

American Spine Registry (ASR)

Achieving and Maintaining the Advanced Certification in Spine Surgery (ACSS) from The Joint Commission

Registry Participation Toolkit

Version 1.0; released May 2023

ABOUT THIS TOOLKIT

This toolkit provides details related to your registry participation for obtaining and maintaining your ACSS certification. This guide includes information related to measure definitions, details to aid in the data submission process to appropriately calculate measures in the registry to inform quality improvement at your site, and frequently asked questions to support ongoing data submission to the registry.



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<u>Section 1: Introduction to the Quality Measures & Supporting Data</u> Elements

The American Spine Registry (ASR), in collaboration with The Joint Commission (TJC), incorporates its clinical expertise into standards development and performance measurement requirements for the Advanced Certification in Spine Surgery. TJC established the voluntary advanced certification in 2021 for accredited hospitals, critical access hospitals, and ambulatory surgery centers (ASCs) seeking to elevate the quality, consistency, and safety of their services and patient care. The ASR serves as the sole pathway for meeting the registry requirement to obtain and maintain the certification.

1.1 Performance Measures

The table below provides a description for each of the four- measures defined by TJC to measure quality outcomes along with a mapping of registry data elements to the measure numerator and denominator and exclusions. Section 1.2 below will further detail the data elements required for submission to populate these measures.

ACSS Performance Measure	Description	Required Data Elements for Measure Calculation	
ACSS-01 Cervical	procedure with a post-operative surgical site infection (SSI) identified within 90 days after	Numerator: Diagnosis coding (DX_1-DX_10) indicating SSI submitted as an inpatient readmission to ASR in the Post-op file	
ACSS-05 Lumbar Surgical Site Infection Rates		For additional information on SSI per the criteria set forth by the CDC and the Surveillance for Surgical Site Infection (SSI) Event, please refer to this document: https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscssicurrent.pdf Denominator: All primary cervical or lumbar degenerative spine cases, ProcedureDate, Procedure Codes (PX_1-PX_10), Diagnosis Codes (DX 1-DX 10)	

ACSS Performance Measure	Description	Required Data Elements for Measure Calculation			
ACSS-02 Cervical ACSS-06 Lumbar New Neurological Deficits	Patients undergoing a primary cervical or lumbar degenerative procedure with new neurological deficits present within 90 days after the primary procedure	Numerator: Diagnosis coding (DX_1-DX_10) indicating new unexpected neurological deficit with focus motor strength that is a 3/5 or worse submitted as an inpatient readmission to ASR in the Post-op file. Denominator: All primary cervical or lumbar degenerative spine cases, ProcedureDate, Procedure Codes (PX_1-PX_10), Diagnosis Codes (DX 1-DX 10)			
ACSS-03 Cervical ACSS-07 Lumbar Unplanned Return Visit to the OR	Patients undergoing a primary cervical or lumbar degenerative procedure who had an unplanned return to the OR within 90 days of the primary procedure	Numerator: Diagnosis coding (DX_1-DX_10) indicating unplanned return to the OR submitted to ASR in the Post-op file Denominator: All primary cervical or lumbar degenerative spine cases, ProcedureDate, Procedure Codes (PX_1-PX_10), Diagnosis Codes (DX_1-DX_10)			
ACSS-04 Cervical ACSS-08 Lumbar Pre- and Post-Operative Patient Report Outcomes	Patients undergoing a primary cervical or lumbar degenerative procedure who completed the general health and spine-specific functional assessments within 90 days prior to the surgery and 30-150 days (3 months) post-operatively	Numerator: ProcedureDate, PROMS_Date, General Health Assessment, Functional Assessment ASR accepts the following assessments: General Health: PROMIS-10 or VR-12, PROMIS Physical Function, PROMIS-CAT, PROMIS-29, PROMIS Pain Interference, PROMIS Emotional Distress Depression, PROMIS Emotional Distress Depression, PROMIS Emotional Distress Anxiety, EQ-5D Spine Specific: ODI, NDI, Numeric Rating Scale for back/leg and neck/arm ALL ≤ 90 days before procedure date and ≥ 30 and ≤ 150 days after procedure date Denominator: PatDOB, ProcedureDate, Procedure Codes (PX_1-PX_10), Diagnosis Codes (DX_1-DX_10), Admission Date (ADMSNDT), Discharge Date (DSCHRGDT)			

1.2 Requirements for Data Submission

The registry requires key data elements for successful submission to the registry as defined by the ASR data specification. For sites that are advanced certified or pursuing advanced certification, there are required elements in the Procedure, Post-Op, and PROMs files that must be populated identify included and excluded cases and to calculate the measures in the dashboards.

Procedure File Submission

- Denominator Inclusion Data (See also inclusion criteria in section 1.1 of this guide):
 - Diagnosis Codes (DX_1-DX_10)
 - Used to identify eligible cervical and lumbar degenerative cases
 - Procedure Codes (PX 1-PX 10)
 - Used to identify eligible cervical and lumbar degenerative cases
- Denominator Exclusion Data (See also inclusion criteria in section 1.1 of this guide):
 - Multi-stage procedures
 - Planned staged procedures can be identified by surgeons/clinical staff on the ASR operative form

Post-Op File Submission

Calculating ACSS measures 01-03 and 05-09 requires submission of readmissions occurring within 90-days for primary degenerative lumbar or cervical spine cases submitted to the ASR.

- Numerator Inclusion
 - Diagnosis Codes (RE_DX_1 RE_DX_10)
 - Used to identify SSI, New Neurological Deficit, or Unplanned Return to OR
 - Primary Procedure Date and Readmission Date (ProcedureDATE, RE ADMSNDT)
 - Used to verify readmission occurred within 90 days postoperatively
- Patient Matching Considerations

 Please view section 1.4 of this toolkit for information on matching data elements required to link a post-op case to a primary procedure

PROM File Submission

ACSS Measures 04 and 08 are identified by the pre- and post-op PROMs submission. PROMs may be submitted through the file upload or via the RegistryInsights PRO Portal.

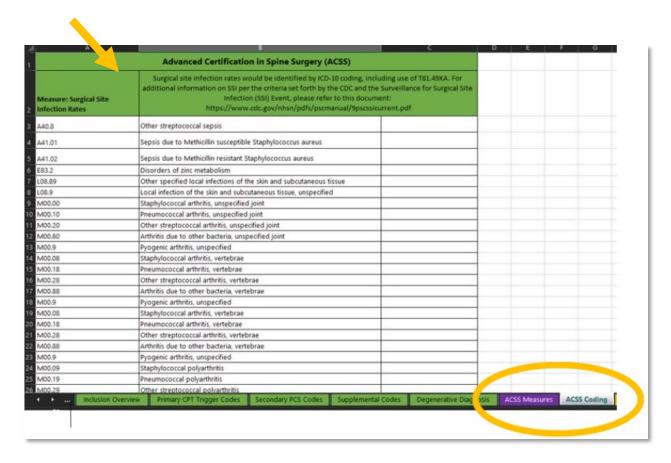
- Numerator Inclusion
 - General Health Assessment ≤ 90 days before procedure date AND
 > 30 and < 150 days after procedure date
 - PROMIS-10 or VR-12, PROMIS Physical Function, PROMIS-CAT, PROMIS-29, PROMIS Pain Interference, PROMIS Emotional Distress Depression, PROMIS Emotional Distress Anxiety, EQ-5D

AND

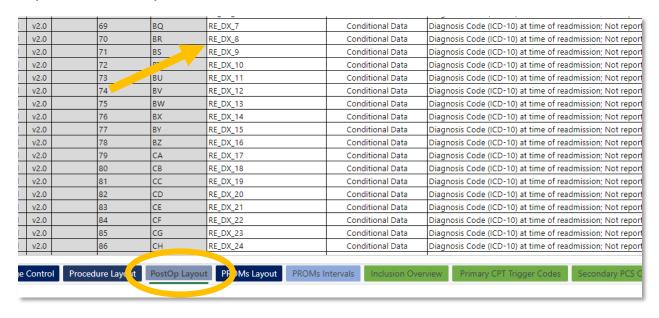
- Spine Specific Assessment ≤ 90 days before procedure date AND ≥ 30 and < 150 days after procedure date
 - ODI, NDI, Numeric Rating Scale for back/leg and neck/arm
- Patient Matching Considerations
 - Please view section 1.4 of this toolkit for information on matching data elements required to link a post-op case to a primary procedure

1.3 Locating ACSS Coding in the ASR Data Specifications

The ASR provides ACSS coding lists within the ASR Data Specifications files. Navigate to this tab using the bottom ribbon, per the image below.



For calculation of ACSS Measures 01-03 and 05-07, readmission data is required to be submitted in the postoperative file. Select the "PostOp Layout" to view readmission data fields and acceptable values, including the diagnosis codes required to identify numerator cases.



For calculation of ACSS Measures 04 and 08, PROMs data submission is required. Select the "PROMs Layout" tab to view all ASR PROMs. General and Spine-Specific PROMs and acceptable values are available in this tab.

50	AX	PROMIS_GLOBAL_Q1	Conditional Data	1-5 (1 = Poor; 2 = Fair; 3 = Good; 4 = Very good; 5 = Excellent); Not reported or NR	
51	AY	PROMIS_GLOBAL_Q2	Conditional Data	1-5 (1 = Poor; 2 = Fair; 3 = Good; 4 = Very good; 5 = Excellent); Not reported or NR	
52	AZ	PROMIS_GLOBAL_Q3	Conditional Data	1-5 (1 = Poor; 2 = Fair; 3 = Good; 4 = Very good; 5 = Excellent); Not reported or NR	
53	BA	PROMIS_GLOBAL_Q4	Conditional Data	1-5 (1 = Poor; 2 = Fair; 3 = Good; 4 = Very good; 5 = Excellent); Not reported or NR	
54	ВВ	PROMIS_GLOBAL_Q5	Conditional Data	1-5 (1 = Poor; 2 = Fair; 3 = Good; 4 = Very good; 5 = Excellent); Not reported or NR	
55	ВС	PROMIS CLORAL OF	Conditional Data	1-5 (1 = Poor; 2 = Fair; 3 = Good; 4 = Very good; 5 = Excellent); Not reported or NR	
PROMs Layout PROMs Intervals Inclusion Overview Primary CPT Trigger Codes Secondar					

1.4 Matching Post-operative Readmissions and Patient-reported Outcome Measures (PROMs) Data

Post-operative readmission cases and PROMs surveys need to be linked to an eligible TJC ACSS procedure case to be calculated in the performance measures and display in your performance measures dashboard.

The Registry Program uses patient identifiers to match the post-operative readmissions and PROMs to the index procedure. The patient identifiers are depicted in the graphic below. The identifiers in box A are preferred, but the identifiers in box B are utilized if A's criteria are not met. Similarly, if the criteria are not met for B, the identifiers in box C are utilized.

Glossary

DOB: Date of Birth

FirstName: The first name of the patient **Index Procedure:** The primary procedure **LastName:** The last name of the patient **Module:** The module that encompasses

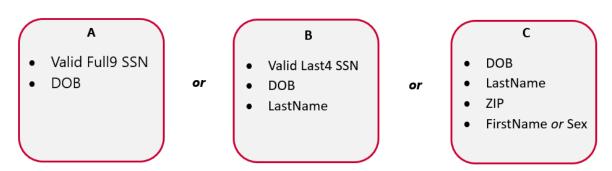
the submitted procedure

ProcedureDate: The date of the index

procedure

Sex: The sex of the patient **SSN:** Social Security Number **ZIP:** ZIP code of the patient

Patient Matching



Post-operative Readmissions Matching & PROMs Matching

The next step is to link the readmissions or PROMs to the index procedure. The table below lists the fields that are used to match postoperative readmissions and PROMs data. If the data in these fields are not consistent in the record submitted, the PROMs case will not be linked to the index procedure.

Post-operative Readmissions Matching				PROM	Matching
ASR	 Module 		ASR	•	Module
	 ProcedureDate 			•	ProcedureDat

Section 2: Extracting Data from EHR Systems

This section is intended to help guide staff running a query and building a report to extract data from an EHR. For successful data submission to the registry, extraction from your clinical systems is necessary for consistent data submission which is an essential step in achieving and maintaining the ACSS Certification. The steps below provide a general overview for developing data extracts from EHR systems.

2.1

Identify where data from the EHR is stored within your system. Sites that store data in-house may use database warehouses such as Clarity, Oracle, or MS SQL Server.

2.2

Review a sample query used in your EHR system, if available. ASR also has a sample query for Clarity that sites may use as a reference point. The query will create tables using data that already exists within the EHR database. Identify query table names and adjust them to match your unique table names. For example, the sample query includes a table name "HSP_ACCOUNT". However, your specific table containing the same values may be named "HOSP_ACCOUNT".

2.3

Launch the coding server used to access your database. Integrate the query and run the query.

2.4

Review the extracted file and compare it to the registry Data Specifications. Ensure that extracted data aligns with given data specifications and is saved in an acceptable format. RegistryInsights will analyze your document and only accept data if it is within the acceptable format and values outlined in the data specifications. If the data extraction does not align with data specifications, adjustments to the query may be needed.

2.5

Upload the completed file to RegistryInsights. The file can be uploaded manually to the RegistryInsights portal, or by the registry's SFTP service. The Registry Support team can provide guidance and information pertaining to the service during onboarding to the registry.

2.6

An individual at your facility with technical experience may apply this query to run with a reporting tool. Once the report is created, steps 1-4 can be omitted. Simply run the report, save the file, and upload to RegistryInsights. Data must be submitted at least once per quarter to be considered an active participant in the Registry. However, most sites submit data once every month.

2.7

Postoperative readmission cases occurring within 90 days of a primary lumbar or cervical degenerative procedure are required to be submitted for the ACSS. The Postoperative query builds on the procedure query by identifying readmissions for any patients submitted in previously submitted procedure file, and then querying the remaining readmission case data from the EHR data tables prior to uploading to the registry.

2.8

PROMs data capture is a requirement by TJC for the ACSS. PROMs are collected and submitted both pre- and postoperatively. The collection process may be done through an internal PROMs collection process (manual PROMs collection) submitted via the PROMs file submission to RegistryInsights, a third-party vendor, or the RegistryInsights PRO tool.

2.9

For sites that are resource constrained or have limited IT support, the Registry Authorized Vendor Program may be an option for supporting registry participation. You can access additional information here related to the program or reach out to Engagement@AmericanSpineRegistry.org for more information.

<u>Section 3: Accessing & Viewing Your TJC Dashboards</u>

Data that is submitted to the registry is populated in your site's dashboard in RegistryInsights®. Below are the steps to access the dashboards to view the TJC measures.

3.1 Login and Access Registry Dashboards

Login at https://www.registryapps.net/. You will be brought to the RegistryInsights home page. The primary navigation ribbon is displayed in red. Hover over 'Dashboards & Reports' and select 'Institution Dashboards'



3.2 Navigating to the Performance Measures Tab

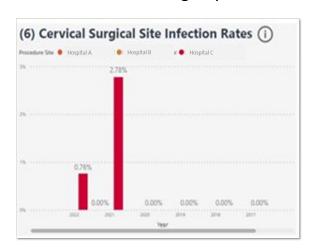
The Institution Dashboards contain important information regarding your institution's data and national comparisons. Scroll to the bottom of the page using the inner scroll bar at the right of the screen to locate the dashboard tabs. For data relating to ACSS, navigate to the bottom ribbon and select 'Your Performance Measures.'

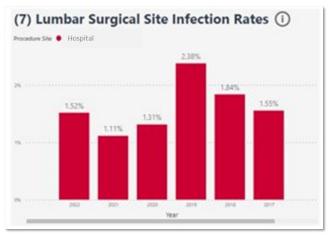


3.3 Viewing ACSS Performance Measure Rates

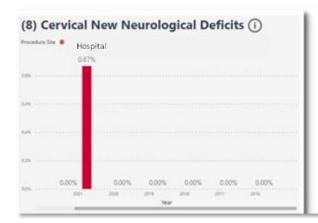
The 8 ACSS measures are displayed separately for cervical and lumbar cases. An encounter date filter at the top of the dashboard allows sites to set the procedure date range to view monthly data. Hovering over any column within a tile will display the measure numerator, denominator, and performance rate for the selected time frame.

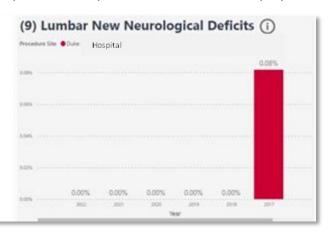
National comparison data is not currently available in these performance measure tiles. As ACSS measure data submitted to the registry grows, we will seek to establish a national registry benchmark.



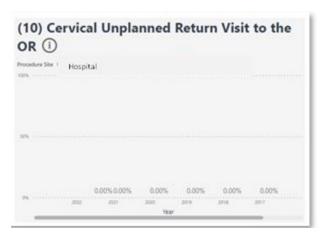


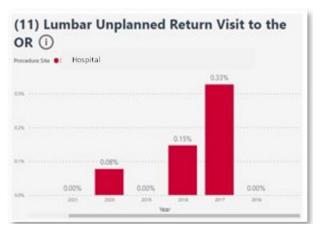
ACSS-01 and ACSS-05 display the performance rates for patients undergoing a primary cervical or lumbar degenerative procedure with a post-operative surgical site infection (SSI) identified within 90 days after the primary procedure. These measures are calculated from the readmission diagnosis data submitted in the ASR PostOp file and linked to a previously submitted ACSS procedure case. Note that the SSI metric is an inverse measure, with lower rates indicating improved performance. So, if your site did not have a 90-day readmission with an applicable diagnosis during a set month/year period, a 0% performance rate will display.



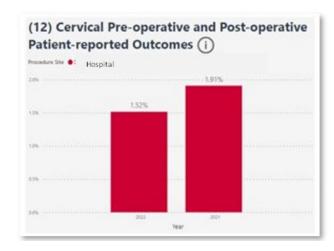


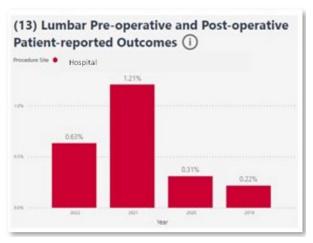
ACSS-02 and ACSS-06 display the performance rates for patients undergoing a primary cervical or lumbar degenerative procedure with a new neurological deficit identified within 90 days after the primary procedure. These measures are calculated from the readmission diagnosis data submitted in the ASR PostOp file and linked to a previously submitted ACSS procedure case. Note that the New Neurological Deficit metric is an inverse measure, with lower rates indicating improved performance. So, if your site did not have a 90-day readmission with an applicable diagnosis during a set month/year period, a 0% performance rate will display.





ACSS-03 and ACSS-07 display the performance rates for patients undergoing a primary cervical or lumbar degenerative procedure with an unplanned return to the operating room (OR) within 90 days after the primary procedure. These measures are calculated from the readmission diagnosis and procedure data submitted in the ASR PostOp file and linked to a previously submitted ACSS procedure case. Note that the Unplanned Return to OR metric is an inverse measure, with lower rates indicating improved performance. So, if your site did not have a 90-day readmission with an applicable diagnosis during a set month/year period, a 0% performance rate will display.





ACSS-04 and ACSS-08 display the performance rates for patients undergoing a primary cervical or lumbar degenerative procedure who completed the general health **and** spine-specific

functional assessments within 90 days prior to the surgery **and** 30-150 days (3 months) post-operatively. These measures are calculated from the surveys submitted in the PROMs file or via the RegistryInsights PRO Portal. Both assessment types need to be submitted for boththe pre-and post-op time points and linked to a primary procedure in ASR to calculate and display in the measure tiles. Additional information on accepted surveys and data used to link procedures with PROMs can be found in sections 1.1 and 1.4 respectively.

Section 4: Frequently Asked Questions

How do sites participate?

TJC Advanced Certification in Spine Surgery requires participation in the American Spine Registry (ASR) for performance measures and quality improvement purposes. Sites must be contracted with ASR and submitting data to the registry on at least a quarterly basis.

How do I get started with the ASR if we are not already enrolled?

To find out if your site is already participating or to start the process of joining ASR, reach out to the Registry Engagement team at Engagement@AmericanSpineRegistry.org, (847) 292-0530, or visit www.americanspineregistry.org to find out more.

What data do I need for my site survey?

For initial certification, at least four months of data for each performance measure must be available at the time of the on-site review. For re-certification, 12-24 months of program data must be available at the time of the on-site review. At least the last twelve months of program data should be available at the time of the Intra-cycle monitoring phone call with the reviewer.

For more information and resources on the site survey process, visit the <u>TJC</u> <u>Advanced Certification in Spine Surgery</u> website.

How many ACSS measures does ASR support?

ASR supports four performance measures for each module – cervical and lumbar.

- Surgical Site Infection Rates
- New Neurological Deficits
- Unplanned Return Visits to the OR
- Pre- and Post-operative PROMs

What level of participation meets the requirements for ACSS?

ASR has two levels of participation: Standard and Vanguard. The same contracting and pricing structure applies to both designations. Vanguard simply reflects the additional data collection and extended PROMs follow ups. Both allow for reporting on the ACSS performance measures.

How will my site collect and submit data for these measures?

Data collection for the ACSS program is completed via ICD-10 coding. Coding associated with a patient case would trigger inclusion in the measure calculation. Codes are available on the purple ACSS tabs within the ASR Data Specifications documents for each module. Refer to sections 1.1-1.3 and section 2 of the Registry Participant toolkit or the Registry Participant Quick Reference Guide for more detail on data elements and ASR submission.

How can sites view their data?

ASR dashboards in the RegistryInsights® platform display a site's performance measure data for the TJC ACSS measures. To view calculated measures in the RegistryInsights dashboard, sites need to submit all 3 file types – Procedure, PostOp, and PROMs. An ACSS Coding list used to identify numerator inclusion is in the ASR Data Specifications. Refer to section 1.2 for additional detail.

How are the performance measures calculated?

The dashboard analytics utilize the ACSS diagnosis coding to identify measure eligible cases from procedure file submissions to calculate measure denominators. The measure numerators are calculated from ACSS diagnosis coding submitted with readmission cases in the PostOp file and linked to primary procedures through matching the, patient, procedure date, and module (cervical or lumbar). Built-in functionalities allow for quick highlighting of graph bars to show a detailed legend including the numerator and denominator counts for each metric. Additional detail on the measure calculation can be reviewed in sections 1.1 and 3.3 of the Registry Participant Toolkit or in the Registry Participant Quick Reference Guide.

How long will it take for data to populate in the dashboards?

We recommend sites allow 2-3 days for data to refresh in the dashboards. If you are still not seeing your submitted data populate, please reach out to registrysupport@aaos.org or call 1-800-999-2939.

What do I do if my ACSS measure tiles are blank or are not displaying the performance rate expected based on cases submitted?

If your data is missing or performance rates are higher or lower than expected in the dashboards, you can take the below steps to review your data submission. If after reviewing you are still not seeing expected data in your dashboard, please reach out to registrysupport@aaos.org or call 1-800-999-2939

1. File Submission Verification

- ✓ Recent Procedure, PostOp and PROMs data files are visible in your RegistryInsights home page file submission history
- ✓ Files are visible and successfully processed
 - Move to #2 Data Element Review
- ✓ File has multiple rejections
 - Click the blue "view" link to drill down to the case rejection details and identify failed fields
 - > Correct these fields and resubmit rejected cases
- ✓ A recent file submitted is not visible in RegistryInsights or you have questions about how to correct your case rejections
 - Reach out to registrysupport@aaos.org or call 1-800-999-2939

2. Data Element Review*

ACSS-01-03 and ACSS 05-07

- ✓ There was a readmission case(s) submitted for the month in question
- ✓ The RE_DX fields submitted include one of the ACSS diagnosis codes listed in the data specifications
 - ➤ If no, this does not meet the inverse metric numerator inclusion criteria and no data will display in the ACSS tiles
- ✓ Patient matching data fields outlined in section 1.4 of the Registry Participant Toolkit are complete

ACSS-05 and ACSS-08

- ✓ A pre-op general health assessment *AND* a spine-specific functional status assessment was completed within 90 days before surgery *AND* within 30-150 days after surgery
- ✓ Both pre- and post-op surveys are submitted on the PROMs file or via the RegistryInsights PRO Portal
- ✓ PROMsTime data element is populated with pre-operative or 3month for the respective pre- and post-operative time points
- ✓ Procedure for the associated PROMs has also been submitted
- ✓ Patient matching data fields outlined in section 1.4 of the Registry Participant Toolkit are complete

*Use the table in section 1.1 to identify data element values used to calculate numerator cases

3. Additional Dashboard Considerations

✓ PROMs measures <u>will not</u> populate unless both general health and functional assessments have been submitted for both the pre- and post-op time points and are linked to the applicable submitted procedure