

# **User Guide for the 2020 Participant Use Data File (PUF)**

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## 4. Data Collection Background and Data Quality

MBSAQIP collects data on over 200 variables including preoperative risk factors, intraoperative variables, and 30-day postoperative mortality and morbidity outcomes for patients undergoing metabolic and bariatric surgical procedures in both the inpatient and outpatient setting.

Required data elements are entered via a web-based data collection tool. Portions of the data may be automatically populated by a software program that was developed to extract data from the participating hospital's existing information systems. Requestors should contact the Metabolic and Bariatric Surgical Clinical Reviewers (MBSCRs), at their hospital for detailed information on how the hospital collects its MBSAQIP data.

To ensure the data collected are of the highest quality, the MBSAQIP has developed a host of different training mechanisms for the MBSCRs and conducts a data integrity audit of selected participating centers. The MBSAQIP requires MBSCRs to complete a series of web-based

## Case Exclusion Criteria

The following exclusion criteria were applied to cases collected in 2020. For the current inclusion/exclusion criteria, please contact the MBSAQIP Clinical Support Team at [clinicalsupport@mbsaqip.org](mailto:clinicalsupport@mbsaqip.org).

Procedures which would not meet metabolic or bariatric inclusion criteria:

- Cancer cases: Any patient who is admitted to the hospital and has an included procedure to address cancer.
- Trauma cases: Any patient who is admitted to the hospital and has an included procedure to address a traumatic injury.
- Patient is under 5 years of age.
- Primary Procedure not performed by the reporting site.
- Multiple MBSAQIP assessed cases within 30 days: Any patient who had an MBSAQIP assessed procedure entered within the previous 30 days at the center, the additional metabolic or bariatric procedure performed within 30 days is only entered as a reoperation or intervention. Only one MBSAQIP procedure can be entered as a new case into the data registry per patient, per 30 days, for a center.
- Cases completed due to complication or occurrences from a prior metabolic and bariatric procedure (with the exception of GERD). For example, cases in which a portion of the metabolic and bariatric procedure was revised, or the metabolic and bariatric procedure was converted due to ulcer, perforation, stricture, nausea, vomiting, or excessive weight loss, the procedure would not be captured on a case form, rather captured as a Reoperation or Intervention. Note: Only Reoperations and Interventions which occurred within the 30 day postoperative timeframe of a case captured on a case form are included in the PUF.

## Hospital Exclusion Criteria

In addition to the case inclusion/exclusion criteria, center inclusion/exclusion criteria are also imposed. To maintain the highest level of data quality, only cases that are saved as complete on a case form in the MBSAQIP registry are included in the PUF. These cases go through an additional level of scrutiny as they are passed from data collection to statistical analysis. A center's cases may also be excluded from the PUF if the center meets any of the following criteria:

- 30-day follow-up rate is under 80% for the SAR timeframe
- Data Integrity Audit disagreement rate is over 5%
- The MBSCR(s) at the center does not successfully complete the annual MBSCR Certification Exam
- The center is found not to be in compliance with MBSAQIP Standard 6, "Data Collection"

## 6. Data Limitations

While every effort has been made to make the PUF as complete as possible, the data do have certain limitations. Some of these limitations have been deliberately introduced to safeguard the privacy of patients (such as removal of absolute dates). The following items represent the most salient limitations of the data:

- While the sex and race distributions are reasonably representative of the national surgery patient population, only patients over the age of 5 are available for assessment, so the age distribution is somewhat truncated. Patients under the age of 13 and over the age of 80 also have their ages de-identified in the PUF (age is set to missing with added indicator variables included to identify patients under the age of 13 and over the age of 80, respectively).
- In order to comply with HIPAA requirements, all absolute dates have been removed. The most critical of these is the date of surgery, which has been reduced to year of surgery only. Some dates (hospital entry, dates of laboratory tests, and so on) have been recoded into durations (e.g., Date of Admission and Date of Discharge are recoded into Days to Discharge from Hospital Admit).
- In order to comply with the Participation Agreement (PA) that is agreed to between the ACS and participating centers, facility identifiers as well as geographic information regarding the case have been removed. The PA stipulates that the ACS does not identify participating centers. Facility identification could be possible even with blinded identifiers through advanced statistics. A stipulation of access to the PUF is completion of the Data Use Agreement that strictly prohibits attempts to identify hospitals, health care providers, or patients.
- While many risk factors are tracked, preventative measures are not recorded which can



## 8. Frequently Asked Questions

### Request Process

Q: Who has access to this file?

A: Any individual from an actively participating MBSAQIP center will be given access to the file following completion of the PUF Data Use Agreement and a short set of questions that are available on the website.

Q: Is the file available to individuals from nonparticipating centers?

A: At this time the data files are only available to individuals at MBSAQIP participating centers.

Q: Is the PUF only available to the MBSAQIP-accredited centers?

A: The only requirement is that centers must be actively participating in the MBSAQIP either as a data collection or accredited center. PUF access is not contingent on accreditation status.

Q: I am at a participating MBSAQIP center and would like to work on a research project with others from a different center that is not participating. Will I be allowed to do that?

A: No. At this time use of the file is restricted to individuals at participating MBSAQIP centers.

Q: How do I obtain a copy of this file?

A: Please see the “Data Request Process” on page 3 of this document for a step-by-step approach on how to do so.

Q: Is there a time limit for downloading the files after the PUF request is approved?

A: Yes, users have 10 days from the time the PUF approval notification is sent to download the files.

### Contents of the Files

Q: What is in each file?

A: Each file contains Health Insurance Portability and Accountability Act (HIPAA) de-identified data from centers participating in the MBSAQIP that were eligible for the corresponding SAR period. See the PUF User Guide Tables in Section 9 of this document for a list.

Q: What procedures (CPTs) are included in the PUF?

A: See Appendix B: Case Inclusion and Follow-up within the MBSAQIP Data Registry Operations Manual for a listing of procedure types. Any primary, conversion, or revisional case that meets inclusion criteria for creation as a “New Case” is included in the PUF.

Q: Are revisional procedures included in the PUF?

A: Yes. All cases that meet inclusion criteria for creation as a “New Case” (see Appendix B: Case Inclusion and Follow-up within the MBSAQIP Data Registry Operations Manual) are included in the PUF.

Q:

Q: I am the MBS Director from a center that has records in the PUF and would like to know which specific records are ours.

A: At this time we do not provide center identification of any cases in the PUF, even self-identification.

Q: Are other PUF data sets available?

A: There are five previous MBSAQIP PUF files available for request / download:

PUF Year	PUF Type	Cases	Centers
2019	MBSAQIP	206,570	868
2018	MBSAQIP	204,837	854
2017	MBSAQIP	200,374	832
2016	MBSAQIP	186,772	791
2015	MBSAQIP	168,903	742

### Values in the Data

Q: Why is age missing for some records in the main dataset?

A: Records will have a missing value for age if the calculated age of the patient was less than 13 years or greater than 80 years.

Q: Why are some records in the main dataset missing a pre-op BMI measurement?

A: Records will have a missing pre-op BMI measurement (either closest to surgery or highest recorded within one year prior to the surgery) if the pre-op BMI was unknown or the calculated pre-op BMI was less than 15 or greater than 150.

Q: Some of the duration variables (e.g., **Dys** from Operation Date to Readmission, Days from Operation Date to Reoperation etc.) have unknown durations. Why is that?

A: Records will have unknown durations for duration variables if an unknown or invalid date was entered which inhibited the calculation of duration. The duration (i.e., number of days) will be missing for such records.

Q: Some of the required variables have missing values. Why is that?

A: In the processing of large amounts of data, a small percentage of descriptions or data fields are inadvertently removed through either software glitches, automated uploader issues, or data entry errors. The program continues to improve the data collection software to minimize the potential for such issues and errors.

### File Formats

Q: In what file formats are the data available?

A: The datasets are made available as tab delimited TXT files, SPSS data files, or SAS data files. Please note that SAS or SPSS files require special software. You can run the Text file, then save, and convert to an Excel File.

Q: Do you provide training on how to use these file formats?

A: MBSAQIP does not provide training, instruction, or guidance in the use of statistical analysis software.

## General

Q: As an MBSAQIP Accredited Center, do we have any obligation to request or use the PUF?

A: No. The PUF is solely a benefit of participation for centers who are interested in using the data for research purposes. There are no PUF requirements related to your center's MBSAQIP Accreditation status.

## 9. PUF User Guide Tables

The PUF User Guide Tables provides a variable-by-variable description for each of the four datasets available in the PUF. This tables contains a column titled "Page Number in Variables

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## MAIN

Position #	Variable Name	Data Type	Variable Label	Search Term in Variables and Definitions	Page Number in Variables and Definitions	Variable Options	Comments
1	CASEID	Num	Case Identification Number	Each case or record in the database has a unique CaseID number.			
2	SEX	Char	Sex	Variable Name: Sex	2	Male; Female; Non-binary	
3	AGE	Num	Age (years)	Variable Name: Date of Birth	1		Values capped between 13 and 80
4	ageLT13	Char	Age Less Than 13 Years	Indicator for patients with recorded age less than 13		Yes; No	
5	ageGT80	Char	Age Greater Than 80 Years	Indicator for patients with recorded age greater than 80		Yes; No	
6	RACE_PUF	Char	Race	Variable Name: Race	3	White Black or African American American Indian or Alaska Native Native Hawaiian or Other Pacific Islander Asian Some Other Race Unknown/Not Reported	Field is multi-select. Selections are separated by " ~ ". Any unique categories with frequency < 50 are set to 'Race combinations with low frequency'.
7	HISPANIC	Char	Hispanic Ethnicity	Variable Name: Hispanic Ethnicity	4	Yes; No; Unknown	
8	PROCEDURE_TYPE	Char	Procedure Type	Variable Name: Procedure Type	7	Conversion; Initial; Revision	Please refer to the Case Exclusion Criteria section in the accompanying User Guide for procedure types and cases eligible for inclusion in these data files.
9	CPT	Char	Primary Procedure CPT	Variable Name: Primary Procedure	8		
10	CPT_DESCR	Char	Primary Procedure CPT Description	Variable Name: Primary Procedure	8		
11	INIT_PROC_DESC	Char	Initial Procedure Description	Variable Name: Initial Procedure Description	9	See "Variable Name: Initial Procedure Description" "Options" List on page 9 of Variables and Definitions	Required if 43659 or 43999 is entered for the Primary Procedure CPT®. If PROCEDURE_TYPE not = 'Initial', then this field will be missing.
12	CONV_PREV_PROC	Char	Conversion Previous Procedure	Variable Name: Conversions Previous Procedure	10	See "Variable Name: Conversions Previous Procedure" "Options" List on page 10 of Variables and Definitions	Field is multi-select. Selections are separated by " ~ ". If PROCEDURE_TYPE not = 'Conversion', then this field will be missing.
13	CONV_CURR_PROC	Char	Conversion Current Primary Procedure	Variable Name: Conversions Current Primary Procedure	11	See "Variable Name: Conversions Current Primary Procedure" "Options" List on page 11 of Variables and Definitions	If PROCEDURE_TYPE not = 'Conversion', then this field will be missing.
14	REV_PROC	Char	Revision Procedure Type	Variable Name: Revisions Procedure Type	12	See "Variable Name: Revisions Procedure Type" "Options" List on page 12 of Variables and Definitions	If PROCEDURE_TYPE not = 'Revision', then this field will be missing.
15	REV_CONV_EMERGCASE	Char	Revision/Conversion Emergency Case	Variable Name: Emergency Case	13	Yes; No	If PROCEDURE_TYPE = 'Initial', this field will be missing.
16	REV_CONV_FININDIC	Char	Revision/Conversion Final Indication	Variable Name: Final Indication	14	See "Variable Name: Final Indication" "Options" List on page 14 of Variables and Definitions	If PROCEDURE_TYPE = 'Initial', this field will be missing.
17	OTHcpt1	Char	Other CPT 1	Variable Name: Other Procedures	15		Any additional CPT® code. If none entered field will be 'NULL'.
18	OTHcpt2	Char	Other CPT 2				
19	OTHcpt3	Char	Other CPT 3				
20	OTHcpt4	Char	Other CPT 4				
21	OTHcpt5	Char	Other CPT 5				
22	OTHcpt6	Char	Other CPT 6				
23	OTHcpt7	Char	Other CPT 7				
24	OTHcpt8	Char	Other CPT 8				
25	OTHcpt9	Char	Other CPT 9				
26	OTHcpt10	Char	Other CPT 10				
27	CONcpt1	Char	Concurrent CPT 1	Variable Name: Concurrent Procedures	16		Any additional CPT® code. If none entered field will be 'NULL'.
28	CONcpt2	Char	Concurrent CPT 2				
29	CONcpt3	Char	Concurrent CPT 3				
30	CONcpt4	Char	Concurrent CPT 4				
31	CONcpt5	Char	Concurrent CPT 5				
32	CONcpt6	Char	Concurrent CPT 6				
33	CONcpt7	Char	Concurrent CPT 7				
34	CONcpt8	Char	Concurrent CPT 8				
35	CONcpt9	Char	Concurrent CPT 9				
36	CONcpt10	Char	Concurrent CPT 10				
37	STAPLING_PROC	Char	Stapler Used/Anastomosis Completed	Variable Name: Stapler Used/Anastomosis Completed	17	Yes; No	

ID	Variable Name	Type	Description	Source	Scale	Units	Values
40	OPYEAR	Num	Year of Operation	Year of initial bariatric or metabolic surgery	6		
41	DTOP	Num	Days to operation from hospital admit date	Days to initial bariatric or metabolic surgery operation date from hospital admission date	18		Values capped between 0 and 30.
42	DTDISCH_OP	Num	Days to discharge from operation date	Days to hospital discharge from initial bariatric or metabolic surgery date	19		Values capped between 0 and 150.
43	DTDISCH_ADMIT	Num	Days to discharge from hospital admit date	Days to hospital discharge from hospital admission date	19		Values capped between 0 and 180.
44	HGT	Num	Height	Variable Name: Height	22		
45	HGTUNIT	Char	Height Unit	Variable Name: Height	22	cm; in	
46	WGT_HIGH_BAR	Num	Highest Pre-Op Weight recorded	Variable Name: Highest Recorded Weight	23		
47	WGT_HIGH_UNIT_BAR	Char	Highest Pre-Op Weight recorded Unit	Variable Name: Highest Recorded Weight	23	kg; lbs	
48	BMI_HIGH_BAR	Num	Highest Recorded Pre-Op BMI	Calculated from highest recorded pre-op weight and height	23		Values capped between 15 and 150.
49	WGT_CLOSEST	Num	Pre-Op Weight closest to bariatric surgery	Variable Name: Weight Closest to Procedure	24		
50	WGTUNIT_CLOSEST	Char	Pre-Op Weight closest to bariatric surgery Unit	Variable Name: Weight Closest to Procedure	24	kg; lbs	
51	BMI	Num	Pre-Op BMI closest to bariatric surgery	Calculated from pre-op weight closest to procedure and height	24		Values capped between 15 and 150.
53	SMOKER	Char	Current smoker within one year	Variable Name: Current Smoker	26		Independent Partially dependent Totally dependent Unknown Yes; No Yes, insulin Yes, non-insulin No
55	CHRONIC_STEROIDS	Char	Pre-Op Steroid/Immunosuppressant Use for Chronic Condition	Variable Name: Steroid/Immunosuppressant for Chronic Condition	28		Yes; No
56	COPD	Char	Pre-Op history of COPD	Variable Name: History of Severe COPD	30		Yes; No
57	HISTORY_PE	Char	History of PE	Variable Name: History of Pulmonary Embolism	31		Yes; No
58	SLEEP_APNEA	Char	Pre-Op Sleep Apnea	Variable Name: Sleep Apnea	32		Yes; No
59	GERD	Char	Pre-Op GERD	Variable Name: GERD	33		Yes; No
60	PREVIOUS_SURGERY	Char	Previous Foregut Surgery	Variable Name: Previous Foregut Surgery	34		Yes; No
61	MI_ALL_HISTORY	Char	History of MI	Variable Name: History of Myocardial Infarction	35		Yes; No
62	PTC	Char	Previous PCI/PTCA	Variable Name: Previous PCI/PTCA	36		Yes; No
63	PCARD	Char	Previous Cardiac Surgery	Variable Name: Previous Cardiac Surgery	37		Yes; No
64	HIP	Char	Pre-Op Hypertension	Variable Name: Hypertension	38		Yes; No
66	HYPERLIPIDEMIA	Char	Pre-Op Hyperlipidemia	Variable Name: Hyperlipidemia	40		Yes; No
67	HISTORY_DVT	Char	Pre-Op Vein Thrombosis Requiring Therapy	Variable Name: Vein Thrombosis Requiring Therapy	41		Yes; No
68	THERAPEUTIC_ANTICOAGULATION	Char	Pre-Op Therapeutic Anticoagulation	Variable Name: Therapeutic Anticoagulation	42		Yes; No
69	VENOUS_STASIS	Char	Pre-Op Venous Stasis	Variable Name: Venous Stasis	44		Yes; No
70	IVC_FILTER	Char	Pre-Op IVC Filter	Variable Name: IVC Filter	45		Yes; No
72	DIALYSIS	Char	Pre-Op Requiring or on dialysis	Variable Name: Currently Requiring/On Dialysis	46		IVC filter placed in anticipation of the metabolic or bariatric procedure IVC filter was preexisting Unknown
73	RENAL_INSUFFICIENCY	Char	Pre-Op Requiring or on dialysis	Variable Name: Currently Requiring/On Dialysis	46		Yes; No

76	CREATININE	Num	Pre-Op Creatinine Lab Value (mg/dL)	Variable Name: Preoperative Lab Value Information	48		Values capped between 0.1 and 15.
77	DPRCREAT	Num	Days from Creatinine Pre-Op Labs to Operation	Days from pre-operative Creatinine to initial bariatric surgery operation date	48		Values capped between 0 and 180.
78	HCT	Num	Pre-Op Hematocrit Lab Value (%)	Variable Name: Preoperative Lab Value Information	48		Values capped between 8 and 60.
79	DPRHCT	Num	Days from Hematocrit Pre-Op Labs to Operation	Days from pre-operative Hematocrit to initial bariatric surgery operation date	48		Values capped between 0 and 180.
80	HEMO	Num	Pre-Op Hemoglobin A1c Value	Variable Name: Preoperative Lab Value Information	48		Values capped between 4 and 20.
81	DPRHEMO	Num	Days from Hemoglobin A1c Pre-Op Labs to Operation	Days from pre-operative Hemoglobin A1c to initial bariatric surgery operation date	48		Values capped between 0 and 180.
82			ASA Class			ASA I - Normal/Healthy ASA II - Mild systemic disease ASA III - Severe systemic disease ASA IV - Severe systemic disease threat to life ASA V - Moribund None assigned General Monitored anesthesia care/IV None Other Local	
83	ANESTYPE	Char	Intragastric Balloon Anesthesia Type			Absorbable Adjustable Air-filled Fluid-filled Endoscopic Laparoscopic Open	If INIT_PROC_DESC not = 'Intragastric balloon placement' then this field will be missing.
84	BALLOON_TYPE	Char	Intragastric Balloon Type	Variable Name: Intragastric Balloon Type	51	Absorbable Adjustable Air-filled Fluid-filled Endoscopic Laparoscopic Open	If INIT_PROC_DESC not = 'Intragastric balloon placement' then this field will be missing.
85	SURGICAL_APPROACH	Char	Procedural Approach	Variable Name: Procedural Approach	52	Yes; No Yes; No Endoscopic Laparoscopic Open	
86	ROBOTIC_ASSST	Char	Robotic Assist	Variable Name: Procedural Approach	52	Yes; No	
87	APPROACH_CONVERTED	Char	Procedure converted to another approach	Variable Name: Procedure Converted to Another Approach	53	Yes; No	
88	CONVERSION	Char	Procedure Converted - Final Procedural Approach	Variable Name: Procedure Converted to Another Approach	53	Endoscopic Laparoscopic Open	If APPROACH_CONVERTED = "No" then this variable will be missing.
89	ROBOTIC_ASSST_CONV	Char	Procedure Converted - Final Procedural Approach Robotic Assist	Variable Name: Procedure Converted to Another Approach	53	Yes; No	If APPROACH_CONVERTED = "No" then this variable will be missing.
90	DRAIN_PLACED	Char	Drain Placed	Variable Name: Drain Placed	54	Yes; No	
91	ANASTOMOSIS_CHECKED	Char	Anastomosis/Staple Line Leak Test	Variable Name: Anastomosis/Staple Line Leak Test	55	Yes; No	
92	OPLength	Num	Operation Length (minutes)	Length of bariatric/metabolic surgery, in minutes	56		Values capped between 1 and 720.
93	METH_VTEPROPHYL	Char	VTE Prophylaxis Method(s)	Variable Name: VTE Prophylaxis	57	Mechanical only Pharmacologic only Mechanical and pharmacologic None	
94	OCCURRENCE_POST_YN	Char	Intraop/Postop Occurrence	Postprocedural Information – Occurrences	58	Yes; No	
95	POSTOPSUPERFICIALINCISIONALSSI	Num	Number of Post-Op Superficial Incisional SSI occurrences	Variable Name: Superficial Incisional SSI	59		
96	SSSIPATOS	Char	Superficial Incisional SSI PATOS	Variable Name: Superficial Incisional SSI – PATOS	61	Yes; No	
97	POSTOPDEEPIPNCISIONALSIS	Num	Number of Post-Op Deep Incisional SSI occurrences	Variable Name: Deep Incisional SSI	62		
98	DSSIPATOS	Char	Deep Incisional SSI PATOS	Variable Name: Deep Incisional SSI – PATOS	64	Yes; No	
99	POSTOPORGANSPACESSI	Num	Number of Post-Op Organ/Space SSI occurrences	Variable Name: Organ/Space SSI	65		
100	OSSIPATOS	Char	Organ/Space SSI PATOS	Variable Name: Organ/Space SSI – PATOS	67	Yes; No	
101	POSTOPANASTOMOTICSTAPLELINELEAK	Num	Number of Post-Op Anastomotic/Staple Line Leak occurrences	Variable Name: Anastomotic/Staple Line Leak	68		Post-op Organ/Space SSI occurrence must be assigned in order to assign Anastomotic/Staple Line Leak.
102	WOUNDDISRUPTION	Num	Number of Post-Op Wound Disruption occurrences	Variable Name: Wound Disruption	69		
103	POSTOPPNEUMONIA	Num	Number of Post-Op Pneumonia occurrences	Variable Name: Pneumonia	70		
104	PNAPATOS	Char	Pneumonia PATOS	Variable Name: Pneumonia – PATOS	73	Yes; No	
105	UNPLINTUBATION	Num	Number of Post-Op Unplanned Intubation occurrences	Variable Name: Unplanned Intubation	74		
106	PULMONARYEMBOLISM	Num	Number of Post-Op Pulmonary Embolism occurrences	Variable Name: Pulmonary Embolism	76		
107	POSTOPVENTILATOR	Char	Post-Op On Ventilator > 48 hours	Variable Name: On Ventilator > 48 Hours	77	Yes; No	
108	VENTPATOS	Char	On Ventilator > 48 hours PATOS	Variable Name: On Ventilator > 48 Hours – PATOS	78	Yes; No	
109	PROGRSRENALINSUF	Char	Progressive Renal Insufficiency	Variable Name: Progressive Renal Insufficiency/Acute Renal Failure Requiring Dialysis	79	Yes; No	
110	ACTERENALFAILURE	Char	Acute Renal Failure	Variable Name: Progressive Renal Insufficiency/Acute Renal Failure Requiring Dialysis	79	Yes; No	

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111	POSTOPUTI	Num	Number of Post-Op Urinary Tract Infection occurrences	Variable Name: Urinary Tract Infection	80		
112	UTIPATOS	Char	Urinary Tract Infection PATOS	Variable Name: UTI – PATOS	82	Yes; No	
113	CVA	Num	Number of Post-Op Stroke/CVA occurrences	Variable Name: Stroke/CVA	83		
114	CARDIACARRESTCPR	Num	Number of Intra-Op or Post-Op Cardiac Arrest Requiring CPR occurrences	Variable Name: Cardiac Arrest Requiring CPR	84		
115	MYOCARDIALINFR	Num	Number of Intra-op or Post-op Myocardial Infarction occurrences	Variable Name: Myocardial Infarction	85		
116	TRANSFINTOPPSTOP	Char	Transfusion Intra-op/Post-Op (72h of surgery start time)	Variable Name: Blood Transfusion	87	Yes; No	
117	BLEEDING_UNITS	Num	Number of Blood Units Transfused	Variable Name: Blood Transfusion	87		If TRANSFINTOPPSTOP = "Yes", values capped between 1 and 20. If TRANSFINTOPPSTOP = "No" then this variable = 0.
118	VEINTHROMBREQTER	Num	Number of Post-Op Vein Thrombosis Requiring Therapy occurrences	Variable Name: Vein Thrombosis Requiring Therapy	89		
119	POSTOPSEPSIS	Char	Post-Op Sepsis	Variable Name: Sepsis	92	Yes; No	
120	SEPSISPATOS	Char	Sepsis PATOS	Variable Name: Sepsis – PATOS	95	Yes; No	
121	POSTOPSEPTICSHOCK	Char	Post-Op Septic Shock	Variable Name: Septic Shock	96	Yes; No	
122	SEPSHOCKPATOS	Char	Septic Shock PATOS	Variable Name: Septic Shock – PATOS	97	Yes; No	
123	UNPLANNEDADMISSIONICU30	Num	Number of Unplanned Admission to ICU occurrences	Variable Name: Unplanned Admission to ICU	98		
124	GITTRACTBLEED	Num	Number of Post-Op GI Tract Bleeding occurrences	Variable Name: Gastrointestinal Tract Bleeding	99		
125	BOWELOBSTRUCTION	Num	Number of Post-Op Bowel Obstruction occurrences	Variable Name: Bowel Obstruction	100		
126	CDIFF	Char	Clostridium difficile (C.diff) Colitis	Variable Name: C. diff Colitis	90	Yes; No	
127	CDIFF_TRTMT	Char	C. diff Treatment Given	Variable Name: C. diff Colitis	90	Yes; No	If CDIFF = "No" then this variable will be missing.
128	REOP30	Char	At Least One Reoperation within 30 days of operation	Any Reoperation date recorded within 30 days from initial bariatric surgery operation date	111	Yes; No	See separate Reoperation file.
129	READ30	Char	At Least One Readmission within 30 days of operation	Any Readmission date recorded within 30 days from initial bariatric surgery operation date	107	Yes; No	See separate Readmission file.
130	INTV30	Char	At Least One Intervention within 30 days of operation	Any Intervention date recorded within 30 days from initial bariatric surgery operation date	120	Yes; No	See separate Intervention file.
131	DEHYD_TRTMT_OUT	Char	IV Treatment as an Outpatient	Variable Name: IV Treatment as an Outpatient	101	Yes; No	
132	DEHYD_NUM_TRTMTS	Char	Number of IV Treatment Outpatient visits	Variable Name: IV Treatment as an Outpatient	101	1 2 3 4 5 or more	If DEHYD_TRTMT_OUT = 'No' then this variable will be missing.
133	EMERG_VISIT_OUT	Char	Emergency Department (ED) Visits	Variable Name: Emergency Department (ED) Visits	102	Yes; No	
134	EMERG_NUM_TIMES	Num	Number of Emergency Department (ED) Visits	Variable Name: Emergency Department (ED) Visits	102		If EMERG_VISIT_OUT= 'No' then this variable will be missing.
135	ED_VSTNM_1	Char	Discharge Diagnosis - ED Visit 1	Variable Name: Emergency Department (ED) Visits	102		See Options list on page 129 in Variables MBSAQIP PUF Definitions
136	ED_VSTNM_2	Char	Discharge Diagnosis - ED Visit 2				
137	ED_VSTNM_3	Char	Discharge Diagnosis - ED Visit 3				
138	ED_VSTNM_4	Char	Discharge Diagnosis - ED Visit 4				
139	ED_VSTNM_5	Char	Discharge Diagnosis - ED Visit 5				
140	ED_VSTNM_6	Char	Discharge Diagnosis - ED Visit 6				
141	ED_VSTNM_7	Char	Discharge Diagnosis - ED Visit 7				
142	ED_VSTNM_8	Char	Discharge Diagnosis - ED Visit 8				
143	ED_VSTNM_9	Char	Discharge Diagnosis - ED Visit 9				
144	DT_EDVISIT_1	Num	Days from operation date to ED Visit 1	Variable Name: Emergency Department (ED) Visits	102		Values capped between 0 and 30.
145	DT_EDVISIT_2	Num	Days from operation date to ED Visit 2				
146	DT_EDVISIT_3	Num	Days from operation date to ED Visit 3				
147	DT_EDVISIT_4	Num	Days from operation date to ED Visit 4				
148	DT_EDVISIT_5	Num	Days from operation date to ED Visit 5				
149	DT_EDVISIT_6	Num	Days from operation date to ED Visit 6				
150	DT_EDVISIT_7	Num	Days from operation date to ED Visit 7				
151	DT_EDVISIT_8	Num	Days from operation date to ED Visit 8				
152	DT_EDVISIT_9	Num	Days from operation date to ED Visit 9				
153	DTPOSTOPSUPERFINCSSI	Num	Days from operation date to first recorded date of Superficial Incisional SSI	Days to first recorded Superficial Incisional SSI occurrence from initial bariatric surgery operation date			Values capped between 0 and 30. If POSTOPSUPERFICIALINCISIONALSSI = 0 then this variable will be missing.
154	DTPOSTOPDEEPPINCISIONALSSI	Num	Days from operation date to first recorded date of Deep Incisional SSI	Days to first recorded Deep Incisional SSI occurrence from initial bariatric surgery operation date			Values capped between 0 and 30. If POSTOPDEEPPINCISIONALSSI = 0 then this variable will be missing.
155	DTPOSTOPORGANSPACESI	Num	Days from operation date to first recorded date of Organ/Space SSI	Days to first recorded Organ/Space SSI occurrence from initial bariatric surgery operation date			Values capped between 0 and 30. If POSTOPORGANSPACESI = 0 then this variable will be missing.
156	DTANASTSLLEAK	Num	Days from operation date to first recorded date of Anastomotic/Staple Line Leak	Days to first recorded Anastomotic/Staple Line Leak occurrence from initial bariatric surgery operation date			Values capped between 0 and 30. If POSTOPANASTSLLEAK = 0 then this variable will be missing.



157	DTPOSTOPVENTILATOR	Num	Days from operation date to first recorded date of On Ventilator > 48 Hours	Days to first recorded On Ventilator > 48 Hours occurrence from initial bariatric sur
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## REOPERATION

Position #	Variable Name	Data Type	Variable Label	Search Term in Variables and Definitions	Page Number in Variables and Definitions	Variable Options	Comments
1	CASEID	Num	Case Identification Number	Each case or record in the database has a unique CaseID number.			



