

IR

Interventional Radiology

Standardized Reporting User Guide

Society of Interventional Radiology (SIR) and
SIR Foundation

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QUICK TIPS

Quick Tips on getting up and running with the Society of Interventional Radiology Standardized Reports:

- Go to the [SIR website](#) for instructions on downloading and installing the templates, and setting up to send data to the ACR/SIR registry
- Customize the templates for your use by:
 - Defaulting fields
 - Creating different versions of templates (e.g. Lung biopsy, Liver biopsy, and Kidney biopsy defaulted templates, all from the SIR_Biopsy template) to allow for rapid procedure reporting
 - Moving the impression as needed based on hospital or practice requirements
 - Deleting or copy/pasting modules
 - Editing areas of narrative text
 - Discussing with your billers/coders the language in the “Procedure Summary” section
 - **Never changing the “Standardized Report:” data element within the “Additional Details” module**
- Refer to the Standardize Reporting User Guide to answer questions in depth
- Email the [SIR](#) for questions not answered by the User Guide

VERSION 3 UPDATES

The following changes have been made in Version 3:

1. Addition of the following templates:
 - a. Chemical Ablation (SIR Ablation Chemical v3)
 - b. Aortic Angiography and Aortic Interventions (SIR Angio Aorta v3, SIR Angio Aorta Interv v3)
 - c. Lower extremity Angiography and Interventions, Upper extremity Angiography and Interventions (SIR Angio LE v3, SIR Angio LE Interv v3, SIR Angio UE v3, SIR Angio UE Interv v3)
 - d. Renal Angiography and Interventions (SIR Angio Renal v3, SIR Angio Renal Interv v3)
 - e. Transplant Angiography with Interventions (SIR Transp Interv v3)
 - f. Biopsy template expanded to CT-guided, US-guided, CT- and US-guided, and miscellaneous
 - g. Sclerotherapy through drainage catheter (SIR Drain Sclerotherapy v3)
 - h. Bronchial artery embolization (SIR Embo Bronchial v3)
 - i. Venous embolizations (SIR Embo Pelvic Congest v3, SIR Embo Varicocele)
 - j. Pre-op Tumor embolization (SIR Embo Pre-op Tumor v3)
 - k. Renal and Splenic embolizations (SIR Embo Renal v3, SIR Embo Splenic v3)
 - l. Fiducial placement (SIR Fiducial Placement v3)
 - m. Nasoenteric tube placement (SIR Nasoenteric Tube v3)
 - n. Percutaneous sclerotherapy (SIR Percutaneous Sclero v3)
 - o. Portal vein interventions (SIR Portal Vein Interv v3)
 - p. TIPS Reduction and Revision (SIR TIPS Reduction v3, SIR TIPS Revision v3)
 - q. Tunneled drain removal (SIR Tunn Drain Removal v3)
 - r. Adrenal vein and parathyroid sampling (SIR Vein Sampling Adrenal v3, SIR Vein Sampling Parathy v3)
2. Removal of QCDR measures no longer approved/utilized
3. Removal of the UDI and Vertebral Units to measure catheter tip in the central venous access templates
4. Addition of “Indication for angiography” or “Indication for venography” to assist in billing
5. Addition of contrast agents to the contrast module
6. Addition of a wider variety of units in the radiation module

*Note – for those needing to report radiation dose to the ACR without the ability to provide Air Kerma or Dose Area Product, please report the fluoroscopy time and add/report the following field in the radiation module: “Total number of images in study:”

INTRODUCTION

Standardized Reporting templates have been created by the Society of Interventional Radiology (SIR) for use in procedure reporting. The templates have undergone extensive review by a committee of private practice and academic Interventional Radiologists, billing and coding experts, regulatory advisors and clinical researchers. A pilot study at numerous practices aided in the refinement of these templates to balance report length with data elements required to optimize billing, satisfy Merit-based Incentive Payment System (MIPS) and The Joint Commission (TJC) requirements, and provide a logical description of the procedure that is easy to read by clinicians and Interventional Radiologists. The structured format allows for data to be extracted for registry, quality, and future research purposes.

The Standardized Reports are a result of the hard work of many members of the SIR. Thousands of work hours have been applied in creating these reports as a starting point for improving the quality of care that is delivered by Interventional Radiologists. The more the reports are utilized, the better they will become when integrating user feedback. Working together will allow the SIR to become leaders in delivering quality care.

GOALS

The SIR Standardized Reporting templates are designed to achieve the following goals:

1. Efficiently collect necessary information to meet billing, regulatory, and quality registry requirements.
2. Be useful in both private practice and academic settings
3. Include the minimum necessary procedure-related information pertinent to interventional radiologists
4. Allow customization for different practice patterns

REGISTRY PRE-REQUISITES

IR Registry – Steps for participating facilities

1. Register facility with the National Radiology Data Registry (NRDR) (See: [How to Get Started with NRDR](#)).
 - a. Sign or [update a participation agreement](#) making sure to check IR Registry
 - b. Know your NRDR facility ID, login and password.
 - c. The IR registry will require the NPI number for each physician participating in the IR Registry.
 - d. Contact: nrdrsupport.acr.org for questions.
 - e. Additional group or site information will be required but not initially necessary to get started.
2. Load IR structured report templates into your reporting software
 - a. [SIR Structured reporting templates](#).
 - b. Refer to structured reporting initiative [User Guide](#) and [video tutorial](#).
 - c. Identify a person on site who can implement the SIR templates into your reporting/dictation system.
3. Identify a workstation or a server for installing ACR TRIAD site server (SS). This machine must have access to the internal network having the HL7 interface and the external internet. Visit [TRIAD](#) for site server installation link and to download the User Guide.
4. Provide the TRIAD SS User Guide to the person who will be installing TRIAD.
5. Identify the IT person at your institution who handles HL7 interfaces for support in getting the IR HL7 message set up.

6. Once 1-5 are complete, contact nrdrrsupport@acr.org when you are ready to install TRIAD site server and we will schedule a time for a guided installation. Please specify in your email your NRDR facility ID and that this is for the IR registry. The IT person identified in #4 should be available for the installation.

More information can be found at the [SIR website](#). It is not required to register with the NRDR to use the templates, but it is strongly encouraged.

REPORT AVAILABILITY

The reports are available online at the [SIR website](#) in both XML and Rich Text Format (RTF) versions. The XML reports have been designed for users of PowerScribe 360® (PS360); however, the RTF versions can be used as a basis for designing the same templates for other systems. The report sent to the SIR is a plain text document. Therefore, any reporting system can be utilized, but modifications will need to be made based on the reporting system used. The RTF versions can be viewed by any word processing software such as Microsoft Word® to use as the basis for template design. The SIR hopes to expand the templates into other reporting systems in the future and is currently working with other vendors.

Report templates are undergoing regular updates based on changes in Center for Medicare and Medicaid Services (CMS) billing requirements, TJC requirements, and feedback from individuals and groups utilizing the templates. Please check the website regularly for updates in reports. The listed version of the reports online should be checked against that in any currently utilized reports to ensure the latest versions are being used.

Note: A login will be needed to download the reports to allow for SIR to contact users regarding updates or notifications. Reports can be downloaded at no charge.

ABBREVIATIONS

ACR	American College of Radiology
CMS	Centers for Medicare and Medicaid Services
MIPS	Merit-based Incentive Payment System
PS360	PowerScribe 360®
QCDR	Qualified Clinical Data Registry
RTF	Rich Text Format
SIR	Society of Interventional Radiology
TJC	The Joint Commission
XML	Extensible Markup Language

STANDARDIZED REPORTING STRUCTURE

The reports have been created in a modular format. This format allows for repeating elements throughout multiple types of reports for consistency. Each module is placed within a heading explained below. Within each module is a list of data elements with corresponding data values. The data elements are the words preceded by the colon character (":") (e.g. "Pre-procedure diagnosis:"). The data values are the options for the data element, otherwise known as "pick-lists" in PS360.

Some information that is known to be variable between different practices and is not critical for data collection has been placed in a free-text format (i.e. narrative text). Please see the area circled in red below. These do not conform to the “data element: data value” format. This information can be altered as needed unless explicitly stated in the report or in this user guide. Other areas with narrative text, e.g. at the start of a module, can similarly be altered as needed.

IMPRESSION:

Percutaneous **Thermal modality**:radiofrequency/high-frequency radiofrequency/microwave ablation of **target(s) including organ and laterality**.

Plan:

Institution-specific plan

HEADINGS

Reports have been organized into the following headings (description follows each heading):

- *Procedure* – The procedure name (**should not be altered**)
- *Impression* – The procedure impression to typically include the most important details or interpretations of the study. This can be modified based on local practice patterns. Pre-filled impressions are often provided for convenience but can be modified as needed. Numbering, bullets, or narrative text use is left to the discretion of the users. Based on local requirements, the impression can be moved to other locations in the report.
- *Plan* – Any follow-up, future studies, or important details regarding patient care. This can be altered as needed based on local practice patterns and defaulted accordingly.
- *Procedure Summary* – A list of pertinent technical details of the procedure intended mostly for billers and coders to be able to view a quick summary of the procedure. Practices should speak with their billing/coding staff to determine what information is best placed here. They have been defaulted with the information needed to properly bill a procedure based on feedback from billing and coding experts. However, the language can be changed, additional entries may be placed, and existing entries may be removed as needed **except for QCDR or MIPS measures**.
- *Procedure Details* – The in-depth description of the procedure broken into modules.

The *Procedure*, *Impression*, and *Plan* heading comprise the Executive Summary. The Executive Summary is located at the top of the report and was created based on referring clinician feedback from the initial SIR Standardized Reporting Pilot Study as a quick reference to the most important details of the procedure.

MODULES

Modules have been designed to include the core details of the procedure. Each module can be duplicated within the report as needed. Each module can also be removed as needed. For example, within the SIR CVA Tunneled Catheter report template is a module named “Venography” whose data elements are shown below:

Venography

Indication for venography:

Vein catheterized:

Findings:

In this instance, a venogram is unlikely to be performed in a majority of tunneled central venous access catheter placements. The module *can therefore be deleted in its entirety*. In case several venograms are performed during a tunneled central venous access catheter placement, the module may be duplicated as many times as needed.

Of note, the “Additional Details” module should **never** be removed as it contains a data element that is required for proper data extraction as described in the next section.

Modules are composed of data elements and, occasionally, narrative text. *The narrative text may be altered as needed*. If practice or procedure specific details need to be added, please enter this under the “Additional description of procedure:” data element in the “Additional Details” module.

DATA ELEMENTS AND DATA VALUES

DATA ELEMENTS

Within each module is a list of data elements and data values. It is crucial that the data elements not be changed in any way during the adoption of the templates. The ability to extract data relies on the precise naming of these data elements. As described previously, the “Additional Details” module should never be removed because of the presence of the “Standardized report:” data element. This element allows for proper identification and data extraction of each report. The data *value* following the “Standardized report:” data element should also not be altered. This defines the particular report, including the version, to allow for proper data extraction.

Please do not change any data elements within the reports.

Modules may be removed from reports, but individual data elements should not be renamed within modules. If an individual data element is not relevant to the procedure, please enter “Not applicable”.

DATA VALUES

Data values are the words/sentences that follow the data elements. In the RTF files, these are often denoted in red letters. In general, the data values can be altered to adhere to local practice patterns. For example, in the SIR CVA Tunneled Catheter report, within the “Closure” module is a data element named “Access site closure technique:”. For convenience, the data values have been pre-populated with the following options:

- Tissue adhesive
- Absorbable suture
- Absorbable suture and tissue adhesive
- Steri-strips
- Other
- None

If more specific details are required within an individual practice, these can be removed or additional options can be added such as 3-0 Vicryl, 3-0 Monocryl, or 3-0 Polysorb. Data elements that are denoted by “MIPS” or “QCDR”

should not have their data values altered by addition, replacement, or subtraction. In addition, as described previously, the “Standardized report:” data value should never be altered or removed. For emphasis:

Do not change the “Standardized report:” data element or its associated data value.

SUMMARY OF MODIFYING RULES

1. Do not modify the procedure name
2. Do not modify data element names (words preceding a colon)
3. Do not remove MIPS or QCDR measures
4. Do not remove the additional details section
5. Narrative/Free text can be modified
6. Modules can be duplicated or removed
7. Pick-lists/Drop-downs can be modified to include additional options except for QCDR and MIPS measures
8. Impression can be modified
9. Plan can be modified

COMMON MODULE DESCRIPTION

The following is an in-depth description of individual modules, with an explanation of why each data element is present, and some supplemental information to help you use these reports in an optimal manner.

EXECUTIVE SUMMARY

The executive summary consists of the Procedure, Personnel, Diagnosis/History, Complications, Impression, and Plan.

PROCEDURE:	Title of the procedure which should not be altered . TJC requirement.
Procedural Personnel	TJC requirement. There is no required format for names. Titles may be added at the front or degrees added at the end of the name. Multiple names may be separated with any character.
Attending physician(s):	List of attending physicians participating in the procedure. The signer name is at the bottom of the document and the responsible physician/practitioner.
Fellow physician(s):	Names of fellows participating in the procedure. If no fellows are present at the site, this can be removed.
Resident physician(s):	Names of residents participating in the procedure. If no residents are present at the site, this field can be removed.
Advanced practice provider(s):	APP names. If no APP's are present or perform procedures at the site, this field can be removed.
Pre-procedure diagnosis:	Patient's underlying diagnosis – may not be the reason for procedure. Joint Commission requirement.

- Post-procedure diagnosis:** Diagnosis determined after the procedure. The diagnosis should be explicitly stated, even if it is the same as the pre-procedure diagnosis. Joint Commission requirement.
- Indication(s):** Procedure indication. If auto-populated from referral, edit as needed to be informative and clinically meaningful, justifying the procedure. Joint Commission requirement.
- Additional clinical history:** Any additional clinical history that may be relevant to the procedure not previously stated such as patient age, patient sex, medical history, etc. Fill with "Not Applicable" or "None" if no additional clinical history is required.
- Complications:** Defaults to no immediate complications; any complications should be entered here. Joint Commission requirement.
- IMPRESSION:** The overall impression. As findings are not explicitly listed in the executive summary, any significant, unusual, or unexpected findings can be highlighted here as well based on operator discretion. Findings are located within modules in the Procedure Details section. This is defaulted for convenience in many templates but can be altered as desired. Lists, either numbered or bulleted, may be used.
- Plan:** Immediate post-procedure plan, and/or follow-up. Should be altered to fit individual practice needs. No formatting requirements.

PROCEDURE SUMMARY

- PROCEDURE SUMMARY:** Itemized list of the procedures performed to guide billing activities, also serving as a reference to referring MDs and future IRs to know what was done. Defaulted to the most common components of each procedure but can be edited as needed. Consultation with billing and/or coding personnel is recommended to tailor the summary for optimized billing.

PROCEDURE DETAILS

- PROCEDURE DETAILS:** The remainder of the report constitutes a more technical description arranged as a series of chronologically arranged modules providing consistency across procedure types. Any modules not relevant to a certain procedure can either be designated "Not applicable" or deleted (for example, the venography module in a port placement report may be deleted for cases where venography is not performed).

PRE-PROCEDURE

The pre-procedure module has slight variations from report to report. An example from the CVA Non-Tunneled Catheter report is reviewed below as an example.

Pre-procedure

- Consent: The consent text may be edited to fit individual or group practice requirements
- Preparation (MIPS): This is a MIPS measure that should not be removed or edited in anyway. This allows for proper calculation of quality measures for reimbursement adjustments. In other templates, this may not be denoted as a MIPS measure. In those instances, it may be edited to suit local practices.
- Medical reason for site preparation exception (MIPS): Continuation of MIPS measure above.

ANESTHESIA/SEDATION

Anesthesia/sedation

- Level of anesthesia/sedation: These are defined by The Joint Commission and the American Society of Anesthesiologists as 4 levels.
- Minimal sedation:* a drug-induced state during which patients respond normally to verbal commands. Although cognitive function and coordination may be impaired, cardiovascular and respiratory functions are unaffected.
- Moderate sedation:* a drug-induced depression of consciousness during which patients respond purposefully to verbal commands either alone or accompanied by light tactile stimulation. No intervention is required to maintain a patent airway, spontaneous ventilation is adequate, and cardiovascular function is maintained.
- Deep sedation:* a drug-induced depression of consciousness during which patients cannot be easily aroused but respond purposefully following repeated stimulation. Patients may require assistance in maintaining a patent airway, spontaneous ventilation may be inadequate, but cardiovascular function is usually maintained.
- General anesthesia:* a drug-induced loss of consciousness during which patients are not arousable even by painful stimulation. Cardiovascular and respiratory function may be impaired.
- Monitored anesthesia care (MAC) has been grouped with general anesthesia
- Other:* could include spinal or regional anesthesia.

- Anesthesia/sedation administered by: For moderate sedation, continuous monitoring by an independent trained observer (a nurse or other qualified person) must be documented. Mild sedation may or may not require such monitoring, depending on the situation. Deep or general anesthesia is typically administered by anesthesiology.

- Total intra-service sedation time (minutes): Time of sedation is billed for the first 15 minutes, but

documentation in minutes must be provided for billing. "See anesthesia record" or "Not applicable" should be entered if general anesthesia or MAC is used.

CONTRAST

Contrast

- Contrast agent: Several common contrast agents are included; this can be modified for individual practice patterns. All agents, including Carbon Dioxide, should be listed here. **If more than one contrast agent was used, duplicate the entire contrast module and enter each agent and volume separately.**
- Contrast volume (mL): Numerical field. Please insert "0" if no contrast was administered. Alternatively, the entire module may be removed if no contrast was used.

RADIATION

Radiation Dose

Reporting of radiation dose is a TJC requirement. If possible, all fields should be reported. Choice of units is provided. If the equipment of an individual practice outputs dose in another unit, please notify the SIR so that these units can be included in future reports.

- Fluoroscopy time [units]: Fluoroscopy time with a pick list of units provided. Options include reporting in minutes, seconds, or MM:SS format.
- Reference air kerma [units]: Air kerma in Gray or milliGray. If not available, please state "Not available" or "Not applicable".
- Kerma area product [units]: Kerma area product (also known as dose area product). Please default the units to what your unit outputs. If not available, state "Not available" or "Not applicable".

ADDITIONAL DETAILS

Additional Details

Please place additional descriptions of the procedure that are not captured by the modules in this location. In addition, specimen submissions (for biopsy, microbiology, etc.) should be entered here.

- Additional description of procedure: Space provided for description of additional or adjunctive procedures performed
- Equipment details: Space provided to list additional equipment used, which may be helpful if the procedure is repeated in the future.
- Specimens removed: TJC requirement
- Estimated blood loss (mL): TJC requirement
- Standardized report: This unique code identifies the use and version number of the SIR report. **This should never be changed.** This code allows for proper data extraction. Removal or changing of this will prevent registry and quality reporting.

ATTESTATION

<u>Attestation</u>	The narrative text of the attestation statement can be altered based on local practice requirements.
Signer name:	The signer name must be the first name and last name with no titles. This will allow for proper assignment of the procedure within the registry. <i>This should be set using either a merge field in PS360 or a pick list.</i> The name will be submitted to the ACR at sign-up, and must remain the same. If a name change occurs (e.g. due to marriage), the ACR will need to be notified so that procedures can be properly assigned. This allows for data at the individual level to be sent to each practice to measure quality metrics.
Attestation statement	As stated above, may be altered as needed.

MODULE DESCRIPTIONS – SPECIFIC USE CASES

The below modules are examples from specific reports that may require further guidance on usage. Please refer to the appropriate module for questions.

ABLATION

The following example is taken from the Image-guided Cryoablation report. The ablation modules utilize a “target” based method of description. The targets, or regions/tumors of treatment, should all be listed under the “Imaging prior to intervention” module. If multiple targets, the fields should be copied and pasted as shown below. These should then be appropriately referenced in the Biopsy and Cryoablation modules.

Imaging prior to intervention

The patient was positioned [supine/left lateral decubitus oblique/
left lateral decubitus/right lateral decubitus oblique/
right lateral decubitus/semi-prone/prone]. Initial imaging was performed.

Target 1:

- Maximal diameter: Lesion size cm
- Location: Target location including laterality

Target 2:

- Maximal diameter: Lesion size cm
- Location: Target location including laterality

Other findings: Other pre-procedure findings

Narrative text here can be altered as needed.

} Copy and paste entire area shown as needed

Biopsy

Under CT/Ultrasound/CT and ultrasound/MR/PET/CT/Fluoroscopy guidance, the biopsy needle was advanced and positioned at the target.

Narrative text here can be altered as needed.

Target lesion: Biopsy target

- Biopsy type: [Coaxial core needle/Coaxial FNA/Core and FNA/Core needle/FNA]
- Core needle biopsy device: Manufacturer and device name
- Core needle size: [14 gauge/16 gauge/18 gauge/20 gauge/Other-/Not applicable]
- Number of core specimens: Number of cores obtained or N/A
- Fine needle aspiration device: Manufacturer and device name
- Fine needle size: [21 gauge/22 gauge/23 gauge/25 gauge/Other-/Not applicable]
- Number of FNA specimens: Number of FNAs obtained or N/A
- On-site biopsy touch preparation: Yes/No
- Additional sampling recommendations: [None/Core requested after FNA/FNA requested after core]

Copy and paste entire area shown as needed. Associate the target lesion with numbers assigned above (e.g. "1" or "2"). This will allow for proper association if multiple biopsies performed.

Cryoablation

Under [CT/Ultrasound/CT and ultrasound/MR/PET/CT/Fluoroscopy] guidance, the ablation applicator(s) were advanced and positioned within the target(s). For each target lesion the applicators were placed and repositioned as necessary to achieve the desired ablation zone.

Ablation applicator: Manufacturer and device name

Target 1:

- Therapeutic intent (QCDR): [Curative/Palliative]
- Number of applicators: Number of applicators

Freeze Cycle 1:

- Freeze duration (minutes): Freeze cycle duration.
- Maximum intensity applied (percent): Maximum intensity

Thaw Cycle 1:

- Thaw duration (minutes): Thaw cycle duration
- Thaw cycle type: [Active thaw/Passive thaw]

Freeze Cycle 2:

- Freeze duration (minutes): Freeze cycle duration.
- Maximum intensity applied (percent): Maximum intensity

Thaw Cycle 2:

- Thaw duration (minutes): Thaw cycle duration
- Thaw cycle type: [Active thaw/Passive thaw]

Freeze Cycle 3:

- Freeze duration (minutes): Freeze cycle duration.
- Maximum intensity applied (percent): Maximum intensity

Thaw Cycle 3:

- Thaw duration (minutes): Thaw cycle duration
- Thaw cycle type: [Active thaw/Passive thaw]

Intraprocedural imaging findings: Intraprocedural imaging findings

Copy and paste entire area shown as needed. Associate the target lesion with numbers assigned above (e.g. "1" or "2"). This will allow for proper association if multiple ablations performed.

Findings only need to be listed once for the entire module.

BIOPSY

The biopsy module below is taken from the [CT-guided biopsy template](#). In any module containing narrative text at the top, the text may be changed according to practice preferences. This data is not extracted. Other comments are offered below.

Biopsy

Local anesthesia was administered. Under CT guidance, the biopsy needle was advanced to the target and biopsy was performed.

Coaxial needle: [10 gauge/11 gauge/13 gauge/15 gauge/17 gauge/19 gauge/Other-/None]

Core needle biopsy device: If multiple devices were used, copy/paste this section.
Core needle size:
Number of core specimens: This indicates number of samples obtained, not passes made.

Fine needle aspiration device: Can delete entire section if FNA not routinely done.
Fine needle size:
Number of FNA specimens:

On-site biopsy touch preparation: [Yes/No]
Additional sampling recommendations: [None/Core requested after FNA/FNA requested after core]
Preliminary assessment of sample adequacy: [Adequate/Adequacy not confirmed/Not applicable]

CHEMOEMBOLIZATION

Selective angiography

The hepatic arterial system was catheterized using [combination of catheter(s) and wire(s) used].
Indication for angiography: [Diagnostic - no prior angiographic study/Diagnostic - change in patient condition/Diagnostic - inadequate visualization on prior/Diagnostic - clinical change during procedure/Non-diagnostic - roadmapping, guidance, or measurement/Other-]

Variant anatomy: Accessory or replaced hepatic arteries

Vessel catheterized: [Celiac artery/Superior mesenteric artery]
Findings: Visceral artery findings, including description of branching pattern.
Delayed portal venogram demonstrates Delayed portal venogram findings.

Vessel catheterized: [Common hepatic artery/Proper hepatic artery]
Findings: Selective hepatic artery findings, including vessel of origin

Vessel catheterized: [Right hepatic artery/Middle hepatic artery/Left hepatic artery]
Findings: Lobar artery findings, including vessel of origin

Vessel catheterized: [Segment 1/Segment 2/Segment 3/Segment 4/Segment 5/Segment 6/Segment 7/Segment 8] hepatic artery
Findings: Segmental artery findings, including vessel of origin

Vessel catheterized: Subsegmental branch of [Segment 1/Segment 2/Segment 3/Segment 4/Segment 5/Segment 6/Segment 7/Segment 8] hepatic artery
Findings: Subsegmental artery findings

Vessel catheterized: Other vessel (e.g. right phrenic or other additional vessel)
Findings: Other vessel findings, including vessel of origin

“Vessel catheterized” and “Findings” should be copied/pasted as often as needed.

These have been pre-filled for convenience, but can be altered as needed based on practice patterns

Important technical details can be placed in the “Additional Description of Procedure” field in the “Additional Details” module

Conventional chemoembolization

Catheter position for embolization #1: Embolization position #1

- Embolic administered from this position: [Emulsion of chemotherapy and ethiodized oil/Chemotherapeutic agent only/Ethiodized oil only]
- Additional embolic administered from this position: Additional embolic (specify embolic agent and amount)
- Angiographic endpoint: [Complete stasis (static contrast column for at least 5 heartbeats)/Near-stasis (not static, but contrast visible for at least 5 heartbeats)/Slowed flow (contrast visible for fewer than 5 heartbeats)/Normal velocity flow with pruning of distal vasculature/Normal velocity flow without pruning of distal vasculature/Other-]

Catheter position for embolization #2: Embolization position #2

- Embolic administered from this position: [Emulsion of chemotherapy and ethiodized oil/Chemotherapeutic agent only/Ethiodized oil only]
- Additional embolic administered from this position: Additional embolic (specify embolic agent and amount)
- Angiographic endpoint: [Complete stasis (static contrast column for at least 5 heartbeats)/Near-stasis (not static, but contrast visible for at least 5 heartbeats)/Slowed flow (contrast visible for fewer than 5 heartbeats)/Normal velocity flow with pruning of distal vasculature/Normal velocity flow without pruning of distal vasculature/Other-]

Chemotherapeutic agent: [Doxorubicin/Cisplatin/Mitomycin-C/Other-]
Chemotherapy dose administered (mg): Chemotherapy dose administered
Additional chemotherapeutic agent: [None/Doxorubicin/Cisplatin/Mitomycin-C/Other-]
Additional chemotherapeutic dose administered (mg): Additional chemotherapeutic dose administered
Method of dosage: [Empiric/Weight-based]
Volume of ethiodized oil administered (mL): Volume of ethiodized oil administered

Advanced imaging

Localized intra-operative [cone-beam CT/3D rotational angiography/limited CT imaging as part of a combined CT/Angio suite] was performed [with/without contrast] [prior to/following/during] embolization. Images [were/were not transmitted] to an independent workstation for 3D rendering and image review under concurrent physician supervision.

Indication for advanced imaging: [Determine vascular anatomy and/or tumor supply/Evaluate for additional tumor supply/Assess completeness of embolization/Other-]

Findings: Advanced imaging findings

For convenience, 2 locations for chemoembolization are listed. If only a single location is embolized, delete the second listing. If more than 2 locations are used for chemoembolization, copy and paste this section of the module, and change “#2” to “#3”, or another number as needed.

Per SIR reporting guidelines, the true embolic volume should be reported rather than the reconstituted volume.

Fill this in if cone-beam CT or conventional CT is utilized. Delete the entire module if not utilized.

Narrative text at the top can be altered as needed.

FREQUENTLY ASKED QUESTIONS

What is Standardized Reporting?

Standardized reporting is a Society of Interventional Radiology (SIR) initiative that will create highly structured procedure report templates to be used by any practice. This will allow for extraction of data for quality, registry, and research purposes that can be harnessed to allow Interventional Radiology to be at the forefront of data-driven medical practice.

Why should I use the templates?

1. Utilizing the templates will allow individual practices to participate in the Merit-Based Incentive Payment System (MIPS) with minimal effort and cost on their part. MIPS is part of the Quality Payment Program (QPP), the replacement for the Sustainable Growth Rate (SGR) formula previously used for reimbursement by CMS. Reporting quality data via the MIPS method or via an Alternative Payment Model (APM) is required to receive full Medicare reimbursement. Currently, reimbursement is based solely on participation. In the future, meeting quality metrics, as measured by the submission of quality measures through the ACR/SIR, will positively or negatively impact reimbursement. Non-participation will negatively impact reimbursement.
2. The data from the reports will be sent to the ACR and the SIR to create a large database of clinical data that can be used to allow interventional radiologists to participate in various registries, research programs, and obtain quality performance down to the level of individual providers. Having this data will be critical in ensuring IR can remain a data-driven field and not be overtaken by other services.

How do I get my practice set up to send data?

The steps are outlined at the [SIR website](#). The following basic steps will be required:

1. Download and install the templates
2. Sign a participation Agreement with ACR
3. Identify IT staff responsible for HL7 interface and server setup/maintenance
4. Install the Transfer of Images and Data (TRIAD) Site Server (requires access to the internal network with the HL7 interface and the external internet)

If I use the templates, can I make changes to them?

Yes, these templates are meant to remain flexible for the user. The templates are designed in modular format. Modules can be deleted or copied/pasted in their entirety. Within modules, there are two types of notations in the reports – data elements and narrative text. Narrative text is conventional text in full sentence and paragraph form at the top of the module. These can be changed entirely, removed, or have text added to them. Data elements are short text followed by a colon, e.g. “Target lesion:”. The data element names should not be changed or altered in any way. For MIPS or QCDR labeled fields, the pick list options should not be changed. **The field “Standardized report:” and its value should never be changed!** This field determines what data to extract. If performing two procedures sequentially on the same patient, please dictate out two different reports rather than copying/pasting different templates into a single report.

I don't want to keep filling in fields. Can I just default them?

Absolutely! Default as many fields as you like. You can change the file names as well, but we strongly recommend against changing the procedure title at the top of the report. You can use the same template with different fill-in fields and different file names in your PowerScribe AutoText Manager to create a large number of templates where everything is defaulted for rapid reporting. For example, the [SIR Biopsy](#) template can be copied and the defaults set so that several versions of the defaulted template exist in an individual's PowerScribe AutoText Manager. In this case, a Liver Biopsy, Kidney Biopsy, and Lung Biopsy template with pre-populated defaults could be created from the [SIR Biopsy](#) template. As long as the “Standardized report: SIR_Biopsy_v2” field remains untouched, data extraction can occur without a problem.

Do I have to use PowerScribe in order to use the templates?

The existing templates have been designed for PowerScribe. We hope to have versions available for other vendors and Electronic Health Records in the future. We are actively working with other vendors.