Emergency readmissions

Summary Position Paper

January 2019
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1 Summary

Readmissions indicators exist within a number of NHS Digital publications:

- CCG Outcomes Indicator Set (CCG OIS) (2 indicators)
- NHS Outcomes Framework (NHS OF) (1 indicator)
- Compendium (26 indicators)
- NHS Choices (39 indicators)
- Seven-day services (1 indicator)

NHS Choices and seven-day services indicators are out of scope for this review. The seven-day services indicator is produced for a very specific purpose relating to discharge on specific days of the week and as such are not directly comparable to other indicators. NHS Choices have been suspended from publication, so updates are not required at this time.

One indicator from CCG OIS is currently published on a quarterly basis (Emergency alcohol-specific readmission to any hospital within 30 days of discharge following an alcohol-specific admission).

This paper provides background information on the position to date and future proposals to facilitate the publication of the above indicators (detailed in Annex 1).
2 Background

Prior to 2014, the data processing and production of readmissions indicators was undertaken by an external third-party provider, the outputs were then provided to NHS Digital to publish. In 2014, this data processing was brought in house for NHS Digital to complete the entire cycle from data production to publication going forward.

Following the transfer of responsibility, NHS Digital were unable to exactly replicate the outputs produced by the third-party provider. Firstly, the construction of the underlying spells table did not exactly match that of the third-party provider and secondly, the specification provided by them was not sufficiently detailed and open to interpretation.

Another issue across publications was the lack of a consistent methodology / definition for measuring readmissions which is confusing for users.

Based on the above, bringing the data production in house allowed for two potential improvements; refinement of the specification and alignment of methodologies to agree a single common definition of what constitutes a readmission.

During 2015/16 the Clinical Indicators team completed an initial phase of working looking at how the indicators could be aligned, and the methodology refined. The work at this time was focussed on the NHS Outcomes Framework indicator, with the intention being to roll out any changes across the other indicators in line with this one. The work was being completed in conjunction with the Department for Health and Social Care (DHSC) (NHS OF sponsor) and the Outcomes Framework Advisory Group (OFTAG). Due to changing priorities the work was never finalised or agreed by OFTAG.

In the time since this, there have been customer queries around readmissions and in recent months there has been a much greater emphasis on completing these outputs. Furthermore, Healthwatch published a paper in November reviewing emergency admissions & the need for a consistent form of measurement. NHS Digital have therefore planned a program of work to allow the publication of some indicators in the short term, with a full review and assurance of the indicators planned in the longer term.

The diagram on the next page provides a summary timeline covering background to date and proposals for the future.
Emergency readmissions

2014
Data produced by an external third-party & published by NHS Digital

Data processing brought in-house

2014/15
NHS Digital unable to replicate third party outputs:
- Underlying spells table has changed
- Specification provided was not sufficiently detailed

Across frameworks:
- More than one methodology / definition for measuring readmissions
- In-house processing provides opportunity to align methodologies and agree a single common definition

2015/16
Initial phase of work
- Look at how indicators could be aligned
- Development included discussions with external organisations; Department for Health and Social Care (DHSC) and Outcomes Framework Advisory Group (OFTAG)
- Work never finalised or agreed across the board due to changing priorities over time

2018
There remain several outstanding issues with no final resolution

Provide short term solution; ready to implement initial results late 2018

Focus on all diagnoses readmissions

Produce revised specifications

2019
Publish indicators:
- Publish CCG OIS and NHS OF March, Compendium May
- Label indicators as experimental

Provide longer-term solution; publish late 2019

Full review of each indicator methodology and alignment of definitions across the board

Full assurance
3 Short-term publication proposals

3.1 Assumptions

To allow publication of readmissions indicators in the short-term, begin to align methodologies so far as possible and ensure efficient processing of data, NHS Digital have made a number of assumptions about the specification and publication as detailed below.

3.1.1 Practical assumptions

- NHS Choices indicators are out of scope
  - NHS Choices are undertaking their own review of what they want to publish on their website and have advised that these indicators have been suspended and updates are not required at this time
- Indicators will initially be created for a five-year period
  - Provides data for comparison over time
  - Aligns with the latest health geographies when CCGs were introduced
  - Is distinct from old figures produced by the third-party supplier on a different specification
  - Breakdowns will be provided in line with those currently published, detailed in Annex 1
- Indicators will initially be labelled as experimental pending full assurance following the in-depth review
- Indicators will be published on an annual basis

3.1.2 Specification assumptions

- Length of time to readmission will be aligned across all indicators to 30 days
  - Aligns with CCG OIS and NHS OF definition; previous assurance recommended 30 days to align with a one-month period
- All indicators will be produced with a consistent definition for main specialty exclusions
  - Consistent with definition currently used in CCG OIS and NHS OF
  - Amendment to Compendium definition; mental health specialties will no longer be excluded
  - Previous assurance documents for NHS OF, provide detail that the revision to the methodology not to exclude mental health admissions is in line with research by the RAND Corporation
• Obstetric exclusions will be based on all episodes in a spell
  - The existing specification excludes spells where the first episode in the CIP spell does not have a primary diagnosis beginning with ‘O’ (Pregnancy, childbirth and the puerperium) AND the last episode in the CIP spell does not have a main specialty of Obstetrics, Midwifery or General Practice with Maternity Function.
  - When the code was initially reviewed in 2015/16 this was revised to exclude the above based on if it occurs in any episode in a spell. This revision is logical and will be maintained

• Standardisation assignment
  - The age groups used within the standardisation differs across indicators. These differences will remain in the short-term and be reviewed in the long-term proposals
  - The current methodology for standardising by diagnosis and procedure is complex and unclear. In the short-term, the indicators will be standardised by three-character diagnosis / procedure grouping

3.2 Timing for implementation and publication

3.2.1 Implementation
  - December 2018 – CCG OIS and NHS OF indicators ready for implementation
  - January / February 2018 – Compendium indicators ready for implementation

3.2.2 Publication
  - March 2019 – NHS OF and CCG OIS, in line within CCG OIS publication schedule
  - April/May 2019 – Compendium

4 Long-term publication proposals

There are a number of known issues within the specification that have previously been raised as topics to review. These will require further input from technical experts in the field and will therefore be reviewed in the long term.

4.1 Known issues for review
  - Review methods for standardisation
    - Current methodology is complex and vague. A simple standardisation method has been used in the short-term to allow publication
    - Some research has been completed into potential alternatives; this would need to be reviewed and a paper written on the findings and recommendations
    - Consider appropriate methods for applying statistical models to assess whether the number of emergency readmissions are higher than / lower than / as expected
  - NHS Digital have been advised about an alternative national definition used by NHS Improvement
• The NHS Improvement definition is linked to payment
• It includes further differences to those outlined above; the reasons for these differences and whether they are appropriate to adopt requires review

• Review exclusions based on main specialty
  • This did differ slightly across workstreams, a review would ensure the exclusions list remains relevant
  • Consider whether it would be possible to group admissions according to original reason for admission and reason for readmission (whether directly related, potentially related or not related)

• Day cases inclusion
  • There are arguments for and against the inclusion of day cases, this requires review, expert input and a final decision made

• Data Quality
  • Consider classification into emergency and elective admission, reviewing whether consistent classification has been applied

• Presentation
  • Look at how the information is presented and whether it is the most appropriate for the uses in terms of things like timeliness, frequency, form of publication

5 Feedback

NHS Digital welcome feedback to help inform the long-term review. If you would like to provide comment or be involved with the review, please email the customer service centre at enquiries@nhsdigital.nhs.uk. In the subject header please include the following: FAO Clinical Indicators – readmissions review. Please provide any feedback by 15 February 2019.
## Annex 1

<table>
<thead>
<tr>
<th>Output mechanism</th>
<th>Number of indicators</th>
<th>Topics</th>
<th>Granularity</th>
<th>Frequency</th>
<th>Last publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCG OIS</td>
<td>2</td>
<td>All readmissions (3.2)</td>
<td>Country, CCG</td>
<td>Annual</td>
<td>March 2014</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Alcohol-specific readmission (3.15)</td>
<td>Country, CCG</td>
<td>Quarterly</td>
<td>June 2018</td>
</tr>
<tr>
<td>NHS OF</td>
<td>1</td>
<td>All readmissions (3b)</td>
<td>Country, Local Authority, Region, Deprivation, Gender</td>
<td>Annual</td>
<td>February 2014</td>
</tr>
<tr>
<td>Compendium</td>
<td>26</td>
<td>All readmissions 12 outputs Female, Male, Person broken down by ages &lt;16 years, 16+ years, 16-74 years, 75+ years</td>
<td>Country, Local Authority, Region, ONS Area Classification, Strategic Health Authority, County, Primary Care Organisation, Provider, Provider clusters</td>
<td>Annual</td>
<td>December 2013</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stroke 3 outputs Female, Male, Person</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Fractured proximal femur 3 outputs Female, Male, Person</td>
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<tr>
<td></td>
<td></td>
<td>Primary hip replacement surgery 3 outputs Female, Male, Person</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Hysterectomy 2 outputs 3-year average trend, annual trend</td>
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<td></td>
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<tr>
<td>NHS Choices</td>
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<td>Broken down by 39 different primary procedures</td>
<td>Provider</td>
<td>Quarterly</td>
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