NHS England

NCIP | Data insights for clinical improvement

Owning your clinical data

November 2024

A guide to support users of the National Consultant Information Programme (NCIP) portal to improve HES data quality

NHS IMPACT
Improving Patient Care Together

GIRFT
GETTING IT RIGHT FIRST TIME

Introduction, about this toolkit and contents

Introduction

NCIP provides a unique opportunity to review NHS practice, helping support clinical quality and patient safety. Your trust submits your surgical data to NHS England, and this is used to produce dashboards in the NCIP portal. Making sure this data is recorded accurately is important for you, and your patients.

The NCIP team are aware of common queries about data collection from conversations we have had with clinicians using the portal. We've produced this toolkit to help consultants to explore and address these themes.

About this toolkit

The first section of this toolkit answers common questions about data in the NCIP portal and includes checklists to help understand and resolve queries.

If you would like to learn more about the flow of patient data and how data is recorded, please see the further information section.

The guide is aimed primarily at consultant surgeons but may also be useful for medical directors, responsible officers using the portal, Chief Clinical Information Officers (CCIO) and clinical coding teams. This toolkit has been written to be consistent with national financial and data quality requirements.

Contents

- NCIP - Getting It Right First Time – GIRFT
- Log in to the portal via: ncip.model.nhs.uk
- Contact the NCIP team: England.ncip@nhs.net

GETTING IT RIGHT FIRST TIME

1. Why can't I see my dashboard(s) in NCIP?

Commonly, this is because either:

- The specialty or procedure is not currently included in the NCIP portal. NCIP aims to cover 80% of activity for each specialty that it includes, focusing on key procedures.

Or

- You have fewer than 6 procedures attributed to you in Hospital Episode Statistics (HES). This means a dashboard will not be visible to you. This may be because there hasn't been enough activity within the available timeframe in NCIP.

Or

- Your surgical activity has been attributed to another consultant colleague in the trust HES data **(see question 2).**

Tip: work with your specialty service manager and/or business intelligence manager to ensure PAS information is accurate.

Check	Action to take
☐	Confirm that the specialty/procedure is included in the portal. See the full list of NCIP dashboards here.
☐	Check that you have undertaken 6 or more procedures listed in the dashboard(s) within the most recent timeframe available in NCIP.
☐	If you are a new consultant, ensure patients are being admitted under your name in the patient administration system (PAS) when you operate. Check the portal again when the next data is released (quarterly).
☐	If taking these actions doesn't help, see **question 2**.

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2. Why don't the activity volumes in my NCIP dashboard(s) match my personal log?

Commonly, this is because either:

- NCIP assigns episodes to the named responsible consultant from HES. This may not match the actual operating surgeon recorded in theatre systems or Electronic Patient Record (EPR) admission modules because HES data is taken from the PAS module within the EPR. **See appendix 3 for common reasons for incorrect attribution and how to address these.**
- In the case of multiple consultants operating, HES can only identify one individual as the primary responsible consultant for the episode of care.

Or

- The episode of care may not match the NCIP coding algorithm and is therefore not included in the dashboard. This could be due to clinical coding or admission details e.g. admitted as emergency rather than an elective episode. **See question 3 for more information on coding.**

Tip: work with your specialty service manager and/or clinical informatics team to develop a report to validate your operative episodes and establish a process to update PAS data monthly as per the actions listed.

Check	Action to take
☐	Compare your personal logs or theatre system data to your corresponding operative Finished Consultant Episodes (FCE) in the PAS, specifically looking at who is recorded as the 'responsible consultant'.
☐	Validate each operative FCE where you are the primary operating surgeon, or responsible consultant for trainees.
☐	Ensure admission details are accurate and consistent between different parts of your EPR and PAS modules e.g. check if the responsible consultant on PAS matches the EPR Admission module consultant.
☐	Update any discrepancies in the PAS ahead of the Secondary Uses Service (SUS) data submission cut-off. This will ensure data received by NHS England is accurate.
☐	Ensure that the clinical coding data represent the procedure that was performed. For information on how to address clinical coding discrepancies, see question 3.

3. Why does my patient's diagnosis and/or procedure coding not reflect my surgical practice?

Commonly, this is because:

- Clinical coded data relies on accurate, complete and specific clinical information from the patient medical record. If coders do not have full access to the operation record, or if data has been recorded incorrectly e.g. at admission, this can result in inaccurate data.
- Clinical documentation within the medical record is not sufficient. Clinical coders are not permitted to interpret findings or code un-verified or ill-defined diagnoses or procedures.

If you are unable to resolve your query after using this guide, contact the NCIP team for support: England.ncip@nhs.net

Tip: work with your clinical coding team to understand how your procedures are being coded and how the codes compare to NCIP coding recipes.

Check	Action to take
☐	Review patient records and coded data with your clinical coding department. To assist the review, you can view the dashboard coding algorithm in the 'Resources' section of the NCIP portal. (See appendix 4 for instructions on how to view coding recipes). **Note: Clinical coding colleagues can access the NCIP coding algorithms via Model Health System, visit** www.model.nhs.uk
☐	Use the NCIP download to support choosing which records to review **(see instructions in appendix 4 on how to access the download).** The download will not include patients where the clinical coding has not met the coding algorithm criteria. You may wish to add relevant patients to your review to determine reasons for the episode of care not meeting the criteria. FCEs may not meet coding algorithm criteria either due to insufficient diagnosis/procedure clinical coding or incorrect admission data, or because it is not a code combination NCIP currently uses.

Top tips for more accurate coding

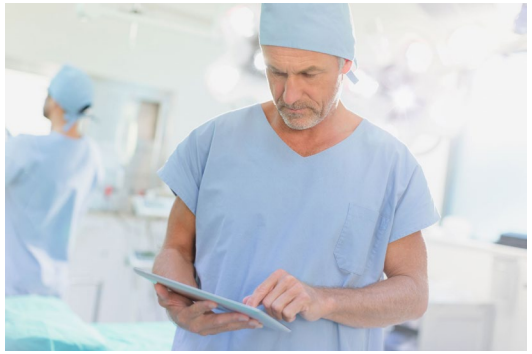
- Regularly review coded data and patient records with your coding manager to resolve any queries about diagnoses and/or procedures. This is particularly helpful for complex or innovative procedures and will support accurate reflection of these procedures as coded data.
- Tick boxes on operation records (paper/electronic) can be a useful method to accurately record diagnoses and procedures when developed with your digital team's configuration lead and your coding manager.
- Ongoing clinical education for clinical coders can reduce the number of queries about patient diagnoses and procedures and increase accuracy of coded data. Education can include coders attending your departmental meetings or vice-versa, coders attending ward rounds or bespoke teach-in sessions and working with the coding manager/trainer to develop guidance.
- NCIP uses the first 20 diagnosis codes and the first 24 procedure codes. If important codes are recorded beyond these positions, they will not be used by NCIP dashboards.

How did you improve the data?

"I engaged with the clinical coding department who were keen to work with me. I introduced tick boxes on the operation record to make it clear for coders which procedures had been undertaken in theatre. An individual within the coding team was appointed to code upper GI cases. We meet regularly to discuss any queries they have about procedures I have done. Queries are logged on a spreadsheet."

Hassan Malik

Hepatobiliary surgeon specialising in highly complex surgical cases at Liverpool FT



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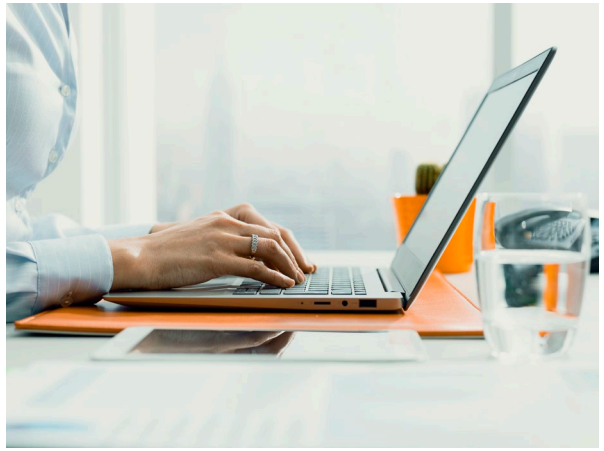
Further information: Patient data flow

NCIP uses HES to present consultant surgical activity data for key elective procedures.

NHS England is collecting theatre data from all trusts in England with the ambition of making this data available to programmes like NCIP to provide greater granularity for operative episodes in the future.



Tip: work with your specialty service manager/business intelligence manager to understand your local data flow as per point four in the table below.

Important points to note about data flow

- Admission details and clinical coding data are inputted by separate teams within the trust.
- Post discharge, admission and clinical coding data streams are combined to create a digital representation of the episode of care which is then submitted monthly to NHS England by the trust.
- Theatre data systems capture detailed information about each surgery but are not always inter-operable with the PAS or EPR.
- Configuration of EPRs and PAS varies among trusts. Changes made to a patient's EPR such as admitting consultant may not be represented in the PAS due to local rules around who holds PAS editing rights. PAS editing rights for key groups such as Ward or Theatre Clerks, supported by auditable data entry standards, can be a cost-effective and efficient solution to ensuring the correct responsible consultant flows from the trust's PAS to HES.

See appendix 1 for details on how patient data are generated and captured for elective care pathways.

Further information: Accurate recording of data

Activity is attributed to an individual surgeon based on the 'responsible consultant' data field in HES. Therefore, accurate recording of the responsible consultant for each FCE is essential for ensuring consultant activity is correctly captured in HES.

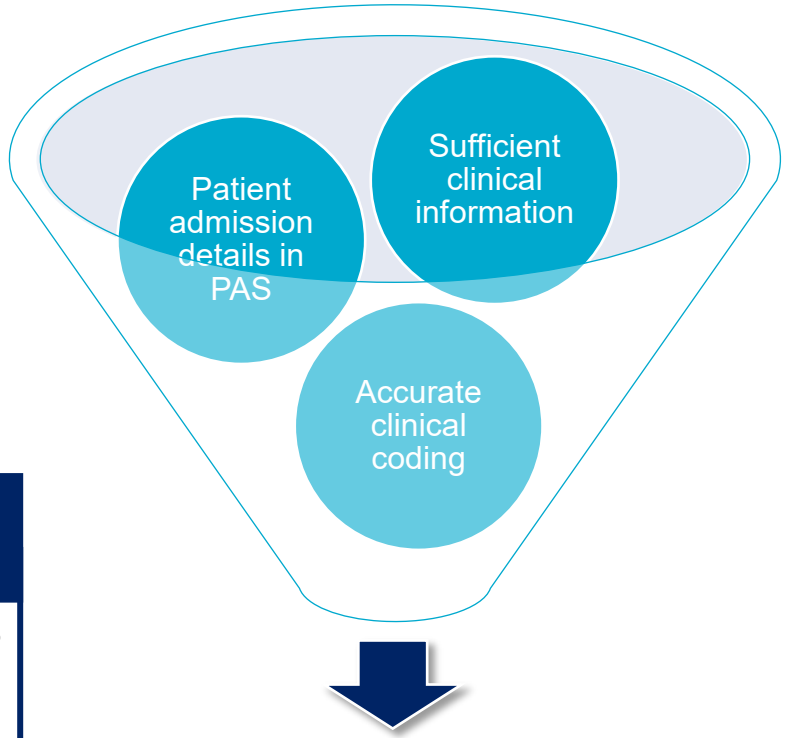
Accurate patient admission details and clinical coding ensure that activity is allocated to the most clinically relevant dashboard in the NCIP portal.

Activity is allocated to a single dashboard even when there are multiple procedures. An episode with multiple surgical procedures will be allocated to the dashboard that includes the procedure that ranks highest in the agreed hierarchy (based on level of clinical risk, patient impact or procedure complexity) for the specialty.

Accurate attribution

In summary, accurate attribution to a named individual consultant and to the most appropriate NCIP dashboard is achieved by:

- ✓ **Correct data entry of patient admission details along the care pathway in the PAS, ensuring that the responsible consultant for the surgical FCE is the primary operating surgeon or the consultant responsible for the primary operating surgeon.**
- ✓ **Accurate clinical coding of admitted patient care. Clinical coding relies on sufficient clinical information from patient medical records.**



Correct attribution of activity to the primary operating consultant and specialty dashboard

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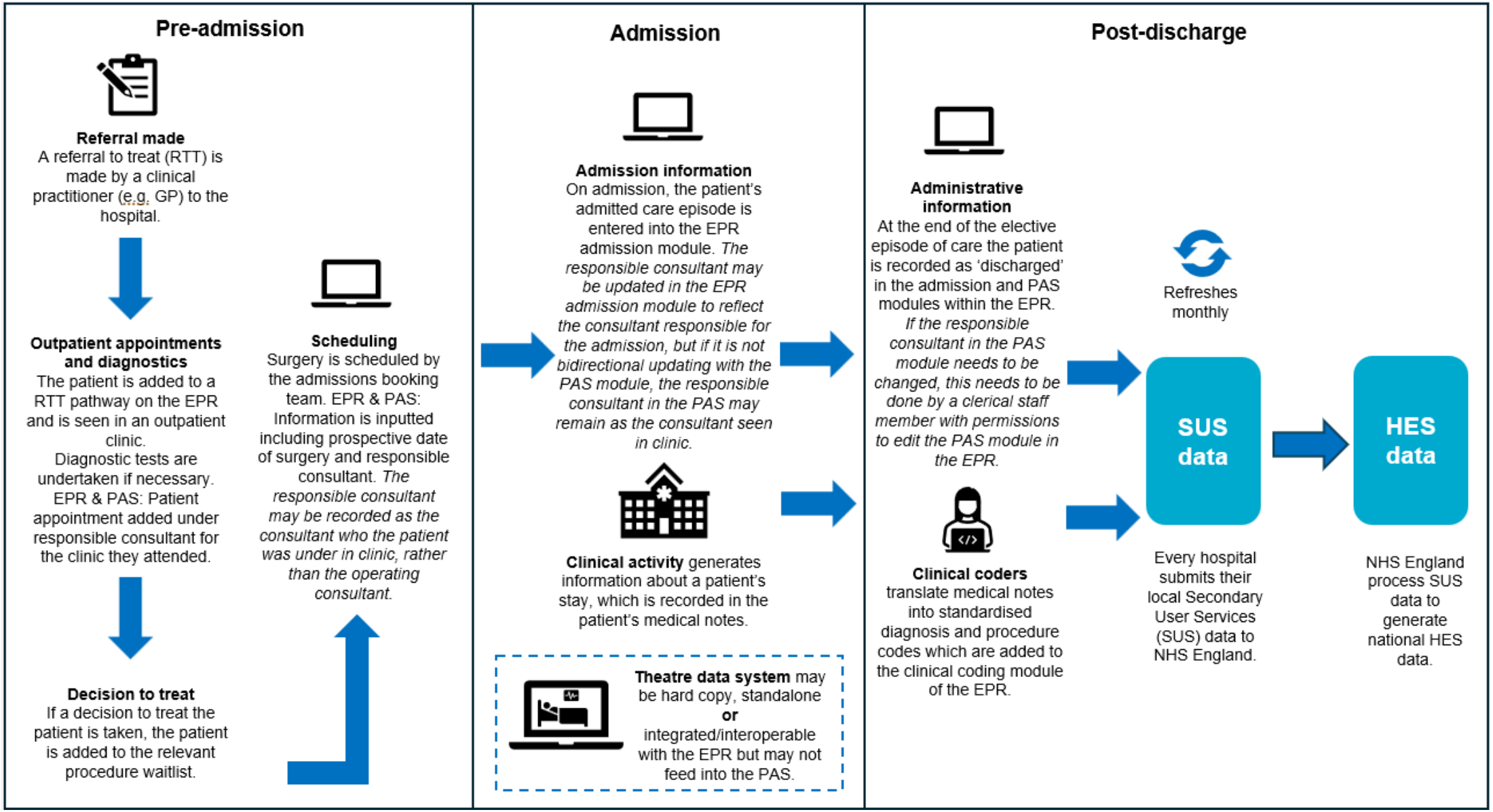
Appendix 1: Simplified elective pathway patient data flow

The illustration below shows how patient data are generated & captured for elective care pathways within the PAS and the trust's EPR that populate the HES dataset.



Appendix 2: Understanding PAS and EPR

An Electronic Patient Record (EPR) consists of various modules (e.g. admission, outpatients, booking, prescribing, etc) centred around a Patient Administration System (PAS) module. All these modules hold key patient data.

HES data is extracted solely from the PAS using nationally specified data fields.

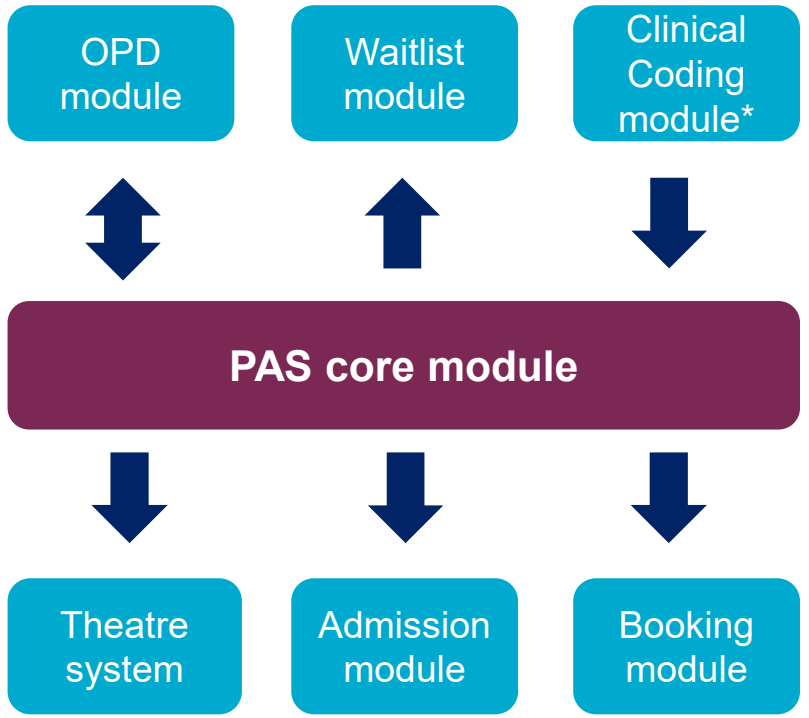
Trusts may limit roles that have PAS editing rights meaning that PAS can update EPR modules, but users cannot update the PAS in return.

Figure 1 provides an example of how assigning the 'responsible consultant' may be handled between PAS and EPR modules e.g. following a GP referral being logged on the PAS. The only other time it may be updated is when the patient visits the outpatient department (OPD).

Each trust's module interface varies based on local configuration, standard operating procedures (SOPs), role-based access controls (RBAC) and administration policies. **Directorate operational teams, trust digital configuration leads and CCIOs can support change in PAS updating rights for roles such as ward and theatre clerks.** This can help to ensure the consultant responsible for the episode of care is updated.

Figure 1 shows how individual modules interact with the PAS module. The direction of the arrow indicates whether the module can update data.

Figure 1: Example EPR Flow Diagram



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Appendix 3: Common reasons for consultant attribution issues

Your specialty service manager or business intelligence manager can explore these issues and work with the relevant staff to resolve the issues described in the following table.

Issue	How to explore this	How to resolve this
The operating consultant is different from the consultant who sees the patient in the outpatient clinic, but the FCE is attributed to the outpatient/listing consultant. Often, PASs and EPRs retain the consultant the patient saw in outpatients (OPD) through to the post-discharge GP letter, meaning that the actual operating consultant (or the consultant responsible for the operating surgeon) is not recorded in the PAS.*	To understand how the trust manages the responsible consultant in the PAS, review with directorate business manager and the digital team's configuration lead: • the PAS editing rights of waiting list, booking, admission, ward and theatre clerks for elective procedures • whether the PAS-EPR interface allows responsible consultant updating and validating for elective procedures.	An efficient solution is for the trust to provide PAS editing rights and standards for both admission and ward clerks to update the admitting/responsible consultant in the PAS (as well as EPR) from the OPD consultant. It may be helpful to undertake a local directorate audit of the listed primary operating consultant compared to the listed responsible consultant in the PAS for elective and non-elective episodes of care.
The non-elective patient is admitted under the consultant on call instead of the consultant who operates.	Compare on call rotas to theatre data and the 'responsible consultant' field in trust PAS data. Review trust practices for non-elective cases where supervising/procedure consultant differs from on-call consultant.	Establish a SOP so the PAS can be updated to reflect the primary operating consultant, or the consultant responsible for the operating surgeon, rather than the on-call consultant. The trust may have a policy that the patient remains under the on-call consultant.
Multiple consultants operated on the patient in theatre, meaning the primary operating consultant is harder to identify.	Identify how the trust requires multi-consultant procedures to be recorded in the PAS 'responsible consultant' field.	Work with Operations, Digital and PAS teams to agree a consistent and useful approach regarding which operating consultant is recorded as 'responsible consultant' in PAS.

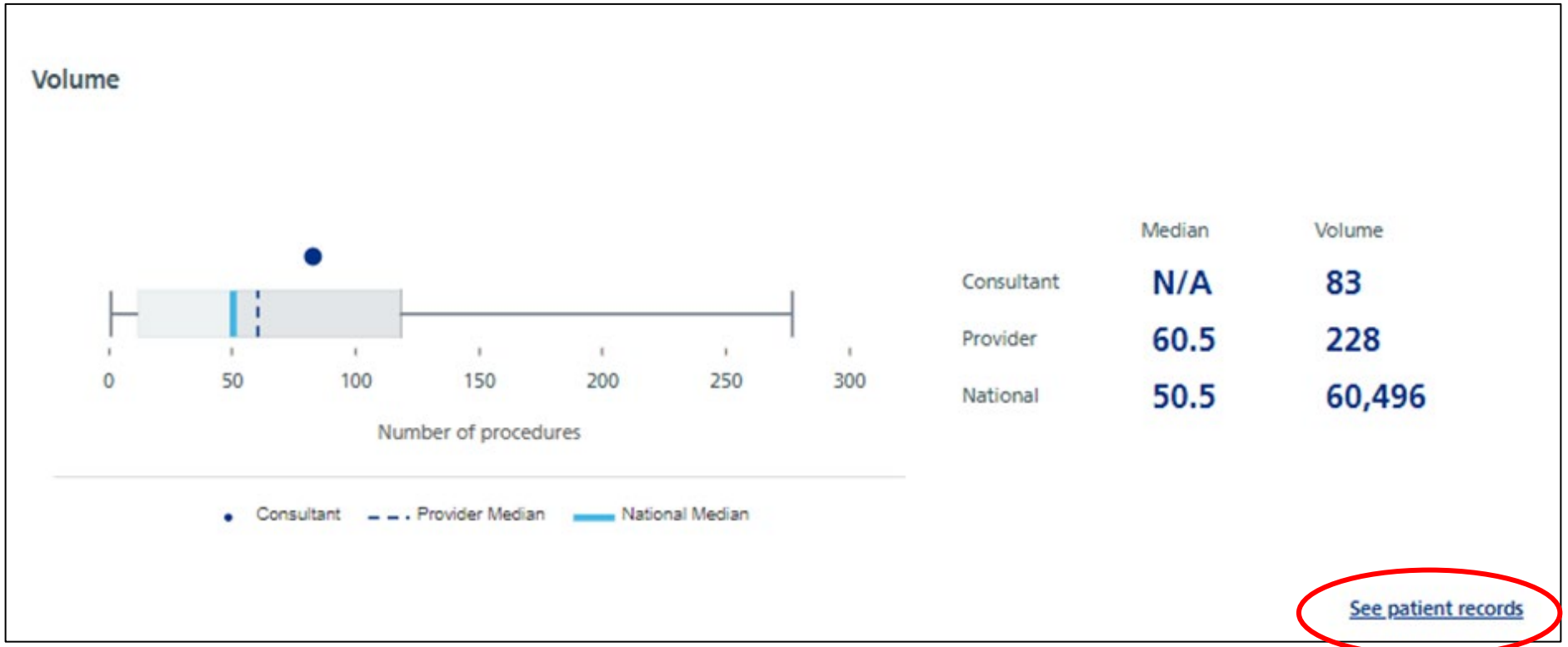
***EPR modules such as admission, booking etc are not always configured to update the PAS consultant field, given the more stringent data quality requirements applied to PAS data fields.**

Appendix 3: Common reasons for consultant attribution issues

Issue	How to explore this	How to resolve this
Team-based approach to surgery scheduling is in place, meaning the primary operating consultant is harder to identify.	Audit the primary operating consultant (or consultant responsible for the primary operating surgeon) recorded in theatre data/EPR admission module compared to the responsible consultant recorded in PAS.	Establish a SOP to cross match the data and batch update the PAS to reflect the correct team member who undertook the procedure.
Surgical FCE within an inpatient spell is not updated to reflect the consultant who operated.	Patients with multiple FCE within a spell may not have their surgical FCE responsible consultant updated. Compare theatre data to inpatient FCE within the PAS.	Update PAS to reflect the operating consultant within the FCE.
Changes to theatre lists mean that the operating consultant is different to the planned operating consultant.	Work with the theatre manager to identify where changes to lists occurred and which patients had a different primary operating consultant.	Ensure the PAS is updated to reflect the primary operating consultant if there is a change to theatre lists.
Hub and spoke care pathways can mean responsible consultants operate in multiple units/trusts. In HES data, this 'visiting responsible consultant' scenario can mean: • Procedure recorded against a hub or locum responsible consultant with admitting rights whilst the visiting/spoke responsible consultant undertook the procedure. • Procedure not recorded by either of the responsible consultants' trusts i.e. own spoke unit and hub unit (less likely). • Procedure recorded by both trusts for same or different responsible consultant. • Underuse of the transfer code and overuse of the discharge code.	Audit 'spoke' patients who undergo their procedure at the 'hub' for responsible consultant accuracy - using PAS, theatre and logbook data. Check whether spoke units' visiting consultants' honorary contracts with hub unit Medical Staffing feed through to PAS and EPR Theatre modules. Ensure that Responsible Consultant, Main Specialty and Treatment Function Code (TFC) status details are made available to clerks.	Ensure all spoke units' visiting consultants have an honorary contract with the hub, admitting rights on the hub PAS, and correct GMC, Main Speciality, TFC, and Responsible Consultant status. Ensure this feeds through from PAS to EPR Booking, Theatre and Admission modules.

Viewing patient data in the NCIP portal

1. In the volume metric, click on ‘see patient records’.



Viewing patient data in the NCIP portal (cont.)

2. Click on ‘generate document’

3. Click on the bell icon in the top right-hand corner to download the document.

Tip: apply filters to data before downloading the report to review a specific cohort of patients.

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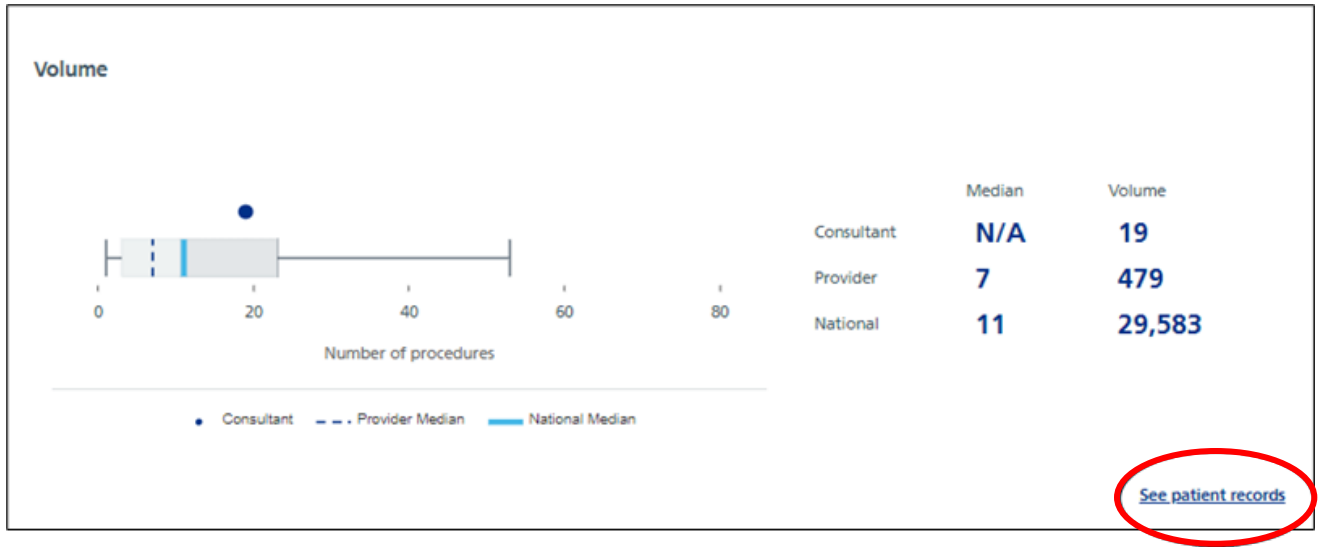
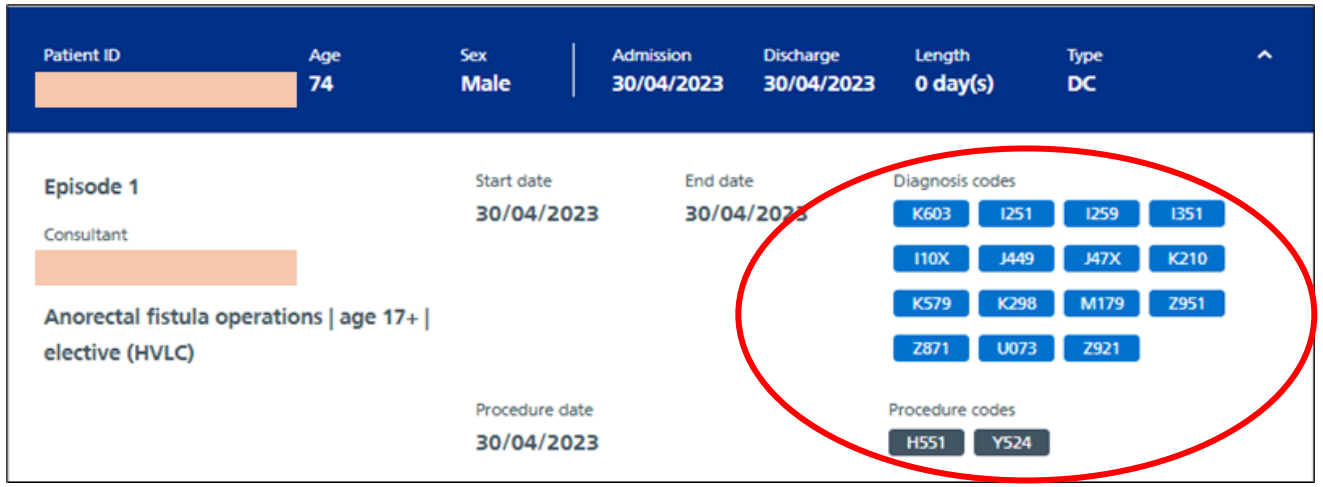
Appendix 4: Using the NCIP portal

Viewing clinical coding in the NCIP portal

1. Each metric has a hyperlink in the bottom right-hand corner ‘See patient records’.



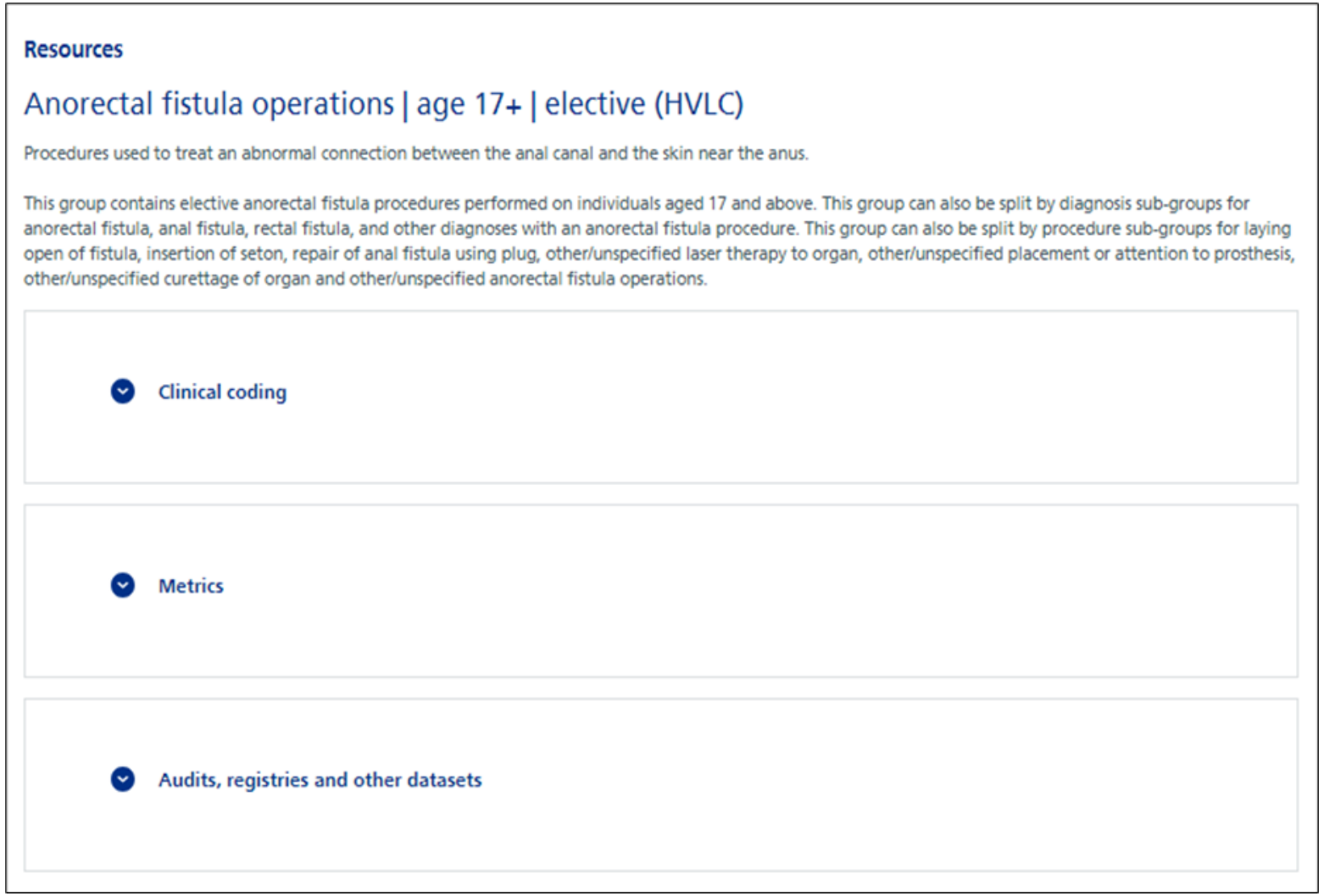
2. Hover over diagnosis and procedure codes to see their description.



Appendix 4: Using the NCIP portal

Viewing procedure algorithms in the NCIP portal

In each dashboard, procedure algorithms can be found in the ‘Resource’ section at the bottom of the page.



Appendix 4: Using the NCIP portal

Using filters to view specific details of a procedure i.e. 'drill down'

By using the filter function, you can further specify which sub-set of cases you would like to view by selecting one or more filters. Once 'apply filters' is clicked, all metrics and ‘see patient records’ hyperlinks will update to reflect your selection.

Filters within categories are mutually exclusive, e.g. Selecting 'cancer' and 'trauma' under the diagnosis category will return patients with 'cancer **or** trauma'. It will not filter to patients with 'cancer **and** trauma'.

Choosing filters from across the different categories will return patients that meet the conditions in all filter groups e.g. Diabetes with PAD and insertion of a drug eluted/costed stent will only return patients that have both in their coded record.

To clear filter selections, click 'reset filters', **and** 'apply filters'.