

ASF CANCELLATION AND TRANSFER TRACKING TOOL REFERENCE USER GUIDE

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For more information, visit <http://www.patientsafetyauthority.org>.

This reference guide and tool accompanies

Gardner L. Tracking ambulatory surgical facility cancellations and transfers: lessons learned from an 18-month collaboration.

Pa Patient Saf Advis [online] 2014 Sep [cited 2014 Sep 15]. [http://patientsafetyauthority.org/ADVISORIES/AdvisoryLibrary/2014/Sep;11\(3\)/Pages/home.aspx](http://patientsafetyauthority.org/ADVISORIES/AdvisoryLibrary/2014/Sep;11(3)/Pages/home.aspx)

BACKGROUND

Ambulatory surgical facilities (ASFs) in northeastern Pennsylvania, in collaboration with the Pennsylvania Patient Safety Authority, participated in the ASF Preoperative Screening Collaboration. A key element of this program was standardizing the reporting of day-of-surgery (DOS) cancellations and transfers. This ASF Cancellation and Transfer Tracking Tool Reference User Guide describes the ASF Preoperative Screening Program Workbook Tracking Tool (ASF tracking tool) that is based on the ASF Preoperative Screening Collaboration and facilitates reporting and tracking of DOS cancellations and transfers. Questions about this tool can be directed to the Authority help desk at support_papsrs@pa.gov or by phone at 866-316-1070.

ASF WORKBOOK TOOLS

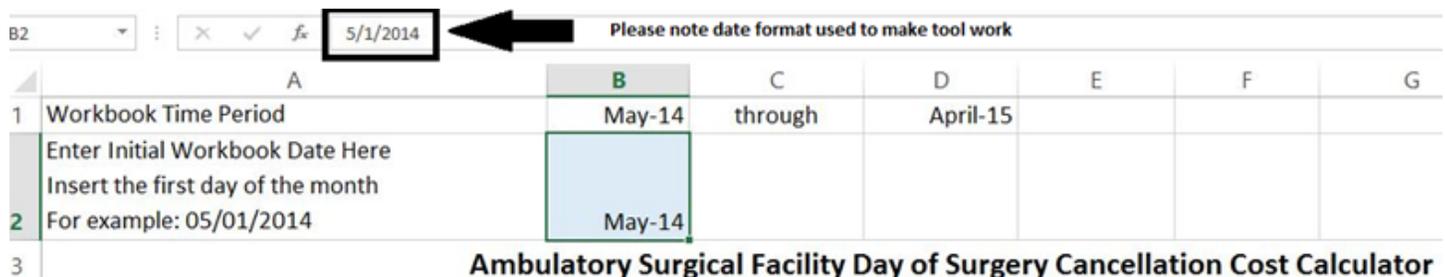
There are three different ASF tracking tools, depending on the focus of your ASF: (1) general surgical ASFs, (2) endoscopy-based ASFs, and (3) ophthalmology-based ASFs. Differences between the three workbooks are noted throughout the reference guide. The tracking tools may require versions of Microsoft Office Excel 2007 or greater.

There are five data-related spreadsheets and two report-related spreadsheets in each workbook. The titles of the five data-related entry spreadsheets are as follows: ASF Cost Calculator, Cancellation Rates, Transfer Rates, DOS Cancellation Information, and Transfer Information. The two report-related spreadsheets are titled: DOS Cancellation Reports and Transfer Reports. An explanation of each spreadsheet follows. Below is a screenshot of five of the spreadsheet tabs.



Setting the Date and Year Field

The ASF tracking tool collects cancellation and transfer information for a 12-month time period that the user will define. The initial month and year needs to be entered into the workbook before any of the reports contained in the workbook will function properly. The date and year field is located at the top of the ASF cost calculator spreadsheet. In the second row (cell B2), there is a blue box. Enter in the month and year, using the first day of the month to set the dates for all the reports. For example, if the user wants to initiate the workbook beginning in May 2014, the following date would be entered, 05/01/2014. Once this date is entered, all the reports and time frames will be calculated automatically.



ASF Cost Calculator

The ASF cost calculator calculates DOS cancellation information: the DOS cancellation rate per 1,000 completed procedures, cost of DOS cancellations (i.e., lost facility-level and physician-level revenues), and potential increases in facility-level and physician-level revenues when reductions in DOS cancellations are achieved. Four pieces of data are required for this calculator to work: the number of DOS cancellations, the number of completed procedures, facility revenues, and physician revenues associated with the type of cancelled procedures. Once the data is entered, the calculator automatically calculates the DOS cancellation rate, associated lost revenues, and potential increased revenue achieved with reductions in DOS cancellations. Any time period can be measured as long as the data comes from the same time period. For example, a quarterly cancellation rate will require the total number of DOS cancellations for the quarter and the total number of completed procedures for that quarter.

Below is a screenshot of the data needed to use the cost calculator.

Calculator ASF Data	Enter Data	Measurement
Total number of DOS completed procedures	234	DOS Completed procedures
Total number of DOS cancellations	7	DOS Cancellations
	29.9	DOS cancellation rate per 1,000 completed
Facility-level cost of cancellation	\$976	Facility-level cost of cancellation
	\$6,832	Total facility-level cost of cancellations
Physician-level cost of cancellation	\$324	Physician-level cost of cancellation
	\$2,268	Total physician-level cost of cancellations

Screenshot interpretation: In this example, the results reflect one month of data. The seven DOS cancellations result in a cancellation rate of 29.9 DOS cancellations per 1,000 completed procedures. Assuming that all seven DOS cancellations are the same procedure, the facility-level revenues lost per cancellation is \$976 and the physician-level revenues lost per cancellation is \$324, for a total monthly lost revenue of \$9,100.

Cancellation Rates

The cancellation rate spreadsheet calculates monthly cancellation rates for three time periods: DOS, 24 hours prior to surgery, and 48 hours prior to surgery. A DOS cancellation occurs after 12:01 a.m. the day of surgery. A 24-hour cancellation occurs anytime during the 24 hours prior to 12:01 a.m. the day of surgery. A 48-hour cancellation occurs anytime between 24 and 48 hours prior to 12:01 a.m. the day of surgery. The number of cancellations for each time period and the number of completed procedures per month are all that is needed to calculate the rates. Cancellation rates are expressed as DOS cancellations per 1,000 completed procedures.

Transfer Rates

A transfer is defined as an ASF admission requiring an unexpected hospital transfer or admission directly following discharge from the ASF. The transfer rate spreadsheet calculates monthly transfer rates using the number of transfers per month and the number of admissions per month. Transfer rates are expressed as transfers per 1,000 admissions.

Cancellation and Transfer Event Information

Identical Data Fields

The cancellation and transfer event information spreadsheets have four identical data fields: patient event number, event date, time preoperative screening occurred, and type of procedure. Two of these data fields—time of preoperative screening and type of procedure—have drop-down boxes with pre-identified choices.

Below is an example of the dropdown box from the transfer event information spreadsheet.



Screenshot interpretation: To the right of the data field is an arrow that when clicked provides a list of choices. In this example, the reason for transfer was pain management.

Patient Event Number

The patient event number requires numeric data. This data is required for the automated reports to work. The workbook allows up to nine numbers for each patient cancellation entry. At the bottom of each month's data, the total number of patient cancellations appears.

Event Date

Enter in the date the cancellation or transfer occurred.

Time Preoperative Screening Occurred

There are six choices to identify the time preoperative screening occurred: (1) DOS, (2) 24 hours prior to surgery, (3) 48 hours prior to surgery, (4) greater than (>) 48 hours prior to surgery, (5) no preoperative screening was performed, and (6) unable to contact patient.

Procedure Type

The general ASF workbook has a comprehensive list of procedure cancellations from which to choose. The ophthalmology-based and endoscopy-based workbooks, marked with symbols * and †, respectively, provide a list of procedures expected to be performed at these type of facilities:

Cataracts*	Podiatric
Argon laser*	Plastic surgery
YAG laser*	Pain injections
Excision of lesions	Dental procedures
Ears, nose, throat	Orthopedic
Urology	Gastrointestinal†
Colonoscopy screening/diagnostic†	Other
Esophagogastroduodenoscopy (EGD) screening/diagnostic†	

* Procedures found in the ophthalmology-based workbook tool.

† Procedures found in the endoscopy-based workbook tool.

Reasons for Cancellations

Seven reasons for cancellations provide insight into why patients cancel. The Table, below, provides the list of the reasons for cancellations with descriptions. Select the main reason a patient cancelled their surgery/procedure. These seven reasons for cancellations are the same for all three ASF pilot program workbooks. Appendix A provides examples and interpretation of cancellations, including the reason and rationale for the cancellations.

Table. Ambulatory Surgical Facility Tracking Tool Reasons for Cancellations Descriptions*

REASONS	DESCRIPTIONS †
Protocol issues (i.e., failure to adhere to facility protocol)	Patient did not meet screening criteria Medical issues missed during preoperative screening Miscommunication and lack of communication between providers Equipment issues (e.g., implant not available, power outages) Incomplete or missing history and physical Scheduling delay
Preoperative instructions not followed	Nothing by mouth or dietary requirements not adhered to Prep issues (e.g., sick from prep, did not complete prep) Medications instructions not followed Misunderstanding day or time of procedure
Procedure not rescheduled	No explanation Patient changed his or her mind Mental health or anxiety Scheduling conflict Patient overslept
Rescheduled procedure	No explanation Scheduling conflict Communication issues with patient
Financial	Insurance and payment-related issues
Transportation	No ride to or from the ASF Car troubles the day of surgery, such as being stuck in traffic, dead battery‡
No shows§	No explanations Patient forgot Miscommunication and lack of communication with patient Patient wanted second opinion

* Not included in the tracking tool are changes in medical status (i.e., patients with new medical conditions, exacerbation of existing conditions, colds, infections, hospitalized, died, or condition improved no longer requiring treatment), surgeon illness, weather-related, work-related, and language barrier cancellation reasons.

† The cancellation descriptions are based on interpretations from the ASF Preoperative Screening Collaboration.

‡ These cancellation reasons may not be affected by the preoperative screening process.

§ No-show explanations best reflected by another defined category (e.g., financial-related issues, protocol issues) assign cancellations to those categories to provide a clearer understanding for the reason for no-show DOS cancellations.

Reasons for Transfers

The ASF Preoperative Screening Program tool provides reasons for transfers based on the ASF Preoperative Screening Collaboration. Select one reason per transfer. Here is the list of reasons:

Hypertension	Syncope
Chest pain	Pain management
Postoperative diagnostic findings	Longer monitoring
Perforation	Bleeding/hemorrhage
Cardiac arrhythmias, including atrial fibrillation and bradycardia	Respiratory monitoring/pneumothorax, including obstructive sleep apnea and respiratory distress
Anesthesia complication/aspiration, including malignant hyperthermia and aspiration pneumonia	Dehydration
	Other

Time of Transfer

Preoperative and postoperative transfer information is used in four of the six monthly transfer reports. The time of transfer, preoperative or postoperative, is paired with patient age, body mass index, and the American Society of Anesthesiologists physical classification system (ASA class) data.

Patient Age

The patient age data field has six choices:

- 20 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65 to 74
- 75 to 99

Body Mass Index (BMI)

The BMI data field has five choices:

- < 24.9 — healthy weight
- 25 to 29.9 — overweight
- 30 to 34.9 — class I obese
- 35 to 39.9 — class II obese
- 40 or higher — class III obese

ASA Class

The ASA class has four choices:

- ASA I — patient is completely healthy and fit
- ASA II — patient has mild systemic disease
- ASA III — patient has severe systemic disease that is not incapacitating
- ASA not assigned

Free Text

In addition to the specific data fields, there are two additional spaces on the cancellation and transfer event information spreadsheets. These data fields allow the user to add in specific information about a cancellation or transfer and general information that the ASF feels is important. Information contained in these two data fields do not appear in the reports.

Cancellation and Transfer Reports

Printing Reports

The cancellation and transfer reports are located on the spreadsheets marked DOS Cancellation Reports and Transfer Reports. Each spreadsheet contains 12 months of reports. There are links with the date identified at the top of each spreadsheet that when clicked will bring the cursor to that location of the monthly report in the spreadsheet. To print the reports, click on the print button. Select the monthly reports needed. The print function will print all the reports for a specific month before printing out the next month's reports.

Time of Preoperative Screening

An association between preoperative screening and DOS no-show cancellations was demonstrated in the ASF Preoperative Screening Collaboration project. The cancellation preoperative screening bar chart shows time of preoperative screening in patients who had DOS cancellations. The transfer preoperative screening bar chart shows time of preoperative screening by the time of the transfer (i.e., preoperative or postoperative).

Below is a screenshot of the bar chart for time of the preoperative screening.

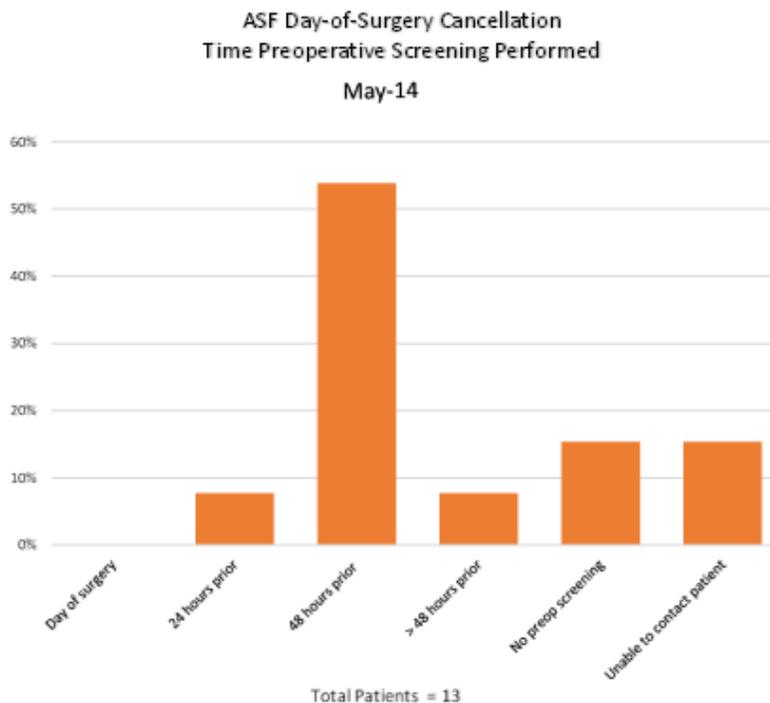


Chart interpretation: Of the patients who cancelled on the DOS, 52% were screened preoperatively 48 hours prior to the DOS, 15% each were not screened preoperatively or were not contacted for a preoperative screening, and 9% each were screened preoperatively either 24 hours prior to the DOS or screened greater than 48 hours prior to the DOS.

Procedure-Related Reports

The procedure-related reports identify the type of procedure that was cancelled and the reason for the cancellation. The procedure-related cancellation reports are a single report. The procedure-related transfer reports are divided into two reports to simplify reading the reports.

Below is a screenshot of the procedure and cancellation type bar chart.

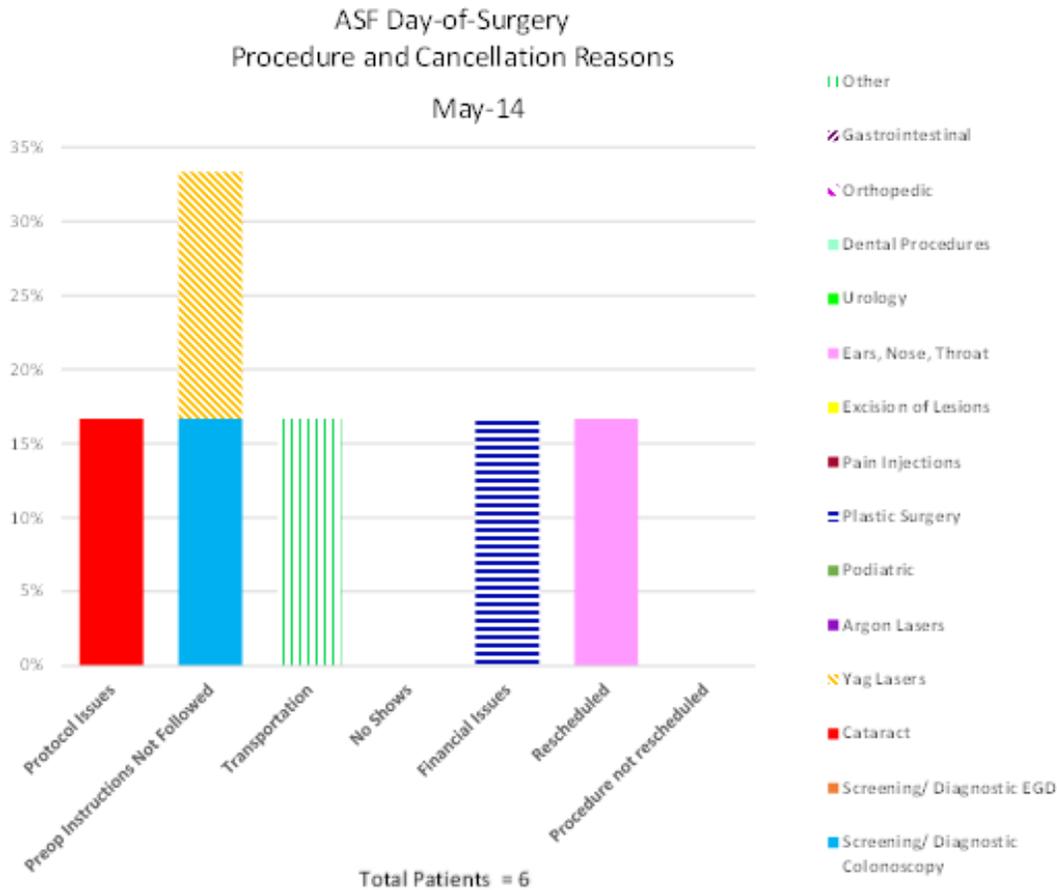


Chart interpretation: Of the patients who cancelled on the DOS in the month of May 2014, 36% each were due to preoperative instructions not being followed, 16% each were due to protocol issues, transportation issues, financial issues, and patients who rescheduled their procedure.

Age, BMI, and ASA Class Reports

Each of the individual transfer-related bar chart reports provides information about the patient’s age, BMI, or ASA class according to whether patients were transferred preoperatively or postoperatively.

Below is a screenshot of the bar chart for patients who transferred and their BMI status:

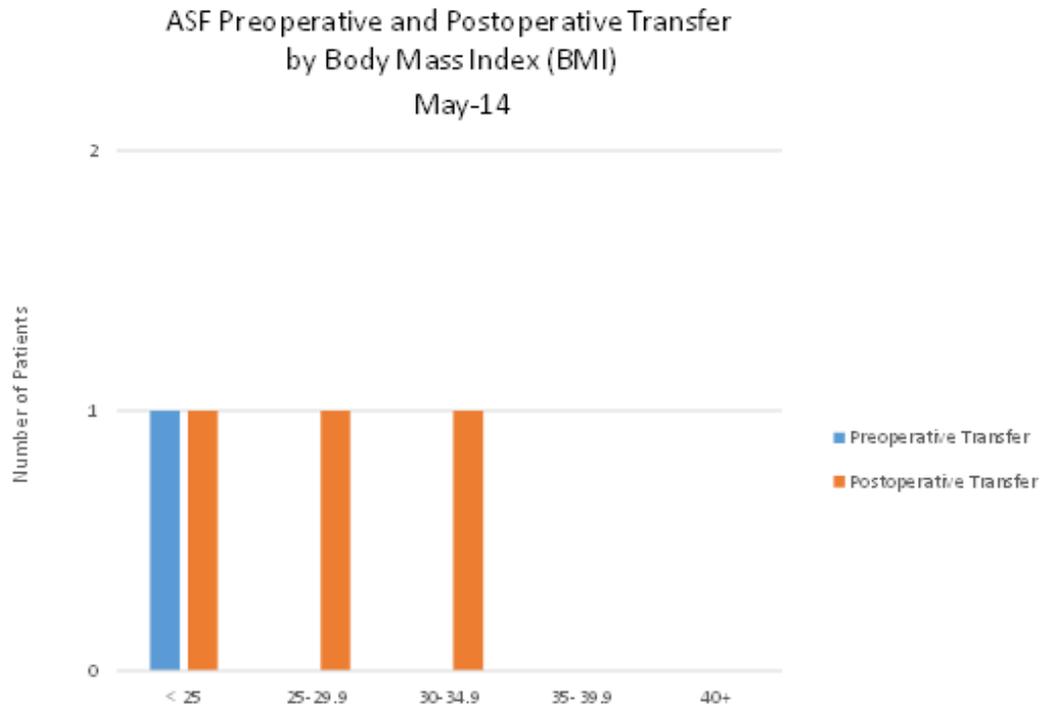


Chart interpretation: Four patients were transferred to the hospital during the month of May; three were post-operative transfers of patients—one whose BMI was <25 (healthy weight), one whose BMI was between 25 and 29.9 (overweight), and one whose BMI was between 30 and 34.9 (class I obese)—and one was a preoperative transfer of a patient whose BMI was <25 (healthy weight).

Appendix A presents examples of clinical cases with the selected cancellation event types based on the analyst’s evaluation of the narrative information.

REFERENCES

- National Institutes of Health National Heart, Lung, and Blood Institute. Clinical guidelines on the identification, evaluation, and treatment of overweight and obesity in adults: the evidence report [online]. NIH pub. no. 98-4083. 1998 Sep [cited 2013 Apr 5]. http://www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.pdf
- American Society of Anesthesiologists. ASA physical status classification system [online]. [cited 2013 Aug 8]. <http://www.asahq.org/Home/For-Members/Clinical-Information/ASA-Physical-Status-Classification-System>

APPENDIX A

CANCELLATION EVENT TYPE EXAMPLES WITH NARRATIVE INTERPRETATIONS

CANCELLATION NARRATIVE	FACTORS UNDER CONSIDERATION	EVENT TYPE	RATIONALE
Patient drank coffee before coming in this morning.	The patient did not maintain NPO (nothing by mouth) status.	Preoperative instructions not followed	NPO status was not maintained.
Patient was sick while taking prep for colonoscopy.	The patient was unable to complete the prep as instructed.	Preoperative instructions not followed	While getting sick from the prep is a change in the patient's medical status, the issue is related to the preoperative instructions. Identifying this situation as a preoperative instruction issue allows an ASF to examine the percentage of patients having issues with their preps. In this case, the ASF can consider using the current prep or using a different one.
The medical clearance from the cardiologist did not arrive by the DOS.	No medical clearance from cardiologist	Protocol issue	The lack of medical clearance from the cardiologist prevents the patient from meeting the preoperative screening criteria.
The patient's lens needed for surgery did not arrive in time.	Lack of appropriate equipment for the scheduled procedure	Protocol issue	Any missing or nonfunctioning equipment prevents the ASF from delivering safe patient care. Even issues such as power outages are a protocol issue.
Patient had no insurance coverage.	Lack of insurance	Financial issue	Lack of insurance may have limited the patient's ability to pay for the procedure.
Patient had a conflict in his schedule (i.e., had another doctor appointment and needed to reschedule).	The patient wants the procedure, but conflicting appointments require a different date for the procedure.	Rescheduled procedure	Patients who actually indicate the desire to have their procedure are included in this event type. Reasons for this type of cancellation include scheduling conflicts, communication issues with patients, or rescheduled procedures with no explanation provided.
Patient changed mind, decided not to have surgery. No explanation provided.	The patient chose to cancel the surgery.	Procedure not rescheduled	Based on this narrative, the patient cancelled and is not likely to reschedule the procedure. This type of patient cancellation focuses on situations in which the patient does not reschedule their procedure.
Patient was a no show. Called patient, who stated that he didn't have a ride home.	The patient lacked a ride home.	Transportation	Even though the patient was a no show, the underlying issue was a lack of transportation. Any patient who is a no show with an underlying issue such as a transportation, financial, preoperative instruction, or protocol issue can be assigned to those event types. By assigning no shows with an identifiable underlying condition, the ASF has a better opportunity to identify specific reasons why patients do not show up on the DOS.
Patient was a no show. There was no explanation. Unable to contact the patient on the phone.	The patient did not show up for surgery.	No show	Based on the narrative, there are no underlying reasons as to why the patient did not show for the procedure. No shows with no explanation, with patients who forgot their appointment time, or with communication issues (i.e., not being able to reach the patient by phone preoperatively) are examples of no-show event types.