

Analysis Method Notice

Acute stroke Quality Improvement Measures (QIMs)

Percentage of applicable patients who were given a formal swallow assessment within 72 hours of clock start

This notice describes an Analysis Method that has been developed for use in the production of published national outcome indicators, performance measures and/or currencies, which are derived directly from NHS Wales data.

The Analysis Method has been reviewed by the Analysis Methodologies Group and its output submitted to the Welsh Information Standards Board (WISB) for potential accreditation.

*It should be noted that, where the data flow on which the analysis is being undertaken has not been reviewed by WISB (see 'Status of WISB Data Standards Assurance' below), accreditation of the analysis method **cannot** be interpreted as an approval of the underlying data standards or the quality of the data used.*

It is recognised that formal review and/or assurance of the data flow may have been undertaken by other bodies, where those data are being formally published; for example, as Official Statistics'. In such circumstances, users of this method are advised to contact the relevant organisations should they require further information on the underlying quality of the specified data source.

For further details about the group, including Terms of Reference and membership, please visit the following website:

<http://howis.wales.nhs.uk/sites3/page.cfm?orgid=742&pid=56696>

WISB Reference: ISRN Ref. 2016 / 007

Please address enquiries about this Analysis Method the NHS Wales Informatics Service Data Standards Team.

E-mail: data.standards@wales.nhs.uk / Tel: 029 2050 2539

WISB Analysis Method Appraisal Assessment	Accredited This Analysis Method has been appraised by WISB and is felt to: <ul style="list-style-type: none"> • Meet the specified indicator requirement, in that it is suitable for its calculation / derivation; • Is reproducible by organisations, where appropriate.
WISB Analysis Method Appraisal Outcome(s)	<u>Outcome</u>

Status of Data Standards Assurance	Not WISB Reviewed Some or all of the data used in this Analysis Method do not have standards approved via the Information Standards Assurance Process. This may include data flows that predate the establishment of WISB.
WISB Decision	N/A
Data Standards Assurance Outcome(s)	N/A

Indicator

The percentage of applicable patients who were given a formal swallow assessment within 72h of clock start

Target:

Latest published SSNAP Clinical Audit UK national position (SSNAP Indicator H15.24) – Published quarterly

Rationale / Context

Stroke services in Wales are currently performance managed against a set of criteria set out in the current framework that are no longer in line with the clinical guidance of the Royal College of Physicians (RCP) and the British Association of Stroke Physicians (BASP).

Current indicators within the Delivery Framework for NHS Wales are therefore out of step with those already applied (and published) via the RCP Clinical Audit in Wales, as well as the performance framework of NHS England and Northern Ireland. The performance framework for acute stroke in Wales is therefore in need of updating in line with those currently used by NHS England, Northern Ireland and the current clinical audit framework already published by the RCP.

The use of appropriate care interventions as an approach to improving the reliability of care has been demonstrated successfully via the use of the current stroke bundles, and is also backed by a growing body of published results in medical journals.

Acute Stroke Quality Improvement Measures (QIMs) build on the success of Intelligence Targets through the continued application of approaches to continuous improvement, and have been derived from the RCP's ongoing clinical audit process (SSNAP). This is in line with the recommendations of the Palmer Report for Welsh Government (2014), the RCP (2014) and the NHS Wales National Clinical Audit and Outcome Review Plan (2014/15).

The indicators themselves and their methodologies align with clinically recognised evidence based best practice, and have already undergone a process of rigorous assurance as part of the RCP's section 251 powers set out under the NHS Act 2006.

In Wales, these indicators have been widely consulted and agreed upon by UHBs, WG Clinical Lead for Stroke and the Stroke Implementation Group, as well as all-Wales clinical bodies the Welsh Association of Stroke Physicians (WASP) and the Welsh Stroke Alliance (WSA).

Full details regarding the national clinical guidelines for stroke can be found at the following address:

<https://www.rcplondon.ac.uk/guidelines-policy/stroke-guidelines>

Data Source(s)

RCP Sentinel Stroke National Audit Programme (SSNAP)

<https://www.strokeaudit.org/>

Definitions:

Definitional Guidance:

The cohort is considered to be all patients entered into the SSNAP audit, i.e. all patients with a primary diagnosis of stroke. SSNAP audit also assesses the estimated number of admissions and discharges in any one quarter. In Wales this is derived from previous data sources and on-going submissions from health boards regarding those with a stroke ICD code of I61, I63 or I64.

If a patient is excluded from a measure (based on the reasons given in the 'Additional Information' section and Technical Information below), the result will mean that they are excluded in both the numerator and denominator. SSNAP question 3.8.1 (If assessment was not performed within 72 hours, what was the reason?) is used to identify exclusions.

Please see the additional information section for examples of the above.

Data Items:

Measure	Related Data Item	SSNAP Question	Question
Denominator	S1Diagnosis	1.9	What was the diagnosis?
Clock Start	S1OnsetInHospital	1.10	Was the patient already an inpatient at the time of stroke?
	S1OnsetDateTime	1.11	Date/time of onset/awareness of symptoms
	S1FirstArrivalDateTime	1.13	Date time patient arrived at first hospital
4a – Formal Swallow Assessment	S3SpLangTherapistSwallow72HrsDateTime	3.8	Date and time of formal swallow assessment by a Speech and Language Therapist or another professional trained in dysphagia assessment
	S3SpLangTherapistSwallow72HrsNotAssessedReason	3.8.1	If assessment was not performed within 72 hours, what was the reason?

Terms:

SSNAP Key Indicator Technical Information

A SSNAP logon is required to access the below document. Clicking on the link will allow for registration, however the relevant information is contained in the 'Additional Information' section below.

<https://www.strokeaudit.org/Support/Resources/Simplified-Technical-Information.aspx>

<https://www.strokeaudit.org/Support/Resources/Simplified-Technical-Information.aspx> (logon required)

Detailed Specification

All datetime measures are calculated based on a time from 'clock start' to intervention (datetime fields are in the format dd/mm/yyyy hh:mm). Clock start is defined as:

- If the patient is an inpatient stroke (Q1.10 – Was the patient already an inpatient at the time of stroke? = 'Y'), then Q1.11 S1OnsetDateTime is used.
- Else if the patient is not an inpatient stroke (Q1.10 – Was the patient already an inpatient at the time of stroke? = 'N'), then Q1.13 S1FirstArrivalDateTime is used

Calculation:

Numerator

Number of patients who were given a formal swallow assessment within 72h (72 hours 0 minutes) of clock start.

Denominator

All the applicable patients in the cohort. Patients who are applicable but not given a formal swallow assessment are included in the denominator.

Reporting Format / Frequency

Monthly – Reported at Health Board provider level

Discussion Points / Areas for Future Development

The following points reflect considerations raised by either the Analysis Methodologies Group or WISB in terms of aspects of the Analysis Method that require further investigation or development.

For a full breakdown of the issues considered, please refer to the formal WISB Outcome for this Analysis Method, which can be access via the Information Standards Assurance website:

<http://howis.wales.nhs.uk/sites3/page.cfm?orgid=742&pid=52532>

This section details any areas the Analysis Methodologies Group felt needed further consideration / review by the 'sponsor' of the method.

n/a

Appendix A – Additional Information

Exclusion Reasons within SSNAP

Measure	Numerator Data Item	SSNAP Question	Denominator Data Item	SSNAP Question	Exclusions?
4a - Formal Swallow Assessment	Date and time of formal swallow assessment by a Speech and Language Therapist or another professional trained in dysphagia assessment	3.8	What was the diagnosis?	1.9 (Answer - "S")	<ul style="list-style-type: none"> • Patient refused (PR) • Patient medically unwell (MU) • Patient passes swallow screening (PS)
	If assessment was not performed within 72 hours, what was the reason?	3.8.1			

The below is an extract taken from the RCP SSNAP technical information document relating to all indicators. The link to this can be found in the “Related Data Definitions” section of this document.

Percentage of applicable patients who were given a formal swallow assessment within 72h of clock start

Included: all patients are included in this indicator, except those who are either medically unwell, refused to be assessed or passed swallow screening.

Excluded: patients who are medically unwell, refused to be assessed or passed swallow screening (ie patients where Q 3.8.1 is answered ‘Patient refused’, ‘Patient medically unwell’ or ‘Patient passed swallow screening’) are excluded from this indicator

Numerator = the number of patients who were given a formal swallow assessment within 72h of clock start.

Denominator = all the applicable patients in the cohort. Patients who are applicable but not given a formal swallow assessment are included in the denominator.

$$\text{Cohort percentage} = 100 * \frac{\text{numerator}}{\text{denominator}}$$

To calculate whether a patient is included in the numerator:

For newly arrived patients, the difference between the date and time of formal swallow assessment by a Speech and Language Therapist or another professional trained in dysphagia assessment (Q 3.8) and date and time of arrival (Q 1.13) must be greater than 0 minutes and less than or equal to 4320 minutes.

For patients already in hospital at the time of their stroke (Q 1.10 is ‘Yes’), the difference between the date and time of formal swallow assessment by a Speech and Language Therapist or another professional trained in dysphagia assessment (Q 3.8) and the date and time of symptom onset (Q 1.11) must be greater than 0 minutes and less than or equal to 4320 minutes.

Example

Patient W arrived (clock start) at hospital at 10:00 on Monday. They were medically unwell until 10:00 on Friday. Patient W is excluded from the indicator because they were medically unwell.

Patient X arrived (clock start) at hospital at 15:00 on Tuesday. They were given a swallow assessment at 16:30 on Wednesday. Patient X has achieved the indicator because Tuesday 15:00 – Wednesday 16:30 = 1530 minutes.

Patient Y arrived (clock start) at hospital at 12:15 on Saturday. They were given a swallow assessment on Wednesday 12:15. Patient Y has not achieved the indicator because Saturday 12:15 – Wednesday 12:15 = 5760 minutes.

Patient Z arrived (clock start) at hospital at 20:08 on Thursday. They were not given a swallow assessment for organisational reasons so have not achieved the indicator.

Therefore the cohort percentage is 0.33 or 33% or 1 / 3 or

(Patient X)

(Patient X, Patient Y, Patient Z)

Appendix B – SQL Code (where applicable)

Important: The following code is intended for information purposes only. It will contain references to specific references (servers, data item descriptions etc.) that are applicable within the NHS Wales Informatics Service only and therefore will not be suitable for direct application to local (LHB) data.

n/a