# ACSD STS Audit Instruction Sheet

The HMS DocuLink Portal is a 256-bit encrypted data and document submission site for participants in the STS National Database Audit to provide responses to data and document requests. This portal is distinct from other document submission procedures for STS and should only be used for requests specific to the STS Adult Cardiac Surgery Database audit. A participant-specific Uniform Resource Link (URL) is provided to your site in the electronic document request letter (DRL) and will remain active throughout the audit period.

## A. Accessing the document submission portal

1. To access the DocuLink Submission Portal, click on the URL in the Data Request email. You will be directed to the HMS DocuLink Submission Portal.
   *Note: This link may be forwarded for file upload by someone other than the original recipient.*

## B. Downloading sample of cases

1. To download the list of sampled cases, from the DocuLink Submission Portal, click on the URL in the Data Request email.
   *Note that the HMS DocuLink portal uses two-factor authentication to <u>download</u> files and <u>only the primary contact with access to the email listed above may be able to retrieve this list</u>. Email sts@hcmsllc.com if assistance is needed.*

2. Once the site loads, click on the "Request Passcode" box. A unique passcode will be emailed to the point of contact email address. (**Figure 1**)
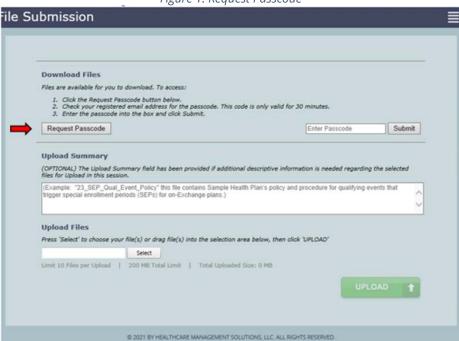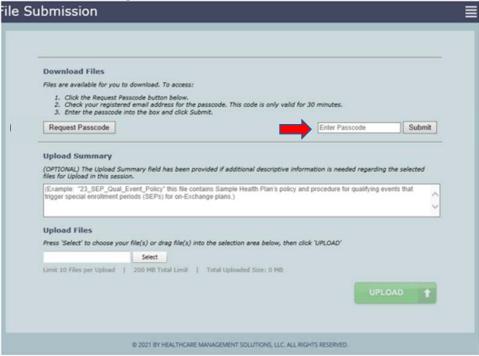
*Figure 1: Request Passcode*

3. This passcode will expire after its first use within 15 minutes. Subsequent attempts to download this file will require the point of contact identified in this notification to request an additional passcode. (**Figure 2)**

*Figure 2: Enter Passcode*



1. Once passcode is entered, an Excel file containing the list of 20 cases to be audited AND a template for submitting your sites Operating Room Log data will be displayed under "Download files."  You may click on the orange button and download the file(s) to your local drive. (**Figure 3**) *IMPORTANT: this file contains PHI*.

*Figure 3: File Download Screen*

## C. Preparing documentation for submission

1.  Once the list of selected cases is retrieved, please use the following process to organize the submission.
    a.  Refer to the audited variables in **Appendix A** for administrative and clinical data fields selected for audit.
    b.  Contact your site's medical records and/or IT departments to assist with obtaining the required documents from your vendor software. The documents must be provided in PDF format. To facilitate an accurate audit, HMS requests that PDF documentation is bookmarked to identify each section where each sequence number entry may be found in the supporting documentation. (**These are the titles under the column labeled Data Collection Area in Appendix B)**. Note that this may require the use of PDF editing software such as AdobePro or NitroPro. (**Appendix C**)

## D. Uploading the documentation

1.  Once the requested data is collected and prepared according to the initial request, the Participant or its designee accesses the portal using the link in the initial request email. The participant begins the file upload process by clicking on the "Select" button in the *Upload Files* section of the portal. **(Figure 4)**

*Figure 4: Submission Portal Upload tool*

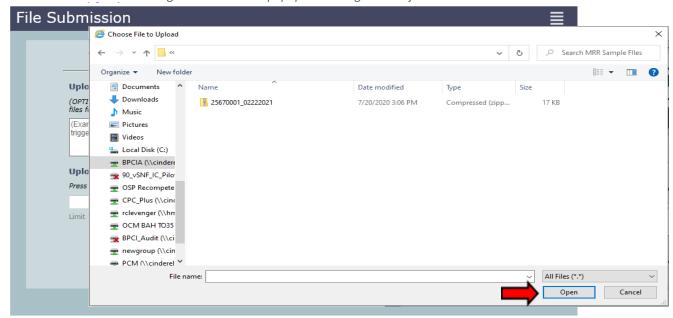2. A pop-up window appears where the participant locates prepared files saved to their local drive. **(Figure 5)**

*Figure 5: Portal with local drive popup*



3. Multiple files may be selected by highlighting one file, then holding the Ctrl key while selecting up to nine more files. Once the applicable files are highlighted, click "Open." **(Figure 6)**

*Figure 6: Portal with popup containing selected files*

4. Once files for upload are selected from the Participant's local drive, each file is displayed in the *upload files* area with a green circle next to it. This indicates the selected file(s) are valid and is pending for upload **(Figure 7).** Enter a brief summary or description of the file(s) being uploaded in the *Upload Summary* field.

*Figure 7: Submission Portal showing file pending for upload*



5. Once selected data files are ready for upload, click the green *Upload* button **(Figure 8)** to transfer files to the audit contractor site. A confirmation page appears if upload is successful **(Figure 9)**.

*Figure 8: Upload screen in portal*

*Figure 9: Upload confirmation screen in portal*



The Confirmation page provides a list of uploaded files, the date and time of upload, and a confirmation number. Print this page or document the confirmation number as a receipt and evidence of the documents uploaded.
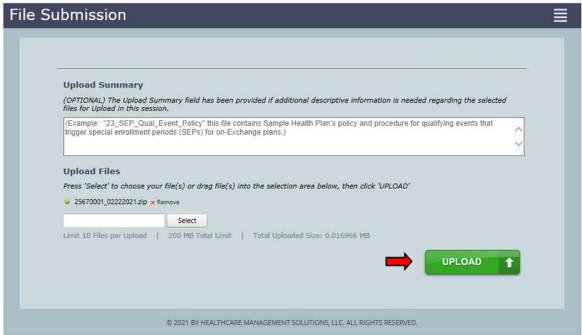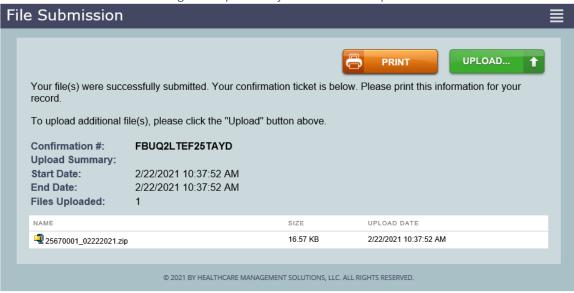
Thank you for your efforts. If you experience any technical difficulties during this process, please reach out to the HMS Review Team at sts@hcmsllc.com.

## Appendix A: Adult Cardiac 2022 Audited Variables List

| Seq. Number | Short Name | Long Name |
|---|---|---|
| **Demographics** | | |
| 65 | DOB | Date of Birth |
| 70 | Age | Patient Age |
| 75 | Gender | Sex |
| 151 | Race Multi | Race |
| 185 | Ethnicity | Hispanic, Latino or Spanish Ethnicity |
| **Hospitalization** | | |
| 291 | PayorPrim | Primary Payor |
| 298 | PayroSecond | Secondary Payor |
| 305 | AdmitDt | Admit Date |
| 310 | SSurgDt | Date of Surgery |
| **Risk Factors** | | |
| 330 | HeightCm | Height (cm) |
| 335 | WeightKg | Weight (kg) |
| 360 | Diabetes | Diabetes |
| 365 | DiabCtrl | Diabetes-Control |
| 375 | Dialysis | Dialysis |
| 380 | Hypertn | Hypertension |
| 385 | InfEndo | Endocarditis |
| 390 | InfEndTy | Endocarditis Type |
| 405 | ChrLungD | Chronic Lung Disease |
| 450 | HmO2 | Home Oxygen |
| 460 | SlpApn | Sleep Apnea |
| 465 | Pneumonia | Pneumonia |
| 470 | IVDrugAb | Illicit Drug Use within One Year |
| 480 | Alcohol | Alcohol Use |
| 485 | LiverDis | Liver Disease |
| 492 | ImmSupp | Immunocompromised Present |
| 495 | MediastRad | Mediastinal Radiation |
| 500 | Cancer | Cancer Within 5 Years |
| 505 | PVD | Peripheral Artery Disease |
| 512 | UnrespStat | Unresponsive State |
| 515 | Syncope | Syncope |
| 525 | CVD | Cerebrovascular Disease |
| 530 | CVA | Prior CVA |
| 535 | CVAWhen | Prior CVA-When |
| 540 | CVDTIA | CVD TIA |
| 550 | CVDStenRt | Severity of stenosis on the right carotid artery |
| 555 | CVDStenLt | Severity of stenosis on the left carotid artery |
| 560 | CVDPCarSurg | History of previous carotid artery surgery and/or stenting |

| Seq. Number | Short Name | Long Name |
|---|---|---|
| 565 | WBC | WBC Count |
| 575 | Hct | Hematocrit |
| 580 | Platelets | Platelet Count |
| 585 | TotAlbumin | Total Albumin |
| 7230 | TempCode | Did the patient have a laboratory confirmed diagnosis of Covid-19? |
| 7225 | TempDt | Date of Positive Covid-19 Test (closest to OR date) |
| **Previous Cardiac Interventions** | | |
| 670 | PrCAB | Previous Coronary Artery Bypass (CAB) |
| 675 | PrValve | Previous Valve Procedure |
| 775 | POCPCI | Previous PCI |
| 780 | POCPCIWhen | PCI Performed Within This Episode of Care |
| 800 | POCPCIIn | PCI Interval |
| 805 | POC | Other Previous Cardiac Interventions |
| **Preoperative Cardiac Status** | | |
| 885 | PrevMI | Prior Myocardial Infarction |
| 890 | MIWhen | MI When |
| 895 | CardSympTimeOfAdm | Primary Coronary Symptom for Surgery |
| 911 | HeartFail | Heart Failure |
| 915 | ClassNYH | Classification-NYHA |
| 930 | CarShock | Cardiogenic Shock |
| 935 | Resusc | Resuscitation |
| 945 | Arrhythmia | Cardiac Arrhythmia |
| 955 | ArrhythSSS | Sick Sinus Syndrome |
| 960 | ArrhythAFlutter | AFlutter |
| 961 | ArrhythAtrFib | AFibrillation |
| 965 | ArrhythSecond | Second Degree Heart Block |
| 970 | ArrhythThird | Third Degree Heart Block |
| **Preoperative Medications** | | |
| 1020 | MedACRI48 | ACE or ARB |
| 1030 | MedBeta | Beta Blocker |
| 1060 | MedADP5Days | ADP Inhibitor (includes P2Y12) |
| 1065 | MedADPIDis | ADP Inhibitors Discontinuation |
| 1073 | MedGP | Glycoprotein IIb/IIIa |
| 1130 | MedInotr | Inotropic, Intravenous |
| 1143 | MedSter | Steroids |
| **Hemodynamics/Cath/Echo** | | |
| 1170 | NumDisV | Number Diseased Vessels |
| 1174 | StenLeftMain | Left Main Stenosis (greater than or equal to) 50% |
| 1545 | HDEF | Ejection Fraction |
| 1590 | VDInsufA | Aortic Valve Regurgitation |
| 1600 | VDStenA | Aortic Valve Stenosis |

| Seq. Number | Short Name | Long Name |
|---|---|---|
| 1615 | VDGradA | Mean Gradient |
| 1617 | VDAort | Aortic Valve Disease |
| 1680 | VDInsufM | Mitral Regurgitation |
| 1690 | VDStenM | Mitral Valve Stenosis |
| 1710 | VDMit | Mitral Valve Disease |
| 1711 | VDMitDis | Chose Primary Lesion if Mitral Valve Disease, yes |
| 1775 | VDInsufT | Tricuspid Regurgitation |
| 1776 | VDStenT | Tricuspid Valve Stenosis |
| 1778 | VDTr | Tricuspid Valve Disease |
| **Operative** | | |
| 1966 | Risk Discussed | Indicate whether the STS Risk Calculator score was discussed with the patient/family prior to surgery |
| 1975 | Status | Status |
| 2290 | AbxDisc | Appropriate Antibiotic Discontinuation |
| **Coronary Bypass** | | |
| 2626 | IMAUsed | Internal Mammary Artery (arteries) used |
| 2629 | NoIMARsn | Reason for no IMA |
| **Valve Surgery** | | |
| 3395 | VSAVpr | Aortic Valve without concomitant Aorta Procedure Performed |
| 3403 | VSAVSurgType | Device Type |
| 3500 | VSMVPr | Mitral Valve Procedure Performed |
| 3502 | VSMVRepAppSurg | If surgical (select all that apply) |
| 3620 | MitralImplantTy | Implant type |
| **Mechanical Cardiac Assist Devices** | | |
| 3725 | IABP | Intra-Aortic Balloon Pump (IABP) |
| **Other Cardiac Events** | | |
| 4139 | OCarAAMeth | Left Atrial Appendage Obliteration |
| 4191 | OCarAFibLesLoc | Lesion location |
| **Post-Operative** | | |
| 6591 | PostopIntub | Re-intubated /or intubated Post Op During Hospital Stay |
| 6595 | VentHrsA | Additional Hours Ventilated |
| 6615 | ICUReadm | Readmission to ICU |
| **Postoperative Events** | | |
| 6690 | SurSInf | Surgical Site Complications during postoperative period up to 30 days or during initial hospitalization* |
| 6700 | DeepSternInf | Deep Sternal |
| 6750 | Complics | Other In Hospital Postoperative Event Occurred |
| 6755 | COpReBld | ReOp for Bleeding/Tamponade |
| 6765 | CPoReVlv | ReOp for Valvular Dysfunction |
| 6771 | CReingMI | Unplanned Coronary Artery Intervention |
| 6774 | CAortReint | Aortic Reintervention |
| 6778 | COpReOth | ReOp for Other Cardiac Reasons |
| 6780 | COpReNon | Returned to the OR for Other Non-Cardiac Reasons |

| Seq. Number | Short Name | Long Name |
|---|---|---|
| 6810 | CNStrokP | Postoperative Stroke |
| 6835 | CPVentLng | Prolonged Ventilation |
| 6870 | CRenFail | Renal Failure |
| 6945 | COtAFib | Atrial Fibrillation |
| **Discharge/Mortality** | | |
| 7001 | Mt30Stat | Status at 30 days After Surgery (either discharged or in-hospital) * |
| 7006 | DischDt | Hospital Discharge Date |
| 7007 | DischMortStat | Status at Hospital Discharged |
| 7060 | DCASA | Aspirin |
| 7070 | DCADP | ADP Inhibitor |
| 7105 | DCBeta | Beta Blocker |
| 7115 | DCLipLowStat | Lipid Lowering - Statin |
| 7121 | MtDate | Mortality - Date |
| 7124 | MtOpD | Operative Mortality |
| **Readmission** | | |
| 7140 | Readmit | Readmit* |
| 7145 | ReadmitDt | Readmit Date |
| 7160 | ReadmRsn | Readmit Primary Reason |

*Verification of 30-day status is required to be submitted to the audit company. This includes any tracking logs or EHR documentation used to code the 30-day status, readmission, and surgical site infection within 30 days fields: Mt30Stat (seq 7001), Readmit (seq 7140), and SurSInf (seq 6690). Failure to submit all 30-day status verification information will result in a failed audit. STS will inform the site when the re-audit will occur.