MBSAQIP®

METABOLIC AND BARIATRIC SURGERY
ACCREDITATION AND QUALITY IMPROVEMENT PROGRAM

User Guide for the

2020 Participant Use Data File (PUF)

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Contents

1. Introduction

The Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP®) is pleased to introduce the 2020 Participant Use Data File (PUF) – including cases with operation dates between January 1, 2020 and December 31, 2020. The PUF is a Health Insurance Portability and Accountability Act (HIPAA)-compliant data file containing cases submitted to the MBSAQIP Registry. The PUF contains patient-level data and does not identify hospitals, health care providers, or patients. The intended purpose of these files is to provide researchers at participating centers with a data resource they can use to investigate and advance the quality of care delivered to the metabolic and bariatric surgical patient through the analysis of cases captured by MBSAQIP. The PUF is provided at no additional cost to employees (surgeons, researchers, bariatric program staff, etc.) of MBSAQIP participant centers. With over 165,000 metabolic and bariatric cases captured each year, the MBSAQIP PUF is the largest, bariatric-specific, clinical dataset in the country and serves as an invaluable resource to investigators looking to answer important clinical questions in this field. It is part of the mission of the MBSAQIP to make this data available to all participants to improve the power and reliability of clinical research and further propel innovation in the field of metabolic and bariatric surgery.

This guide is designed to accompany the 2020 Participant Use Data File available for download via the MBSAQIP website (https://www.facs.org/quality-programs/mbsaqip/participant-use). The sections contained herein will provide the user with information on how to request the PUF, contents of the data files, data collection background, data limitations, and answers to frequently asked questions.

This user guide applies specifically to the 2020 PUF and will be updated with each subsequent PUF. All historical user guides remain available at the MBSAQIP website (https://www.facs.org/quality-programs/mbsaqip/participant-use). Please note that a new MBSAQIP data registry was launched January 1, 2020. These represent the first PUF documents reflecting the new registry, and, as such, may differ considerably from historical versions. It is the responsibility of the researcher to identify nuances between variables across different file years and versions.

2. Data Request Process

An individual who has an official role at an actively enrolled MBSAQIP center and wants to obtain a copy of the MBSAQIP PUF can do so by visiting https://www.facs.org/quality-programs/mbsaqip/participant-use and following the steps listed below:

1. From the MBSAQIP main page (www.facs.org/quality-programs/mbsaqip) the requestor can click on the “Participant Use Data File (PUF)” link. This will take you to the PUF information and request page.
2. Following a brief introduction and explanation of the PUF, the requestor can click on “Request PUF.”

3. This will take the requestor to the Data Use Agreement. This is a three page document that implements the data protections of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and the MBSAQIP Participation Agreement. Delivery of the PUF is contingent on agreement to the terms and conditions specified within the Data Use Agreement. The Data Use Agreement can be read from this page or the three-page document can be downloaded. The requestor is then required to type in their first and last name and click on "Request Data File." By clicking on "Request Data File" the requestor agrees to the terms and conditions of the Data Use Agreement.
4. Requestors will then be required to complete a brief online form to provide ACS with basic information about themselves, including the participating center in which they are currently employed and in what capacity, as well as how the requestor plans to utilize the PUF data. Once all of the required fields are completed, the requestor clicks "Submit."
5. Upon approval an email will be sent to the requestor containing a username and password along with the URL to download the data. The web link will be active from the time of the email for 10 full days (240 hours).
6. The file will be available in three different formats (Text, SPSS, SAS) and depending on the user's internet connection speed should take between 5 and 30 minutes to download.
7. The requestor may be contacted to confirm receipt of the data file and allow for feedback on the delivery mechanism, data points contained, and data file format.

3. File Description

The PUF consists of four distinct datasets which are referred to as main, reoperation, readmission, and intervention, respectively. Each dataset is available in one of three different formats - Text, SAS, and SPSS. The main dataset is a flat file containing preoperative, intraoperative, and postoperative patient and procedure characteristics for all metabolic and bariatric surgical cases that were eligible for the PUF in 2020. The reoperation, readmission, and intervention datasets are available in long form (i.e., multiple rows per case), and contain detailed information on readmissions, reoperations, and interventions, respectively, associated with cases in the main dataset. All four datasets contain a unique key matching variable, CASEID, which allows users to merge datasets as necessary.

All postoperative events or outcomes (e.g., death, sepsis, reoperation, readmission, intervention, postop BMI, etc.) recorded in the main, reoperation, readmission, and intervention datasets are 30-day outcomes (i.e., occurred within 30 days of the index procedure).

The main dataset contains three variables (REOP30, READ30, and INTV30) derived from the reoperation, readmission, and intervention datasets, respectively. These variables represent whether at least one reoperation, readmission, or intervention occurred, respectively, *for any reason*, within 30 days of the index procedure. Investigators interested in other facets of reoperation, readmission, or intervention will need to manipulate the long datasets and merge them with the main dataset in a manner which is appropriate to the specified research question. For example, suppose a researcher is interested in estimating the overall 30-day *unplanned* reoperation rate for metabolic and bariatric surgical procedures. The specific research question

is: “What is the 30-day unplanned reoperation rate for all cases included in the main dataset?” To answer this question, the researcher could use the variable REOP_UNPLANNED in the reoperation dataset to identify and create a flat file of cases where at least one 30-day reoperation was recorded as unplanned following the index procedure. This flat file would then be merged (using the unique key matching variable CASEID) with the main dataset to construct a variable, say UNPLANNED_REOP30, taking values of either “Yes” or “No” to indicate whether at least one unplanned 30-day reoperation occurred for each case in the main dataset. The 30-day unplanned reoperation rate for all metabolic and bariatric surgical procedures could then be estimated by calculating the proportion of cases in the main dataset where UNPLANNED_REOP30 = “Yes.”

Using the CASEID variable, other readmission, reoperation, or intervention-specific variables, or combinations thereof, can be merged to the main PUF dataset. A variable-by-variable description for each dataset is provided in the PUF User Guide Tables in Section 9 of this document. A brief description of each dataset follows:

Dataset	File Types Available	Uncompressed File Size	Description
MBSAQIP_PUF_Main	SAS, SPSS, TXT	SAS: 1.2 GB SPSS: 1.3 GB TXT: 121 MB	Contains 183 HIPAA compliant variables on 168,568 cases submitted from 885 centers in 2020. Each row represents one case and there is exactly one row per case.
MBSAQIP_PUF_Read	SAS, SPSS, TXT	SAS: 1.3 MB SPSS: 1.3 MB TXT: 345 KB	Contains 7 HIPAA compliant variables on 6,038 readmissions. Each row represents a 30-day readmission associated with some case from the Main file. Multiple rows per case are possible in this file.
MBSAQIP_PUF_Reop	SAS, SPSS, TXT	SAS: 1.2 MB SPSS: 1.2 MB TXT: 325 KB	Contains 14 HIPAA compliant variables on 2,337 reoperations. Each row represents a 30-day reoperation associated with some case from the Main file. Multiple rows per case are possible in this file.
MBSAQIP_PUF_Intv	SAS, SPSS, TXT	SAS: 640 KB SPSS: 602 KB TXT: 170 KB	Contains 10 HIPAA compliant variables on 1,782 interventions. Each row represents a 30-day intervention associated with some case from the Main file. Multiple rows per case are possible in this file.

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 training modules followed by an annual certification exam. The modules and certification exam focus on the program, processes, and analysis; preoperative, intraoperative, and postoperative definitions and case studies. These modules are complemented by the availability of MBSAQIP Clinical Support Registered Nurse (RN) Specialists who are available to MBSCRs on an ongoing basis for one-on-one data abstraction support and web-based training. The Clinical Support staff makes available a host of written educational resources available through the MBSAQIP Resource Portal through a support system designed to ensure MBSCRs have the knowledge and resources available to collect high-quality data.

The data integrity audit is a fundamental tool of the MBSAQIP to assess the quality of the data collected at participating centers. The process involves the review of multiple charts, some of which are selected randomly, and others selected based on criteria designed to identify potential reporting errors.

MBSAQIP has determined that a data integrity audit disagreement rate of 5% or less is acceptable. Centers that have higher than a 5% disagreement rate are not included in the MBSAQIP Semiannual Report and may be required to undergo an additional audit following training and education recommendations from the MBSAQIP.

5. Participation and Case Exclusion Criteria

Case Collection Process

All metabolic and bariatric surgical procedures and interventions, including those performed by non-metabolic and bariatric surgery credentialed general surgeons or other physician practitioners (i.e. gastroenterologists), must be entered into the MBSAQIP Registry. Documentation of each hospitalization and surgical procedure is required to obtain valid outcomes data. Data collection is ultimately the responsibility of the Metabolic and Bariatric Surgery (MBS) Director working collaboratively with the Metabolic and Bariatric Surgical Clinical Reviewers (MBSCRs), the physician offices, and institutional departments to ensure accurate short and long-term results. Data is collected at 30 days, six months, one year, and annually thereafter.

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.

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 lead to an underestimation of the risk of certain conditions when such measures are routinely taken before surgery.
- The data are submitted from hospitals that are participating in the MBSAQIP and do not represent a statistically valid nationally representative sample. Furthermore, the PUF includes international sites so the data would not strictly represent the situation in U.S. hospitals. The inclusion of international sites may lead to other problems in interpretation. For example, many international sites are not permitted to provide patient race and ethnicity. As such, observed effects of missing race/ethnicity on outcomes would be confounded with the effects of country.
- Many patients do not receive all possible preoperative laboratory tests, so some of these variables have a high percentage of missing values (10% to >50%, depending on the tests). This high percentage of missing data can make it problematic to use these variables in traditional logistic regression models as well as in many other types of analysis.

This list may not include all data limitations and additional limitations may apply in future versions of the data.

7. Contact Information

All questions about the User Guide or PUF, as well as comments and suggestions for improvements are welcome and may be directed to Brian Matel, Statistical Report Manager, at bmatel@facs.org.

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 <u>not</u> 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: **Does the PUF contain long-term (1 year, 2 year, 3 year, etc.) outcomes?**
A: At this time the 2020 PUF only contains 30-day outcomes.

Q: **How is the PUF different from the SAR?**
A: The Main PUF is a raw, flat file of HIPAA-compliant variables captured within the data registry. The data have been cleaned (e.g., removal of invalid dates, truncation of variable bounds, etc.), but no analysis (e.g., risk adjustment, quality assessments, etc.) has been performed.

Q: **Can we publish data from the PUF?**
A: Yes. Please see the terms of the PUF Data Use Agreement within the PUF request portal.

Q: **Can we publish data from the PUF individually or collaboratively?**
A: Pursuant to the MBSAQIP PUF Data Use Agreement, centers will not grant access to or share the PUF either in its entirety or as a subset to any party who is not an employee of the participating center at which the Data Recipient is employed, and centers will not sublease or permit other parties to use the PUF without advance written approval of the ACS MBSAQIP.

Q: **Are other MBSAQIP PUF data sets available?**
A: Yes, the 2015 PUF was the first MBSAQIP PUF available. Subsequent PUFs have been released on a yearly basis.

Q: **Are center identifiers included in the database?**
A: At this time we do not provide any geographic or center-specific identification. We took this approach to ensure the privacy of both the participating MBSAQIP centers and surgeons.

Q: **Are there surgeon-specific identifiers included in the database?**
A: At this time we do not provide any surgeon-specific information. We took this approach to ensure the privacy of both the participating centers and surgeons.

Q: **Why does the PUF exclude specific dates?**
A: In order to release the PUF, certain adjustments to the data are required to ensure proper protection of patient information. To meet these requirements, we remove all elements of dates (except year of operation) for dates directly related to an individual.

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., Days 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 and Definitions." To provide investigators with ready access to complete and authoritative variable definitions, the "Page Number in Variables and Definitions" column contains the page number that will locate the complete definition in the *MBSAQIP PUF Variables and Definitions Manual*.

The *MBSAQIP PUF Variables and Definitions Manual* is derived directly from Chapter 4 of the MBSAQIP Operations Manual - the authoritative variable definition reference manual used by the Metabolic and Bariatric Surgical Clinical Reviewers (MBSCRs). Please be aware that these definitions are year specific. Investigators receiving the PUF will have the opportunity to download the PUF Variables and Definitions Manual corresponding to the specific PUF year.

The PUF User Guide Tables also contains a column titled "Search Term in Variables and Definitions." As an alternative to searching for variable definitions by page number in the *PUF Variables and Definitions Manual*, users can copy the entire text within an individual cell from the "Search Term in Variables and Definitions" column in the PUF User Guide Table and paste it into a search field (you can create a search field by simultaneously hitting Ctrl and F on your keyboard) in the *PUF Variables and Definitions Manual*. Once the text is copied into the search field and enter is hit, you will see the variable definition and other information pertinent to that particular variable. Appropriate definitions are provided in the "Search Term in Variables and Definitions" column for those variables that are constructed specifically for the PUF and do not exist in Chapter 4 of the MBSAQIP Operations Manual.

The *PUF Variables and Definitions Manual* will be made available to you for download with the rest of your requested PUF files. Data Use Agreements apply to the use and distribution of the *PUF Variables and Definitions Manual*, as well as all PUF datasets

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	

38	DISCHARGE_DESTINATION	Char	Discharge Destination	Variable Name: Hospital Discharge Destination	20	Expired Facility which was home Home Rehab Separate acute care Skilled care, not home Unknown Unskilled facility, not home	
39	SURGSPECIALTY_BAR	Char	Medical specialty of the physician performing the Primary Procedure	Variable Name: Medical Specialist	21	Gastroenterologist General surgeon Interventional radiologist Metabolic and bariatric surgeon Other	
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.
52	FUNSTATPRESURG	Char	Pre-Op Functional Health Status	Variable Name: Functional Health Status	25	Independent Partially dependent Totally dependent Unknown	
53	SMOKER	Char	Current smoker within one year	Variable Name: Current Smoker	26	Yes; No	
54	DIABETES	Char	Pre-Op Diabetes Mellitus	Variable Name: Diabetes Mellitus	27	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	
65	NBHTN_MEDS	Char	Number of Anti-Hypertensive Medications	Variable Name: Number of Anti-Hypertensive Medications	39	0 1 2 3 or more	
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	
71	IVC_TIMING	Char	Pre-Op IVC Filter Timing	Variable Name: IVC Filter	45	IVC filter placed in anticipation of the metabolic or bariatric procedure IVC filter was preexisting Unknown	If IVC_FILTER = "No" then this variable will be missing.
72	DIALYSIS	Char	Pre-Op Requiring or on dialysis	Variable Name: Currently Requiring/On Dialysis	46	Yes; No	
73	RENAL_INSUFFICIENCY	Char	Pre-Op Renal Insufficiency	Variable Name: Renal Insufficiency	47	Yes; No	
74	ALBUMIN	Num	Pre-Op Albumin Lab Value (g/dL)	Variable Name: Preoperative Lab Value Information	48		Values capped between 1 and 10.
75	DPRALBUM	Num	Days from Albumin Pre-Op Labs to Operation	Days from pre-operative Albumin to initial bariatric surgery operation date	48		Values capped between 0 and 180.

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	ASACLASS	Char	ASA Class	Variable Name: ASA Classification	49	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	
83	ANESTYPE	Char	Intragastric Balloon Anesthesia Type	Variable Name: Intragastric Balloon Anesthesia Type	50	General Monitored anesthesia care/IV None Other Local	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	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	Endoscopic Laparoscopic Open	
86	ROBOTIC_ASST	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_ASST_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	POSTOPDEEPINCISIONALSSI	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	POSTOPANASTSLLEAK	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	PULMONARYEMBOLSM	Num	Number of Post-Op Pulmonary Embolism occurences	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	

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	GITRACTBLEED	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	DTPOSTOPDEEPINCISIONALSSI	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 POSTOPDEEPINCISIONALSSI = 0 then this variable will be missing.
155	DTPOSTOPORGANSPACESSI	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 POSTOPORGANSPACESSI = 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 surgery operation date			Values capped between 0 and 30. If DTPOSTOPVENTILATOR = 0 then this variable will be missing.
158	DTPOSTOPPNEUMONIA	Num	Days from operation date to first recorded date of Pneumonia	Days to first recorded Pneumonia occurrence from initial bariatric surgery operation date			Values capped between 0 and 30. If POSTOPPNEUMONIA = 0 then this variable will be missing.
159	DTPOSTOPSEPSIS	Num	Days from operation date to first recorded date of Sepsis	Days to first recorded Sepsis occurrence from initial bariatric surgery operation date			Values capped between 0 and 30. If POSTOPSEPSIS = 0 then this variable will be missing.
160	DTPOSTOPSEPTICSHOCK	Num	Days from operation date to first recorded date of Septic Shock	Days to first recorded Septic Shock occurrence from initial bariatric surgery operation date			Values capped between 0 and 30. If POSTOPSEPTICSHOCK = 0 then this variable will be missing.
161	DTPOSTOPUTI	Num	Days from operation date to first recorded date of Urinary Tract Infection	Days to first recorded Urinary Tract Infection occurrence from initial bariatric surgery operation date			Values capped between 0 and 30. If POSTOPUTI = 0 then this variable will be missing.
162	DTWOUNDDISRUPTION	Num	Days from operation date to first recorded date of Wound Disruption	Days to first recorded Wound Disruption occurrence from initial bariatric surgery operation date			Values capped between 0 and 30. If WOUNDDISRUPTION = "No" then this variable will be missing.
163	DTUNPLINTUBATION	Num	Days from operation date to first recorded date of Unplanned Intubation	Days to first recorded Unplanned Intubation occurrence from initial bariatric surgery operation date			Values capped between 0 and 30. If UNPLINTUBATION = "No" then this variable will be missing.
164	DTPULMONARYEMBOLSM	Num	Days from operation date to first recorded date of Pulmonary Embolism	Days to first recorded Pulmonary Embolism occurrence from initial bariatric surgery operation date			Values capped between 0 and 30. If PULMONARYEMBOLSM = "No" then this variable will be missing.
165	DTPROGRSRENALINSUF	Num	Days from operation date to Progressive Renal Insufficiency	Days to Progressive Renal Insufficiency occurrence from initial bariatric surgery operation date			Values capped between 0 and 30. If PROGRSRENALINSUF = "No" then this variable will be missing.
166	DTACTERENALFAILURE	Num	Days from operation date to Acute Renal Failure	Days to Acute Renal Failure occurrence from initial bariatric surgery operation date			Values capped between 0 and 30. If ACTERENALFAILURE = "No" then this variable will be missing.
167	DTCVA	Num	Days from operation date to first recorded date of Stroke/CVA	Days to first recorded Stroke/CVA occurrence from initial bariatric surgery operation date			Values capped between 0 and 30. If CVA = "No" then this variable will be missing.
168	DTCARDIACARRESTCPR	Num	Days from operation date to first recorded date of Cardiac Arrest Requiring CPR	Days to first recorded Cardiac Arrest Requiring CPR occurrence from initial bariatric surgery operation date			Values capped between 0 and 30. If CARDIACARRESTCPR = "No" then this variable will be missing.
169	DTMYOCARDIALINFR	Num	Days from operation date to first recorded date of Myocardial Infarction	Days to first recorded Myocardial Infarction occurrence from initial bariatric surgery operation date			Values capped between 0 and 30. If MYOCARDIALINFR = "No" then this variable will be missing.
170	DTTRANSFINTOPPSTOP	Num	Days from operation date to Blood Transfusion (72h)	Days to Blood Transfusion (72h) occurrence from initial bariatric surgery operation date			Values capped between 0 and 3. If TRANSFINTOPPSTOP = "No" then this variable will be missing.
171	DTVEINTHROMBREQTER	Num	Days from operation date to first recorded date of Vein Thrombosis Requiring Therapy	Days to first recorded Vein Thrombosis Requiring Therapy occurrence from initial bariatric surgery operation date			Values capped between 0 and 30. If VEINTHROMBREQTER = "No" then this variable will be missing.
172	DTUNPLANADMICU	Num	Days from operation date to first recorded date of Unplanned Admission to ICU	Days to first recorded Unplanned Admission to ICU occurrence from initial bariatric surgery operation date			Values capped between 0 and 30. If UNPLANNEDADMISSIONICU30 = 0 then this variable will be missing.
173	DTGITRACTBLEED	Num	Days from operation date to first recorded date of GI Tract Bleed	Days to first recorded Gastrointestinal Tract Bleeding occurrence from initial bariatric surgery operation date			Values capped between 0 and 30. If GITRACTBLEED = 0 then this variable will be missing.
174	DTBOWELOBSTRUCTION	Num	Days from operation date to first recorded date of Bowel Obstruction	Days to first recorded Bowel Obstruction occurrence from initial bariatric surgery operation date			Values capped between 0 and 30. If BOWELOBSTRUCTION = 0 then this variable will be missing.
175	DTCDIFF	Num	Days from operation date to C. diff Infection	Days to C. diff Infection occurrence from initial bariatric surgery operation date			Values capped between 0 and 30. If CDIFF = "No" then this variable will be missing.
176	FOLLOW_30DAYS_BAR	Char	Follow-up data (30 Day) Captured	Variable Name: Morbidity Occurrences, Events, and Mortality Data Captured	103	Yes; No	
177	WGT_CLOSEST30D	Num	Post-Op Weight Closest to Day 30	Variable Name: Weight Closest to Day 30	105		
178	WGTUNIT_CLOSEST30D	Char	Post-Op Weight Closest to Day 30 Unit	Variable Name: Weight Closest to Day 30	105	kg; lbs	
179	BMI_CLOSEST30D	Num	Post-Op BMI Closest to Day 30	Calculated from weight closest to day 30 post-op and height	105		Values capped between 15 and 150.
180	DTBMI_30D	Num	Days from bariatric surgery to Post-Op BMI measurement	Days from bariatric surgery to Post-Op BMI Closest to Day 30 measurement			Values capped between 0 and 30.
181	PHYSASS_30D	Char	Post-Op Physical Assessment (30 Day)	Variable Name: Physical Assessment Completed	106	Yes; No	
182	DTDEATH_OP	Num	Days to death from operation date	Days to death from initial bariatric surgery operation date	6, 127		Values capped between 0 and 30.
183	DEATH_CAUSE_BAR	Char	Most Likely Cause of Death	Variable Name: Cause of Death	128	See Options list on page 129 in Variables MBSAQIP PUF Definitions	

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.			
2	REOP_CENTER	Char	Reoperation Performed at Reporting Site	Variable Name: Performed at Your Site	5	Yes; No	
3	REOP_WEIGHTLOSS_MNFUT	Char	Reoperation To Maintain or for Future Weight Loss	Variable Name: To Maintain or for Future Weight Loss	110	Yes; No	
4	REOP_UNPLANNED	Char	Unplanned Reoperation	Variable Name: Unplanned Reoperation	111	Yes; No	
5	REOP_EMERGENCY	Char	Reoperation Emergency Case	Variable Name: Emergency Case (Reoperation form)	112	Yes; No	
6	REOP_STAPLING_PROC	Char	Reoperation Stapler Used/Anastomosis Completed	Variable Name: Stapler Used or Anastomosis Completed (Reoperation form)	113	Yes; No	
7	REOP_SURGICAL_APPROACH	Char	Reoperation Final Procedural Approach	Variable Name: Final Surgical Approach (Reoperation form)	114	Endoscopic Laparoscopic Open	
8	REOP_ROBOTICASST	Char	Reoperation Robotic Assist	Variable Name: Final Surgical Approach (Reoperation form)	114	Yes; No	
9	REOP_DIAGNOSIS	Char	Reoperation Postprocedural Diagnosis	Variable Name: Postprocedural Diagnosis (Reoperation form)	115	See Options list on page 129 in Variables MBSAQIP PUF Definitions	
10	REOP_TYPE	Char	Reoperation Type	Variable Name: Reoperation Type	116	See Table on page116 in MBSAQIP PUF Definitions	
11	REOP_CPT	Char	Reoperation CPT Code	Variable Name: Reoperation Type	116	CPT® code. LH - If REOP_CENTER= 'No' then this variable will be missing	
12	REOP_PREV_PROC	Char	Reoperation Previous Metabolic or Bariatric Procedure	Variable Name: Conversions - Previous Metabolic and Bariatric Procedure (Reoperation form)	118	See Options list on page 118 in Variables MBSAQIP PUF Definitions	
13	REOP_CURR_PROC	Char	Reoperation Current Procedure	Variable Name: Conversions - Current Procedure (Reoperation form)	119	See Options list on page 119 in Variables MBSAQIP PUF Definitions	
14	DTREOP	Num	Days to Reoperation	Days from initial bariatric or metabolic surgery procedure to reoperation			Values capped between 0 and 30.

READMISSION

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				
2	READ_HOSPITAL	Char	Readmission Occurred at Reporting Center	Variable Name: Readmission	107	Yes; No	
3	READ_UNPLANNED	Char	Unplanned Readmission	Variable Name: Unplanned Readmission	109	Yes; No	
4	READ_DIAGNOSIS	Char	Readmission Discharge Diagnosis	Variable Name: Readmission	107	See Options list on page 129 in Variables MBSAQIP PUF Definitions	
5	DTREAD	Num	Days from Operation date to Readmission	Days from initial bariatric or metabolic surgery procedure to readmission			Values capped between 0 and 30.
6	DTREAD_DISCH	Num	Days from Original Discharge to Readmission	Days to readmission from original hospital stay discharge			Values capped between 0 and 30.
7	DTDISDT_READ	Num	Days from Readmission to Readmission Discharge	Days to readmission discharge from readmission date			Values capped between 0 and 150.

INTERVENTION

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	INTV_CENTER	Char	Intervention Performed at Reporting Site	Variable Name: Performed at Your Site	5	Yes; No	
3	INTV_WEIGHTLOSS_MNFUT	Char	Intervention To Maintain or for Future Weight Loss	Variable Name: To Maintain or for Future Weight Loss	110	Yes; No	
4	INTV_UNPLANNED_BAR	Char	Unplanned Intervention	Variable Name: Unplanned Intervention	121	Yes; No	
5	INTV_EMERGENCY_BAR	Char	Intervention Emergency Case	Variable Name: Emergency Case (Intervention form)	122	Yes; No	
6	INTV_ANESTYPE	Char	Intervention Intragastric Balloon Anesthesia Type	Variable Name: Intragastric Balloon Anesthesia Type (Intervention form)	123	General Local Monitored anesthesia care/IV sedation None Other	If INTV_TYPE not = 'Intragastric balloon adjustment', 'Intragastric balloon placement', or 'Intragastric balloon removal', then this variable
7	INTV_IGBALLOON_TYPE	Char	Intervention Intragastric Balloon Type	Variable Name: Intragastric Balloon Type (Intervention form)	124	Absorbable Adjustable Air-filled Fluid-filled	If INTV_TYPE not = 'Intragastric balloon adjustment', 'Intragastric balloon placement', or 'Intragastric balloon
8	INTV_TYPE	Char	Intervention Type	Variable Name: Intervention Type	125		
9	INTV_DIAGNOSIS	Char	Intervention Postprocedural Diagnosis	Variable Name: Postprocedural Diagnosis (Intervention form)	126	See Options list on page 129 in Variables MBSAQIP PUF Definitions	
10	DTINTV	Num	Days from Operation date to Intervention	Days from the initial metabolic and bariatric surgical operation to the intervention procedure			Values capped between 0 and 30.

MBSAQIP®

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