Simple Data Integration With PATHWAYS™

Challenge

Redundant data entry can be a time-consuming hurdle in the clinical setting. Not only is it a headache, but it also affects productivity and data quality by:

- Requiring additional data entry for each procedure.
- Introducing opportunities for data entry errors during transposition from one system to another.

Solution

M2S can assist your organization with this simple data integration service. The integration service is easy to implement, both from a time and technical standpoint.

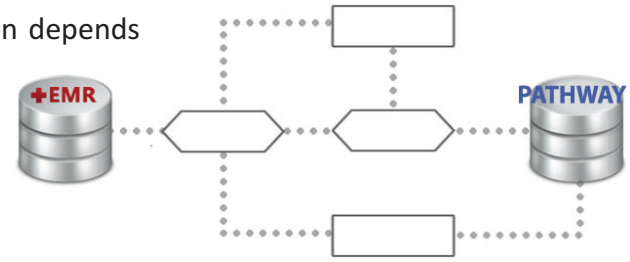
Currently, fields in the *General* and *Demographics* sections of each procedure form can be pre-populated. On average, this saves 4 to 6 minutes per procedure or 40% of the total data entry time*.

This is achieved by establishing a simple file transport between your organization and M2S. This file is exported and sent from your EMR, database, or individual computer to M2S. This can be a manual export, or it can be automated with the help of your IT department.

Workflow

The most appropriate method used to send M2S this information depends on your data entry model.

On the following pages, review the examples of common models and their recommended data transport methods. Use these as a guide to determine the best method for your organization.



** Based on a progressive data entry model*

M2S • 12 Commerce Ave • West Lebanon, NH 03784 • P. 603.298.5509 • F. 603.298.5055 • m2s.com

Workflow Models for Simple Data Integration with PATHWAYS

Data Entry Methods

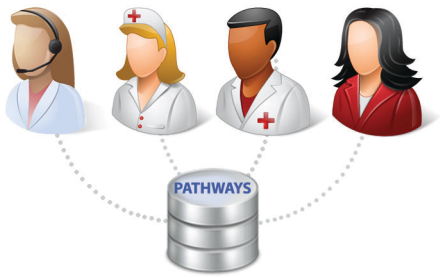
A basic data import of the six patient identifiers is required to create the patient record within PATHWAYS. To import data specific to a procedure, a data source indicating procedure type must be specified.

Below are three common methods for data entry into PATHWAYS. Each method lists the recommended data source within your organization. We can work with your Information Systems and HIM staff to determine the best solution.

Progressive Method

Data is entered by different staff as a patient progresses through their care at your organization. Data entry typically starts during scheduling, and is progressively entered by staff during pre-op, post- op, and at discharge.

- *Example*: Data is exported from your scheduling system and prepared to be sent to M2S.



Split Method

Data is entered at two points: pre-op and discharge. Pre-op data is typically entered by staff at the time of registration and then finished by clinical staff post-discharge.

- *Example:* Data is exported from your registration system and prepared to be sent to M2S.

Abstracted Method

Data is entered post-discharge, typically by data abstractors.

- *Example: Data is exported from your billing system and prepared to be sent to M2S.*

Technical Information for Simple Data Integration With PATHWAYS

Overview

To integrate your data into PATHWAYS, we need to establish a communication channel and a standardized file format

Data Transport Method

Data is exported from your data source (either manually, or using an automated process) and sent to M2S via Secure File Transfer Protocol (SFTP).

SFTP Security & Standards

Organizations may use any SFTP software that supports 256k encryption and M2S can assist you in finding the correct client should you need recommendations.

File Specification

The file required to be sent to M2S is a flat file, delimited by double-tildes (~~), and named using a format specific t
your organization. Please see the following pages for file format and field specifications.

Next Steps

- Review file format for a description of fields and field specifications
- Decide which system(s) contain the data to be exported
- Define the frequency of the file transport
- Contact the Registry Team at M2S to set up a meeting to discuss the process

File Specifications for Simple Data Integration File

Specification Type	Specification Values
File Name	pathways_centerid_yyyymmddhhmmss.dat *centerid's to be provided by M2S
File type	flat text file with double tilda delimiter
File Extension	.dat
New line character at the end of every record	CHR(13)
Null values	two tildas followed immediately by two additional tildas ~~~~
Sample dataset *(by variable name)* *(Note: the file needs to have the column headers displayed at the top)*	First Name~~Last Name~~MI~~DOB~~MRN~~SSN~~Zip/Postal Code~~Gender~~Hispanic or Latino~~Race~~Height (inches)~~Height (cm)~~Weight (lbs)~~Weight (kg)~~Visit Code~~Physician First Name~~Physician Last Name~~Physician e-mail/Physician NPI~~Surgery Date~~Admit Date~~Discharge Date~~Primary Insurer~~Medicare Health Insurance Claim Number~~Transferred From?~~Discharge Status~~Date of Death~~Smoking~~Quit Smoking Date~~Hyperte nsion~~Diabetes~~CAD Symptoms~~Prior CABG~~Prior PCI~~Prior CHF~~COPD~~Dialysis~~Creatinine (mg/dl)~~Creatinine (umol/L)~~Stress Test~~Pre-adm Living~~Ambulatory Status~~CKD Stage 4 or 5~~ASA Class~~Pre-op Hemoglobin (g/dl)~~Pre-Op Hemoglobin (g/L)~~Prior Bypass~~Prior CEA/CAS~~Prior Aneurysm Repair~~Prior PVI~~Prior Major Amp~~Pre-Op ASA~~P2Y12 Antagonist~~Pre-Op Statin~~Pre-Op Beta Blockers~~Pre-Op ACE Inhibitor/ARB~~Pre-Op Chronic Anticoagulant~~HbA1c ~~Side~~Procedure ID~~ICD-9 Diagnosis~~ICD-9/ICD-10 Procedure~~CPT~~Medical Center Name
Sample dataset *(by demo data)*	John~~Smith~~J~~1/1/1900~~F0021675~~123-45-6789~~12345~~1~~0~~5~~67~~170~~161~~73~~ABC123~~Frosty~~Snow man~~frostysnowman@e-mail.com~~10/07/2010~~10/07/2010~~10/08/2010 ~~1~~88927382~~0~~1~~~~1~~11/28/2005~~1~~0~~2~~1~~0~~1~~0~~1 ~~0.7~~61.88~~1~~1~~1~~0~~1~~6~~60~~0~~0~~1~~0~~0~~1~~0~~1~~ 1~~0~~4~~3.7~~1~~2~~440.21~~38.48~~35656~~Demo Medical Center

Field Definitions for Simple Data Integration File

Tab on Form	Field Name on Form	M2S Variable Name	Definition	Field Values	Rules	Field Type	Field Format
PHI	First Name	FIRST_NAME			Mandatory	VARCHAR2(50 BYTE)	
PHI	Last Name	LAST_NAME			Mandatory	VARCHAR2(50 BYTE)	
PHI	MI	MI			Opt	VARCHAR2(50 BYTE)	
PHI	DOB	DOB			Mandatory	VARCHAR2(10 BYTE)	mm/dd/yyyy
PHI	MRN	MRN			Mandatory	VARCHAR2(50 BYTE)	alpha-numeric
PHI	SSN	SSN			Mandatory or need 999-99-9999	VARCHAR2(11 BYTE)	xxx-xx-xxxx
General	Zip/Postal Code	ZIPCODE	Of patient's home residence.		Opt, does NOT apply to Cerebral Aneurysm or Cerebral Arteriovenous Malformations.	VARCHAR2(50 BYTE)	
General	Gender	GENDER	Use gender at birth	1 = Male,2 = Female	Opt	number	
General	Hispanic or Latino	ETHNICITY		0 = No,1 = Yes	Opt, does NOT apply to Cerebral Aneurysm, Cerebral Arteriovenous Malformations, and Acute Ischemic Stroke.	number	
General	Race	RACE		1 = American Indian or Alaskan Native,2 = Asian,3 = Black or African American,4 = Native Hawaiian or other Pacific Islander,5 = White,6 = More than 1 race,7 = Unknown / Other	Opt, does NOT apply to Cerebral Aneurysm, Cerebral Arteriovenous Malformations, and Acute Ischemic Stroke.	number	
General	Height (inches)	HEIGHT		Min/Max range: 54 to 80 inches.	Opt	numeric float (38,1)	
General	Height (cm)	HEIGHT_CM		Min/Max range: 137 to 203 cm.	Opt	numeric float (38,1)	
General	Weight (lbs)	WEIGHT		Min/Max range: 40 and 500 lbs.	Opt	numeric float (38,1)	
General	Weight (kg)	WEIGHT_KG		Min/Max range: 18.1 and 227 kg.	Opt	numeric float (38,1)	
General	Visit Code	VISITCODE	Optional free text (alphanumeric) used to capture unique identifier for this patient visit; sometimes referred to as an account or encounter number. Internal use.		Opt	text	alpha-numeric
General	Physician First Name	fname			Opt * If not sent then the procedure form cannot be created. Instution needs to make sure it is an exact match for first and last name throughout import file incase the procedure form needs to be populated.	char50	
General	Physician Last Name	lname			Opt * If not sent then the procedure form cannot be created. Instution needs to make sure it is an exact match for first and last name throughout import file incase the procedure form needs to be populated.	char50	
General	Physician e-mail/Physician NPI	EMAIL_NPI			Opt * E-mail ID or NPI is used to get the actual surgeon for the procedure. If not sent the procedure form cannot be created.	char255	
General	Surgery Date	SURGERY_DT	Discharge Date should be greater than or equal to Surgery Date which should be greater than or equal to Admit Date.		Opt * If not sent then the procedure form cannot be created, Surgery date should be >= admit date. Surgery date should be <= discharge date.	text [10]	mm/dd/yyyy
General	Admit Date	ADMIT_DT	Discharge Date should be greater than or equal to Surgery Date which should be greater than or equal to Admit Date.		Opt Admit date should be <= Discharge date. Admit date should be >= surgery date.	text [10]	mm/dd/yyyy
General	Discharge Date	DISCHARGE_DT	Discharge Date should be greater than or equal to Surgery Date which should be greater than or equal to Admit Date. This discharge date is the hospital discharge date. If a patient has other operations during this same admission, even if unrelated to the vascular procedure, the entire admission still counts. (Any other method does not allow auditing of the data)		Opt Discharge date should be >= surgery date, admit date.	text [10]	mm/dd/yyyy
General	Primary Insurer	PRIMARY_INSURER	Primary payer for the procedure	1=Medicare, 2=Medicaid, 3=Commercial, 4=Military/VA, 5=non-US insurance, 6=self pay, 7=Medicare Advantage (applies only to Carotid Artery Stent)	Opt	number	
General	Medicare Health Insurance Claim Number	MED_INS_CLM_NMBR	The only two (2) acceptable values for this field are a valid Health Insurance Claim (HIC) ID number or NA. For Medicare patients, please be sure to enter the correct HIC for each patient. For example: 123456789A. Valid HICs are between six (6) and twelve (12) digits and contain at least one letter. For non-Medicare patients and Medicare Advantage plans (Medicare HMO, Medicare Replacement Insurance, etc.), please enter NA in this field.		Opt, does NOT apply to Peripheral Vascular Intervention. The only two (2) acceptable values for this field are a valid Health Insurance Claim (HIC) ID number or NA. For Medicare patients, please be sure to enter the correct HIC for each patient. For example: 123456789A. Valid HICs are between six (6) and twelve (12) digits and contain at least one letter. For non-Medicare patients and Medicare Advantage plans (Medicare HMO, Medicare Replacement Insurance, etc.), please enter NA in this field.	text	alpha-numeric
General	Transferred From?	TRANSFER	Was the patient transferred in from another hospital (any other acute care hospital or emergency room), or from a rehab unit (i.e. units where a patient qualifies for rehab). Choose no, if the patient came from home, nursing home or skilled nursing facility.	0 = No,1 = Hospital,2 = Rehab Unit	Opt, does NOT apply to Peripheral Vascular Intervention, Cerebral Aneurysm, and Cerebral Arteriovenous Malformations.	number	
General	Discharge Status	DISCHARGE_STATUS	Home=if the patient went back to where they came from even if it's a nursing home or discharge to hospice; Rehab Unit=subacute or acute rehab facilities in or outside of your institution; Nursing Home=skilled or regular nursing home; Other Hospital=acute tertiary hospital or long term acute care hospital; Homeless=patient has no physical home;	1 = Home,2 = Rehab Unit,3 = Nursing Home,4 = Dead,5 = Other Hospital,6 = Homeless	Opt, If the value is dead (4) then DOD is required.	number	
General	Date of Death	MORTDATE	If the patient died in-hospital, the date of death and the discharge should be the same. Date of Death should be greater or equal to Surgery Date. Dates should be entered in the MM/DD/YYYY format.		Opt DOD should be > DOB, DOD should be >= Discharge date. Required if Discharge Status is = Dead (4)	text [10]	mm/dd/yyyy

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Tab on Form	Field Name on Form	M2S Variable Name	Definition	Field Values	Rules	Field Type	Field Format
Demographics	Smoking	SMOKING	Prior = quit >= 1 month ago. Current = still smoking within the last month, includes cigarettes, pipe or cigar. EXCLUDE smokeless, i.e. chewing tobacco, snuff, nicotine replacement therapy (e.g. patch, gum, lozenge, e-cigarettes)	0 = Never, 1 = Prior, 2 = Current	Opt	number	
Demographics	Quit Smoking Date	QUIT_SMKG_DATE	List the exact mm/dd/yyyy patient Quit smoking; if day not known, use "1", if month not known use "1", if year not known give best estimate			text [10]	mm/dd/yyyy
Demographics	Hypertension	HTN	Hypertension documented in history or recorded BP >=140/90 preoperatively.	0 = No,1 = yes (>=140/90 or history)	Opt, does NOT apply to Cerebral Aneurysm, Cerebral Arteriovenous Malformations, and Carotid Artery Stent.	number	
Demographics	Diabetes	DIABETES	Select most severe category (they are listed in hierarchical order) None=patient has never been diagnosed with diabetes; Diet=diagnosis of diabetes but not on any medication, including patients refusing medication; Non-insulin Meds=oral meds and non-insulin injections (e.g. Victoza); Insulin=injectable insulin.	0 = None,1 = Diet,2 = Non-insulin Meds,3 = Insulin,4 = Insulin + Non-Insulin Meds (applies only to Carotid Artery Stent).	Opt, does NOT apply to Cerebral Aneurysm or Cerebral Arteriovenous Malformations.	number	
Demographics	CAD Symptoms	CAD	CAD - Coronary Artery Disease: History of MI(Myocardial Infarction) no SX (symptoms)= old MI greater than 6 months ago; Stable angina = stable pattern or symptoms with or without anti-anginal medication; MI < 6 months ago= recent MI withing last 6 months; Unstable angina= new onset, increasing frequency, lasting > 20 min and/or rest angina	0 = None,1 = hx MI but no sx,2 = Stable Angina,4 = MI < 6 mos,5 = Unstable angina,6 = CAD, asymptomatic (applies only to Carotid Artery Stent).	Opt, does NOT apply to Cerebral Aneurysm or Cerebral Arteriovenous Malformations.	number	
Demographics	Prior CABG	PRIOR_CABG	CABG (Coronary Artery Bypass Surgery)	0 = None,1 = <5yr,2 = >= 5yrs ago	Opt, does NOT apply to Cerebral Aneurysm or Cerebral Arteriovenous Malformations.	number	
Demographics	Prior PCI	PRIOR_PCI	PCI (Percutaneous Coronary Intervention) angioplasty, atherectomy, stent	0 = None,1 = <5yr,2 = >= 5yrs ago	Opt, does NOT apply to Cerebral Aneurysm or Cerebral Arteriovenous Malformations.		
Demographics	Prior CHF	PRIOR_CHF	CHF - Congestive Heart Failure: Asymp, hx CHF: No limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation, or dyspnea (shortness of breath); Mild: Slight limitation of physical activity. Comfortable at rest, but ordinary physical activity results in fatigue, palpitation, or dyspnea; Moderate: Marked limitation of physical activity. Comfortable at rest, but less than ordinary activity causes fatigue, palpitation, or dyspnea; Severe: Unable to carry out any physical activity without discomfort. Symptoms of cardiac insufficiency at rest. If any physical activity is undertaken, discomfort is increased.	0 = None,1 = Asymp, hx CHF,2 = Mild,3 = Moderate,4 = Severe	Opt, does NOT apply to Cerebral Aneurysm or Cerebral Arteriovenous Malformations.	number	
Demographics	COPD	COPD	COPD - Chronic Obstructive Pulmonary Disorder: Not treated = COPD documented in record but not treated with medication. Medication includes theophylline, aminophylline,inhalers or steroids	0 = No,1 = Not Treated,2 = On Meds,3 = On Home Oxygen	Opt, does NOT apply to Cerebral Aneurysm or Cerebral Arteriovenous Malformations.	number	
Demographics	Dialysis	DIALYSIS	Transplant = patient has functioning kidney transplant; Dialysis = currently on hemo- or peritoneal dialysis.	0 = No,1 = Functioning Transplant,2 = On Dialysis	Opt, does NOT apply to Cerebral Aneurysm, Cerebral Arteriovenous Malformations, and Carotid Artery Stent.	number	
Demographics	Creatinine (mg/dl)	CREATININE	Use most recent measurement taken before procedure. Min/Max range: 0.4 to 15 mg/dl	Min/Max range: 0.4 to 15 mg/dl.	Opt. Required when dialysis is = 0 or 1.	numeric float (8,2)	
Demographics	Creatinine (µmol/L)	CREATININE_MOL	Use most recent measurement taken before procedure. Min/Max range: 35.36 to 1,326 µmol/L	Min/Max range: 35.36 to 1,326 µmol/L.	Opt. Required when dialysis is = 0 or 1.	numeric float (8,2)	
Demographics	Stress Test	STRESS	Includes stress EKG, stress echo, nuclear stress scans, within 2 years of surgery, assuming no intervening coronary intervention. If there has been coronary intervention and no new stress test then code as not done.	0 = Not done,1 = Normal,2 = (+)ischemia,3 = (+)MI,4 = (+)both	Opt, does NOT apply to Cerebral Aneurysm, Cerebral Arteriovenous Malformations, Acute Ischemic Stroke.	number	
Demographics	Pre-adm Living	PRE_ADMIN	Use last living status before any current, acute hospitalization or rehab unit.	1 = Home,2 = Nursing home,3 = Homeless	Opt, does NOT apply to Cerebral Aneurysm or Cerebral Arteriovenous Malformations.	number	
Demographics	Ambulatory Status	AMB_STATUS	Choose best ambulation category experienced within one month of admission. They are listed in decending order with Amb as the best and Bedridden the worst.	1 = Amb,2 = Amb w/ Assistance,3 = Wheelchair,4 = Bedridden	Opt, does NOT apply to Peripheral Vascular Intervention, Cerebral Aneurysm, Cerebral Arteriovenous Malformations, and Carotid Artery Stent.	number	
Demographics	CKD Stage 4 or 5	CKDSTAGE4OR5	CKD - Chronic Kidney Disease Stage 4: Severe reduction in GFR (15-29 mL/min/1.73 m2). Preparation for renal replacement therapy. Stage 5: Established kidney failure (GFR <15 mL/min/1.73 m2), or already on dialysis with end stage renal failure (EDRF).	0 = No,1 = Yes	Opt, only apply to Hemodialysis Access procedures	number	

Field Definitions for Simple Data Integration File

Tab on Form	Field Name on Form	M2S Variable Name	Definition	Field Values	Rules	Field Type	Field Format
Demographics	ASA Class	ASA_CLASS	ASA Class - American Society of Anesthesiologists Class: 1 = Normal/healthy 2 = w/ mild systemic dx 3 = w/ severe systemic dx 4 = w/ severe systemic dx that's constant threat to life 5 = moribund / not expected to survive w/o op	1 = 1,2 = 2,3 = 3,4 = 4,5 = 5	Opt, does NOT apply to Peripheral Vascular Intervention, Cerebral Aneurysm, and Cerebral Arteriovenous Malformations.	number	
Demographics	Pre-op Hemoglobin (g/dl)	HEMO	Most recent pre-op hemoglobin. Please make sure you provide hemoglobin and not hematocrit. Min/max range: 4 to 20 g/dl	Min/max range: 4 to 20 g/dl.	Opt, does NOT apply to Peripheral Vascular Intervention.	numeric float (8,2)	
Demographics	Pre-op Hemoglobin (g/L)	HEMO_L	Most recent pre-op hemoglobin. Please make sure you provide hemoglobin and not hematocrit. Min/max range: 40 to 200 g/L	Min/max range: 40 to 200 g/L.	Opt, does NOT apply to Peripheral Vascular Intervention.	numeric float (8,2)	
Demographics	Prior Bypass	BYPASS	Any prior non-cardiac arterial bypass for occlusive disease	0 = No,1 = Yes	Opt, does NOT apply to Peripheral Vascular Intervention, Cerebral Aneurysm, Cerebral Arteriovenous Malformations, Carotid Artery Stent, and Acute Ischemic Stroke.	number	
Demographics	Prior CEA/CAS	PRIOR_CEA_CAS	History of CEA (Carotid Endarterectomy) CAS (Carotid Artery Stent)	0 = No,1 = Yes	Opt, does NOT apply to Thoracic and Complex EVAR, Endo AAA Repair, Peripheral Vascular Intervention, Cerebral Aneurysm, Cerebral Arteriovenous Malformations, and Carotid Artery Stent.	number	
Demographics	Prior Aneurysm Repair	ANEUR	True aneurysm is a primary enlargement of a native artery due to disease (saccular, fusiform describe the shape of a true aneursym). False (Pseudo) aneurysms are caused by some type of trama or failure of a previous bypass anastomosis site leading to a hematoma that can look similar to an aneurysm.	0 = No,1 = Yes	Opt, does NOT apply to Thoracic and Complex EVAR, Endo AAA Repair, Peripheral Vascular Intervention, Cerebral Aneurysm, Cerebral Arteriovenous Malformations, Carotid Artery Stent, and Acute Ischemic Stroke.	number	
Demographics	Prior PVI	PTA_STENT	Any non-coronary endovascular intervention such as Angioplasty, Atherectomy or Stent or leg, arm, neck, renal, mesenteric artery	0 = No,1 = Yes	Opt, does NOT apply to Cerebral Aneurysm or Cerebral Arteriovenous Malformations, Carotid Artery Stent, and Acute Ischemic Stroke.	number	
Demographics	Prior Major Amp	MAJOR_AMP	NO=no prior majory amputation, BK/thru knee=Below or thru the knee amputation, AK or higher=Above the knee amputation or higher	0 = No,2 = BK/thru knee,3 = AK or higher	Opt, does NOT apply to Peripheral Vascular Intervention, Cerebral Aneurysm, Cerebral Arteriovenous Malformations, Carotid Artery Stent, and Acute Ischemic Stroke.	number	
Demographics	Pre-op ASA	ASA	ASA - Aspirin. Also include drugs containing ASA, such as Aggrenox. Taken within 36 hours of surgery. No, for medical reason=patient should not take aspirin due to documented medical reasons; Non-compliant=patient not taking medication as prescribed	0 = No,1 = Yes, 2 = No, for medical reason, 3 = Non-compliant	Opt, does NOT apply to Acute Ischemic Stroke.	number	
Demographics	Pre-Op P2Y12 Antagonist	PLAVIX	Chose platelet inhibitor taken within 36 hours of procedure: Clopidogrel/Plavix, Prasugrel/Effient, Ticlopidine/Ticlid or Ticagrelor/Brilinta. None=not on any platelet inhibitor; Other=other P2Y12 not on current list; No, for medical reason=patient should not take P2Y12 due to documented medical reasons or held for surgery; Non-compliant=patient not taking medication as prescribed;	0 = None,1 = Clopidogrel, 2 = Prasugrel,3 = Ticlopidine, 4 = Ticagrelor,5 = Other, 6 = No, for medical reason, 7 = Non-compliant	Opt, does NOT apply to Peripheral Vascular Intervention, Carotid Artery Stent, and Acute Ischemic Stroke.	number	
Demographics	Pre-Op Statin	STATIN	Any of the HMG-CoA reductase inhibitors used to reduce cholesterol, including atorvastatin (Lipitor and Torvast), fluvastatin (Lescol), lovastatin (Mevacor, Altocor, Altoprev), pitavastatin (Livalo, Pitava), pravastatin (Pravachol, Selektine, Lipostat), rosuvastatin (Crestor), simvastatin (Zocor, Lipex) or combination preparations of a statin and another agent - such as ezetimibe/simvastatin (Vytorin). Taken within 36 hours of surgery. No, for medical reason=patient should not take statin due to documented medical reasons; Non-compliant=patient not taking medication as prescribed (e.g. Advicor/Niacin and Lovastatin, Altoprev/Lovastatin, Caduet/amlodipine and atorvastatin, Crestor/Rosuvastatin, Juvisync/Simvastatinand Sitagliptin, Lescol/fluvastatin, LipitorAtorvastatin, LivaloPitavastatin, Mevaco/Lovastatinr, Provachol/Pravastatin, Simcor/Niacin and Simvastatin, Vytorin/Ezetimibe and Simvastatin, Zocor/Simvastatin)	0 = No,1 = Yes, 2 = No, for medical reason, 3 = Non-compliant	Opt, does NOT apply to Acute Ischemic Stroke.	number	

Tab on Form	Field Name on Form	M2S Variable Name	Definition	Field Values	Rules	Field Type	Field Format
Demographics	Pre-Op Beta Blockers	BETABLOCKERS	Peri-operative=started within one month before surgery or during surgery. Chronic=more than one month before surgery. No, for medical reason=patient should not take Beta Blocker due to documented medical reasons; Non-compliant=patient not taking medication as prescribed (e.g. Acebutolol/Sectral, Atenolol/Tenormin, Betaxolol/Kerlone/Betoptic, Bisoprolol/Zebeta, Carteolol/Cartrol, Carvedilol/Coreg, Lopressor/Toprol XL/metaprolol, Nadolol/Corgard, Nebivolol/Bystolic, Solatol/Betapace. . .)	0 = No,1 = Pre-op 1-30 days, 2 = Chronic > 30 days, 3 = No, for medical reason, 4 = Op Day only,5 = Non-compliant	Opt, does NOT apply to Peripheral Vascular Intervention and Acute Ischemic Stroke.	number	
Demographics	Pre-op ACE-Inhibitor/ARB	ACE_I_ARB		0 = No,1 = Yes,2 = No, for medical reason,3 = Non-compliant	Opt, does NOT apply to Acute Ischemic Stroke.	number	
Demographics	Pre-op Chronic Anticoagulant	PRE_OP_ANTICOAGULANT	Choose None, if patient was not on chronic anticoagulant before the procedure. Choose one of the anticoagulants (Warfarin, Dabigatran, Rivaroxaban), if the patient was on chronic anticoagulation that was or was not stopped prior to the procedure. Choose No, for medical reason, if patient should not take anticoagulant due to documented medical reasons. Choose Non-compliant, if patient not taking medication as prescribed.	0 = None,1 = Warfarin,2 = Dabigatran,3 = Rivaroxaban,4 = Other,5 = No, for medical reason,6 = Non-compliant	Opt, does NOT apply to Peripheral Vascular Intervention, Carotid Artery Stent, and Acute Ischemic Stroke.		
Demographics	HbA1c	HBA1C	Most recent HbA1c value available. Min/max range: 2.0 to 19.0. Obtain from PCP if surgeon does not have one.		Opt, does NOT apply to Peripheral Vascular Intervention, Cerebral Aneurysm, Cerebral Arteriovenous Malformations, and Acute Ischemic Stroke.	numeric float (38,0)	
Procedure	Side	GRFTORGSIDE (Supra-inguinal Bypass), SURGERYSIDE (Carotid Endarterectomy, Hemodialysis Access, Infra-inguinal Bypass, Lower, Extremity Amputation), TEVAR_SIDE (Thoracic and Complex EVAR)		1 = Right, 2 = Left, 3 = Bilateral, 4 = Aortic, abdominal, 5 = Aorta, ascending	Opt, only apply to Carotid Artery Stent, Carotid Endarterectomy, Hemodialysis Access, Infra-inguinal Bypass, Supra-inguinal Bypass, Lower, Extremity Amputation, Thoracic and Complex EVAR, Carotid Artery Stent, and Acute Ischemic Stroke.	number	
N/A	Procedure ID	PROCEDUREID		1= Carotid Endarterectomy, 2 = Infra-inguinal Bypass, 4 = Open AAA Repair, 9 = Supra-inguinal Bypass, 12 = Hemodialysis Access, 15 = Lower Extremity Amputation, 16 = IVC Filter, 17 = Acute Ischemic Stroke, 18 = Thoracic and Complex EVAR, 19 = Endo AAA Repair, 21 = Cerebral Aneurysm, 22 = Cerebral Arteriovenous Malformations, 23 = Peripheral Vascular Intervention, 24 = Carotid Artery Stent.	Required, unless ICD-10 procedure code or CPT code is provided	number	
N/A	ICD-9 Diagnosis	ICD9D		Industry Standards	If multiple ICD-9 Diagnosis codes please use a comma ',' delimiter and one data record		
N/A	ICD-9/ICD-10 Procedure	ICD9P/ICD-10		Industry Standards (Note: 39.25 will create a Supra Inguinal Bypass procedure, 39.29 will create an Infra-inguinal Bypass procedure. 04U03JZ and 04U04JZ will create an Endo AAA Repair procedure, 04V03DZ and 04V04DZ will create a Thoracic and Complex EVAR procedure. 03VG3DZ will create a case both for Cerebral Aneurysm and Cerebral Arteriovenous Malformations)	If multiple codes please use a comma ',' delimiter and one data record	Industry Standards	
N/A	CPT	CPT		Industry Standards	If multiple CPT codes please use a comma ',' delimiter and one data record	Industry Standards	
N/A	Medical Center Name	MEDCENTERNAME		Full Name of the Medical Center	Mandatory	text	