document, which present proposals for each of the seven separate domains that are incorporated in the deprivation measures – income; employment; health and disability; education, skills and training; access to services; living environment; and crime and disorder – and in Section 16 (response to non domain-specific recommendations).

iii. The consultation invites your views on our responses to each of the NIMDM 2010 recommendations and on the proposed indicators in each of the NIMDM 2017 domains. In addition, it seeks your views on whether the current domain weights reflect current priorities and invites you to outline how you have used, or intend to use, the deprivation measures.

iv. The consultation period will run from 21 November 2016 through to midnight on 15 January 2017. Section 8 of this document outlines how to take part, and details five supporting information sessions that will be held during this period to outline the various proposals. All key stakeholders are encouraged to register to attend one of these sessions.

v. The NIMDM 2010 consisted of 30 indicators, 20 of which are proposed to be retained in the updated measures. A further 7 are proposed to be modified in line with newly available data, while 3 are proposed to be omitted due to data quality and/or availability issues. A total of 12 new indicators are also proposed, as a result of addressing the 2010 NIMDM recommendations or as a result of new information having become available.

vi. In arriving at the proposals, consideration has been given to each of the 36 recommendations that arose as part of the NIMDM 2010. Positive action has been taken in respect of 17 recommendations, which it is considered will improve the updated measures. Six recommendations cannot be advanced at present due to data availability and/or quality issues and will be carried over. One recommendation was considered out of scope for this update, and a further 9 recommendations were rejected by the domain expert groups as not aligning with the agreed indicator principles. The remaining 3 recommendations will be addressed after the initial dissemination phase of the project.

vii. All-in-all, it is expected that these proposals could lead to a number of improvements over the set of indicators used in the 2010 deprivation measures. In summary, the proposals include new indicators capturing: average household incomes; complex and pro-longed health needs through greater use of prescription data; travel times to a wider variety of services by public transport as well as by car; broadband coverage; road quality; household overcrowding and the suitability of houses for the disabled.

viii. The deprivation team recognises that the updated measures, which are planned for release in mid-2017, will be hugely important to a variety of interested parties and users. Accordingly, we actively encourage you to take part in this important consultation and look forward to meeting you at one of the planned information sessions.

1   INTRODUCTION

1.1   The Northern Ireland Statistics and Research Agency (NISRA) has been commissioned by the Statistics Co-ordinating Group (SCG) of the Northern Ireland Civil Service, which comprises senior policy officials from Government Departments, to undertake an update of the current Northern Ireland Multiple Deprivation Measure (NIMDM 2010).

1.2   The updated measures will be hugely important to a wide variety of interested parties and users. They will continue to play a pivotal role in both informing the targeting of resources to the most deprived areas in Northern Ireland and the monitoring of the spatial impact of policy interventions.

1.3   The current aim is to publish the updated measures in mid-2017, which will be referred to as NIMDM 2017 throughout this document.

2   PURPOSE OF THIS DOCUMENT

2.1   In recognition of the impact that the updated measures may have on both the delivery of services throughout Northern Ireland and the lives of those who utilise those services, the purpose of this document is to:

- Provide some contextual background on the NI Deprivation Measures, in particular the current measure (NIMDM 2010);

- Outline the scope of the update that NISRA has been commissioned to undertake;

- Describe how the work to undertake the update is being overseen;

- Present the criteria that individual domain indicators need to meet in order to be considered for inclusion in the updated measures;

- Present proposals for the indicators to be included in the updated measures and consult users about these proposals; and

- Gain some insight into the use being made of the deprivation measures. This information will help NISRA to target the right people and organisations through our communication and engagement activities, and help ensure that we understand their requirements, produce results that are fit for purpose and develop appropriate guidance and advice in terms of the use of the updated deprivation measures.

3 HISTORICAL NORTHERN IRELAND MEASURES OF SPATIAL DEPRIVATION

3.1 Measures that describe the spatial distribution of deprivation or disadvantage have been developed and used in Northern Ireland since the 1970s.

3.2 The most recent and current measures (which were released in 2010 and were largely based on data relating to 2008) were developed in-house by NISRA using the methodology deployed in NIMDM 2005 work, which was led by Professor Mike Noble from the Social Disadvantage Research Centre at the University of Oxford.

4 CURRENT NI MEASURES OF SPATIAL DEPRIVATION (NIMDM 2010)

4.1 The current measures of spatial deprivation in Northern Ireland (NIMDM 2010) utilise a total of 30 indicators[1] to provide information on seven types or 'domains' of deprivation, along with an overall measure of multiple deprivation based on a weighted combination of these seven domains. The domains and their associated weights in the overall NIMDM are detailed below:

- Income Deprivation Domain (25 per cent)

- Employment Deprivation Domain (25 per cent)

- Health Deprivation and Disability Domain (15 per cent)

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[1] The NIMDM 2010 referred to 52 indicators, having counted individual benefits selected in the income and employment domains, and individual services in the Proximity to Services, as separate indicators. It is considered that each of these domains consists of one indicator each, bringing the total to 30 indicators.

- Education, Skills and Training Deprivation Domain (15 per cent)

- Proximity to Services Domain (10 per cent)

- Living Environment Domain (5 per cent)

- Crime and Disorder Domain (5 per cent)

4.2   These domains are largely unchanged from those used in the two previous measures of spatial deprivation in Northern Ireland (i.e. NIMDM 2001 and NIMDM 2005)[2]. The associated weights, which were subject to consultation and subsequently endorsed by the NI Executive, have not changed since NIMDM 2001 and were driven by theoretical considerations as well as the robustness of available data at that time.

5   SCOPE OF THE 2017 UPDATE

5.1   As previously outlined, NISRA has been commissioned by SCG to undertake an update of the current Northern Ireland Multiple Deprivation Measure (NIMDM 2010), with the aim of releasing the NIMDM 2017 results in mid-2017. Any significant revisions to the methodology are outside of the scope of this update.

5.2   While the seven domains that were used in 2010 will remain, the update will consider the appropriateness (or otherwise) of the current indicators that were incorporated within these domains and the datasets upon which they are based. Indicators must conform to the criteria outlined in Section 7 and will only be revised where there is a strong rationale (and supporting data) to support the revision. This update will also include a consideration of any urban/rural bias and the inclusion of any amendments as a result of considering the 36 recommendations that arose from the 2010 work.

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[2] Northern Ireland Multiple Deprivation Measure 2010: Domain Weight Analysis, NISRA, May 2011.
http://www.nisra.gov.uk/deprivation/NIMDM2010/NIMDM_2010_domain_weight_analysis.pdf

6   OVERSIGHT OF THE UPDATE

6.1   The work to produce the updated measures is being managed under the leadership of NISRA's Director of Analysis and is being overseen by a formal Steering Group. Its wide membership includes representatives from Non-Departmental Public Bodies, the voluntary and community sector, District Councils, and each Government Department. The Steering Group is responsible for all key decisions associated with the update and will meet at key stages throughout the project on no fewer than four occasions. Details of the meetings are made publically available via the Deprivation website.

6.2   The Steering group is being supported by seven Domain Expert Groups (i.e. Income & Employment, Health, Education, Living Environment, Crime and Disorder, Proximity to Services and Urban/ Rural considerations). Their role is to support the NISRA team in the methodological development work in terms of securing access to essential data, advancing the 36 recommendations that arose from the NIMDM 2010 work and bringing forward recommendations to the Steering Group.

6.3   The above approach, which follows that successfully taken with the 2010 update, has been integral to the production of this consultation document. It is expected that the wide and inclusive membership of both the Steering Group and the Domain Expert Groups will help ensure that the views of key stakeholders are actively considered and assessed for inclusion in the proposed methodology.

6.4   Annexes C and D outline the membership of the Steering Group and Domain Expert Groups respectively.

7 CRITERIA FOR INDICATORS

7.1 Each of the seven domains consists of one or more indicators that are considered to encapsulate that particular type of deprivation. In order to be considered for inclusion, each indicator should conform to the following six criteria:

- It should be <u>specific</u> to one of the seven domains of deprivation thus avoiding double counting and attaching undue weight to any particular indicator.

- It should represent <u>major features</u> of that form of deprivation rather than deprivation affecting a small number of people or particular types of area in Northern Ireland. This allows the degree of deprivation to be identified as opposed to a simple 'present/ not present' approach.

- It should be available for all of Northern Ireland, collected in a <u>consistent</u> form and be free from spatially bias characteristics.

- It should represent either <u>direct measures or good proxies</u> of that form of deprivation.

- It should be statistically <u>robust at the small area level</u>, facilitating the identification of 'pockets' of deprivation.

- It should be as <u>up to date</u> as possible.

7.2 These criteria – unchanged from NIMDM 2005 and NIMDM 2010 – have been applied to the indicators proposed in this consultation document and will be used to assess any alternative indicators that may be suggested during the consultation.

8   OVERVIEW OF CONSULTATION PROCESS

8.1   This document sets out the proposals for the updated Multiple Deprivation Measure (NIMDM 2017). The consultation period will run from 21 November 2016 through to midnight on 15 January 2017.

8.2   Given the strategic importance of the update, all key stakeholders are actively encouraged to engage in the consultation so that their views might be considered.

8.3   The best way to respond to this consultation is online, providing any comments that you may have on each of the consultation questions. If you wish to respond by email or on paper, please download the Consultation Questionnaire (PDF version or MS Word version) and, when completed, return it using the following contact details:

        by email to: deprivation.nisra@finance-ni.gov.uk

        or by post to: Deprivation
                              NISRA
                              McAuley House
                              2-14 Castle Street
                              Belfast
                              BT1 1SA

8.4   In order to support transparency in the decisions taken by the Project Steering Group, all responses to this consultation will be made public (subject to our Moderation Policy) on the Deprivation web site. This will include the name of the responding organisation (if applicable). However, names of individuals will only be published if the individuals concerned have given their consent – contact details will not be published. It should be noted however, that any information provided in response to this consultation could be made publicly available if required under a Freedom of Information request.

8.5 The potential reach of the work will be further widened through the initiation of dedicated public information sessions, which include the following locations. All those planning to attend are asked to register online or using the contact details provided above.

Location	Date
Newry	Monday 28th November 2016
Limavady	Thursday 8th December 2016
Cookstown	Monday 12th December 2016
Enniskillen	Thursday 15th December 2016
Belfast	Monday 19th December 2016

8.6 After consideration of responses, the updated deprivation measures will be developed, with a final report currently planned for mid-2017. The report will be published on the Deprivation webpage and will also be available in hard copy format. Details of the geographical areas for which the results will be released have already been informed by a separate consultation exercise[3].

8.7 Sections 9 through to 15 that follow constitute the main body of this consultation document. For ease of readership, a separate section has been included for each of the seven domains as follows:

- Income Deprivation Domain – **Section 9**

- Employment Deprivation Domain – **Section 10**

- Health Deprivation and Disability Domain – **Section 11**

- Education, Skills and Training Deprivation Domain – **Section 12**

- Access to Services Domain – **Section 13**

- Living Environment Domain – **Section 14**

- Crime and Disorder Domain – **Section 15**

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[3] Findings of the Consultation on Output Geography for the Updated Multiple Deprivation Measure (NIMDM 2017): http://www.nisra.gov.uk/deprivation/NIMDM17-GCF.pdf

8.8   In terms of structure, each section will present:

- the indicator(s) that were included in that domain in NIMDM 2010;

- a review of the relevant domain specific recommendations that emerged from the NIMDM 2010 followed by a general discussion;

- the proposed indicator(s) for inclusion in the NIMDM 2017; and

- the main consultation questions for response.

8.9   Within certain Domains (Education, Skills and Training; Living Environment; Crime and Disorder), where there is a natural grouping of indicators, the indicators have been combined to form a sub-domain. In such instances, results will typically be released for the domain as a whole and for each of the sub-domains within it.

8.10   It is expected that the methodology for combining the various indicator and sub-domain data within domains will broadly mirror the approach taken in the 2010 update. This was tailored on a domain by domain basis in accordance with the nature of the indicator data that had to be combined, and is discussed in the Technical Annex of the Northern Ireland Multiple Deprivation 2010 Report.

Important Information before you respond

Before responding to this consultation, please take the time to carefully consider both the scope of the update (**Section 5**), and the criteria that proposed deprivation indicators must meet in order to be considered for inclusion (**Section 7**).

In addition, respondents should be mindful of the following important points of clarification, which equally apply to the current measures of deprivation (i.e. NIMDM 2010):

- NIMDM 2017 will provide an updated **area based** measure (i.e. spatial) of **relative** deprivation for small areas within NI. It will provide a mechanism for identifying areas in the order of most deprived to least deprived. As such, it will highlight which areas are more (or less) deprived than others, but not by how much. This will also be the case for each of the seven separate domain measures associated with the NIMDM 2017.

- NIMDM 2017 will be based on indicators that consider the aggregate characteristics of the people living in an area as well as, in some cases, the characteristics of the area itself.

- As NIMDM 2017 is an area based measure, it will not identify individuals who are multiply deprived; rather, it identifies areas where there are relative concentrations of several different types of deprivation.

- The NIMDM 2017 methodology recognises that there will be people who may be regarded as deprived but are living in areas which have been ranked as the least deprived. Similarly, it recognises that there will be people who may not be regarded as deprived but are living in areas which have been ranked as the most deprived.

- In developing the NIMDM 2017 and the seven associated separate domain measures, every effort will be made to capture the relevant indicator data at the lowest geographical level possible so that pockets of deprivation can be more readily identified.

- The NIMDM 2017 ranks <u>do not</u> give a measure of the amount of deprivation in an area. As such it does not allow for statements such as, "area A is twice as deprived as area B". The ranks can however be used to say that "area A is more deprived that area B". This is particularly important when trying to draw inferences from successive measures of deprivation over time (e.g. NIMDM 2010 and NIMDM 2017). Even though an area's rank may have stayed the same between successive measures, the level of deprivation may have increased or decreased but just not enough to affect the comparison and relative ranking to other areas. Having said that, the analysis of the individual indicators does allow for such comparisons between areas over time provided the indicators are comparable.

9 INCOME DEPRIVATION DOMAIN

Purpose of the Domain

9.1 The purpose of the Income Deprivation Domain is to identify the proportion of the population on low income at the small area level.

Current Indicators included in NIMDM 2010

9.2 The Income Domain of the NIMDM 2010 comprised of one indicator, namely the proportion of the population living in households where at least one household member was in receipt of at least one of the following income related benefits:

Income Support
(2008/09 Source: DSD, now DfC)

State Pension Credit
(2008/09 Source: DSD, now DfC)

Income based Jobseeker's Allowance
(2008/09 Source: DSD, now DfC)

Income based Employment and Support Allowance
(2008/09 Source: DSD, now DfC)

Housing Benefit
(2008/09 Source: DSD, now DfC /LPS)

Working Tax Credit
(August 2008. Source: HMRC)

Child Tax Credit
(August 2008. Source: HMRC)

Consideration of the NIMDM 2010 Recommendations

9.3   There were three recommendations from the NIMDM 2010 update that related to the Income Deprivation Domain.

Recommendations 9a-c

(a) Research should be carried out to create small area income deprivation estimates for Northern Ireland

(b) Investigate alternative approaches, such as need based approaches, to the measurement of income deprivation at the small area level.

(c) Research should be carried out to develop a model of small area take-up rates of all means tested benefits across Northern Ireland.

Domain Expert Group Response

These recommendations arose as a result of concerns regarding the NIMDM 2010 indicator being solely based on those in receipt of one of a number of benefits.

The Deprivation Team is currently working with colleagues in Department for Communities to source suitable information regarding household incomes. In the event of suitable information being available, it is proposed that the Income Domain consists of one indicator, namely, the proportion of the population living in households whose equivalised income is below 60 per cent of the NI median. If successful, these recommendations will be addressed through the inclusion of the proposed new household based income indicator.

Proposed Indicators for NIMDM 2017

9.4   The Deprivation Team is currently working with colleagues in Department for Communities to source suitable information regarding household incomes. In the event of suitable information being available, it is proposed that the Income Domain consists of one indicator, namely, the proportion of the population living in households whose equivalised income is below 60 per cent of the NI median. In the event that suitable information regarding household incomes cannot be sourced, the indicator would be based on that deployed in NIMDM 2010 (i.e. the proportion of the population living in households where at least one household member was in receipt of at least one of the income related benefits listed at paragraph 9.2 above).

9.5   Supporting information will be produced in respect of income deprivation affecting children (i.e. those aged 15 and under) and older people (i.e. those aged 65 and over) showing:

- the percentage of an SOA's population aged 15 and under living in the households identified above; and

- the percentage of an SOA's population aged 65 and over living in the households identified above.

Consultees are invited to share their views on

➢ The Domain Expert Group response to the NIMDM 2010 recommendations.

➢ The proposed Income Deprivation Domain indicator for NIMDM 2017.

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10   EMPLOYMENT DEPRIVATION DOMAIN

Purpose of the Domain

10.1   The purpose of the Employment Deprivation Domain is to identify the proportion of the working population excluded from work at the small area level.

Current Indicators included in NIMDM 2010

10.2   The Employment Deprivation Domain of the NIMDM 2010 comprised of one indicator, i.e. the proportion of the working age population (women aged 18-59 and men aged 18-64), who are in receipt of at least one of the following benefits:

Job Seeker's Allowance
(2008/09. Source: DSD, now DfC)

Incapacity Benefit
(2008/09. Source: DSD, now DfC)

Severe Disablement Allowance
(2008/09. Source: DSD, now DfC)

Carer's Allowance
(2008/09. Source: DSD, now DfC)

Employment and Support Allowance
(2008/09. Source: DSD, now DfC)

Steps to Work or New Deal Participants
(October 2008-March 2009. Source: DEL, now DfE)

Consideration of the NIMDM 2010 Recommendations

10.3 There were two recommendations from the NIMDM 2010 update that related to the Employment Deprivation Domain.

Recommendation 10a

Investigate 2011 Census as alternative for employment deprivation

Domain Expert Group Response

The 2011 Census specifically asked about economic activity during the 4 week period prior to Census day (27th March 2011) and, as such, was considered to be affected by seasonality. It is therefore proposed that 2011 Census data will not be used as an indicator for employment deprivation, but will be used as a comparator in the quality assurance of the Employment Deprivation Domain.

Recommendation 10b

Investigate alternatives to benefit data for information on hidden unemployment

Domain Expert Group Response

The Labour Force Survey and the Family Resources Survey are quarterly surveys and have achieved annual sample sizes of 2,500 and 1,900 respectively. Due to the relatively small sample sizes of both surveys, and subsequently the relatively small number of respondents who would be identified as out of work while not receiving benefits, it is considered that these surveys would not produce robust results at the small geographical area level.

The Deprivation Team is currently working with colleagues in Department for Communities to source suitable information that might be used to shed light on the spatial distribution/ prevalence of hidden unemployment. If successful, this may provide some scope to address this recommendation.

Discussion

10.4   Steps 2 Success (S2S) was introduced in October 2014, replacing the Steps to Work (StW) programme. StW was included in the previous measures to capture those not claiming Jobseeker's Allowance (JSA), but who were actively seeking employment. However, 99 per cent of those who are in the current S2S Programme are claiming JSA and therefore will already be included in the domain. Therefore, S2S participants will not be included in this domain.

10.5   The eligibility age for working age benefits has changed in line with the pension age at the time of claim. This is reflected by assuming working age to be all persons aged 18-64.

Proposed Indicators for NIMDM 2017

10.6   It is proposed that the Employment Deprivation Domain consists of one indicator, namely, the proportion of the working age population (aged 18-64 for both males and females) who are in receipt of at least one of the selected benefits outlined below. In addition, the Deprivation Team is currently working with colleagues in Department for Communities to source suitable information that might be used to shed light on the spatial distribution/ prevalence of hidden unemployment. If available, this will be incorporated into the indicator.

10.7   The selected benefits are:

Job Seeker's Allowance.
(2014/15. Source: DfC)

Incapacity Benefit.
(2014/15. Source: DfC)

Severe Disablement Allowance.
(2014/15. Source: DfC)

Carer's Allowance.
(2014/15. Source: DfC)

Employment and Support Allowance.
(2014/15. Source: DfC)

Consultees are invited to share their views on

➢ The Domain Expert Group response to the NIMDM 2010 recommendations.

➢ The proposed Employment Deprivation Domain indicator for NIMDM 2017.

11   HEALTH DEPRIVATION AND DISABILITY DOMAIN

Purpose of the Domain

11.1   The purpose of the Health Deprivation and Disability Domain is to identify rates of premature deaths, and proportions of the population's quality of life impaired by poor health or disability at the small area level.

Current Indicators included in NIMDM 2010

11.2   The Health Deprivation and Disability Domain of the NIMDM 2010 comprised of seven indicators, including a combined mental health indicator (previously labelled a sub-domain):

> Potential Years of Life Lost
> *(2004 to 2008 Source: GRO)*
>
> Comparative Illness and Disability Ratio: Age and sex standardised benefit ratio[4]
> *(2008/09. Source: DSD, now DfC)*
>
> People registered as having cancer (excluding non-melanoma skin cancers)
> *(2003 to 2007. Source: Northern Ireland Cancer Registry)*
>
> Hospital Emergency Admission Rate
> *(2007/08. Source: DHSSPS, now DoH)*
>
> Low Birth Weight
> *(2004 to 2008. Source: Child Health System)*
>
> Children's Dental Extractions
> *(2006/07 to 2008/09. Source: BSO and DHSSPS, now DoH)*

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[4] This ratio is based on a non-overlapping count of recipients of the following benefits: Income Support (in receipt of disability premium), State Pension Credit (disability premium), Attendance Allowance, Severe Disablement Allowance, Disability Living Allowance, Incapacity Benefit and Employment and Support Allowance.

Combined Mental Health indicator

> Individuals suffering from mood and anxiety disorders, based on prescribing data
> *(2008/09. Source: BSO)*

> Suicides
> *(1999 to 2008 Source: GRO)*

> Mental health inpatient stays
> *(2003/04 to 2008/09. Source: DHSSPS, now DoH)*

Consideration of the NIMDM 2010 Recommendations

There were six recommendations from the NIMDM 2010 update that related to the Health Deprivation and Disability Domain.

Recommendation 11a

Greater use of prescription data in the identification of health deprivation

Domain Expert Group Response

Prescription data have been used in the combined mental health indicator in both the 2005 and 2010 Deprivation Measures, including groups of medications that are exclusively prescribed for specific mental health conditions. The prevalence of other conditions may be approximated using this data source as well. During discussions with experts, it became apparent that prescriptions can be non-specific to conditions or used as a preventative measure. A more general approach was suggested that looked at all prescriptions rather than linking it to specific conditions. To reflect health deprivation, the emphasis was put on complex health needs (multiple prescriptions) for a prolonged period of time.

It is proposed that an indicator of '*the proportion of people with multiple prescriptions for a prolonged period*' should be included in the domain as an indication of people with complex health needs. Those prescriptions that are already reflected in the combined mental health indicator and those of associated with people who reside in care homes are recommended for exclusion.

Recommendation 11b

Investigations into data recorded for the Quality Outcomes Framework

Domain Expert Group Response

The quality outcomes framework information is not readily available for analysis at a low level geographical area. As such, it is not possible to incorporate this indicator into the measure of spatial deprivation at this time.

Recommendation 11c

Review potential years of life lost (PYLL) indicator

Domain Expert Group Response

The standard method of measuring PYLL – used in the previous NIMDMs – is to consider deaths under the age of 75 and the years of life lost from the age of death to 75. The recommendation was to look at the possibility to use a different cut-off, or use the NI-level age/sex-specific life expectancy at time of death to work out how many years were lost. Research shows that the alternative measures of potential years of life lost return similar results and, as such, there is no strong evidence to replace PYLL.

The recently published draft Programme for Government[5] includes a measure of preventable deaths. It states that 'a death is preventable if, in the light of understanding of the determinants of health at the time of death, all or most deaths from that cause (subject to age limits if appropriate) could be avoided by public health interventions in the broadest sense'. Preventable deaths are a subsection of all deaths, and therefore can be used to create standardized rates to allow for different demographic profiles of small geographical areas. The Health Domain Expert Group recommended using the Potential Years of Life Lost in conjunction with a standardized preventable death rate.

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[5] https://www.northernireland.gov.uk/sites/default/files/consultations/newnigov/draft-pfg-framework-2016-21.pdf

Recommendation 11d

Review of Hospital Emergency Admissions indicator

Domain Expert Group Response

Research for NIMDM 2010 carried out by the Department for Health indicated that there was a small, negative correlation between rural-related variables and emergency admission rates. Modelling standardised emergency admission rates whilst controlling for health need showed that although there was no discriminatory rural effect[6] there was a small but significant distance to Accident and Emergency hospital effect (i.e. people from rural areas who presented with the same condition were more likely to be admitted than those from urban areas). This effect disappeared completely when admissions with a length of stay of three nights or fewer were removed. Therefore an age and sex standardised emergency admission rate (for emergency admissions with length of stay of <u>four nights or more</u>) was included to remove the potential for urban/ rural bias in the indicator.

Analysis recently carried out by the Department of Health suggests that the direction of the potential bias has since changed, with people from urban areas now appearing to have higher admission rates than those from rural areas. It is therefore proposed that the indicator continues to be based on emergency admissions with length of stay of <u>four nights or more</u> to remove the potential for urban/ rural bias in the indicator. It was also felt that this criterion would help capture the severity of the condition that gave rise to the emergency admission.

Recommendation 11e

Inclusion of community dentist data in dental extraction indicators

Domain Expert Group Response

Information on community dental extractions is not currently available at a level below Health and Social Care Trust. As such, it is not possible to incorporate this indicator into the measure of spatial deprivation at this time.

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[6] As measured by population density or urban-rural definition as per Report of the Inter-Departmental Urban-Rural Definition Group (2005), Statistical Classification and Delineation of settlements, NISRA, Annex C, p.23

> **Recommendation 11f**
>
> Research into the improved measurement of disability for small areas
>
> **Domain Expert Group Response**
>
> The 2010 measure of disability in the Health Deprivation and Disability Domain was based on the proportion of the population in an area who were in receipt of disability related benefits. The 2011 Census captured information on the prevalence of a range of disabilities including deafness, blindness, mobility and learning difficulties. It is recommended that an additional indicator that utilises this information is included.

Discussion

11.3   In addition to the above, the domain expert group suggested that benefits received specifically for mental health reasons should be taken out of the Comparative Illness and Disability Ratio and added to the combined mental health indicator.

11.4   The domain expert group also recommended using all psychotropic medication in the combined mental health indicator, by adding hypnotics, barbiturates and antipsychotics. It was also recommended to include only those medications prescribed for a prolonged period, in order to rule out transient episodes.

11.5   NIMDM 2010 measured Low Birth Weight as the proportion of all births that were regarded as low birth weight, where low birth weight was defined as a birth weight of less than 2.5 kilograms. It is proposed that this indicator is included again. It is also included in the Programme for Government as an indicator and in line with that definition, it is proposed that multiple births (which naturally tend to be of lower weight) are excluded.

Proposed Indicators for NIMDM 2017

11.6   It is proposed that the Health Deprivation and Disability Domain consists of 11 indicators, including one combined mental health indicator, as detailed below:

Standardised Potential Years of Life Lost
(2012 to 2016 Source: GRO)

Standardized preventable death rate
(2012 to 2016 Source: GRO)

Standardised physical health-related benefit ratio[7] (formerly Comparative Illness and Disability Ratio)
(2015/16. Source: DfC)

People registered as having cancer (excluding non-melanoma skin cancers)
(2011 to 2015. Source: Northern Ireland Cancer Registry)

Standardised emergency admission rate
(2015/16. Source: DoH)

Proportion of Singleton Births with Low Birth Weight
(2012 to 2016. Source: Child Health System)

Children's Dental Extractions
(2013/14 to 2015/16. Source: BSO and DoH)

Standardised Proportion of people on multiple prescriptions on a regular basis
(2015/16. Source: BSO)

Standardised proportion of people with a long-term health problem or disability
(2011. Source: Census)

Standardised drug or alcohol related deaths
(2009-13. Source:DoH)

Combined Mental Health Indicator

Proportion of population in receipt of prescriptions for mood and anxiety disorders
(2015/16. Source: BSO)

Standardized suicide rate
(2007 to 2016 Source: GRO)

Standardised rate of mental health inpatient stays
(2011/12 to 2015/16. Source: DoH)

Standardised mental health related benefit ratio
(2015/16. Source: DfC)

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[7] This ratio is based on a non-overlapping count of recipients of the following benefits: Income Support (in receipt of disability premium), State Pension Credit (disability premium), Attendance Allowance, Severe Disablement Allowance, Disability Living Allowance, Incapacity Benefit and Employment and Support Allowance.

Consultees are invited to share their views on

➢ The Domain Expert Group response to the NIMDM 2010 recommendations.

➢ The proposed Health Deprivation and Disability Domain indicators for NIMDM 2017.

12   EDUCATION, SKILLS AND TRAINING DEPRIVATION DOMAIN

Purpose of the Domain

12.1   The purpose of the Education, Skills and Training Deprivation Domain is to identify the prevalence of poor educational outcomes for children and low levels of qualifications for working age adults at the small area level.

Current Indicators included in NIMDM 2010

12.2   The Education, Skills and Training Deprivation Domain of the NIMDM 2010 comprised of ten indicators, grouped into three sub-domains:

Sub-Domain: Primary School

Key Stage 2 Teacher Assessments for English and Maths (and Irish in Irish medium schools/units)
(2006/07 to 2007/08 Source: DE)

Proportions of pupils attending Special Educational Needs Schools or attending primary school with Special Education Needs Stages 3-5
(2006/07 to 2007/08 Source: School Census, DE)

Absenteeism at Primary Schools (all absences)
(2006/07 to 2007/08 Source: DE)

Sub-Domain: Post Primary

Key Stage 3 Teacher Assessments for English and Maths (and Irish in Irish medium schools/units)
(2006/07 to 2007/08 Source: DE)

GCSE or equivalent qualifications points score
(2005/06 to 2007/08 Source: School Leavers Survey, DE)

Proportions of those leaving school aged 16, 17 and 18 and not entering Further Education, Higher Education, Employment or Training
(2003/04 to 2007/08 Source: School Leavers Survey, DE)

Proportions of 18-21 year olds who have not enrolled in Higher Education Courses at Higher Education or Further Education establishments
(2004/05 to 2007/08 Source: HESA and FESR, DEL)

Proportions of pupils attending Special Education Needs Schools or who are attending post-primary school with Special Education Needs Stages 3-5
(2006/07 to 2007/08 Source: School Census, DE)

Absenteeism at post primary Schools (all absences)
(2006/07 to 2007/08 Source: DE)

Sub-Domain: Working Age Adults

Proportions of working age adults (25-59) with no or low levels of qualification
(2001 Census Source: NISRA)

Consideration of the NIMDM 2010 Recommendations

12.3   There were six recommendations from the NIMDM 2010 update that related to the Education, Skills and Training Deprivation Domain.

Recommendation 12a

Investigation into the inclusion of attainment data for young children

Domain Expert Group Response

It was recommended that research would be undertaken into the viability of a small area Key Stage 1 indicator to measure attainment of pupils in the first years of Primary School. However, the provision of Key Stage 1 data has been impacted by industrial action resulting in a limited number of returns being made to CCEA since 2013/14. In 2014/15, the coverage was 17% of P4 pupils and early estimates from CCEA for 2015/16 Key Stage 1 data suggest coverage of around 25%. These levels of coverage are not considered sufficient to support the robust small area analyses required for NIMDM 2017.

Recommendation 12b

Modification of attainment at GCSE level, focus on English/Mathematics

Domain Expert Group Response

As in the Education, Skills and Training Deprivation Domain 2010, the School Leavers Survey will be used to provide information on GSCE attainment. The indicator has been updated from '*GCSE and equivalent point scores'* to the '*proportion of school leavers achieving 5 or more GCSEs at A*-C (and equivalent) including GCSE English and Maths'*. This is used in the Programme for Government.

Recommendation 12c

Future Key Stage 2 attainment indicators based on pupil results

Domain Expert Group Response

Previously information on Key Stage 2 attainment was collected at the school level and applied to areas based on the school each pupil attended. Changes were introduced to secure such assessments at individual pupil level thus improving their utility. However, as the provision of Key Stage 2 data has similarly been impacted by industrial action, it is not considered to be sufficiently robust for the small area analysis required for NIMDM 2017.

Recommendation 12d

Consideration of the measurement of special education needs (SEN)

Domain Expert Group Response

In terms of the SEN stages, 1 and 2 are school level while stage 3 is where the Education Authority (formerly ELBs) becomes involved in the process. There may be some anecdotal evidence to suggest that there can be variation in recording of SEN stages 1 and 2 at individual school level but these levels are not currently included in MDM and therefore cannot influence these figures.

Recommendation 12e

Development of Year Group Snapshots for school leavers

Domain Expert Group Response

The Department of Education has recently begun developing a database to allow a snapshot to be provided. However, as it will not be available in time for inclusion in this update, it is recommended that the deprivation team continues to use three years of School Leavers Survey data.

Recommendation 12f

Adult literacy and numeracy measures

Domain Expert Group Response

This recommendation concerned considering alternatives to using data from the Census for calculating Education, Skills and Training deprivation in working age adults. The Labour Force Survey was investigated as an alternative as it collects information on the working age adults with no qualifications. However, due to the sample size of the survey it would not be possible to model the results robustly to the small area level required for NIMDM 2017. The upper limit of working age has been changed from 59 to 64, to reflect changes in pensionable age.

Discussion

12.4   The provision (and hence coverage) of Key Stage data has been impacted by industrial action resulting in a limited number of returns being made to CCEA since 2013/14. The levels of coverage are unfortunately not considered sufficient to support the robust small area analyses required for NIMDM 2017. Accordingly, it is proposed that the indicators relating to Key Stage 2 and 3 attainment are removed.

Proposed Indicators for NIMDM 2017

12.5 It is proposed that the Education, Skills and Training Deprivation Domain consists of eight indicators grouped in three sub-domains:

Sub-Domain: Primary School

Proportions of pupils attending Special Schools or attending primary school with Special Education Needs Stages 3-5
(2014/15 to 2015/16 Source: School Census, DE)

Absenteeism at Primary Schools
(2014/15 to 2015/16 Source: DE)

Sub-Domain: Post-Primary

Proportions of school leavers achieving 5 or more GCSEs at A*-C (and equivalent) inc GCSE English and maths
(2013/14 to 2015/16. Source: School Leavers Survey, DE)

Proportions of those leaving school aged 16, 17 and 18 and not entering Further Education, Employment or Training
(2013/14 to 2014/15 Source: School Leavers Survey, DE)

Proportions of 18-21 year olds who have enrolled in Higher Education Courses at Higher Education or Further Education establishments
(2012/13 to 2015/16 Source: HESA and FESR, DfE)

Proportions of pupils attending Special Schools or who are attending post-primary schools with Special Education Needs Stages 3-5
(2014/15 to 2015/16 Source: School Census, DE)

Absenteeism at post-primary schools
(2014/15 to 2015/16 Source: DE)

Sub-Domain: Working Age Adults

Proportions of working age adults (25-64) with no or low levels of qualification
(2011 Census Source: NISRA)

Consultees are invited to share their views on

➢ The Domain Expert Group response to the NIMDM 2010 recommendations.

➢ The proposed indicators for NIMDM 2017 Education, Skills and Training Deprivation Domain.

13   ACCESS TO SERVICES DOMAIN

Purpose of the Domain

13.1   The purpose of the Access to Services Domain – formally known as the Proximity to Services Domain – is to measure the extent to which people have poor physical and online access to key services at the small area level.

Current Indicators included in NIMDM 2010

13.2   The Proximity to Services Domain of the NIMDM 2010 comprised of one indicator, namely the service-weighted fastest car travel time to the following services:

Accident and Emergency hospital *(2009 Source: DHSSPS, now DoH)*	GP premises *(2009 Source: BSO)*
Job Centre or Jobs and Benefits Office *(2008 Source: DEL, now DfE)*	Dentists *(2009. Source: BSO)*
Post Office *(2008 Source: Post Office Ltd)*	Pharmacists *(2009. Source: BSO)*
Supermarket / Food Store *(2007 Source: Experian)*	Opticians *(2009. Source BSO)*
Council Leisure Centre *(2009 Source: DCAL, now DfC)*	Large Service Centre *(2009 Source: DSD, now DfC)*
Financial Services *(2007 Source: Experian, Credit Union Register)*	Other general services *(2007 Source: Experian)*

Consideration of the NIMDM 2010 Recommendations

13.3   There were four recommendations from the NIMDM 2010 update that related to the Proximity to Services Domain.

Recommendation 13a

Access to Services

Domain Expert Group Response

Several issues relating to access of services were raised during the consultation for the 2010 NIMDM. These included hospital waiting lists, problems faced by elderly or disabled, cost of services, cross-community movement, public transport provision and traffic congestion. The latter two issues have been addressed by including public transport travel times and updated private travel times.

It is recognised that there may be barriers to cross-community movement. Peace lines are visual examples of these, but there are also invisible geographical barriers, including in rural areas. It is difficult to measure the existence and impact of such barriers, which (while important) affect relatively small number of areas in Northern Ireland. The domain expert group was unable to identify a suitable indicator to measure barriers to cross-community movement, and, accordingly, have recommended that it is not included as a proposed indicator in this domain.

Hospital waiting lists are a very topical issue. Recent figures[8] show that there is a variation in waiting times between Health Trusts and specialty. However, there is no evidence that within a Trust, the home address of a patient will have any effect on the waiting times. Therefore, whilst recognising that waiting times are of concern to people, the domain expert group did not consider that waiting list times accorded with the criteria for inclusion.

It was also recommended that the problems faced by the elderly or people with a disability are taken into consideration. Issues such as lack of mobility will be addressed to a degree through the inclusion of public transport times to services. Other issues relating to the elderly and people with poor health or disability will already be addressed in the Health Deprivation and Disability Domain.

The expert group also discussed the name of this domain. Deprivation measures in Wales and Scotland refer to 'Access to Services', even though they include similar indicators (and services) around travel times as the NIMDM 2010. It is proposed to change the name to 'Access to Services'.

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[8] https://www.health-ni.gov.uk/sites/default/files/publications/health/hs-niwts-inpatient-waiting-times-q1-16-17.pdf

Recommendation 13b
Additional Services

Domain Expert Group Response
A recommendation in the 2010 report was to gather data on the locations of other services over and above those already included, such as: child care facilities, libraries, internet and schools. It is recommended that libraries, primary schools and post-primary schools are included among the services in this domain. An indicator relating to access to internet broadband was considered to fit better in the 'Living Environment Domain'.

There are around 3,500 registered child care providers in Northern Ireland (including child minders, crèches and day nurseries) serving the 890 Super Output Areas and 4,537 Small Areas in Northern Ireland. Geographical analysis suggests that just under half of Small Areas and over 90 per cent of Super Output Areas contain at least one registered child care provider. Additional provision will of course be available via those family members/ friends (not all of whom may be registered) who elect to assist in the provision of such care. In view of (a) the widespread availability of childcare provision and (b) the fact that information is not available for those providing child care who are not registered, it is recommended that child care facilities are not included in this domain.

Recommendation 13c and 13d
(c) The inclusion of public transport travel times and (d) the weighting assigned to car and public transport travel times.

Domain Expert Group Response
It is recommended that public transport travel times should be included in NIMDM 2017 as clearly not every journey is made by car. The original recommendation stated that weights of public and private travel times should be based on area-specific rates of car ownership. However, this differs from the approach used in both Scotland and Wales, where constant weights are used for all areas. In addition, car ownership rates may reflect the availability of public transport, but could also be associated with, for example, income/ employment and (physical) health. As such, the risk of urban/rural bias of using area-specific car ownership rates, as well as the potential interaction with the income, employment and health domains, means that we recommend using constant weights for public transport and car travel times.

Discussion

13.4   The domain expert group recognised that there will be other issues which affect a person's ability and/or personal choice to use a particular service other than location. For example, the nearest shop may be more expensive or there may simply be a preference to use one that is slightly further away. Such issues are particularly relevant when looking at post-primary schools, with acceptance criteria and different school types to be considered. While an important phenomenon, the domain expert group was unable to identify a suitable indicator to measure this element of personal preference. The group has however recommended the inclusion of public transport times and expanded the range of services included, both of which will strengthen this domain.

13.5   The NIMDM2010 recommended that the inclusion of an indicator relating to availability of quality Broadband would add another dimension to the measurement of living environment. However, expert groups and the Steering Group felt that it would be better placed in the Access to Services Domain.

Proposed Indicators for NIMDM 2017

13.6   It is proposed that the Access to Services Domain consists of three indicators:

Service-weighted fastest travel time by private transport
(2016; Source: DfI)

Service-weighted fastest travel time by public transport
(2016; Source: DfI)

Proportion of properties with broadband speed below 10Mbs
(2015, Source: OfCOM)

13.7   The proposed services to be included in the public and private transport travel time indicators are as follows:

Accident and Emergency hospital *(2016 Source: DoH)*	GP premises *(2016 Source: BSO)*
Job Centre or Jobs and Benefits Office *(2016 Source: DfE)*	Dentists *(2016. Source: BSO)*
Post Office *(2016 Source: Post Office Ltd)*	Pharmacists *(2016. Source: BSO)*
Supermarket / Food Store *(2016 Source: IBDR)*	Opticians *(2016. Source BSO)*
Primary Schools *(2016 Source: DfE)*	Libraries *(2016 Source: DfC)*
Post-Primary Schools *(2016 Source: DfE)*	Large Service Centre *(2016 Source: DfC)*
Council Leisure Centre *(2016 Source: DfC)*	Other general services *(2016 Source: IBDR)*
Financial Services *(2016 Source: IBDR)*	

Consultees are invited to share their views on

➢ The Domain Expert Group response to the NIMDM 2010 recommendations.

➢ The proposed Access to Services Domain indicators for NIMDM 2017.

➢ Whether this domain should be renamed from 'Proximity to Services' to 'Access to Services'.

14   LIVING ENVIRONMENT DOMAIN

Purpose of the Domain

14.1   The purpose of the Living Environment Domain is to identify, at the small area level, the prevalence of shortcomings in the quality of housing, access to suitable housing, and the outdoor physical environment.

Current Indicators included in NIMDM 2010

14.2   The Living Environment Domain of the NIMDM 2010 comprised of four indicators, grouped into three sub-domains:

Sub-Domain: Housing quality

Decent Homes Standard
(2006 Source: NIHE, modelled NI House Conditions Survey)

Housing Health and Safety Rating System
(2006 Source: NIHE, modelled NI House Conditions Survey)

Sub-Domain: Housing Access

Homelessness Acceptances under the homelessness provisions of the Housing (Northern Ireland) Order 1988 and the Housing (Northern Ireland) Order 2003
(2005/06 to 2007/08 Source: NIHE)

Sub-Domain: Outdoor physical environment

Local Area Problem Score
(2006 Source: NIHE, NI House Conditions Survey)

Consideration of the NIMDM 2010 Recommendations

14.3   There were seven recommendations from the NIMDM 2010 update that related to the Living Environment Domain.

Recommendation 14a

Homeless information

Domain Expert Group Response

In line with the NIMDM 2010 recommendations the quality of the geographical coding of homeless data has been investigated. The NI Housing Executive has advised that it is unable to provide comprehensive data on the actual last permanent address of homeless applicants. Data on homeless presentations are reported by location of presentation (local office) rather than previous address for a number of reasons:

- It allows for adequate service planning in locations where the services are required;
- Many homeless clients will be of no fixed abode; and
- Many have been transient for a long time, or may have come from outside Northern Ireland.

This means that any report on previous address would be patchy and would not give a good basis for service planning. It is therefore proposed that the Living Environment Domain no longer includes an indicator on homelessness acceptances.

Recommendation 14b

Accidents in the home

Domain Expert Group Response

Following the NIMDM 2010 recommendations the potential for a home accidents indicator was also investigated. A delay in the development of a Home Accident Prevention Strategy has meant that there are no data available on accidents in the home at this time. The domain expert group was unable to identify any available indicator data in respect of accidents in the home that could be used.

Recommendation 14c

Additional Indicators regarding litter, broadband, vacant properties, quality of open space, interface areas and perception of safety for a fuller measurement of the physical environment.

Domain Expert Group Response

A number of potential indicators were investigated. While noise pollution and fly tipping are collected by local Councils, there is currently a lack of consistency in terms of both the collection and reporting of the data. Also, information collected by the former 26 Councils prior to the creation of the new 11 Councils in May 2015 can not readily be disaggregated for the new council areas. As such, appropriate indicator data are not currently available.

The number of vacant buildings in an area was suggested for consideration following NIMDM 2010. Since the Rating of Empty Homes policy changed in Oct 2010 ratepayers do not have to inform LPS when a dwelling is vacant, with the result that data relating to vacant domestic properties do not meet the indicator criteria for inclusion.

In terms of interface areas, the domain expert group felt that while such areas exist in both urban and rural areas, there was a lack of uniformity in terms of the availability of comparable information. The group felt that information regarding urban areas, for example in terms of peace walls, was more readily available for urban areas and hence had the potential for bias. Accordingly, the domain expert group did not consider that a suitable indicator could be developed.

An indicator on broadband is proposed for the Access to Services Domain.

A further suggestion by the domain expert group was the inclusion of an indicator on flood risk. Maps of such risk from rivers, tidal, and surface water are published by the Rivers Agency[9]. These maps can be used to estimate the proportion of the population that live either in or near flood risk areas for inclusion as an indicator.

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[9] See https://www.infrastructure-ni.gov.uk/articles/what-flood-maps-ni.

Recommendation 14d

Suitability of houses for the Disabled

Domain Expert Group Response

The 2011 Census collected information on both the health conditions of the usual residents, as well as adaptations of domestic properties for conditions such as wheelchair usage, other physical or mobility difficulties, visual difficulties, hearing difficulties and a variety of others. It is therefore possible to identify the unmet need of those whose accommodation has not been adapted for their conditions. The proportion of people whose accommodation has not been adapted for their condition is proposed as a new indicator for the Housing Access Sub-Domain.

Recommendation 14e

Measurement of Energy Efficiency

Domain Expert Group Response

The NIMDM 2005 included a measure of central heating as a measure of housing quality. A suitable up to date small area measure of central heating did not exist at the time of the calculation of the NIMDM 2010.

It is proposed that the NI Housing Conditions Survey is used to create a measure of energy efficiency. The proposed indicator is the modelled proportion of properties with either (1) no loft insulation and single glazing or (2) no central heating or a boiler that is more than 15 years old.

Energy Performance Certificates were suggested in NIMDM 2010 as a potential source of data. However, these are only required when a property is being sold or put on the rental market and, as such, will not be available for the sizeable proportion of the population that has lived at the same address for a long period of time. Due to the likely coverage and risk of bias in the data, the domain expert group did not consider that a suitable indicator could be derived from energy performance certificates.

Recommendation 14f

Road Quality

Domain Expert Group Response

Following on from the NIMDM2010, road quality was considered for inclusion in this domain and data relating to road surface defects have improved since the last update. To get a fuller picture of deprivation resulting from Road Quality it is proposed that information on both Road Surface defects and Road Traffic Collisions is utilised in the domain.

Recommendation 14g

Measurement of Overcrowding

Domain Expert Group Response

Household overcrowding remains an important issue and it is therefore proposed that an indicator is added using data taken from the 2011 Census.

Discussion

14.4   Due to timing issues, data relating to the Decent Home Standard and the Housing Health and Safety Rating Standard which were previously incorporated in NIMDM 2010 are not available in time for this update. Is it proposed that raw responses from the Housing Conditions Survey are modelled and applied to the Land and Property database to develop indicators, representing the proportion of domestic dwellings that are 'unfit' or ' in a state of disrepair'. The domain expert group was content that, in the circumstances, this alternative approach would help to address the information gap.

14.5   The Outdoor Environment Sub-Domain will also be taken from the House Conditions Survey, based on the Local Area Problem Score and the visual quality of the area. Problems to be included are presence of litter and rubbish; graffiti; vandalism; dog fouling; scruffy or neglected gardens; scruffy or neglected buildings; and vacant or boarded-up buildings.

Proposed Indicators for NIMDM 2017

14.6   It is proposed that the Living Environment Domain consists of nine indicators, grouped into three sub-domains:

Sub-Domain: Housing quality

Proportion of domestic dwellings that are unfit
(2016 Source: NIHE, modelled NI House Conditions Survey)

Proportion of domestic dwellings in a state of disrepair
(2016 Source: NIHE, modelled NI House Conditions Survey)

Proportion of domestic dwellings without (1) modern boiler, or (2) loft insulation and double glazing.
(2016 Source: NIHE, modelled NI House Conditions Survey)

Sub-Domain: Housing Access

Household overcrowding
(2011. Source: 2011 Census)

Proportion of population with disability without adaptations to dwelling
(2011. Source: 2011 Census)

Sub-Domain: Outdoor physical environment

Proportion of domestic dwellings with Local Area Problem Scores
(2016 Source: NIHE, modelled NI House Conditions Survey)

Standardised rate of road defects
(2014/15 and 2015/16 Source: DfI)

Road Traffic Collisions
(2006-15; Source: PSNI)

Flood risk: proportion of properties in flood risk area
(2013; Source: Rivers Agency)

Consultees are invited to share their views on

➢ The Domain Expert Group response to the NIMDM 2010 recommendations.

➢ The proposed Living Environment Domain indicators for NIMDM 2017.

16   CRIME AND DISORDER DOMAIN

Purpose of the Domain

16.1   The purpose of the Crime and Disorder Domain is to identify the rate of crime and disorder at the small area level.

Current Indicators included in NIMDM 2010

16.2   The Crime and Disorder Domain of the NIMDM 2010 comprised of six indicators, grouped into two sub-domains:

Sub-Domain: Crime

Violence, robbery and public order
(2004/05 to 2008/09 Source PSNI)

Burglary
(2004/05 to 2008/09 Source PSNI)

Vehicle Theft
(2004/05 to 2008/09 Source PSNI)

Criminal Damage (inc. arson)
(2004/05 to 2008/09 Source PSNI)

Sub-Domain: Disorder

Deliberate Primary and Secondary Fires
(2004/05 to 2008/09 Source: NIFRS)

Anti-Social Behaviour Incidents
(2006/07 to 2008/09 Source: PSNI)

Consideration of the NIMDM 2010 Recommendations

16.3 There were four recommendations from the NIMDM 2010 update that related to the Crime and Disorder Domain.

Recommendation 15a

Variation in reporting rates

Domain Expert Group Response

Police recorded crimes are a sub-section of all crimes. The Northern Ireland Crime Survey[10] shows that in 2014/15, 47 per cent of non-fatal crimes against private households and their adult occupants were reported to the police. This varied from 26 per cent for vehicle vandalism to 61 per cent of (attempted) vehicle theft. The main reason for not reporting was the crime was too trivial, there was no loss, or that police would not/could not do anything.

The domain expert group concluded that the evidence in respect of the relationship between deprivation and reporting rates was inconclusive.

Recommendation 15b

Measurement of Domestic Violence

Domain Expert Group Response

Similar to hate crimes, domestic violence will already be included in the other crime indicators and therefore will not be included as a separate indicator. The recommendation specifically refers to data other than police reported crime. The domain expert group were not aware of other data sources that could meet the indicator criteria for inclusion in particular the consistent collection across Northern Ireland and the provision of robust figures for small geographical areas.

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[10] https://www.justice-ni.gov.uk/articles/northern-ireland-crime-survey

Recommendation 15c

Hate Crimes Indicator

Domain Expert Group Response

Hate Crimes can include threatening behaviour, assault, criminal damage and harassment. Some of these would already be captured by the current indicators of police recorded crimes. It is recognised that not all crimes will be reported, and that some information is collected by other voluntary organisations. Therefore, hate crimes are not proposed as an additional indicator in the Crime and Disorder Domain.

Recommendation 15d

Additional Community Safety indicators

Domain Expert Group Response

Other community safety indicators such as noise complaints are dealt with by Local Councils. It was felt that such indicators would fit better in the 'Living Environment Domain' – see discussion in recommendation 14g regarding noise pollution.

Discussion

16.4   Since the NIMDM 2010, the Police Service for Northern Ireland has changed the categorisation of crimes to align with those used in England and Wales[11]. It is expected that the impact of this change was minimal for the purpose of the Crime and Disorder Domain.

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[11] See https://www.psni.police.uk/globalassets/inside-the-psni/our-statistics/police-recorded-crime-statistics/documents/crime-user-guide.pdf#page=12 and
https://www.psni.police.uk/inside-psni/Statistics/police-recorded-crime-statistics/official-statistics/

Proposed Indicators for NIMDM 2017

16.5   It is proposed that the Crime and Disorder Domain will consist of six indicators, grouped into two sub-domains:

Sub-Domain: Crime

Violence, (sexual offences), robbery and public order
(2011/12 to 2015/16, Source PSNI)

Burglary
(2011/12 to 2015/16, Source PSNI)

Vehicle Crime
(2011/12 to 2015/16, Source PSNI)

Criminal Damage and Arson
(2011/12 to 2015/16, Source PSNI)

Sub-Domain: Disorder

Deliberate Primary and Secondary Fires
(2011/12 to 2015/16, Source: NIFRS)

Anti-Social Behaviour Incidents
(2011/12 to 2015/16, Source: PSNI)

Consultees are invited to share their views on

➢ The Domain Expert Group response to the NIMDM 2010 recommendations.

➢ The proposed Crime and Disorder Domain indicators for NIMDM 2017.

17   OTHER RECOMMENDATIONS

17.1   There were a further six recommendations from the NIMDM 2010 that were not specific to a domain. This section will discuss the progress towards these recommendations.

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Recommendation 16a

Alternative Methodological Approaches

Progress

The NIMDM 2001, 2005 and 2010 were based on the 'domain' methodology developed by a team led by Professor Mike Noble in the Social Disadvantage Research Centre, University of Oxford. This methodology, which will again be deployed in the NIMDM 2017 work, e continues to align with that utilised in England, Wales and Scotland where similar updates have recently been conducted.

A full methodological review (which would have taken considerably longer and cost considerably more) was ruled out of scope by SCG which commissioned NISRA to undertake this update. A number of important proposals (reflected throughout this document) have however been recommended by the various domain expert groups facilitating the update, which it is believed will enhance the updated measures.

As identified in the user engagement strategy, NISRA will use the dissemination phase of the project to inform users of the advantages and limitations of the Multiple Deprivation Measure. To this end, the consultation will gather information on how the various key stakeholders are using the deprivation measures. This will facilitate the production of results that are fit for purpose, and will assist with the formulation of appropriate guidance and training sessions.

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Recommendation 16b

Additional Domains

Progress

This recommendation specifically mentions incorporating population decline as a new domain. Over the period 2001-2008, the population declined in the most deprived decile, while population increases occurred in all other deciles according to the 2010 Measure. The recommendation was to investigate whether population decline is a measure of deprivation, or a result of deprivation.

Work will be undertaken, in conjunction with NISRA's population estimates team, to explore the potential association between population decline and deprivation. The work will feed into the development of the final NIMDM 2017 methodology that will be considered and ratified by the Steering Group.

Recommendation 16c

Child Specific Multiple Deprivation Measure

Progress

The current 2010 Measure provides an indicator of the proportion of children living in low income households, closely tied to the Income Deprivation Domain. By incorporating evidence from other domains, this indicator could be expanded into a separate child specific multiple deprivation measure. Some of the proposed indicators are already specific to children, for example, low birth weight and dental extractions from the Health Deprivation and Disability Domain, and most of the indicators in the Education, Skills and Training Deprivation Domain. Other indicators can be disaggregated by age, some may not (directly) affect children, such as the proximity to a Jobs and Benefit Office. Against this background, the Deprivation team will consider the feasibility of developing a child specific multiple deprivation measure once the data have been processed.

Recommendation 16d

Urban-Rural Deprivation

Progress

This recommendation stated that further research should be undertaken into the identification of rural deprivation, giving consideration to the geographical unit of analysis and suitability of indicators employed. User guidance[12] on current and previous Measures suggests using the official urban-rural definition to identify rural areas, and to focus on the Measures for the former Census Output Areas to identify pockets of deprivation. Urban-rural considerations have been integral to the work of each of expert groups who have been facilitating the update and a dedicated urban-rural group was established to have oversight of the proposals brought forward by each of the six domain expert groups. In addition, steps were taken to ensure that the Steering Group included members representing rural communities. It is expected that the update will include a number of improvements that will address known rural concerns.

Recommendation 16e

Time trend indicator data

Progress

The NIMDM is a relative measure of spatial deprivation. As already outlined in Section 8, it is not possible to ascertain whether deprivation in an area has increased, decreased or remained the same from the change in rank. Data for key indicators could however shed light on absolute changes in area based deprivation. Following the main publication in mid-2017, NISRA will (subject to available resourcing) set out plans to publish updated figures for key indicators on a more frequent basis.

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[12] http://www.nisra.gov.uk/deprivation/NIMDM2010/using_area_based_measures.pdf#page=6

Recommendation 16f

Review of Domain Weights

Progress

The weights used when combining the individual domains of deprivation into the overall multiple deprivation measure were identical in the 2001, 2005 and 2010 Measures: Income and Employment (25 per cent each), Health and Education (15 per cent each), Proximity to Services (10 per cent), and Living Environment and Crime & Disorder (5 per cent each).

This consultation will however invite consultees to share their views on the appropriateness (or otherwise) of continuing to use these weights in NIMDM 2017.

Consultees are invited to share their views on

- ➢ The responses to the 'Other' NIMDM 2010 recommendations highlighted in this section.

- ➢ Whether the current Domain Weights (see Section 4 and Annex A for detail) still reflect current priorities.

- ➢ How they have used, or intend to use, the various indicators in each of the domains, individual domain rankings and the overall Multiple Deprivation Measure.

Annex A: Indicator Summary

Income Domain 25%

The proportion of the population living in households where at least one household member was in receipt of at least one of the following income related benefits:
Income Support , State Pension Credit, Income based Jobseeker's Allowance, Income based Employment and Support Allowance, Housing Benefit, Working Tax Credit, Child Tax Credit

The proportion of the population living in households whose equivalised income is below 60 per cent of the NI median before housing costs

Employment Domain 25%

The proportion of the working age population who are in receipt of at least one of the following benefits:
Job seekers Allowance, Incapacity Benefit, Severe Disablement Allowance, Carer's Allowance, Employment and Support Allowance, *Steps to Work or New Deal Participants*

not in receipt of any of these benefits and have not made tax contributions or self-assessment (hidden unemployment)

Health and Disability Domain 15%

Standardised Potential Years of Life Lost
Standardised Preventable Death Rate
Standardised physical health related benefit rate (formally Comparative Illness and Disability Ratio)
People registered as having cancer (excluding non-melanoma skin cancers)
Standardised Emergency Admission Rate
Proportion of singleton births with low birth weight
Children's Dental Extractions
Standardised proportion of people on multiple prescriptions on a regular basis
Standardised proportion of people with a Long-term Health Problem or Disability
Standardized Drug or Alcohol Related Deaths

A combined mental health indicator:
- **Proportion of population in receipt of prescriptions for mood and anxiety disorders**
- **Standardised suicide rates**
- **Standardised rate of mental health inpatient stays**
- Standardised mental health related benefit rates

} **Combined mental health indicator**

Education Domain 15%

Key Stage 2 Teacher Assessments for English and Maths (and Irish in Irish medium schools/units)
Proportions of pupils attending Special Educational Needs Schools or attending primary school with Special Education Needs Stages 3-5
Absenteeism at primary schools (all absences)
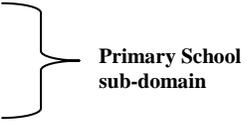
} **Primary School sub-domain**

Key Stage 3 Teacher Assessments for English and Maths (and Irish in Irish medium schools/units)
GCSE or equivalent qualifications points score
Proportions of school leavers achieving 5 or more GCSEs at A*-C (and equivalent) inc GCSE English and maths
Proportions of those leaving school aged 16, 17 and 18 and not entering Further Education, Employment or Training
Proportions of 18-21 year olds who have not enrolled in Higher Education Courses at Higher Education or Further Education establishments
Proportions of pupils attending Special Education Needs Schools or who are attending post-primary school with Special Education Needs Stages 3-5
Absenteeism at post- primary schools (all absences)
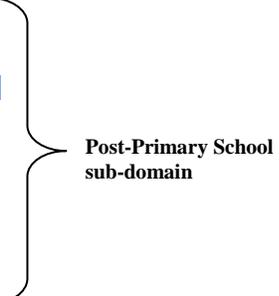
} **Post-Primary School sub-domain**

Proportions of working age adults (25-59) with no or low levels of qualification

} **Working age adults sub-domain**
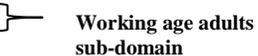
Access to Services Domain 10%

Service-weighted fastest travel time by private transport

Service-weighted fastest travel time by public transport

Proportion of properties with broadband speed below 10Mbs

The proposed services to be included in the public and private transport travel time indicators are as follows:

Accident and Emergency hospital	**GP premises**
Job Centre or Jobs and Benefits Office	**Dentists**
Post Office	**Pharmacists**
Supermarket / Food Store	**Opticians**
Primary Schools	Libraries
Post-Primary Schools	**Large Service Centre**
Council Leisure Centre	**Other general services**
Financial Services	

Living Environment 5%

SOA level Decent Homes Standard
SOA level Housing Health and Safety Rating System
Proportion of domestic dwellings that are unfit
Proportion of domestic dwellings in a state of disrepair
Proportion of domestic dwellings without (1) modern boiler or (2) loft insulation and double glazing

Housing Quality sub-domain

Homelessness Acceptances under the homelessness provisions of the Housing (Northern Ireland) Order 1988 and the Housing (Northern Ireland) Order 2003
Household overcrowding
Proportion of population with disability without adaptations to dwelling

Housing Access sub-domain

Proportion of domestic dwellings with Local Area Problem Scores
Standardised rate of road defects
Road Traffic Collisions
Flood risk: proportion of properties in flood risk area

Outdoor Physical Environment sub-domain

Crime and Disorder Domain 5%

Violence, (sexual offences), robbery and public order
Burglary
Vehicle Crime
Criminal Damage and Arson

Crime sub-domain

Deliberate Primary and Secondary Fires
Anti-Social Behaviour Incidents

Disorder sub-domain

Annex B: Moderation Policy

Proposals for the Updated NI Multiple Deprivation Measure (NIMDM 2017)

Moderation Policy

In the interests of transparency, the Northern Ireland Statistics and Research Agency (NISRA) will publish all responses to the consultation on the proposals for the updated Multiple Deprivation Measure (NIMDM 2017).

This gives you the opportunity to post a response to this consultation that will remain publicly available on this website and the NISRA website. The site, therefore, operates a moderation policy to ensure that responses are appropriate and not harmful to others. Moderation is performed by NISRA in accordance with the terms set out below.

Responses that include any of the following may be deleted:

- Threats or incitements to violence;
- Use of obscenity;
- Duplicative or substantially duplicative postings by the same person or entity;
- Postings seeking employment or containing advertisements for a commercial product or service; or
- Information posted in violation of law, including libel, condoning or encouraging illegal activity, revealing classified information, or infringing on a copyright or trademark.

We deeply value your time and input, and our desire is to remove as few responses as possible while ensuring that a focused, constructive consultation takes place. To address additional matters as may be warranted this moderation policy is subject to change. If you have a complaint about an item of user-generated content on this site, or feel that your own content has been removed in error, please contact us at:

Email: deprivation.nisra@finance-ni.gov.uk
Telephone: 028 9034 8271

Annex C: Membership of Steering Group

Name	Organisation
Tracy Power (Dr)	NISRA (chair)
Brian Green	NISRA
Jos IJpelaar (Dr)	NISRA
Claire McCann	NISRA
Joe Reynolds	The Executive Office
Paul Caskie (Dr)	Department of Agriculture, Environment and Rural Affairs
Michelle Crawford	Department for Communities
Stephen Donnelly (Dr)	Department for the Economy
David Hughes	Department of Education
Eugene Mooney (Dr)	Department of Health
Tom Reid	Department for Infrastructure
Liz Loughran	Department for Infrastructure
Glyn Capper	Department of Justice
Freda Magill	Ulster Farmers' Union
Aidan Campbell	Rural Community Network
Karen McCoy	Southern Health & Social care Trust
Teresa Canavan	Northern Ireland Rural Development Council
Andrea Thornbury	NICVA
Simon Hookham	Equality Commission
Joe Frey	NI Housing Executive
Sharon McNicholl	Belfast City Council
Michael Gallagher	Derry City & Strabane District Council
Heather McKee	Newry, Mourne & Down District Council
Louise Scullion	Causeway Coast & Glens District Council

Annex D: Membership of Domain Expert Groups

Domain Expert Group	Organisation
Income and Employment	Department for Communities
	Department for the Economy
	Antrim & Newtownabbey Council
	Lisburn & Castlereagh Council
Health & Disability	Department for Communities
	Department of Health
	HSC – Business Services Organisation
	HSC – Public Health Agency
	NISRA – Census Branch
	NISRA – Vital Statistics
Education, Skills & Training	Department for the Economy
	Department of Education
Access to Services	Department for Communities
	Department for Infrastructure
	Department of Agriculture, Environment and Rural Affairs
	NISRA – Economic and Labour Market Statistics
	Northern Ireland Rural Development Council
Living Environment	Land & Property Service NI
	Newry, Mourne & Down Council
	Northern Ireland Housing Executive
Crime & Disorder	Department of Justice
	Northern Ireland Fire & Rescue Service
	Police Service for Northern Ireland
Urban-Rural	Belfast City Council
	Department of Agriculture, Environment and Rural Affairs
	Rural Development West
	Sustainable Rural Communities

Glossary

BSO	Business Services Organisation
CCEA	Council for the Curriculum, Examinations and Assessment
DCAL	Department of Culture, Arts and Leisure
DE	Department of Education
DEL	Department for Employment and Learning
DfC	Department for Communities
DfE	Department for the Economy
DfI	Department for Infrastructure
DHSSPS	Department of Health, Social Services and Public Safety
DoH	Department of Health
DSD	Department for Social Development
ELBs	Education and Library Boards
FESR	Further Education Statistical Record
GCSE	General Certificate of Secondary Education
GP	General Practitioner
GRO	General Register Office
HESA	Higher Education Statistics Agency
HMRC	Her Majesty's Revenue and Customs
HSC	Health and Social Care
IBDR	Inter- Departmental Business Register
JSA	Job Seekers Allowance
LPS	Land and Property Services
NICVA	Northern Ireland Council for Voluntary Action
NIFRS	Northern Ireland Fire and Rescue Service
NIHE	Northern Ireland Housing Executive
NIMDM	Northern Ireland Multiple Deprivation Measure
NINIS	Northern Ireland Neighbourhood Information Service
NISRA	Northern Ireland Statistics and Research Agency
OFCOM	Office of Communications
PSNI	Police Service of Northern Ireland
PYLL	Potential years of life lost
SCG	Statistics Co-ordinating Group
SEN	Special Educational Needs
SOA	Super Output Area
StW	Steps to Work
S2S	Steps to Success