



QS138

Quality Insights

HOSPITAL USER GUIDE

A quality improvement benchmarking audit tool, designed to support hospitals to monitor their compliance to the National Institute of Clinical Excellence Blood Transfusion Quality Standard QS138

Version 1.0

February 2023

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About QS138 Quality Insights

In 2016 National Institute for Health and Care Excellence (NICE) published Blood Transfusion Quality Standard QS138¹, associated with the NICE guideline for blood transfusion NG24², which covers general principles of blood transfusion in adults, young people, and children over one year old. QS138 highlights four priority areas for improvement: Iron supplementation; Tranexamic acid for adults; Reassessment after red blood cell transfusion; Patient Information.

The Publication of Transfusion 2024: A 5-year plan for clinical and laboratory transfusion³ specified the need to *'Develop a tool for self-assessment by hospitals/trusts with plan for pilot and rollout. To include compliance with NICE Quality Standards for Transfusion'*. The QS138 Quality Insights audit tool aims to support hospitals by meeting that objective. The QS138 Quality Insights audit tool has been developed with funding from the National Blood Transfusion Committee.

This audit tool has in-built automated reporting, is free to use at the point of access and available for use by all hospitals in England, Wales, and Northern Ireland. The development of this tool has been made possible by building on earlier work undertaken by the NHS Blood and Transplant (NHSBT) Patient Blood Management (PBM) Team, with the former South East Coast Transfusion Practitioner group. The audit tool developed by that project group was endorsed by NICE and provided the foundations for this automated version.

QS138 Quality Insights is a live database, allowing hospitals to record their own compliance to elements of QS138 in real time. Data is entered online, and at the touch of a button an automated bespoke Hospital Report is available, displaying performance results and trends for up to the last four audit periods, alongside any regional or national data entered.

Use of this tool will provide those registered with benchmarking data, alongside evidence of local engagement with quality improvement and compliance with best practice. Audit reports will be readily available to share with internal governance groups and external inspectors. Data submitted will also feed into a Regional Report, which may be shared at Regional Transfusion Committee (RTC) meetings to support collaborative regional work and promote shared learning. At a national level, QS138 Quality Insights will allow accumulation of large datasets on performance, supporting the Transfusion 2024 agenda and providing insight of where resource development may be beneficial.

A 2021 National Comparative Audit of NICE Quality Standard QS138⁴ carried out across 153 sites and involving 4679 patients found inconsistencies in performance and encouraged hospitals to uptake regular QS138 re-audit opportunities.

QS138 Quality Insights supports hospitals and regions to enter a quality improvement cycle by monitoring and benchmarking their own performance and provides opportunities to identify areas for improvement, with the aim of optimising the care of patients who may need a blood transfusion.

Patient Blood Management Team

NHS Blood and Transplant

Limitations

QS138 Quality Insights

- is a live database. The information displayed on reports reflects all data entered up to the time of generating/download. As more data is entered, the stronger the benchmarking data becomes. Reports will update in real time accordingly.
- has been tested on the following:
Browsers - Microsoft Edge; Google Chrome; Safari.
Devices - Desktop; Laptop; iPad.
- allows hospitals to enter datasets for up to four quarters per year. The frequency / number of different Quality Statements to be audited each quarter can be locally determined, but a maximum of one dataset per Quality Statement can be submitted (per quarter).
- has been designed to be a national tool and therefore local tweaking of report format is not possible as this would not allow for national benchmarking.
- can only accept one registration per hospital. This registration must be done using a named person's Email account (registration from a shared Email account is not permitted). This is to enable management of permissions, the 4-digit login codes for data entry and Snap online © account.

Before you Start

We recommend that you engage with your Hospital Transfusion Team/ Hospital Transfusion Committee and contact your Audit/Clinical Governance Departments, to evaluate whether use of this quality improvement audit tool should be taken forward within your organisation.

USER AGREEMENT

To access *QS138 Quality Insights*, you must first accept the 'User Agreement' set out by NHS Blood and Transplant. The User Agreement outlines the terms and conditions for use, including that by entering your data you give agreement for your results to be displayed on Regional Reports and included in the national picture to support discussions for improvement areas. The User Agreement also provides confirmation that you understand the limitations of the tool.

If you would like to gain access to *QS138 Quality Insights*, please first check that no-one is already registered for your hospital. For us to manage permissions, we ask that only one [named] user is registered per hospital site.

To send an expression of interest, please use your hospital email to contact NICEQS138@nhsbt.nhs.uk, stating your role, the hospital that you wish to enrol and which RTC region it belongs to. This inbox is monitored Monday – Wednesday, 09:00 – 17:00. You will be sent a 'User Agreement' to review, this must be agreed by you for your application to proceed. A hospital user will only need to do this once. **A record of completed User Agreements will be kept on file by NHSBT. NHSBT should be informed by hospitals if a registered user is no longer in post so that we can remove access.**

Please confirm to the above email address when you have responded to the User Agreement. If you have agreed, this will initiate the process for getting you enrolled as a hospital user.

NHSBT will email you this Hospital User Guide and your unique 4-digit hospital code for data entry which you will need later in section 3. Please note that the 4-digit hospital code for data entry is unique for a hospital site (not Trust), this code will be used every time you audit, should be kept safe and should not be shared.

1. Setting yourself up as a new user

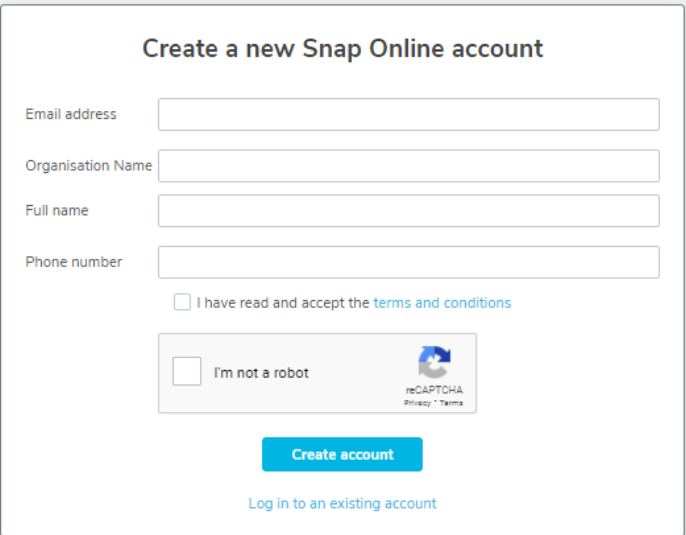
1.1 SETTING UP A SNAP ONLINE © ACCOUNT

To use *QS138 Quality Insights*, you will need to have a Snap online © account, this is the platform that you will use to view your reports later. **You will only need to do this once.** If you already have an account, you can skip to section 1.2. **Note:** Please use the same Email address you used to notify NHSBT that you wished to enrol.

To create an account, your device must have internet connection, this can via a hard wire; connection to Wi-Fi or having mobile data enabled. Use the following weblink.

[Create a Snap online © account](#)

The following screen should appear.

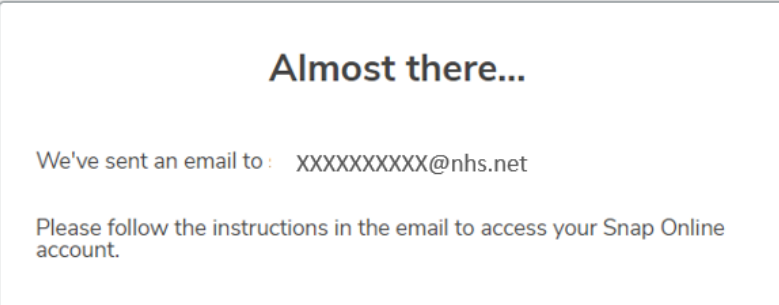


Email address:

A hospital email address must be used to register, e.g., nhs.net; nhs.uk; nhs.wales; hscni.net or from a private hospital e.g., @spirehealthcare.com; @nuffieldhealth.com; @circlehealthgroup.co.uk

Complete the fields as outlined and select 'Create account'. Remember the details that you register with as you will need these later.

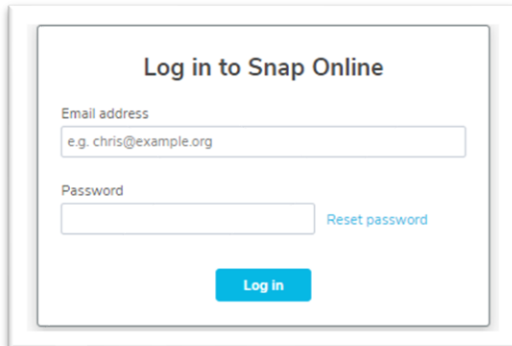
The following pop up will appear.



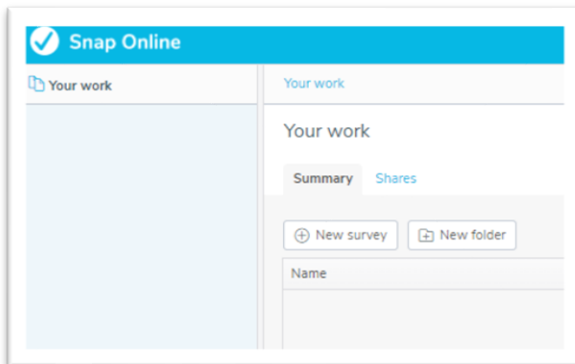
To complete registration, click on the link in the email to verify your account.

1.2 CHECKING YOUR ACCESS

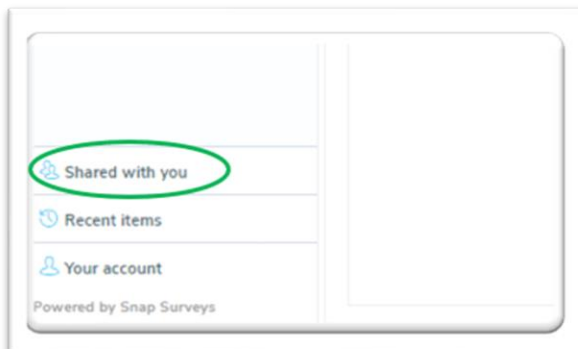
Test your access by following this [link](#).



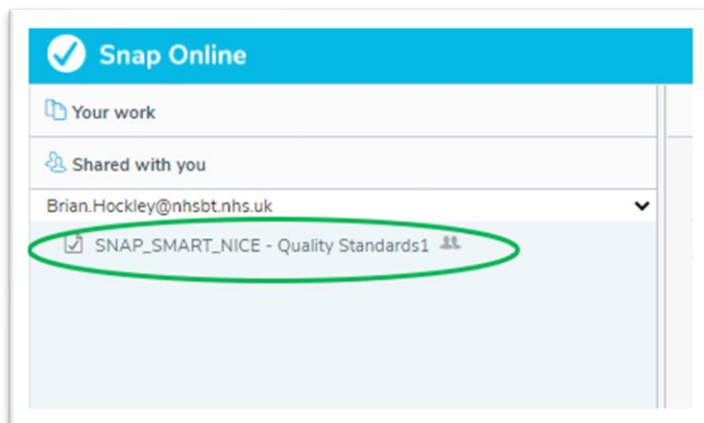
Use the same login details as you used when you created your account



The default home screen appears



Look at the bottom left-hand side of the page and select the **'Shared with you'** tab.




The **'Shared with you'** now moves to the top left-hand side of the page. Select **'SNAP_SMART_NICE - Quality Standards1'**.

The screenshot shows the 'Snap Online' dashboard. On the left, there's a sidebar with 'Your work' and 'Shared with you'. The main area shows a survey titled 'SNAP_SMART_NICE - Quality Standards1'. Below the survey title, there's a 'Summary' section with details like 'Created on 25 October 2021 from upload' and 'Interviewing in progress - started at 09:49 on Thursday Aug 4'. At the bottom, there's a table with 'Collect' and 'Responses: 12'. The 'Analyze' button is circled in green.

Select '**Analyze**'

The screenshot shows the 'Context' section of the Snap Online interface. The 'Context' button is circled in green. Below it, there's a section titled 'Context' with a plus icon and the text '[no context applied]'. The bottom left corner says 'Powered by Snap Surveys'.

You will now need to filter to check your permissions. Select '**Context**' on the bottom left-hand side of the screen and then click on the 

The screenshot shows the 'Add context rule' dialog. On the left, there's a list of variables with 'Hospital Name' circled in green. On the right, there's a section titled 'Add context rule' with 'Hospital Name' selected. At the bottom, there are 'Cancel' and 'Next' buttons, with 'Next' circled in green.

The screen now changes to ask you which variables (contexts) to set. Select '**Hospital name**', then '**Next**'

The screenshot shows the 'Edit context rule' dialog. It has a title 'Edit context rule' and a subtitle 'Hospital Name'. Below that, there's a list of options with 'Anywhere Hospital' circled in green. At the bottom, there's a 'Next' button circled in green.

Only the hospital that you have requested access should appear. If this is correct, your permissions are set. **If this is not correct, inform NHSBT: NICEQS138@nhsbt.nhs.uk**

The screenshot shows the bottom of the Snap Online interface. There are two buttons: 'Log out' and 'Help', both circled in green.

You can now log out of Snap online ©; the icon is on the top right-hand side of the

2. Collecting your audit data

2.1 QUALITY STANDARD VS QUALITY STATEMENT DATASETS

QS138 is made up of four Quality Statements (QS).

QS138 Quality Insights allows monitoring of the following elements:

NICE Quality Statement	<i>QS138 Quality Insights</i> auditable elements
QS1 – Iron Supplementation*	QS1a – Iron supplementation given to iron-deficient patients pre-surgery
QS2 – Tranexamic Acid (TXA)	QS2 – Adults undergoing moderate blood loss surgery are given TXA
QS3 – Reassessment after red cell transfusion	QS3a - Clinical reassessment after red cell transfusion QS3b - Haemoglobin checked after red cell transfusion QS3 both** - Clinical and Haemoglobin reassessment after red cell transfusion
QS4 – Patient Information*	QS4b verbal** - Transfused patients were given verbal information about blood transfusion QS4b written** - Transfused patients were given written information about blood transfusion QS4b both - Transfused patients were given verbal <u>and</u> written information about blood transfusion
<p>*Following early pilot, QS1b (iron supplementation post-surgery) and QS4a (patient information for those who may need transfusion) were excluded from the <i>QS138 Quality Insights</i> due to difficulties capturing audit cases</p> <p>**Additional QS data provided to support quality reviews</p>	

2.2 AUDIT DEFINITIONS

Dataset	<p>Data is collected and summarized locally then submitted as a 'dataset'.</p> <p>A dataset is made up of a minimum of 10 cases per QS audited*.</p> <p>All data within a dataset must be from the same hospital site, this improves the accuracy of benchmarking results.</p> <p>All data within a dataset must be from the same quarter.</p> <p>All data within a dataset must be from the same financial year.</p> <p>No patient identifiable information is entered into <i>QS138 Quality Insights</i>.</p>
Quality Statements audited	<p>Datasets can be entered for all (4) or some (1-4) QS, i.e.:</p> <ol style="list-style-type: none"> 1. QS1a 2. QS2 3. QS3a/QS3b/QS3 both 4. QS4b verbal/QS4b written/QS4b both <p>You may enter a dataset for different QS at the same time if it from the same quarter/financial year. You can also enter individual QS datasets at different times. However, a maximum of one dataset entry per QS can be submitted per quarter.</p>
Quarters (Q) <i>Note: These are financial quarters and are different to calendar quarters</i>	<p>Q1: April - June</p> <p>Q2: July - September</p> <p>Q3: Oct - December</p> <p>Q4: January - March.</p>
Financial year (F/Y)	Runs April - March, e.g., 2022/23.
Frequency	Datasets can be entered for a maximum of four quarters per f/y.
<p>*QS1a is the exception, where a greater number of cases will need to be initially reviewed to capture the minimum number (10) of relevant cases, see Appendix 1.</p>	

2.3 AUDIT POPULATION GUIDANCE

The cases you select to make up your dataset for each statement will vary per QS audited as each statement includes caveats on those that are suitable for audit. Guidance for the selection of cases is provided in the appendices as follows:

Appendix 1 - Audit guidance: QS1a

Appendix 2 - Audit guidance: QS2

Appendix 3 - Audit guidance: QS2 Moderate blood loss surgery examples

Appendix 4 - Audit guidance: QS3

Appendix 5 - Audit guidance: QS4b

2.4 AUDIT DATASET PROFORMA

The questions asked for each QS in *QS138 Quality Insights* are as laid out in an audit proforma.

Use this proforma to summarise your local dataset findings ahead of data entry.

It may be useful to keep a local record of patient groups being audited in each period for your own reference, e.g., if a particular specialty is being targeted as part of a quality improvement programme.

See Appendix 6 – Audit Proforma (3 pages)

Should it be needed, further guidance on audit proforma content is below:

Login code	This code is allocated to the registered user during set up and is unique for that hospital site. Codes are not transferrable between different sites. Codes should not be shared.
QS1 Iron supplementation: How many cases are included in this audit?	This should be the total number of pre-op iron-deficient cases that you have identified after you have narrowed down your original search
QS1a How many cases received iron supplementation before surgery?	This is the proportion (n) of the above cases who received iron

3. Entering your audit dataset

3.1 QS138 QUALITY INSIGHTS DATA ENTRY LINK

Data is submitted to *QS138 Quality Insights* tool via a SnapSurveys© form. To do this, your computer/device must have internet connection, this can be via a hard wire; connection to Wi-Fi or having mobile data enabled.

When you are ready to enter data, you will need your completed proforma (Appendix 6) and the unique 4-digit code assigned to you for the hospital site you are entering data for to hand.

[QS138 Quality Insights data entry form](#)

3.2 DATASET ENTRY

TIP: Where you see a question mark, you can hover over for more information



IMPORTANT

If there is a discrepancy with the hospital and RTC name, **do not continue**, contact NHSBT

Entering a speciality is optional

NICE QS1 Iron Supplementation

Does your hospital operate pre-operative anaemia pathway?

☒ Yes
☐ No

How many cases are included in this audit? [?]

10

This is the total number of cases identified as having iron deficiency at any point during the pre-op period

How many received iron supplementation **before** surgery?

3

This is the number of iron deficient cases who received iron during the pre-op period

Does your hospital operate a post operative anaemia pathway?

☐ Yes
☒ No

Progress

[Back](#) [Reset](#) [Next](#)

Select 'Next'

NICE QS2 - Tranexamic Acid for Adults

Audit a number of ADULT cases (minimum 10) where patients undergoing procedures have a moderate blood loss anticipated [?]

NCA Surgical PBM codes are indicated below

Procedure Descriptions	OPCS Codes
Primary unilateral total hip replacement	W37.1, W38.1, W39.1 with a Z94.2, Z94.3 or Z94.4
Primary bilateral total hip replacement	W37.1, W38.1, W39.1 with a Z94.1
Primary unilateral total knee replacement	W40.1, W41.1, W42.1 with a Z94.2, Z94.3 or Z94.4
Primary bilateral total knee replacement	W40.1, W41.1, W42.1 with a Z94.1
Unilateral revision hip replacement	W37.3, W37.4, W38.3, W38.4, W39.3 with a Z94.2, Z94.3, Z94.4
Unilateral revision knee replacement	W40.3, W40.4, W41.3, W41.4, W42.3 with a Z94.2, Z94.3, Z94.4
Colorectal resection for any indication (open or laparoscopic)	H29, H33 H048; H061; H062; H099; H103; H108; H41.1
Open arterial surgery e.g.: scheduled [(non-ruptured)] aortic aneurysm repair, infrainguinal femoropopliteal or distal bypass)	L19.3 - L19.6, L21.3 - L21.6, L49, L51, L57, L59
Primary coronary artery bypass graft	E44.1
Valve replacement +/- CABG	K25 - K29 (INCLUSIVE)
Simple or complex hysterectomy	Q07 - Q08 (INCLUSIVE)
Cystectomy	M34.3, M34.4, M35.9
Nephrectomy	M02.1, M02.3, M02.5, M03.1, M03.9
# neck of femur (arthroplasty)	W19.1, W24.1, W46.1 to W46.9, W47.1 to W47.9, W48.1 to W48.9

This is the same list as shown in Appendix 3

How many cases are included in this audit?

10

Total number of moderate blood loss surgery cases

How many of these 10 cases received tranexamic acid?

7

Total number of eligible moderate blood loss surgery cases who received Tranexamic Acid

Progress

[Back](#) [Reset](#) [Next](#)

Select 'Next'

National Institute for Health and Care Excellence (NICE) Quality Standard

Transfusion - QS 138

Gap Analysis Tool

NICE QS3 - Reassessment after red blood cell transfusion

Audit a case sample (minimum 10) of patients who have received a red blood cell transfusion ?

How many cases are you reviewing? ← This is the total number of transfused cases

How many of these 10 cases were clinically re-assessed after the red cell transfusion? ?

How many of these 10 cases had the haemoglobin level checked after the red cell transfusion? ?

How many of the 10 cases had **both** a clinical re-assessment and the haemoglobin level checked after the red cell transfusion?

Progress

Back Reset Next

Select 'Next'

This number cannot be higher than the lowest denominator of the above two questions. All elements must be answered.

NICE QS4b - Patient Information

Audit a number of cases (minimum 10) of patients who have had a blood transfusion ?

How many cases are being audited? ← This is the total number of transfused cases

How many of these 10 cases have documented evidence that they were given **verbal** information about blood transfusion?

How many of these 10 cases have documented evidence that they were given **written** information about blood transfusion?

How many of these 10 cases have documented evidence that they were given verbal **AND** written information about blood transfusion ?

Progress

Back Reset Next

Select 'Next'

This number cannot be higher than the lowest denominator of the above two questions. All elements must be answered.

3.3 SUBMITTING YOUR DATA TO THE DATABASE

National Institute for Health and Care Excellence (NICE) Quality Standard
Transfusion - QS 138

Gap Analysis Tool

Summary for: Anywhere Hospital
 RTC: Anywhere example

NICE QS1

% offered iron supplementation before surgery = 30.00 % compliance to QS1a

Post op anaemia pathway (Yes/No) = indication of potential for compliance to QS 1b
 You have indicated: No

NICE QS2

% offered Tranexamic Acid = 70.00 % compliance to QS2

NICE QS3

% transfusions where a clinical re-assessment was carried out = 50.00 % compliance to QS3a
 % transfusions where the Haemoglobin level was re-checked = 30.00 % compliance to QS3b

% Clinical re-assessment and haemoglobin level was re-checked = 20.00 % (for reference only)

NICE QS4

80.00 % transfusions where verbal information was given (for reference only)
 40.00 % transfusions where written information was given (for reference only)

% transfused given written and verbal information = 40.00 % compliance to QS4b

Progress

Back Reset Next

A brief summary of your results will appear

IMPORTANT!
 You still need to submit your data to the database!
 Select 'Next'

National Institute for Health and Care Excellence (NICE) Quality Standard
Transfusion - QS 138


Gap Analysis Tool

Thank you for completing this audit sample.
 Please ensure you click on the submit button to send your information

Progress

Back Reset Submit

IMPORTANT! To submit your data to the database, select 'Submit'



Thank you for completing this survey.

Once you have successfully submitted your data to QS138 Quality Insights, this message will appear

4. Accessing your report

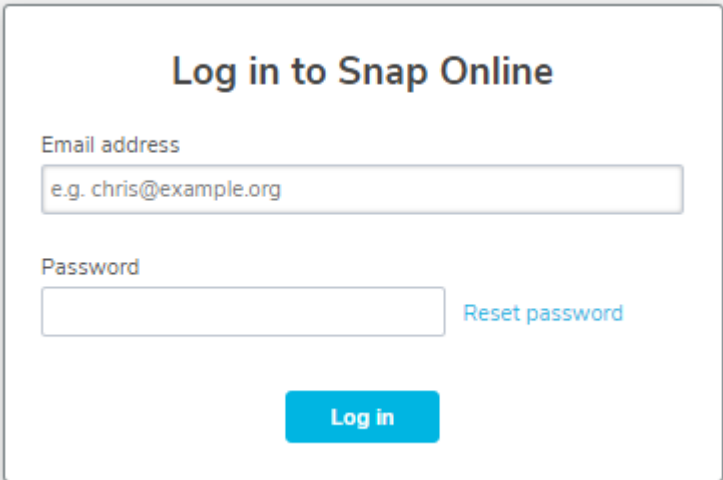
4.1 DOWNLOADING YOUR HOSPITAL REPORT

Reports are held on Snap online © using Snap XMP© software. You will need to have already set up a Snap online © as outlined in step 1 and have your registration details to hand to log on to your account.

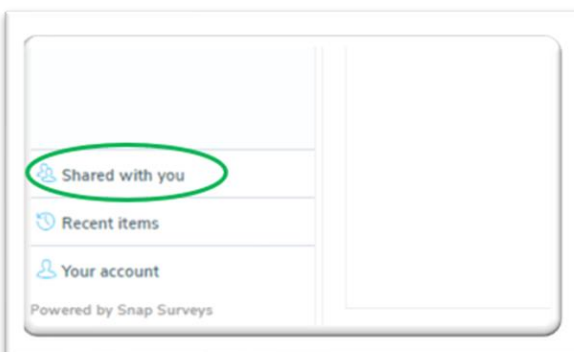
Your computer/device must have internet connection, this can via a hard wire; connection to Wi-Fi or having mobile data enabled.

A dataset must have been entered into the *QS138 Quality Insights* tool for the corresponding audit period for you to obtain a report.

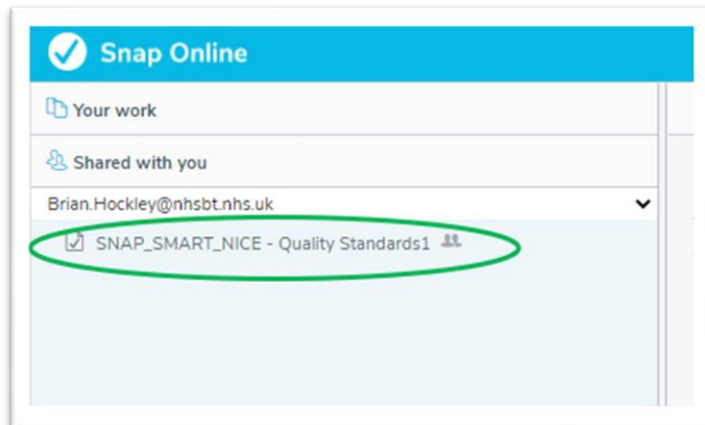
[Log into Snap online ©](#)



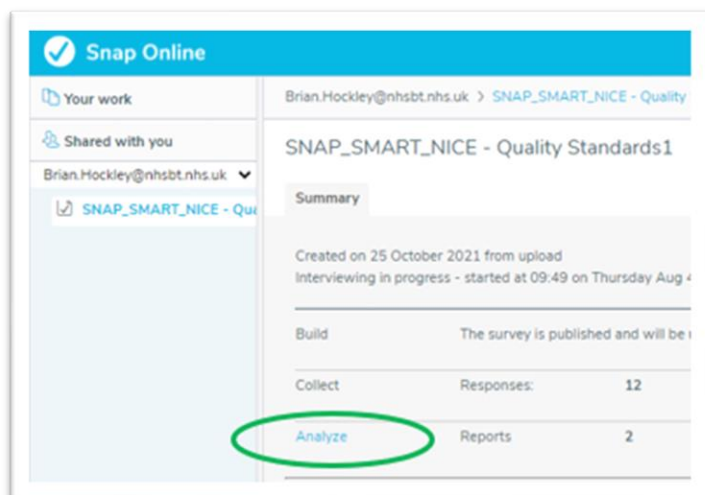
Enter your Snap online © account details that you used at registration and Select 'Log-in'



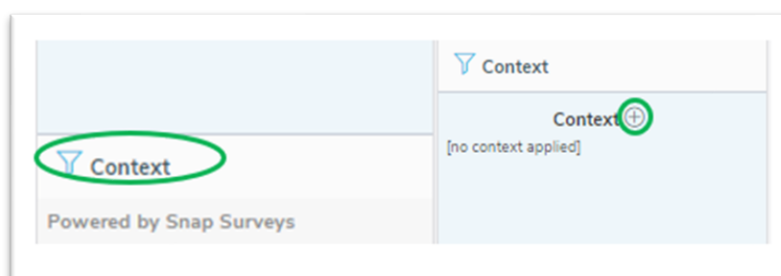
Look at the bottom left-hand side of the page and select the **'Shared with you'** tab.




The 'Shared with you' now moves to the top left-hand side of the page, the files shared with you are listed below. Select **'SNAP_SMART_NICE - Quality Standards1'**.

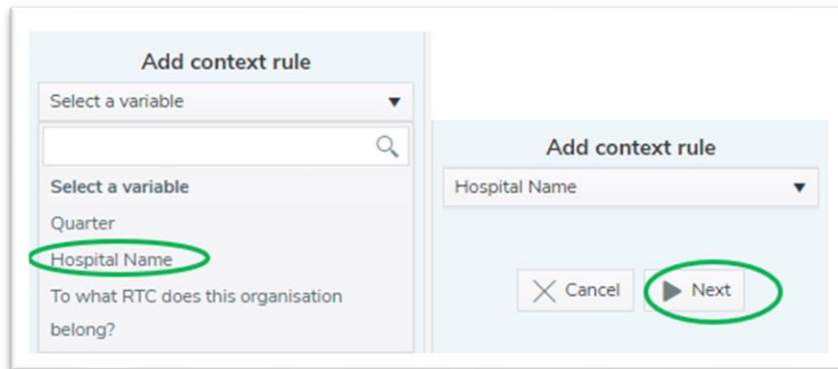


Select **'Analyze'**



You will now need to set the filters for the report you would like to view.

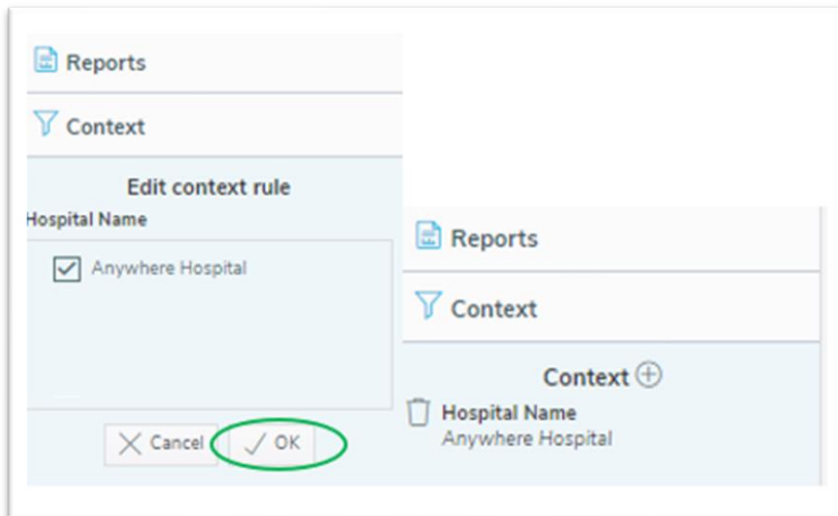
Select **'Context'** on the bottom left-hand side of the screen and then click on the 




The screen now changes to ask you which variables (contexts) to set. There will be 3 contexts to set in total:

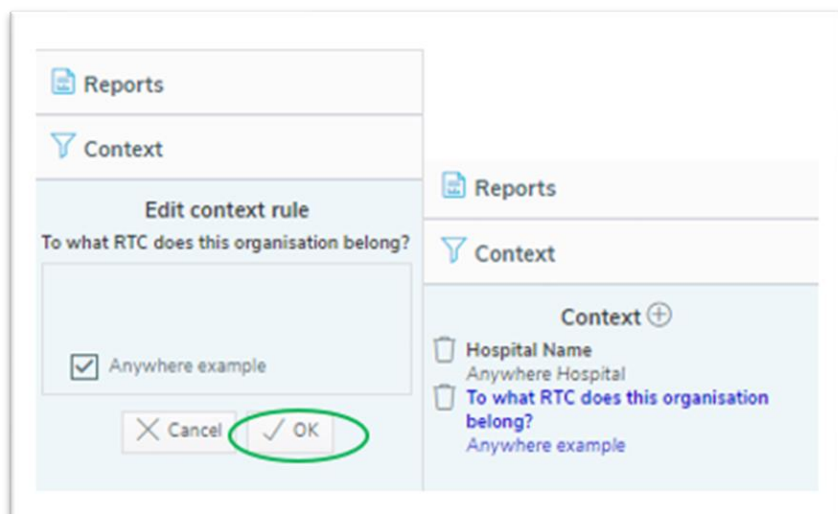
- Quarter
- Hospital Name
- RTC

All contexts must be set. Some regional users can access multiple sites/RTC and therefore filters are essential for all users. Select '**Hospital name**', then '**Next**'




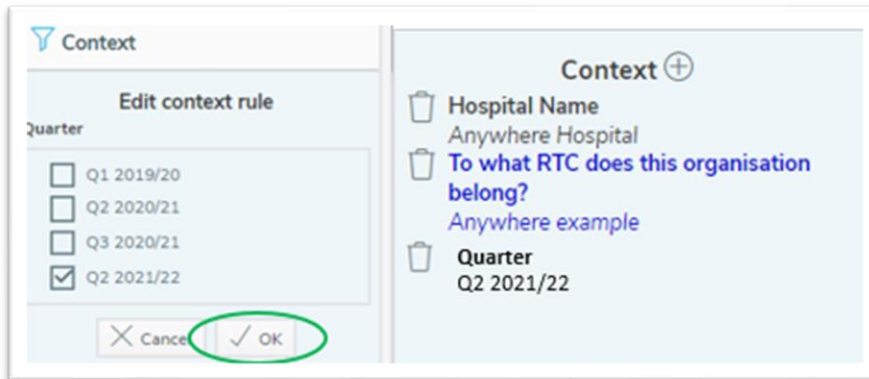
Tick the box for your hospital and select '**OK**'. **Select only one hospital.**

Your hospital name should now be applied under the Context 




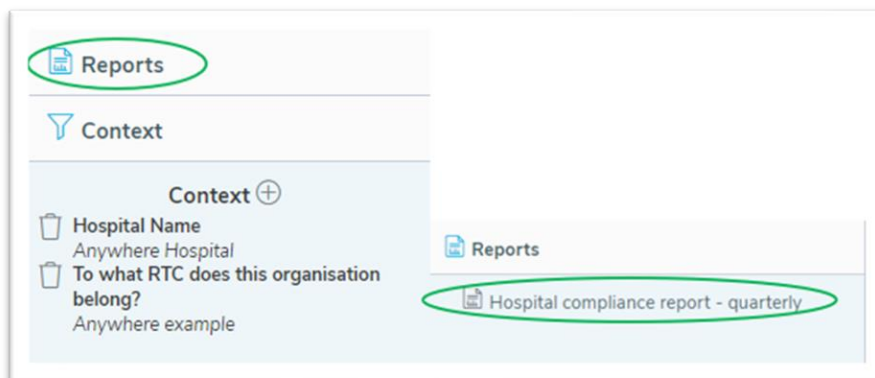
Now add the context for 'To what RTC does this organisation belong' variable. Tick the box for your RTC and select '**OK**'.

Your hospital name and RTC should now be applied under the Context 

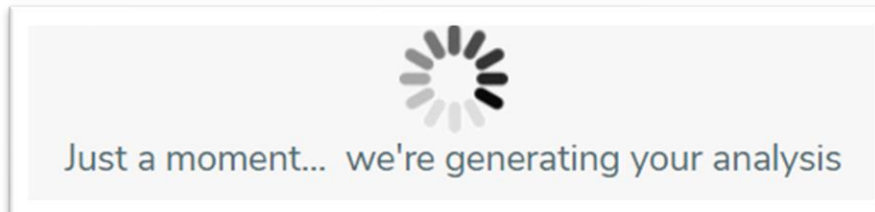


Now add the context for 'Quarter' variable. Tick the box for the quarter/ financial year that you audited and select 'OK'. **Select only one quarter. ***

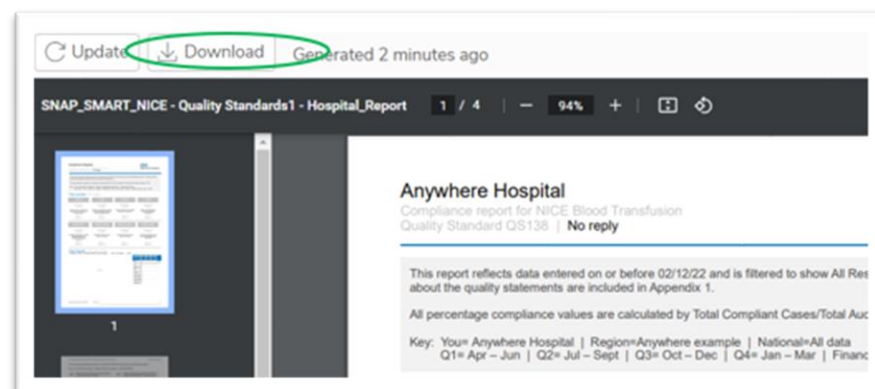
Your hospital name, RTC and Quarter should be applied under the Context  * If other users have entered data for other quarters, these appear. Only select your audited period or you will get a blank report. The same applies if you fail to select a quarter.



Now you have set **all 3** contexts, you can access your report. Select 'Reports' followed by 'Hospital compliance report - quarterly'



The system will now generate your report



Your report will appear. A 'Download'* option is available. * A report download is recommended after entering data. Be aware this is a live database, updating every time data is entered. For regional audit reviews, a report re-print once the audit period is closed is advised. This will update your report with any new regional figures.

Context

Context +

Hospital Name
Anywhere Hospital
To what RTC does this organisation belong?
Anywhere example

Reports

Context

Apply changes

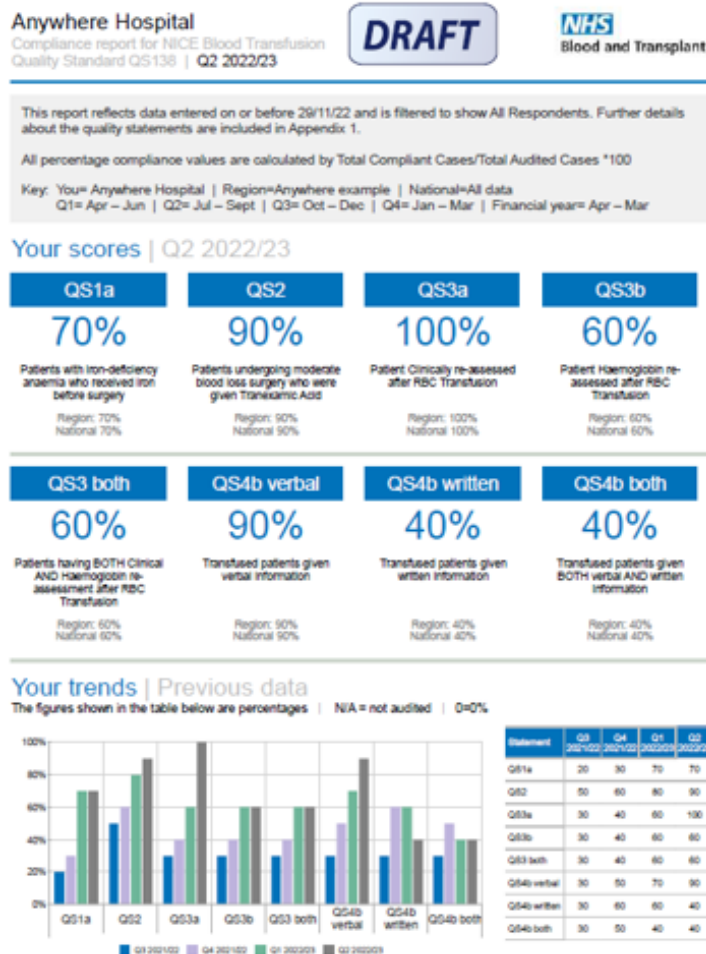
Context +

If you need to print another report, go back into 'Context', change the variable, e.g., Quarter, then 'Apply Changes'. This will update the report.

4.2 INTERPRETING YOUR HOSPITAL REPORT

A Hospital Report consists of 4 pages.

Hospital Report page 1 gives an overview of hospital results for that quarter, and trending data for the last four quarters audited.

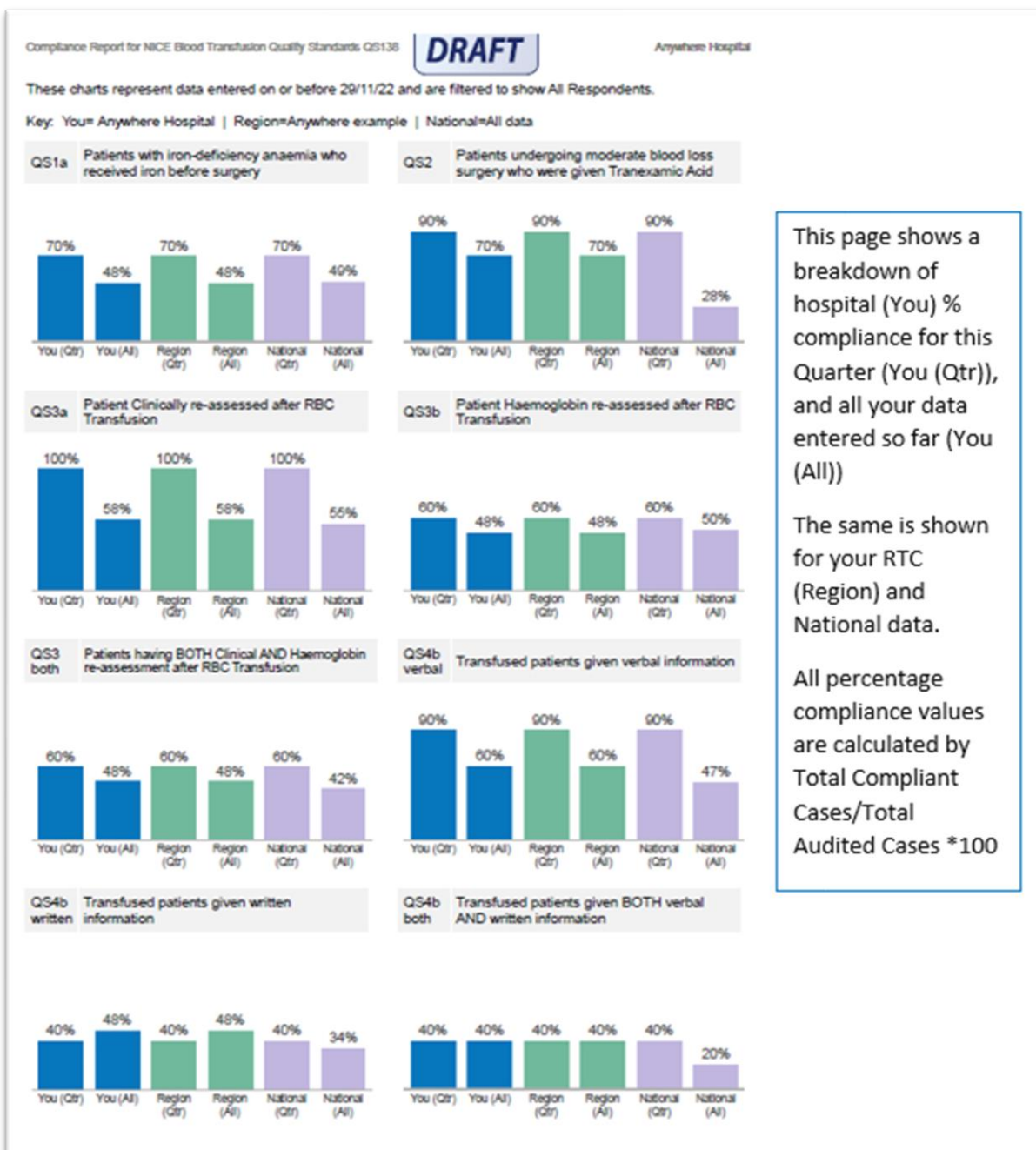


This section gives an overview of the report, the hospital and the region

This section shows headline hospital compliance figures for each element of the Quality Standard audited for 'this Quarter'. Regional and National data entered for the same quarter are also included. Those sections not audited will be greyed out.

This section shows your hospital % compliance trends for the last four quarters audited. Where compliance is 0 % this will show as 0. Where a statement has not been audited, this will display in the table as N/A

Hospital Report page 2 shows benchmarking data



Hospital Report page 3 shows absolute numbers, page 4 provides additional information on each QS

Compliance Report for NICE Blood Transfusion Quality Standards QS138 Anywhere Hospital

The table below shows the number of patients audited for each quality statement.

Key: You= Anywhere Hospital | Region=Anywhere example | National=All data

Quality statement	You (this Qtr)	You (all)	Region (this Qtr)	Region (all)	National (this Qtr)	National (all)
QS1a - Patients with iron-deficiency anaemia who received iron before surgery	10	40	10	40	10	428
QS2 - Patients undergoing moderate blood loss surgery who were given Tranexamic Acid	10	40	10	40	10	643
QS3a - Patient Clinically re-assessed after RBC Transfusion	10	40	10	40	10	436
QS3b - Patient Haemoglobin re-assessed after RBC Transfusion	10	40	10	40	10	436
QS3 both - Patients having BOTH Clinical AND Haemoglobin re-assessment after RBC Transfusion	10	40	10	40	10	436
QS4b verbal - Transfused patients given verbal information	10	40	10	40	10	670
QS4b written - Transfused patients given written information	10	40	10	40	10	670
QS4b both - Transfused patients given BOTH verbal AND written information	10	40	10	40	10	670

Total absolute numbers are shown for

You (Quarter)

You (All)

The same is shown for your region and national data

This is to add context when interpreting results.

Appendix 1 | NICE QS138 **DRAFT**

National Institute for Health and Care Excellence (NICE) Quality Standard QS138, published in 2016, covers the general principles of blood transfusion in adults, young people, and children over 1 year old. It describes high-quality care in four priority areas for improvement. It does not cover specific conditions that blood transfusion is used for.

QS138 constitutes of 4 Quality Statements (QS). This report has been generated by the NHS Blood and Transplant audit tool, which supports statements 2 and 3 as well as aspects of statements 1(a) and 4(b). Elements QS 1b (post-op iron deficiency) and QS 4a (patients who may need a transfusion) are excluded. Results are generated automatically from data entered via a unique hospital log in code.

Participation in this audit supports aspects of the Patient Blood Management Self-Assessment objectives (Section A1) of the Transfusion 2024 report – five-year plan supporting patient care across the NHS which highlights key priorities for clinical and laboratory transfusion practice.

QS 138 Quality Statements	Rationale (from NICE QS138)	Report reference
QS1a - People with iron-deficiency anaemia who are having surgery are offered iron supplementation before surgery	Preoperative anaemia is associated with increased postoperative morbidity and mortality, and with increased transfusion needs. Treating iron deficiency with iron supplements can reduce the need for blood transfusion. This avoids serious risks associated with blood transfusion, for example infection, fluid overload and incorrect blood transfusions being given. It may also reduce the length of hospital stays and the cost to the NHS. Depending on the circumstances, the cause of the iron deficiency should be investigated before or after surgery.	QS1a
QS2 - Adults who are having surgery and are expected to have moderate blood loss (>500ml) are offered tranexamic acid.	Tranexamic acid can reduce the need for blood transfusion in adults having surgery. This avoids serious risks associated with blood transfusion, for example infection, fluid overload and incorrect blood transfusions being given. It may also reduce the length of hospital stays and the cost to the NHS.	QS2
QS3 - After each unit of red blood cells they receive, unless they are bleeding or are on a chronic transfusion programme, people a) are clinically reassessed b) have their haemoglobin levels checked	Clinical reassessment and measurement of haemoglobin levels after each unit of red blood cells transfused helps healthcare professionals to decide whether further transfusions are needed. This helps avoid the serious risks associated with red blood cell transfusions, for example infection, fluid overload and incorrect blood transfusions being given. It may also reduce the length of hospital stays and the cost to the NHS. For children and for adults with low body weight, red blood cell transfusion volumes should be calculated based on body weight.	QS3a (clinically reassessed) QS3b (Hb checked) QS3 Both (Both QS3a/QS3b – for reference)
QS4b - People who have had a blood transfusion are given verbal and written information about blood transfusion.	It is important that people fully understand the benefits and risks of a blood transfusion, so they can give informed consent. Discussing the alternatives and knowing that they cannot donate blood after a blood transfusion, helps people to decide if they want one. However, some blood transfusions are not planned and are carried out in an emergency. In these cases, information should be given after the transfusion, including advice about the implications of the transfusion. Helping people to understand the process and its implications can improve their experience of receiving a blood transfusion.	QS4b verbal (for reference) QS4b written (for reference) QS4b Both (Both verbal and written)

Page 4: The appendix gives background on the QS138; a breakdown of the Quality Statements and the rationale of why compliance is important in optimising patient care. This provides the additional clarity on the significance of the report and is designed to aid discussions with Hospital Transfusion Committees, Audit and Clinical Governance Teams and external inspections, e.g., by the Care Quality Commission.

5. Frequently asked questions

1. Q: When I print a report, why are some or all the fields greyed out?

A: This happens if: there are any QS that you did not enter data for; if you have selected an audit period (quarter) that you haven't entered any data for; or if you have not selected a quarter at all. Regardless of which apply, the last four quarter trend chart will always appear on page 1. Refresh your screen by selecting 'Snap online ©' in the top right-hand corner, then re-select your context settings, making sure you select the correct quarter you wish to view.

2. Q. Can I only enter a dataset for some of the QS?

A. You can enter data for all or some if it is within the same Quarter/Financial year. Only enter one dataset per QS per Quarter though.

3. Q: My Snap online © session timed out and/or I got an error message?

For security reasons, Snap online © session will time out after a period of inactivity. You will need to log back in. If an error message appears when you are retrieving a report, try refreshing the page.

4. Q: My colleague is registered as a user but is leaving, can I take over their account?

A: The registrant will need to inform us so that we can update our records/ assign a new user.

5. Q: I have just entered a dataset; I cannot see the report?

A: If you already had your Snap online © account open when you entered data, try refreshing your page, this will update the session with any newly added data.

6. Q: Why can I see more than one Quarter on my Hospital Report?

A: Check your context settings. Only one Quarter should be selected at a time

7. Q: What reports can I access?

A: Hospital users can only access Hospital Reports. A Regional user, e.g., a PBM Practitioner will be able to access Regional Reports to share at RTC meetings.

8. Q: I'm not sure my hospital 4-digit login code for data entry is correct and/or whether my Snap online © account permissions and/or settings are correct, what should I do?

A: Contact NHSBT. Do not enter any data or download any reports.

9. Q: Can I share the 4-digit login code and Snap online © account with my colleague?

A. No. Use of *QS138 Quality Insights* is allocated only to those who have agreed to the User Agreement. Sharing of codes and passwords breaches the User Agreement.

10. Q: I have entered a dataset incorrectly or wish to delete a dataset, what should I do?

A: Contact NHSBT

6. Troubleshooting and Contact Information

Should you encounter any issues, please first refer to Section 5 to see if your query is covered here.

If you are unable to resolve your issue, please contact NHSBT by emailing our dedicated inbox:
NICEQS138@nhsbt.nhs.uk

This inbox is monitored Monday – Wednesday 09:00-17:00. We aim to respond to queries within 1 week.

We also welcome any feedback on *QS138 Quality Insights* and would love to hear how you are using the tool where you work.

General SnapSurveys © support hub:

<https://www.snapsurveys.com/support-snapxmp/>

7. References

- 1 National Institute for Health and Care Excellence (NICE) (2016) Blood Transfusion Quality Standard [QS138] URL <https://www.nice.org.uk/guidance/qs138>
- 2 National Institute for Health and Care Excellence (NICE) (2015) Blood Transfusion [NG24] URL <https://www.nice.org.uk/guidance/ng24>
- 3 National Blood Transfusion Committee and NHS Blood and Transplant (2020) Transfusion 2024: A 5-year plan for clinical and laboratory transfusion. <https://www.transfusionguidelines.org/uk-transfusion-committees/national-blood-transfusion-committee/transfusion-2024>
- 4 National Comparative Audit of Blood Transfusion. 2021 National Comparative Audit of NICE Quality Standard QS138 URL <https://nhsbt.dbe.blob.core.windows.net/umbraco-assets-corp/25926/2021-nice-qs138-audit-report-generic.pdf>
- 5 The PBM in Elective Surgery Working Group, on behalf of the National Comparative Audit in Blood Transfusion (NCABT) Steering Group. The 2016 Patient Blood Management in adults undergoing elective, scheduled surgery (2017). URL <http://hospital.blood.co.uk/audits/national-comparative-audit/surgical-audits/patient-blood-management-in-adults-undergoing-elective-scheduled-surgery-2016/>

Appendix 1

AUDIT GUIDANCE: QS1A

QS138 Quality Insights	Audit Population guidance
<p>Important: Patient cases should be selected at random within the applicable patient group and date range (Q/FY). Selecting/Deselecting cases to include will bring bias to results.</p>	
<p>QS1a: Iron supplementation <u>given</u> to iron-deficient patients pre-surgery</p>	<p>Planned elective surgical patients over the age of 1 year should be considered for audit. Audit random cases regardless of the surgery type and risk of bleeding.</p> <p>Exclude patients on a chronic transfusion programme</p> <p>Use your local hospital reference ranges and policy to identify a minimum of 10 elective surgical pre-operative patients who showed signs of iron-deficiency <u>at any point</u> during the pre-op period. It is recommended that you initially view results of patients attending pre-op clinic. This will allow you to follow up any iron-deficient patients to see whether there is evidence that iron supplementation was given before surgery. Further guidance on iron-deficiency is available in the PBM toolkit: https://hospital.blood.co.uk/pbm-toolkit/</p> <p>Do not review cases solely from an IV iron clinic or results only from the day of surgery as this will bias your results.</p> <p>You will likely need to review a higher number of cases initially to identify sufficient cases for audit, e.g., if 50% of patients are iron-deficient at pre-assessment clinic, you will need to review 20 cases to identify enough patients to meet the minimum of 10 required to audit. In this instance, the final total number of audited iron-deficient cases would be 10 (not 20). Patients who were iron-deficient but had a normal Hb at the point of surgery should be included.</p> <p>NICE define iron supplementation as follows: <i>People should have their hemoglobin levels checked at least 2 weeks before surgery, if possible and necessary for the procedure they are having. If they have iron-deficiency anaemia, they should be offered iron supplementation. Oral iron should be offered initially and started at least 2 weeks before surgery. If oral iron is not appropriate, intravenous iron should be considered.</i>¹</p>

Appendix 2

AUDIT GUIDANCE: QS2

QS138 Quality Insights	Audit Population guidance
<p>Important: Patient cases should be selected at random within the applicable patient group and date range (Q/FY). Selecting/Deselecting cases to include will bring bias to results.</p>	
<p>QS2: Adults undergoing moderate blood loss surgery are <u>given</u> Tranexamic Acid (TXA)</p>	<p>Audit a minimum of 10 patients</p> <p>Audit 'Adult' patients only (aged 18 years and older)</p> <p>Exclude patients where use of TXA is contra-indicated: https://bnf.nice.org.uk/drugs/tranexamic-acid/#contra-indications</p> <p>Audit patients who have undergone operations/codes as per the National Comparative Audit Re-Audit of Patient Blood Management in Adults undergoing elective, scheduled surgery⁵ or surgical trauma cases AND a moderate blood loss is anticipated.</p> <p>Moderate blood loss is defined as >500 mls in the NICE Blood Transfusion Guideline [NG24]²</p> <p>Interpret QS 2 compliant cases as those with evidence that the patient received tranexamic acid.</p>

Appendix 3

AUDIT GUIDANCE: QS2 – MODERATE BLOOD LOSS SURGERY EXAMPLES

Taken from the 2016 Patient Blood Management in adults undergoing elective, scheduled surgery⁵

Procedure Descriptions	OPCS Codes
Primary unilateral total hip replacement	W37.1, W38.1, W39.1 with a Z94.2, Z94.3 or Z94.4
Primary bilateral total hip replacement	W37.1, W38.1, W39.1 with a Z94.1
Primary unilateral total knee replacement	W40.1, W41.1, W42.1 with a Z94.2, Z94.3 or Z94.4
Primary bilateral total knee replacement	W40.1, W41.1, W42.1 with a Z94.1
Unilateral revision hip replacement	W37.3, W37.4, W38.3, W38.4, W39.3 with a Z94.2, Z94.3, Z94.4
Unilateral revision knee replacement	W40.3, W40.4, W41.3, W41.4, W42.3 with a Z94.2, Z94.3, Z94.4
Colorectal resection for any indication (open or laparoscopic)	H29, H33, H048, H061, H062, H099, H103, H108, H41.1
Open arterial surgery e.g.: scheduled ((non-ruptured) aortic aneurysm repair, infrainguinal femoropopliteal or distal bypass)	L19.3 - L19.6, L21.3 - L21.6, L49, L51, L57, L59
Primary coronary artery bypass graft	K44.1
Valve replacement +/- CABG	K25 - K29 (INCLUSIVE)
Simple or complex hysterectomy	Q07 - Q08 (INCLUSIVE)
Cystectomy	M34.3, M34.4, M35.9
Nephrectomy	M02.1, M02.3, M02.5, M03.1, M03.9
# neck of femur (arthroplasty)	W19.1, W24.1, W46.1 to W46.9, W47.1 to W47.9, W48.1 to W48.9

ICD-10 codes for ACS Unstable Angina = I20.0

STEMI OR NSTEMI = I21.9

Appendix 4

AUDIT GUIDANCE: QS3

QS138 Quality Insights	Audit Population guidance
<p>Important:</p> <p>Patient cases should be selected at random within the applicable patient group and date range (Q/FY). Selecting/Deselecting cases to include will bring bias to results.</p>	
QS3:	<p>Audit a minimum of 10 patients</p> <p>Patients over the age of 1 year should be considered for audit</p> <p>Ensure the patients you are auditing are not bleeding or on a chronic transfusion programme</p> <p>This QS is to evaluate how often a single unit approach is taken, regardless of the number units transfused overall.</p> <p>Select random cases where a patient has received a transfusion of red cells. Where more than one unit was given, select one 'post unit' episode. Do not select patients who have only had one unit (or only had more than one unit) as this will bias your results.</p>
QS3a – Clinical reassessment after red cell transfusion	<p>A clinical assessment as defined by QS138 is the following:</p> <ul style="list-style-type: none"> - <i>Asking the person if their anaemia symptoms have resolved.</i> - <i>Asking the person about any new symptoms that might indicate an adverse response to transfusion (such as circulatory overload).</i> - <i>Reviewing the vital signs taken before, during and after the transfusion.</i> - <i>Any further clinical assessment that could be needed.</i>¹ <p>The list provided by NICE is deliberately not prescriptive, leaving it open to interpretation for local contexts.</p>
QS3b – Haemoglobin checked after red cell transfusion	<p>Allow up to 24 hours post completion of the transfused unit for a haemoglobin and clinical reassessment to be done.</p>
QS3 both – Clinical and Haemoglobin reassessment after red cell transfusion	<p>Evidence that both clinical reassessment and a haemoglobin check was carried out</p>

Appendix 5

AUDIT GUIDANCE: QS4B

QS138 Quality Insights	Audit Population guidance
<p>Important: Patient cases should be selected at random within the applicable patient group and date range (Q/FY). Selecting/Deselecting cases to include will bring bias to results.</p>	
<p>QS4:</p> <p>QS4b verbal - Transfused patients were given verbal information about blood transfusion</p> <p>QS4b written - Transfused patients were given written information about blood transfusion</p> <p>QS4b (both) – Transfused patients were given verbal and written information about blood transfusion</p>	<p>Audit a minimum of 10 patients</p> <p>Patients over the age of 1 year who have had a transfusion of red cells should be considered for audit</p> <p>Where a patient is considered too young, there should be evidence that information was given to a parent/guardian as applicable</p> <p>Verbal and written information as defined by QS138 should include:</p> <ul style="list-style-type: none"> - <i>The reason for the transfusion.</i> - <i>The risks and benefits.</i> - <i>The transfusion process</i> - <i>Any transfusion needs specific to them.</i> - <i>Any alternatives that are available, and how they might reduce their need for a transfusion.</i> - <i>That they are no longer eligible to donate blood¹</i> <p>The list provided by NICE is deliberately not prescriptive, leaving it open to interpretation for local contexts.</p> <p>Evidence that both verbal and written information were given to a transfused patient.</p>

Appendix 6

QS138 QUALITY INSIGHTS AUDIT PROFORMA (PAGE 1 OF 3)

Please Enter Your 4 Digit Login Code

What quarter does this audit cover?

Financial Year

What speciality are you auditing (e.g., orthopaedics, gynae etc)

Please select which part of the quality standard you wish to audit (choose all that apply)

QS 1 Iron supplementation	
QS 2 Tranexamic acid for adults	
QS 3 Reassessment after red blood cell transfusions	
QS 4 Patient information	

QS 1 Iron Supplementation

Does your hospital operate a pre-operative anaemia pathway?

YES	
NO	

How many cases are included in this audit? (Minimum of 10)

How many received iron supplementation **before** surgery?

Does your hospital operate a post-operative anaemia pathway?

YES	
NO	

Appendix 6

QS138 QUALITY INSIGHTS AUDIT PROFORMA CONTINUED (PAGE 2 OF 3)

NICE QS 2 Tranexamic Acid for Adults

How many cases are included in this audit? (Minimum of 10)

How many of these cases received tranexamic acid?

NICE QS 3 Reassessment After Red Blood Cell Transfusion

How many cases are you reviewing? (Minimum of 10)

How many of these cases were clinically re-assessed after the red cell transfusion?

How many of these cases had the haemoglobin level checked after the red cell transfusion?

How many of these cases had BOTH a clinical re-assessment AND the haemoglobin level checked after the red cell transfusion?

Appendix 6

QS138 QUALITY INSIGHTS AUDIT PROFORMA CONTINUED (PAGE 3 OF 3)

NICE QS 4 Patient Information

How many cases are being audited? (Minimum of 10)

How many of these cases have documented evidence that they were given **verbal** information about blood transfusion?

How many of these cases have documented evidence that they were given **written** information about blood transfusion?

How many of these cases have documented evidence that they were given verbal AND written information about blood transfusion?

End of audit proforma

****When you complete your data entry on the Snap Survey ©, a summary page will appear.**

Please ensure that you press 'Next' and then 'Submit' to send your data to the server**