# Identification

Record ID - this will be assigned based on site and number for data entry - using REDCap permissions for multi-site studies

Data will come from the UHC/Vizient CDB/RM excel data file, which has been run through Stata matching. Data for this instrument will either be at the far left or the far right of the csv data file.

Patient ID (Medical Record Number)	
	(number - e.g. 8112233 )
Encounter Number	(number - e.g. 941100416082. If the number displays oddly (e.g. "9.50004E+11" either double click on the cell to convert it to a true number or right click and format cell as a number with no decimal points))
Case_Control - identifies the patient as either a case or a control (listed in the "case" column of the xls file)	$\bigcirc$ Case $\bigcirc$ Control (indicate if patient is a case (PSI 11 + = 1) or a control (PSI 11 - = 0) per UHC CDB)
Medicare ID (Hospital Identifier)	<ul> <li>UCD - 050599</li> <li>UCSF - 050454</li> <li>UCI - 050348</li> <li>UCLA_RR - 050262</li> <li>UCSD - 050025</li> <li>(Identifies the site (in addition to the record ID auto-assignment) Necessary due to REDCap DAG restrictions on data entry and site auto-assignment. *Note: may not function as described in REDCap training due to 3 abstractors assigned to 4 sites)</li> </ul>
ID as identified from Stata match (listed in the "id" column of the csv file)	(whole number - e.g. "51", "2356", etc These numbers are assigned by the PI when doing the stata match function. Numbers are not distinct per site, so it is important to have both the "id" and the "medicare_id" to reference back to the master key document.)
ICD version	<ul> <li>ICD-9 (through 3Q15)</li> <li>ICD-10 (from 4Q15 onward)</li> </ul>
Clinical classification software (CCS) bin (listed in the "newccs" column in the csv file)	(Precise CCS code - from matching data file created in Stata ***" Labeled "new_ccs" or "newccs" from xls file (from study PI). Enter precisely as displayed in the xls document (e.g. "121", "14.13.1"))
Age Bin ("age_bin" or "agecat" in csv file)	(binned by decade (from matching xls data file). This will be a single number (integer): e.g. "5" if the patient is in their 50s)



Page 1 of 78

	Page 2 of 78
Match ("match")	(match number for the matched PAIR (from matching xls data file). This will be an integer: e.g. "18". Numbers are not distinct per site, so it is important to have both the "match" and the "medicare_id".)
Match ID ("match_id")	(the identifier (id) for the PARTNER in the pair (from the matching xls data file). whole number - e.g. "51", "2356", etc These numbers are assigned by the PI when doing the stata match function. Numbers are not distinct per site, so it is important to have both the "match id" and the "medicare_id" to reference back to the master key document.)
Abstracter initials	(use three letters - e.g. "jcs")
Coding Case (TP v. FP) - identifies the patient as a true case based on coded data. All controls are marked "N/A".	<ul> <li>False Positive</li> <li>True Positive</li> <li>N/A patient is a control (not a case)</li> <li>(If patient is a control, check "N/A". Otherwise done by PI, clinical/documentation judgment (e.g. was the patient reported as a PSI-11 case to UHC but, based on exclusion criteria, should not have been reported?))</li> </ul>
Clinical Case (TP v. FP) - identifies the patient as a true case based on clinical data. All controls are marked "N/A".	<ul> <li>False Positive</li> <li>True Positive</li> <li>N/A patient is a control (not a case)</li> <li>(If patient is a control, check "N/A". Otherwise done by Pl, clinical judgment (e.g. Does the patient meet clinical criteria for having</li> </ul>
	postoperative respiratory failure even if PSI-11
POD Diagnosis	postoperative respiratory failure even if PSI-11 exclusion criteria are present?)) (from procedure code (or dx code notes if no proc code))

but, based on exclusion criteria, should not have

been reported?))



Clinical Control (TN v. FN) - identifies the patient as a true control based on coded data. All cases are marked "N/A".	<ul> <li>False Negative</li> <li>True Negative</li> <li>N/A patient is a case (not a control)</li> <li>(If patient is a control, check "N/A". Otherwise done by Pl, clinical/documentation judgment (e.g. was the patient reported as a PSI-11 case to UHC but, based on exclusion criteria, should not have been reported?))</li> </ul>
51851 PPV and NPV	<ul> <li>True Positive</li> <li>False Positive</li> <li>True Negative</li> <li>False Negative</li> <li>(Acute respiratory failure following trauma and surgery)</li> </ul>
51853 PPV and NPV	<ul> <li>True Positive</li> <li>False Positive</li> <li>True Negative</li> <li>False Negative</li> <li>(Acute and chronic respiratory failure following trauma and surgery)</li> </ul>
9672 PPV and NPV	<ul> <li>True Positive</li> <li>False Positive</li> <li>True Negative</li> <li>False Negative</li> <li>(Continuous MV for 96 consecutive hours or more; 0 or more days post op)</li> </ul>
9671 PPV and NPV	<ul> <li>True Positive</li> <li>False Positive</li> <li>True Negative</li> <li>False Negative</li> <li>(Continuous MV for less than 96 consecutive hours; 2 or more days post op)</li> </ul>
9670 PPV and NPV	<ul> <li>True Positive</li> <li>False Positive</li> <li>True Negative</li> <li>False Negative</li> <li>(Continuous MV of unspecified duration; 2 or more days post op)</li> </ul>
9604 PPV and NPV	<ul> <li>True Positive</li> <li>False Positive</li> <li>True Negative</li> <li>False Negative</li> <li>(Insertion of endotracheal tube; 1 or more days post op)</li> </ul>



# **UHC/Vizient**

UHC-Vizient Data: All fields are REQUIRED and come directly from the CDB/RM xls report, which has been run through Stata matching to create the csv data file. Data fields are listed in the order in which they appear in the CDB/RM report to facilitate efficient and accurate data entry. Drop down options are as they appear in the CDB/RM report. For all text fields, it is easier and more accurate to copy and paste from the UHC/Vizient xls.

Admission Date	(The calendar date the patient was admitted to the facility. MM-DD-YYY)
Admission Day	<ul> <li>Sunday</li> <li>Monday</li> <li>Tuesday</li> <li>Wednesday</li> <li>Thursday</li> <li>Friday</li> <li>Saturday</li> <li>(The day of the week on which the patient was admitted to the hospital. select one )</li> </ul>
Admission Source	<ul> <li>Clinic referral</li> <li>Non-facility point of origin</li> <li>Transfer from a different hospital</li> <li>Transfer from another facility</li> <li>Transfer from another Home Health Referral</li> <li>Transfer from skilled nursing facility or ICF</li> <li>Transfer from inpatient care in same facility</li> <li>Court/Law Enforcement: STOP data collection</li> <li>Other</li> <li>(Select from the dropdown menu)</li> </ul>
Admission Source - Other	(Copy and paste from the UHC/Vizient xls. The referral source for the admission.)
Admission Status	<ul> <li>Elective</li> <li>Emergent</li> <li>(Indicates the priority of the visit/admission - elective or emergent. Only eligible if elective)</li> </ul>
Age	(This field represents the age of the patient upon admission. This is a UHC calculated field based on date of birth and date of admission. Years as listed in UHC data file - enter numbers only e.g. "64")
Sex (gender)	<ul> <li>Female</li> <li>Male</li> <li>(The gender of the patient. Male or female)</li> </ul>



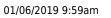
Page 4 of 78

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Race	<ul> <li>White</li> <li>Black</li> <li>Asian</li> <li>Other</li> <li>(Patient's racial background as reported. select one )</li> </ul>
Ethnicity	<ul> <li>Non Hispanic Origin</li> <li>Hispanic Origin</li> <li>Unavailable</li> <li>Not reported</li> <li>(select one )</li> </ul>
Vizient Primary Payer	(Copy and paste from the UHC/Vizient xls. As identified by the hospital as being chiefly responsible for payment and mapped to UHC's generic lexicon of payers (ie Commercial, Medicare, etc.) to allow for comparable reporting across Hospitals. )
Vizient Primary Payer Bin	<ul> <li>Medicare</li> <li>Medicaid</li> <li>Private or Commercial Insurance (inc. PPO, HMO)</li> <li>Military/VA</li> <li>All Others</li> <li>(new variable created for analysis. Select one of the options based on the response to the previous question)</li> </ul>
Admit APR-DRG	(three digit number - e.g. 440. The APR-DRG (all patient refined diagnosis related group) as calculated by the 3M APR grouper software to reflect the patient's condition at admission, any diagnosis with POA "NO" is excluded. More information can be found on the 3M Web site.)
MS-DRG	(three digit number - e.g. 652. Medicare-severity diagnosis-related group. MS-DRGs were created by the Centers for Medicare & Medicaid Services (CMS) to classify patients into clinically cohesive groups that demonstrate similar consumption of hospital resources and length of stay patterns. MS-DRGs can be designated as either medical or surgical.)
Base MS-DRG	(three digit number - e.g. 209. The CMS value is the combination of individual MS-DRGs for the same condition or procedure regardless of MCCs and/or CCs.)



Vizient Service Line	
	(Copy and paste from the UHC/Vizient xls. UHC-defined groups of MS-DRGs that make up clinical cohorts. UHC subservice lines are further divisions of the service lines provided to assist in drilldown. The 2014 UHC service lines are available in the CDB/RM Learning Center on the UHC Web site (https://www.uhc.edu/17771). UHC bases this on the DRG - so, may not match how the hosital site defines the actual svc lines. **These are defined by UHC in an xls crosswalk - long list, updated yearly. Easiest to copy text from xls file and bin them during analysis prn since many in the list will likely not appear in our dataset, but would only create an unwieldy drop down list)
Vizient Sub-Service Line	(Copy and paste from UHC/Vizient xls. UHC-defined groups of MS-DRGs that make up clinical cohorts. UHC subservice lines are further divisions of the service lines provided to assist in drilldown. The 2014 UHC service lines are available in the CDB/RM Learning Center on the UHC Web site (https://www.uhc.edu/17771). UHC bases this on the DRG so, may not match how the hospital site defines the svc/subservice lines (the site/facility service line for admitting and discharge are entered in the "EHR" instrument). UHC bases this on the DRG - so, may not match site svc lines (the site/facility service line for admitting and discharge are entered in the "EHR" instrument). See comments above after "**")
Admit Severity of Illness	<ul> <li>Minor</li> <li>Moderate</li> <li>Major</li> <li>Extreme</li> <li>No Class Specified</li> <li>(The APR-DRG SOI (severity of illness) as calculated at the time of admission using the 3M grouper, any diagnosis with POA "NO" is excluded. More information can be found on the 3M Web site. select one )</li> </ul>
Relative Expected Mortality (2015 Risk Model [AMC])	<ul> <li>Well Below</li> <li>Below</li> <li>Equal to</li> <li>Above</li> <li>Well Above</li> <li>Unavailable</li> <li>(select one - Relative Expected Mortality (REM) is a qualitative description of a patient's % expected mortality in comparison to other patients in the same model group. More information is available in the Risk Adjustment Methodology information on the CDB/RM Learning Center on the UHC Web site (https://www.uhc.edu/17771).)</li> </ul>





Admit Risk of Mortality	<ul> <li>Minor</li> <li>Moderate</li> <li>Major</li> <li>Extreme</li> <li>No Class Specified</li> <li>(The APR-DRG ROM (risk of mortality) as calculated at the time of admission using the 3M grouper, any diagnosis with POA "NO" is excluded. More information can be found on the 3M Web site. select one )</li> </ul>
Discharge MD Specialty	(Copy and paste from UHC/Vizient xls. Represents the specialty of the discharge physician as defined by the hospital. See sub-analysis note above. **Tech Specs, Appendix A had a 2-page list. A drop down would be cumbersome for data entry and many specialties may not appear in this study - easiest to copy/paste from Vizient xls file and bin later for analysis prn.)
Discharge MD Specialty - Bin	<ul> <li>Anesthesia</li> <li>Allied Health Professional</li> <li>Dermatology</li> <li>Emergency Medicine</li> <li>Family Practice/General Practice</li> <li>Internal Medicine</li> <li>Neurology</li> <li>Obstetrics/Gynecology</li> <li>Palliative Care</li> <li>Pathology</li> <li>Pediatrics</li> <li>Physical Medicine/Rehab</li> <li>Psychiatry</li> <li>Radiology</li> <li>Surgery</li> <li>Urology</li> <li>Not Elsewhere Classified</li> <li>Unknown</li> <li>(Bin based on Consolidated Patient Data Feed Specification v7.0 Appendix A overarching categories for specialties listed above. All data for the MD Specialty "Bins" are in teh file located in the REDCap File Repository.)</li> </ul>
Discharge Date	(The calendar date on which patient was discharged from or transferred out of the facility. MM-DD-YYYY)
Discharge Day	<ul> <li>Sunday</li> <li>Monday</li> <li>Tuesday</li> <li>Wednesday</li> <li>Thursday</li> <li>Friday</li> <li>Saturday</li> </ul>

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Discharge Status       Oischtranst to another rehab facility including rehab distinct part units of a hospital         Discharged to home care or self care (routine discharge)       Oischarged to home care or self care (routine discharge)         Oischarged/transferred to home under care of organized home health service       Oischarged/transferred to home under care of organized home health service         Oischarged/transferred to solited nursing facility (SNF) with Medicare certification       Expired (all in-hospital death except for Medicare or CHAMPUS hospital hospital death except for Medicare or CHAMPUS hospital death except for the isolation of the most up to date as listed on the record. It is based on the status on the discharge date as listed on the record. It is based on the spital Mortality         Discharge Status - Other <td< th=""><th></th><th></th></td<>		
ischarge       Obicharged/transfered to another short term         general hospital for inpatient care       Obicharged/transferred to home under care of         organized home health service       Obicharged/transferred to long term care hospital         (LTCH)       Obicharged/transferred to skilled nursing facility         (SKP) with Medicare certification       Expired (all in-hospital deaths except for         Medicare or CHAMPUS hospice patients)       Left against medical advice or discontinued care         Obsharged/transferred to skilled nursing facility       (SKP) with Medicare certification         Obtions for this field does the record. It is based on the       tast advice or discontinued care         Obter       Other       This is the patient status on the discharge date as listed on the record. It is based on the standard set of UB04 codes for Discharge Status.         Options for this field does on page please review your UB04 definitions for the most up to date available fields. Select one 1         Discharge Status - Other       (type exactly as it appears in the UHC data file (there are 1.5 pages of possible options in the Appendix A))         In Hospital Mortality       No         Yes       (hapatient deaths within 2 days of admission. UHC will calculate this based on days, not hours. )         Total Cost Observed (2015 Risk Model)       (numbers only, no 5 or other sign: e.g., "s63,233" is entered as 6323. "includes direct (related to patient care) and indirect (includes capital and building costs) costs	Discharge Status	rehab distinct part units of a hospital
○ Discharged/transfered to another short term         ○ meanal hospital for inpatient care         ○ Discharged/transferred to home under care of organized home health service         ○ Discharged/transferred to long term care hospital (LTCH)         ○ Discharged/transferred to skilled nursing facility (SNF) with Medicare certification         ○ Expired (all in-hospital deaths except for Medicare or CHAMPUS hospice patients)         ○ Let against medical advice or discontinued care         ○ Hospice - Home         ○ Discharge Status on the discharge date as listed on the record. It is based on the stand set of UB04 codes for Discharge Status. Options for this field do change please review your UB04 definitions for the most up to date available fields. Select one )         Discharge Status - Other       Itype exactly as it appears in the UHC data file (there are 1.5 pages of possible options in the Appendix A))         In Hospital Mortality       ○ No         ○ Yes       (Dased on "Discharge Status" above - "expired" = yes to in hospital Mortality)         Early Death       ○ No         ○ Total Cost Observed (2015 Risk Model)       Inumbers only, no \$ or other sign: e.g. "\$63.233" is entered as 63233. "includes direct (related to patient care) and Indirec		
○ Discharged/transferred to home under care of organized home health service         ○ Discharged/transferred to long term care hospital (LTCH)         ○ Discharged/transferred to skilled nursing facility (SNF) with Medicare certification         ○ Expired (all in-hospital deaths except for Medicare or CHAMPUS hospice patients)         ○ Left against medical advice or discontinued care         ○ Hospice - Home         ○ Unknown         ○ Other         (This is the patient status on the discharge date as listed on the record. It is based on the standard set of UB04 codes for Discharge Status.         ○ Discharge Status - Other         (type exactly as it appears in the UHC data file (there are 1.5 pages of possible options in the Appendix A))         In Hospital Mortality         ○ No         ○ Yes         (Inpatient deaths within 2 days of admission, UHC will calculate this based on days, not hours. )         Total Cost Observed (2015 Risk Model)         (Incomer and individual encounter)         LOS Observed         (Actual LOS for an individual patient encounter, Whole number for days - e.g. 5)         Charges Observed		O Discharged/transfered to another short term
Discharged/transferred to long term care hospital (LTCH)         Discharged/transferred to skilled nursing facility (SNF) with Medicare certification         Expired (all in-hospital deaths except for Medicare or CHAMPUS hospice patients)         Left against medical advice or discontinued care Hospice - Home         Unknown         Other         (This is the patient status on the discharge date as listed on the record. It is based on the standard set of UB04 codes for Discharge Status. Options for this field do change please review your UB04 definitions for the most up to date available fields. Select on )         Discharge Status - Other       Itype exactly as it appears in the UHC data file (there are 1.5 pages of possible options in the Appendix A))         In Hospital Mortality       No         Yes       (Inpatient deaths within 2 days of admission. UHC will calculate this based on days, not hours. )         Total Cost Observed (2015 Risk Model)       Inumbers only, no \$ or other sign: e.g. "\$63,233" is entered as 63233. "includes direct (related to patient care) and indirect (includes capital and building costs) costs for an individual encounter, Whole number for days - e.g. 5)         Charges Observed       IObserved charges for the individual (Observed charges for the individual encounter/Visit. Numbers, no \$ sign: e.g.		Discharged/transferred to home under care of
<ul> <li>Discharged/transferred to skilled nursing facility (SNF) with Medicare certification</li> <li>Expired (all in-hospital deaths except for Medicare or CHAMPUS hospice patients)</li> <li>Left against medical advice or discontinued care</li> <li>Hospice - Home</li> <li>Unknown</li> <li>Other</li> <li>(This is the patient status on the discharge date as listed on the record. It is based on the standard set of UBA/ codes for Discharge Status.</li> <li>Options for this field do change please review your UB04 definitions for the most up to date available fields. Select one )</li> <li>Discharge Status - Other</li> <li>In Hospital Mortality</li> <li>No</li> <li>Yes</li> <li>(based on "Discharge Status" above - "expired" = yes to In Hospital Mortality</li> <li>Early Death</li> <li>No</li> <li>Yes</li> <li>(Inpatient deaths within 2 days of admission. UHC will calculate this based on days, not hours, )</li> <li>Total Cost Observed (2015 Risk Model)</li> <li>Inter care) and indirect (includes capital and building costs) costs for an individual encounter. Whole number for days - e.g. 5)</li> <li>Charges Observed</li> <li>(Observed charges for the individual encounter. Whole number for days - e.g. 5)</li> </ul>		O Discharged/transferred to long term care hospital
Expired (all in-hospital deaths except for Medicare or CHAMPUS hospice patients)         Left against medical advice or discontinued care         Hospice - Home         Unknown         Other         (This is the patient status on the discharge date as listed on the record. It is based on the standard set of UB04 codes for Discharge Status. Options for this field do change plaese review your UB04 definitions for the most up to date available fields. Select one )         Discharge Status - Other         (type exactly as it appears in the UHC data file (there are 1.5 pages of possible options in the Appendix A))         In Hospital Mortality         No         Yes         (based on "Discharge Status" above - "expired" = yes to In Hospital Mortality)         Early Death         Otal Cost Observed (2015 Risk Model)         (numbers only, no \$ or other sign: e.g. "\$63,223" is entered as 6323. "includes direct (related to patient care) and indirect (related to patient care) and indirect (related to patient care) and indirect (includes capital and building costs) costs for an individual encounter. Whole number for days - e.g. 5)         Charges Observed       (Observed charges for the individual encounter/visit. Numbers, no \$ sign: e.g.		$\bigcirc$ Discharged/transferred to skilled nursing facility
Left against medical advice or discontinued care         Hospice - Home         Unknown         Other         (This is the patient status on the discharge date as listed on the record. It is based on the standard set of UB04 codes for Discharge Status. Options for this field do change please review your UB04 definitions for the most up to date available fields. Select one )         Discharge Status - Other         (type exactly as it appears in the UHC data file (there are 1.5 pages of possible options in the Appendix A))         In Hospital Mortality       No         Yes       (based on "Discharge Status" above - "expired" = yes to In Hospital Mortality)         Early Death       No         Total Cost Observed (2015 Risk Model)       (numbers only, no \$ or other sign: e.g. "\$63,233" is entered as 63233. "includes direct (related to patient care) and indirect ( includes capital and building costs) costs for an individual encounter)         LOS Observed       (Actual LOS for an individual patient encounter. Whole number for days - e.g. 5)		O Expired (all in-hospital deaths except for
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(based on "Discharge Status" above - "expired" =         yes to In Hospital Mortality)         Early Death         O No         Yes         (Inpatient deaths within 2 days of admission. UHC will calculate this based on days, not hours. )         Total Cost Observed (2015 Risk Model)         (numbers only, no \$ or other sign: e.g. "\$63,233" is entered as 63233. *includes direct (related to patient care) and indirect ( includes capital and building costs) costs for an individual encounter)         LOS Observed         (Actual LOS for an individual patient encounter. Whole number for days - e.g. 5)         Charges Observed         (Observed charges for the individual encounter.)	In Hospital Mortality	⊖ No
Early Death       No         O No       Yes         (Inpatient deaths within 2 days of admission. UHC will calculate this based on days, not hours. )         Total Cost Observed (2015 Risk Model)         (numbers only, no \$ or other sign: e.g. "\$63,233" is entered as 63233. *includes direct (related to patient care) and indirect ( includes capital and building costs) costs for an individual encounter)         LOS Observed       (Actual LOS for an individual patient encounter. Whole number for days - e.g. 5)         Charges Observed       (Observed charges for the individual encounter. Wisit. Numbers, no \$ sign: e.g.		
O Yes (Inpatient deaths within 2 days of admission. UHC will calculate this based on days, not hours. )Total Cost Observed (2015 Risk Model)(numbers only, no \$ or other sign: e.g. "\$63,233" is entered as 63233. *includes direct (related to patient care) and indirect ( includes capital and building costs) costs for an individual encounter)LOS Observed(Actual LOS for an individual patient encounter. Whole number for days - e.g. 5)Charges Observed(Observed charges for the individual encounter/visit. Numbers, no \$ sign: e.g.		
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(Actual LOS for an individual patient encounter. Whole number for days - e.g. 5) Charges Observed (Observed charges for the individual encounter/visit. Numbers, no \$ sign: e.g.		
Whole number for days - e.g. 5)         Charges Observed         (Observed charges for the individual encounter/visit. Numbers, no \$ sign: e.g.	LOS Observed	
(Observed charges for the individual encounter/visit. Numbers, no \$ sign: e.g.		
(Observed charges for the individual encounter/visit. Numbers, no \$ sign: e.g.	Charges Observed	
	-	
\$05,255 is enlered as 05255		encounter/visit. Numbers, no \$ sign: e.g. "\$63,233" is entered as 63233)



ICU Days Obs	
	(*This data filed is missing from the UHC/Vizient data file. Leave it blank. Explanation of the field: The total "whole" number of days the patient spent in an intensive care unit (ICU) while in the hospital. This field is determined by the hospital, not calculated by UHC. Enter whole number for days - e.g. 2. This value will be a legacy value, replaced by the "ICU File" value (which uses start/end/type ICU data fields). When ICU Days are removed from UHC, only the ICU File value will remain.)
ICU Days Total Obs from ICU File	(When ICU Days are removed from UHC, only the ICU File value will remain. Enter whole number for days - e.g. 1. Blank = 0)
LOS Outlier (2015 Risk Model (AMC))	<ul> <li>No</li> <li>Yes</li> <li>(The LOS Outlier Flag is applied to an encounter when the observed LOS is greater than the 99th percentile within the base MS-DRG. The 99th percentile by base MS-DRG is determined by the normative data set used for risk modeling. This is not based on CMS outlier thresholds for individual MSDRGs. In the report output, when applicable the number of cases is followed in parenthesis by the number of LOS outliers. Yes or no)</li> </ul>
Direct Cost Expected (2015 Risk Model (AMC))	(The expected direct costs for an individual encounter based on the UHC Risk Model. UHC organizes discharges based on DRGs or Base MS-DRGs for the Risk Model Groups. Expected values are unique to each patient and based on clinical characteristics (such as co-morbidities, diagnoses, and other patient demographics). Refer to the CDB/RM Learning Center on the UHC Web site (https://www.uhc.edu/17771) for more detail on the Risk Model Process. Numbers, no \$ sign: e.g. "\$63,233" is entered as 63233)
LOS Expected (2015 Risk Model (AMC))	(The expected LOS as calculated by the UHC MS-DRG-based risk model for Length of Stay. Refer to the risk adjustment methodology materials on the CDB/RM Learning Center on the UHC Web site (https://www.uhc.edu/17771). This number will be something like "5.1826")
Mortality Expected (2015 Risk Model (AMC))	(Appears in the Case Profile Report; the expected mortality for the case as predicted by the MS-DRG-based mortality risk model for the year selected (current and previous year are available). The CDB/RM tool supports two risk model groups within the tool at any given time. Refer to UHC's risk adjustment methodology for more information. Number < 1. e.g. 0.00043)



Direct Cost Observed (2015 Risk Model) (The direct costs for an individual encounter. The direct costs are those costs related to the patient care. This is based on a ratio of cost to charges. Refer to the CDB/RM Learning Center on the UHC Web site (https://www.uhc.edu/17771) for most current methodology. Numbers, no \$ sign: e.g. "\$63,233" is entered as 63233) REM Model Observed (2015 Risk Model (AMC)) (The mean observed value for the mortality model group. Compare to the REM for the pt (explained above). Number < 1. e.g. 0.00037)

ICD-9-CM or ICD-10-CM Dx Code 1 from UHC

ICD-9-CM or ICD-10-CM Dx Code 1 Description from UHC

ICD-9-CM or ICD-10-PCS Procedure Code 1 from UHC ("Index\_Therapeutic\_Procedure" code - used for CCS bins and case-control matching)

ICD-9-CM or ICD-10-PCS Procedure Code 1 Description from UHC ("Index\_Therapeutic\_Procedure" code - used for CCS bins and case-control matching)

Procedure Code 1 Date from UHC ("Index\_Therapeutic\_Procedure" code - used for CCS bins and case-control matching)

Procedure Code 1 MD Specialty from UHC

(Words only, no caps. ICD-9 example: unilaterals-o nec. ICD-10 example: fusion 2-6 c jt w intbd dev, ant appr a col, open. \*\*\*\*NOTE: Use the column labeled "Index\_Therapeutic\_Procedure". For the

(No decimal point, letters and numbers. ICD-9 example: 220. ICD-10 example: m5032. \*\*\*For example, in the UCD file this is found in column

(Words only, no caps. ICD-9 example: benign ovarian neoplasm. ICD-10 example: other cervical

(No decimal point, letters and numbers. ICD-9

"Index Therapeutic Procedure". For the UCD file

example: 6549. ICD-10 example: 0rg20a0. \*\*\*\*NOTE:

disc degeneration, mid-cervical region.)

AT and labeled "ICD9 Diagnosis1")

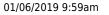
(MM-DD-YYYY)

Use the column labeled

UCD file this is column AEA)

this is column AEA )

(Copy from the csv file. The physician responsible for the primary procedure as reported by the hospital. \*\*NOTE: you will need to look for the code listed as the "Index\_Therapeutic\_Procedure" and then look for this exact code in the "ICD\_Procedure x" columns to find the exact same procedure code. From that procedure code column (which will usually be "ICD\_Procedure1", but may be 2 or 3), look about 3 columns to the right for the MD specialty for the procedure. Copy from the csv file into this data field.)







Procedure Code MD Specialty - Bin	<ul> <li>Anesthesia</li> <li>Allied Health Professional</li> <li>Dermatology</li> <li>Emergency Medicine</li> <li>Family Practice/General Practice</li> <li>Internal Medicine</li> <li>Neurology</li> <li>Obstetrics/Gynecology</li> <li>Palliative Care</li> <li>Pathology</li> <li>Pediatrics</li> <li>Physical Medicine/Rehab</li> <li>Psychiatry</li> <li>Radiology</li> <li>Surgery</li> <li>Urology</li> <li>Not Elsewhere Classified</li> <li>Unknown</li> <li>(Bin based on Consolidated Patient Data Feed Specification v7.0 Appendix A overarching categories for specialties listed above)</li> </ul>
Admitting - Physician Specialty 1 - Service Line	(Copy and paste from UHC/Vizient xls file "PhysicianRole1" = Admitting, use column labeled "PhysicianSpecialty1". This appears ~column YT in the cases file and ~column AEI in the controls file. The location may be slightly different in the Stata file)
Admitting MD Specialty - Bin	<ul> <li>Anesthesia</li> <li>Allied Health Professional</li> <li>Dermatology</li> <li>Emergency Medicine</li> <li>Family Practice/General Practice</li> <li>Internal Medicine</li> <li>Neurology</li> <li>Obstetrics/Gynecology</li> <li>Palliative Care</li> <li>Pathology</li> <li>Pediatrics</li> <li>Physical Medicine/Rehab</li> <li>Psychiatry</li> <li>Radiology</li> <li>Surgery</li> <li>Urology</li> <li>Not Elsewhere Classified</li> <li>Unknown</li> <li>(Bin based on Consolidated Patient Data Feed Specification v7.0 Appendix A overarching categories for specialties listed above)</li> </ul>



# **Outcome UHC/Vizient**

UHC/Vizient Outcome (all fields are required for all CASES and come directly from the CDB/RM report). For CONTROLS, only mark the first question as "N/A" - no further data collection is required.

ICD Version for UHC Outcome

O ICD-9

○ ICD-10

 N/A - patient is a control (not a case) \*\*No further data collection is necessary for this instrument - mark this form as complete (branching logic is used to simplify data entry based on ICD-9 or ICD-10 codes )

Page 12 of 78

ICD-9 \*\*NOTE: The first procedure code date (the date nearest the admission date) is the date to use for calculating post-operative days and/or pre-diagnosis days. Diagnosis codes 51851 and 51853 will NOT have a date. If there are dates for re-intubation (9604) AND mechanical ventilation (9672, 9671, and/or 9670) use the mechanical ventilation code and date that appears nearest to the admission date.

ICD-9 51851 Diagnosis Present?	<ul> <li>Yes</li> <li>No</li> <li>(518.51 - Acute Respiratory Failure Following Trauma and Surgery (any secondary ICD-9-CM diagnosis code for acute respiratory failure))</li> </ul>
ICD-9 51853 Diagnosis Present?	<ul> <li>Yes</li> <li>No</li> <li>(518.53 - Acute and Chronic Respiratory Failure Following Trauma and Surgery (any secondary ICD-9-CM diagnosis code for acute and chronic respiratory failure))</li> </ul>
ICD-9 9672 Procedure Present?	<ul> <li>Yes</li> <li>No</li> <li>((96.72) Continuous mechanical ventilation for 96 consecutive hours or more - any-listed ICD-9-CM procedure codes for a mechanical ventilation for 96 consecutive hours or more that occurs zero or more days after the first major operating room procedure code (based on days from admission to procedure))</li> </ul>
ICD-9 9672 Procedure Date - FIRST in chronological order	((96.72) Date will be located in the xls file (generally 2 columns to the right of the code). **Enter the FIRST date in chronological order. *If there are additional/subsequent (e.g. 2nd and 3rd) codes and dates, enter the codes and dates in the "comments field" below)



ICD-9 9671 Procedure Present?	<ul> <li>Yes</li> <li>No</li> <li>((96.71) Continuous mechanical ventilation for less than 96 consecutive hours - any-listed ICD-9-CM procedure codes for a mechanical ventilation for less than 96 consecutive hours that occurs two or more days after the first major operating room procedure code (based on days from admission to procedure))</li> </ul>
ICD-9 9671 Procedure Date - FIRST in chronological order	((96.71) Date will be located in the xls file (generally 2 columns to the right of the code). **Enter the FIRST date in chronological order. *If there are additional/subsequent codes and dates, note these in the "comments" box.)
ICD-9 9670 Procedure Present?	<ul> <li>Yes</li> <li>No</li> <li>((96.70) Continuous mechanical ventilation of unspecified duration - any-listed ICD-9-CM procedure codes for a mechanical ventilation for an undetermined number of hours that occurs two or more days after the first major operating room procedure code (based on days from admission to procedure))</li> </ul>
ICD-9 9670 Procedure Date - FIRST in chronological order	((96.70) Date will be located in the xls file (generally 2 columns to the right of the code). **Enter the FIRST date in chronological order. *If there are additional/subsequent codes and dates, note these in the "comments" box.)
ICD-9 9604 Procedure Present?	<ul> <li>Yes</li> <li>No</li> <li>((96.04) Insertion of an endotracheal tube - any-listed ICD-9-CM procedure codes for a reintubation that occurs one or more days after the first major operating room procedure code (based on days from admission to procedure))</li> </ul>
ICD-9 9604 Procedure Date - FIRST in chronological order	((96.04) Date will be located in the xls file (generally 2 columns to the right of the code). **Enter the FIRST date in chronological order. *If there are additional/subsequent codes and dates, note these in the "comments" box.)

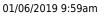
# ICD-10 \*\*Note, enter the date for the FIRST procedure in chronological order (nearest the first operative procedure/date of admission)

ICD-10 J95821 Diagnosis Present?	<ul> <li>Yes</li> <li>No</li> <li>(any secondary ICD-10-CM diagnosis code for acute Postprocedural respiratory failure)</li> </ul>
ICD-10 J95822 Diagnosis Present?	<ul> <li>Yes</li> <li>No</li> <li>(any secondary ICD-10-CM diagnosis code for acute and chronic Postprocedural respiratory failure)</li> </ul>



ICD-10 5A1955Z Procedure Code	<ul> <li>Yes</li> <li>No</li> <li>(any-listed ICD-10-PCS procedure codes for a mechanical ventilation for 96 consecutive hours or more that occurs zero or more days after the first major operating room procedure code (based on days from admission to procedure);)</li> </ul>
ICD-10 5A1955Z Procedure Date	
ICD-10 5A1945Z Procedure Code	<ul> <li>Yes</li> <li>No</li> <li>(any-listed ICD-10-PCS procedure codes for a mechanical ventilation for 24-96 consecutive hours that occurs two or more days after the first major operating room procedure code (based on days from admission to procedure);)</li> </ul>
ICD-10 5A1945Z Procedure Date	
ICD-10 0BH13EZ Procedure Code	<ul> <li>Yes</li> <li>No</li> <li>(Insertion Of Endotracheal Airway Into Trachea, Percutaneous Approach (any-listed ICD-10-PCS procedure codes for a reintubation that occurs one or more days after the first major operating room procedure code (based on days from admission to procedure)))</li> </ul>
ICD-10 0BH13EZ Procedure Date	
ICD-10 0BH17EZ Procedure Code	<ul> <li>Yes</li> <li>No</li> <li>(Insertion Of Endotracheal Airway Into Trachea, Via Natural or Artificial Opening (any-listed ICD-10-PCS procedure codes for a reintubation that occurs one or more days after the first major operating room procedure code (based on days from admission to procedure)))</li> </ul>
ICD-10 0BH17EZ Procedure Date	
ICD-10 0BH18EZ Procedure Code	<ul> <li>Yes</li> <li>No</li> <li>(Insertion Of Endotracheal Airway Into Trachea, Via Natural or Artificial Opening Endoscopic</li> <li>(any-listed ICD-10-PCS procedure codes for a reintubation that occurs one or more days after the first major operating room procedure code</li> <li>(based on days from admission to procedure)))</li> </ul>

#### ICD-10 0BH18EZ Procedure Date





# **Procedure Dates/Times**

Dates/Times to be collected by data abstractors. \*Study PI will use these data in conjunction with the date/time of the index therapeutic procedure, presence of PRF Diagnosis codes (51851, 51853), and presence of PRF procedure codes (9604, 9670, 9671, 9672) to determine TP v. FP case for PPV calculations.

Ventilator 1: date/time of first ventilator initiation	
Ventilator 1: date/time of first ventilator discontinuation	
Ventilator 2: date/time of 2nd ventilator initiation	
Ventilator 2: date/time of 2nd ventilator discontinuation	
Ventilator 3: date/time of 3rd ventilator initiation	
Ventilator 3: date/time of 3rd ventilator discontinuation	
Intubation 1: date/time of 1st endotracheal intubation initiation/placement	
Extubation 1: date/time of 1st endotracheal intubation removal	
Intubation 2: date/time of 2nd endotracheal intubation initiation/placement	
Extubation 2: date/time of 2nd endotracheal intubation removal	
Intubation 3: date/time of 3rd endotracheal intubation initiation/placement	
Extubation 3: date/time of 3rd endotracheal intubation removal	
Procedure Dates/Times - Comments	

(example: Airway (other than endotracheal tube) placed and discontinued: We are looking for insertion and removal of an "endotracheal tube" a tube that goes into the trachea. If the tube is an endotracheal or ET tube, there is no need for clarififcation. If the tube is a tracheostomy tube, please indicate this in the comments. In this example, you would document "Airway 8 Shiley, Cuffed placed 10/23/16 at 1330")



Page 15 of 78

### **Demographics EHR**

Demographics - EHR (All fields are required, except middle name. Obtained from the hospital site's medical record - typically an electronic health record. Sources of data will include Nurses Notes, Physician Notes, Surgery/Anesthesia/Operating Room Notes.). \*\*NOTE: for all numbers (e.g. weight in kg, height in cm, etc.) - DOCUMENT the NUMBER ONLY. For example "74.5 kg" is documented as: 74.5

Admitting Service	
	(Retained variable as svc from site may differ from UHC DRG-based service attributions. Typically located in the physician's History & Physical (H&P), but may also be listed toward the top of the Discharge Summary (admitting and discharge services are often listed).)
Discharge Service	(Typically located in the physician's Discharge Summary.)
Last Name	(e.g. Smith)
Middle Name	(e.g. James. many charts do not list one - not required)
First Name	(e.g. John)
Date of Birth	(MM-DD-YYYY)
Weight in Kilograms	(1 kilogram = 2.2 pounds. Weight in pounds/2.2 = weight in kilograms. Document the pre-op NUMBER ONLY - e.g. 51 kg is documented as 51. This is the patient's ACTUAL weight on ADMISSION. Round to one decimal point: e.g. 75.4. Best location is probably the anesthesia note.)
Height in Centimeters	(1 inch = 2.54 centimeters. 1 foot = 12 inches or 30.48 centimeters. Round to one decimal point and document the NUMBER only: e.g. 175.4 cm is documented as 175.4. To convert meters to cm, move the decimal point two spaces to the right (14.99 meters = 149.9 cm). Best location is probably the anesthesia note.)



Page 16 of 78

Ideal Body Weight (kg)

(http://www.mdcalc.com/ideal-body-weight/ Enter gender and height in centimeters calculator will provide IDEAL body weight in kg and pounds using the Devine formula (document the wt in kg): The Dr. Devine formula: Ideal Body Weight (men) = 50kg + 2.3kg \* ( Height(in) - 60 ) Ideal Body Weight (women) = 45.5kg + 2.3kg \*( Height(in) - 60 ) Note: This formula is only an approximation, and is generally only applicable for people 60 inches (5 foot) tall or greater.. Round to one decimal point: e.g. 45.4 kg and document te NUMBER only: e.g. 74.4 kg is documenetd as 74.4)



(From chart/medical record. Round to one decimal point: e.g. 25.4. lf not provided in the chart (typically the operative note) the formula is: English ΒMĬ Formula BMI = ( Weight in Pounds Height in inches Х Height in inches ) x 703 Metric BMI Formula BMI = ( Weight in Kilograms Height in Meters Х Height in Meters ) ). This

)

1 (

online calculator can also be used: http://www.nhlbi.nih.gov/health/educational/lose\_wt/BMI/br O Underweight: < 18.5

 $\bigcirc$  Underweight: < 18.5  $\bigcirc$  Normal weight: 18.5 - 24.9  $\bigcirc$  Overweight:25 - 29.9  $\bigcirc$  Obese1: 30 - 34.9  $\bigcirc$  Obese2: 35 - 39.9  $\bigcirc$  Morbidly obese: >40 (Bin based on BMI categorical )

BMI (Body Mass Index) Categorical

# **Comorbid Conditions**

#### **Comorbid Conditions**

# (Data source will typically be the Admitting Physician's History & Physical. Some data may be located in the Surgery/Anesthesia Preoperative Note.)

Alcohol Current	<ul> <li>No</li> <li>Yes</li> <li>Not addressed/documented</li> <li>(Current includes drinking daily within 4 weeks of this admission.)</li> </ul>
Alcohol categorical	<ul> <li>Never drinker</li> <li>Past drinker</li> <li>Occassional drinker</li> <li>Current daily drinker</li> <li>Not addressed/documented</li> <li>(Current includes drinking daily. Occasional drinker = social drinker (e.g. "a couple glasses of wine on the weekend"). Never drinker = does not drink at all and no history of drinking. Past drinker = no longer drinks. )</li> </ul>
Alcohol withdrawal treatment protocol ordered (e.g. CIWA protocol)	<ul> <li>No</li> <li>Yes - CIWA, CIWA-A, or CIWA-Ar protocol ordered or CIWA score documented</li> <li>Not addressed/documented (http://www.mdcalc.com/ciwa-ar-for-alcohol-withdrawal/. T</li> </ul>
American Society of Anesthesiologists (ASA) class	<ul> <li>I (A normal healthy patient)</li> <li>II (A patient with mild systemic disease)</li> <li>III (A patient with severe systemic disease)</li> <li>IV (A patient with severe systemic disease that is a constant threat to life)</li> <li>V (A moribund patient who is not expected to survive without the operation)</li> <li>VI (A declared brain-dead patient whose organs are being removed for donor purposes)</li> <li>Not addressed/documented</li> <li>(Typically found in the surgery/anesthesia preoperative notes)</li> </ul>
Asthma	<ul> <li>No</li> <li>Yes</li> <li>Not addressed/documented</li> </ul>
Chronic kidney disease (CKD)	<ul> <li>No</li> <li>Yes</li> <li>Not addressed/documented</li> <li>(includes CKD, CKD class 5, renal disease, renal failure, kidney failure)</li> </ul>
Chronic Obstructive Pulmonary Disease (COPD)	<ul> <li>No</li> <li>Yes</li> <li>Not addressed/documented</li> <li>(Includes COPD, emphysema, chronic bronchitis)</li> </ul>



On Home Oxygen?	<ul> <li>No</li> <li>Yes</li> <li>Not addressed/documented</li> <li>(is patient on oxygen at home?)</li> </ul>
Cardiovascular Disease	<ul> <li>No</li> <li>Yes</li> <li>Not addressed/documented</li> <li>(Includes heart attack, myocardial infarction, STEMI, NSTEMI, angina, dysrhythmia, valve disease (mitral, aortic), cardiomyopathy)</li> </ul>
Dementia	<ul> <li>No</li> <li>Yes</li> <li>Not addressed/documented</li> <li>(Includes: Alzheimer's, senile dementia, dementia. Dementia represents a chronic global loss of cognitive or brain function and phenotypically manifests as the loss of memory, executive function, and attention. It differs from the acute onset if Impaired Sensorium. Dementia in older adults is related to an increased incidence of adverse health care events, including morbidity (pneumonia, febrile episodes, and feeding problems), as well as high 6-month mortality (source: Gajdos et. al, JAMA, 2015).)</li> </ul>
Diabetes - present or absent	<ul> <li>No</li> <li>Yes</li> <li>Not addressed/documented</li> <li>(Includes Diabetes Mellitus, DM, Type I diabetes, Type II diabetes, juvenile onset diabetes )</li> </ul>
Diabetes Oral Controlled	<ul> <li>No</li> <li>Yes</li> <li>Not addressed/documented</li> <li>(type II diabetes, controlled with oral pills)</li> </ul>
Diabetes Insulin Controlled	<ul> <li>No</li> <li>Yes</li> <li>Not addressed/documented</li> <li>(type I diabetes, controlled with insulin injections or pump)</li> </ul>
Dysphagia	<ul> <li>No</li> <li>Yes</li> <li>Not addressed/documented</li> <li>(includes patient reports of dysphagia (difficulty swallowing) POA (present on admission))</li> </ul>
Dyspnea	<ul> <li>No</li> <li>Yes</li> <li>Not addressed/documented</li> <li>(includes patient reports of dyspnea (difficulty breathing) POA)</li> </ul>



Functional status	<ul> <li>Independent</li> <li>Partially dependent</li> <li>Totally dependent</li> <li>Not addressed/documented</li> <li>(Does the patient perform activities of daily living (ADLs = bathing, eating, etc.) by him/herself (independently), with some assistance (partially dependent), or totally dependent on assistance from family or aides. May be located in social work or nursing notes)</li> </ul>
Gastroesopageal Reflux Disease (GERD)	<ul> <li>No</li> <li>Yes</li> <li>Not addressed/documented</li> </ul>
Heart Failure (HF)	<ul> <li>No</li> <li>Yes</li> <li>Not addressed/documented</li> <li>(Includes congestive heart failure, CHF, HFrEF, HFpEF)</li> </ul>
Heart Failure New York Heart Assocation Functional Classification	<ul> <li>Class I symptoms of HF only at levels that would limit normal individuals (asymptomatic)</li> <li>Class II symptoms of HF on ordinary exertion</li> <li>Class III symptoms of HF on less-than-ordinary exertion</li> <li>Class IV symptoms of HF at rest</li> </ul>
Heart Failure - Ejection Fraction (HF-EF)	(Number is expressed as a percentage - only include the number. E.g. "40%" is entered as 40.)
Hypertension (HTN)	<ul> <li>No</li> <li>Yes</li> <li>Not addressed/documented</li> <li>(HTN, high blood pressure, diastolic hypertension, systolic hypertension)</li> </ul>



	1 age 25 61 76
Impaired Sensorium	<ul> <li>No</li> <li>Yes</li> <li>Not addressed/documented</li> <li>(The American College of Surgeons (ACS) for its NSQIP program defines impaired sensorium is present if the patient is acutely confused and/or delirious and responds to verbal and/or mild tactile stimulation in the context of their current illness. Other descriptors include: disorientation, inattention, agitation, and mental status change. IS occurs within 48 hours prior to the surgical procedure. Patients with long-standing mental changes due to chronic illness (Alzheimer's, chronic mental illness) are not included in "IS", but may be included as having "Dementia" (above). IS may also be a marker of decreased reserve to tolerate the underlying disease process, reflecting a more frail state, which can lead to increased risk of postoperative complications and mortality. (source: Gajdos et. al, JAMA, 2015). This definition of "IS" is similar in definition to "Delirium" but temporally occurs prior to the surgical intervention and hospitalization, rather than after. )</li> </ul>
Liver disease	<ul> <li>No</li> <li>Yes</li> <li>Not addressed/documented</li> <li>(includes liver failure, hepatic failure)</li> </ul>
Neurologic disease	<ul> <li>No</li> <li>Yes</li> <li>Not addressed/documented</li> <li>(includes disease/deficit: spinal cord injury, paralysis (e.g. following stroke or trauma), stroke, CVA, Parkinson's, Cerebral Palsy), TBI (trauamtic brain injury), hypoxic or anoxic brain injury)</li> </ul>
Obstructive Sleep Apnea (OSA)	<ul> <li>No</li> <li>Yes</li> <li>Not addressed/documented</li> </ul>
Using a Home CPAP machine?	<ul> <li>No</li> <li>Yes</li> <li>Not addressed/documented</li> <li>(Does the patuent use a CPAP machine at home?)</li> </ul>
Respiratory infection - recent - within 1 month	<ul> <li>No</li> <li>Yes</li> <li>Not addressed/documented</li> <li>(within the most recent 4 weeks prior to surgery (source: McAlister, 2003, AJRCCM - used 2 weeks, PPC, not-sig))</li> </ul>
Sepsis	<ul> <li>No</li> <li>Yes</li> <li>Not addressed/documented</li> <li>(POA, Includes septic shock, SIRS, sepsis, sepsis syndrome)</li> </ul>





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Smoking Current	<ul> <li>No</li> <li>Yes</li> <li>Not addressed/documented</li> <li>(smoking info may be located in anesthesia pre-op note)</li> </ul>
Smoking categorical	<ul> <li>Never smoker</li> <li>Past smoker</li> <li>Current smoker</li> <li>Not addressed/documented</li> </ul>
Smoking - when quit (number of years since patient quit smoking)	
Smoking - packs per day (ppd)	
Smoking - number of years	
Smoking pack years (ppd x years)	
Weight loss => 10%	<ul> <li>○ No</li> <li>○ Yes</li> <li>○ Not addressed/documented</li> </ul>

Comments for this instrument and this abstraction

Not addressed/documented
 (in past three months without trying)



# Laboratory and Radiology Tests - Pre-Operative Values

Lab Values and Chest XRay (pre-operatively - document the results that are closest in time to the actual elective surgery). If the lab was not tested preoperatively, leave the field blank. If there was no pre-op CXR or ECG, check the box for "no pre-op test done". \*\*Note: for all lab tests, document the NUMERICAL value only

Albumin	(document the numerical value only. E.g. 3.1 g/dL is documented as 3.1. A value of $< 3.5$ g/dL (or 35 g/L) is an indicator of malnutrition.)
BUN	(blood urea nitrogen. In general, 7 to 20 mg/dL (2.5 to 7.1 mmol/L) is considered normal. But normal ranges may vary, depending on the reference range used by the lab, and age.)
Creatinine	(The normal range for creatinine in the blood may be 0.84 to 1.21 milligrams per deciliter (74.3 to 107 micromoles per liter), although this can vary from lab to lab, between men and women, and by age. Since the amount of creatinine in the blood increases with muscle mass, men usually have higher creatinine levels than do women.)
GFR	(GFR= glomerular filtration rate. Test to measure level of kidney function and determine stage of kidney disease. Can calculate it from blood creatinine test, age, body size and gender if not listed in chart. Online calculator: http://www.mdcalc.com/mdrd-gfr-equation/ If "test not performed", leave blank)
Hemoglobin	(Normal: For men, 13-17 g/dL; for women, 12-15 g/dL. )
Total bilirubin	(Normal results for a total bilirubin test are 1.2 milligrams per deciliter (mg/dL) of total bilirubin for adults)
SpO2 (oxygen saturation)	(oxygen saturation - document the %, numbers only e.g. 98% = 98. Typically found in the surgery/anesthesia preoperative or operative notes. We are interested in room air preoperative SpO2, but realize some patients will be on oxygen preoperatively (see next variable))
SpO2 on room air or oxygen?	<ul> <li>Room air</li> <li>Oxygen</li> <li>(Was the SpO2 reading taken On room air? On oxygen? Select one)</li> </ul>



Chest XRay (any significant abnormalities?)	<ul> <li>No - no abnormalities documented</li> <li>Yes - yes, abnormalities documented</li> <li>No Pre-Op CXR done</li> <li>(chest xray - any significant abnormal findings yes or no. Significant abnormal findings include: pneumothorax, pneumonia, pulmonary edema, cardiomegaly, ARDS, consolidation, atelectasis, pleural effusion.)</li> </ul>
Chest XRay (findings?)	<ul> <li>Pneumothorax</li> <li>Pneumonia</li> <li>Pulmonary edema</li> <li>Cardiomegaly</li> <li>ARDS (adult respiratory distress syndrome)</li> <li>Consolidation</li> <li>Atelectasis</li> <li>Pleural effusion</li> <li>(document the significant findings (radiology note or MD H&amp;P). e.g. cardiomegaly, pulmonary edema, pneumothorax, pneumonia)</li> </ul>
Electrocardiogram (any 12-lead ecg abnormalities?)	<ul> <li>No - no abnormalities documented</li> <li>Yes - yes, abnormalities documented</li> <li>No Pre-Op ECG done</li> <li>(any abnormal findings yes or no. Abnormal findings may include cardiac arrhythmias, evidence of old or new myocardial infarction)</li> </ul>
Electrocardiogram (findings?)	<ul> <li>ST changes (depression, elevation -STEMI)</li> <li>Bundle branch block</li> <li>Tachycardia (&gt;100 bpm)</li> <li>Bradycardia (&lt; 60 bpm)</li> <li>Ventricular ectopy (PVCs, VTach/VT/ventricular tachycardia, Torsades, VFib/VF/ventricular fibrillation)</li> <li>Atrial disturbance (Afib/atrial fibrilation, Aflutter/atrial flutter)</li> <li>Acute myocardial infaction (AMI) - old (document the findings (MD H&amp;P). e.g. ST elevation, bundle branch block, sinus tachycardia, bradycardia, PVCs, atrial fibrillation)</li> </ul>
Comments for this instrument and this abstraction	



# Laboratory And Radiology Tests - Pre-Diagnosis Values

# Lab and Radiology Values - enter the values for the date closest to the diagnosis date (if a procedure code date is present). For example, if the procedure code is dated 1/27/2012, enter the values for that date or the nearest preceding date for which results are available.

Procedure/Diagnosis Code Date - present in UHC data file?	<ul> <li>No - diagnosis code only, no date present</li> <li>Yes - procedure code present, with date</li> <li>Yes - procedure code present AND outside of POD 0-5</li> <li>(There will be a procedure code date for: 9604, 9672, 9671, and 9670. There will be no date for diagnosis codes 51851 and 51853.)</li> </ul>
Albumin	(document the numerical value only. E.g. 3.1 g/dL is documented as 3.1. A value of $< 3.5$ g/dL (or 35 g/L) is an indicator of malnutrition.)
BUN	(blood urea nitrogen. In general, 7 to 20 mg/dL (2.5 to 7.1 mmol/L) is considered normal. But normal ranges may vary, depending on the reference range used by the lab, and age.)
Creatinine	(The normal range for creatinine in the blood may be 0.84 to 1.21 milligrams per deciliter (74.3 to 107 micromoles per liter), although this can vary from lab to lab, between men and women, and by age. Since the amount of creatinine in the blood increases with muscle mass, men usually have higher creatinine levels than do women.)
GFR	(GFR= glomerular filtration rate. Test to measure level of kidney function and determine stage of kidney disease. Can calculate it from blood creatinine test, age, body size and gender if not listed in chart. Online calculator: http://www.mdcalc.com/mdrd-gfr-equation/ If "test not performed", leave blank)
Hemoglobin	(Normal: For men, 13-17 g/dL; for women, 12-15 g/dL. )
Total bilirubin	(Normal results for a total bilirubin test are 1.2 milligrams per deciliter (mg/dL) of total bilirubin for adults)
SpO2 (oxygen saturation)	(oxygen saturation - document the %, numbers only e.g. 98% = 98. Typically found in the surgery/anesthesia preoperative or operative notes. We are interested in room air preoperative SpO2, but realize some patients will be on oxygen preoperatively (see next variable))



SpO2 on room air or oxygen?	<ul> <li>Room air</li> <li>Oxygen</li> <li>(Was the SpO2 reading taken On room air? On oxygen? Select one)</li> </ul>
Chest XRay (any significant abnormalities?)	<ul> <li>No - no abnormalities documented</li> <li>Yes - yes, abnormalities documented</li> <li>No Pre-Op CXR done</li> <li>(chest xray - any significant abnormal findings yes or no. Significant abnormal findings include: pneumothorax, pneumonia, pulmonary edema, cardiomegaly, ARDS, consolidation, atelectasis, pleural effusion.)</li> </ul>
Chest XRay (findings?)	<ul> <li>Pneumothorax</li> <li>Pneumonia</li> <li>Pulmonary edema</li> <li>Cardiomegaly</li> <li>ARDS (adult respiratory distress syndrome)</li> <li>Consolidation</li> <li>Atelectasis</li> <li>Pleural effusion</li> <li>(document the significant findings (radiology note or MD H&amp;P). e.g. cardiomegaly, pulmonary edema, pneumothorax, pneumonia)</li> </ul>
Electrocardiogram (any 12-lead ecg abnormalities?)	<ul> <li>No - no abnormalities documented</li> <li>Yes - yes, abnormalities documented</li> <li>No Pre-Op ECG done</li> <li>(any abnormal findings yes or no. Abnormal findings may include cardiac arrhythmias, evidence of old or new myocardial infarction)</li> </ul>
Electrocardiogram (findings?)	<ul> <li>ST changes (depression, elevation -STEMI)</li> <li>Bundle branch block</li> <li>Tachycardia (&gt;100 bpm)</li> <li>Bradycardia (&lt; 60 bpm)</li> <li>Ventricular ectopy (PVCs, VTach/VT/ventricular tachycardia, Torsades, VFib/VF/ventricular fibrillation)</li> <li>Atrial disturbance (Afib/atrial fibrilation, Aflutter/atrial flutter)</li> <li>Acute myocardial infaction (AMI) - old (document the findings (MD H&amp;P). e.g. ST elevation, bundle branch block, sinus tachycardia, bradycardia, PVCs, atrial fibrillation)</li> </ul>
Commonts for this instrument and this abstraction	

Comments for this instrument and this abstraction

01/06/2019 9:59am



### **Operative Procedural Factors**

#### **Operative Procedural Factors**

(Data are typically found in the Surgery/Anesthesia Documentation) \*\*\*NOTE: only document the NUMBER ONLY, not any associated measurement scale, commas, etc.. For example: 300 cc is documented as 300; 3,600 cc is documented as 3600; 70 mmHg is documented as 70; 65 bpm is documented as 65; 98% is documented as 98. All times are MILITARY.

Anesthesia type	<ul> <li>Local or Regional (e.g. epidural)</li> <li>Conscious sedation</li> <li>General</li> <li>(Local or Regional, Conscious sedation, General</li> <li>(or GA). Most will be general)</li> </ul>
Neuromuscular Blocker (NMB) Used?	<ul> <li>No</li> <li>Yes</li> <li>(Yes if Succinylcholine (Anectine), Rocuronium</li> <li>(Zemuron), Vecuronium (Norcuron), Atracurium</li> <li>(Tracrium), Cisatracurium (Nimbex), Pancurounim</li> <li>(Pavulon), etc.)</li> </ul>
NMB used - type	<ul> <li>None</li> <li>Succinylcholine</li> <li>Atracurium</li> <li>Vecuronium</li> <li>Rocuronium</li> <li>Cisatracurium</li> <li>Pancuronium</li> <li>Other</li> <li>(Succinylcholine (Anectine), Rocuronium (Zemuron)</li> <li>Vecuronium (Norcuron), Atracurium (Tracrium),</li> <li>Cisatracurium (Nimbex), Pancuronium (Pavulon))</li> </ul>
NMB Used - Other	(type exactly as it appears in the anesthesia/physician note)
Surgery date	(MM-DD-YYYY for all dates)
Anesthesia start time	(The time anesthesia care started. All times are entered using military time, no colon, dash, or space (e.g. 08:15 a.m. is documented as 0815))
Airway start time	(Airway insertion or intubation time)
Airway placement location	<ul> <li>Operating room</li> <li>Pre-Op or PACU (e.g. during perioperative time, but not in OR)</li> <li>Preoperatively (e.g. ICU, Ward)</li> <li>(Where was the airway placed?)</li> </ul>
Surgery start time	(skin incision time)

REDCap

www.projectredcap.org

Surgery end time	(skin closed (suture, staple, dressing))
Airway end time	(Airway removed or extubation time, endotracheal tube removed)
Anesthesia end time	(The time anesthesia care ended)
Anesthesia duration	(Hours and minutes are converted to MINUTES and only the NUMBERS are documented (e.g. 2 hours, 34 minutes is documented as 154). Do not round up or down.)
Anesthesia duration categorical	$\bigcirc$ 1 - 150 minutes (.001 - 2.5 hours) $\bigcirc$ 151 - 300 minutes (2.51 - 5.0 hours) $\bigcirc$ 301 - 450 minutes (5.01 - 7.5 hours) $\bigcirc$ >451 minutes (>7.51 hours) (select the appropriate time block)
Surgery duration	(Hours and minutes are converted to MINUTES and only the NUMBERS are documented (e.g. 2 hours, 34 minutes is documented as 154). Do not round up or down.)
Surgery duration categorical	$\bigcirc$ 1 - 150 minutes (.001 - 2.5 hours) $\bigcirc$ 151 - 300 minutes (2.51 - 5.0 hours) $\bigcirc$ 301 - 450 minutes (5.01 - 7.5 hours) $\bigcirc$ >451 minutes (>7.51 hours) (select the appropriate time block)
Lowest mean arterial pressure (MAP) in OR	(Report the lowest intraoperative mean arterial pressure (MAP) recorded during the procedure. Preferred source of documentation: anesthesia records. Calculate the MAP if it is not recorded using this equation: MAP = [(2 x diastolic) + systolic] / 3. Use the lowest intraoperative diastolic reading and its associated systolic reading to calculate MAP. Enter NUMBERS only: "70 mmHg" is entered as 70 )
Highest heart rate (HR) in OR	(Record the highest heart rate during the surgical procedure)
Lowest SpO2 in OR	(Record the lowest oxygen saturation during the procedure (between the anesthesia start and end times). 97% is documented as 97)
Highest EtCO2 in OR	(Record the highest end tidal carbon dioxide during the procedure (between the anesthesia start and end times))
Intraoperative estimated blood loss (EBL)	(the amount of blood loss documented in the anesthesia or surgeon record, document in ccs (aka mls) (e.g. 300 cc is documented as 300; 3 liters is documented as 3000))



Intraoperative transfusion (blood)	(the amount of blood products documented in the anesthesia or surgeon record, document in ccs (e.g. 300 cc is documented as 300). Inclusive of all blood products: RBCs, whole blood, platelets, fresh frozen plasma (FFP))
Intraoperative crystalloid	(the amount of crystalloid documented in the anesthesia or surgeon record, document in ccs (e.g. 3000 cc is documented as 3000). Includes: normal saline, NS, 0.9% saline, hypertonic (3%) saline, lactated ringers, ringers lactate, LR. Dextrose solutions (D5W) are not used for fluid replacement/blood loss, but should be included n the total surgical volume).)
Intraoperative colloid	(the amount of colloid documented in the anesthesia or surgeon record, document in ccs (e.g. 300 cc is documented as 300). Includes: Albumin, Hetastarch)
Intraoperative tidal volume total cc - lowest	(The lowest volume of gas delivered to the patient. Typically recorded directly in flowchart as total volume. Round to nearest whole number - 450.6 = 451 cc and is documented as 451)
Intraoperative tidal volume cc - highest	(The highest volume of gas delivered to the patient. Typically recorded directly in the flowchart. Round to nearest whole number - 556.7 = 557 cc. and is documented as 557)
Intraoperative ventilator respiratory rate - lowest	(Document the lowest respiratory rate (RR) the ventilator was set for in the operating room.)
Intraoperative ventilator respiratory rate - highest	(Document the highest respiratory rate (RR) the ventilator was set for in the operating room.)
Intraoperative FiO2 - lowest	(FiO2 = fraction of inspired oxygen. 0.5 FiO2 = $50\%$ . Record the lowest FiO2 during the surgical procedure. This value may be .21, which equals room air.)
Intraoperative FiO2 - highest	(FiO2 = fraction of inspired oxygen. 0.5 FiO2 = 50%. Record the highest FiO2 during the surgical procedure. This value may be 1.0, which equals 100% oxygen.)
Intraoperative PEEP - lowest	(PEEP = positive end-expiratory pressure. The pressure maintained in the patient's airway during expiration/exhalation. Record the lowest PEEP setting during the operative procedure. This value may be 0, although a PEEP of 3-5 cmH2O is considered physiologic. Record the numbers only.)



Intraoperative PEEP - highest	
	(PEEP = positive end-expiratory pressure. The pressure maintained in the patient's airway during expiration/exhalation. Record the highest PEEP setting during the operative procedure. Examples include: 5, 8, 12, etc.)
Intraoperative PIP - lowest	(PIP = peak inspiratory pressure. The maximum pressure delivered to the patient during inspiration/inhalation. Record the lowest PIP setting during the operative procedure. A normal low value may be 16 cmH2O. Record the numbers only.)
Intraoperative PIP - highest	(PIP = peak inspiratory pressure. The maximum pressure delivered to the patient during inspiration/inhalation. Record the highest PIP setting during the operative procedure. A normal high value may be 29. Document the numbers only)
Intraoperative analgesia 1 name	(Includes: Fentanyl (Sublimaze), Hydromorphone (Dilaudid), Alfentanil (Alfenta), Sufentanil (Sufenta), Meperidine (Demerol), Morphine sulfate (Morphine). Record the name of the first analgesic given. E.g. fentanyl. )
Intraoperative analgesia 1 dose	(Record the dose of the first analgesia given, do NOT include the measurement scale. E.g. 100 mcg is documented as 100)
Intraoperative analgesia 1 scale	<ul> <li>mcg</li> <li>mg</li> <li>(Record the measurement scale of the first analgesia given)</li> </ul>
Intraoperative analgesia 2 name	(Includes: Fentanyl (Sublimaze), Hydromorphone (Dilaudid), Alfentanil (Alfenta), Sufentanil (Sufenta), Meperidine (Demerol), Morphine sulfate (Morphine). Record the name of the second analgesic given. E.g. dilaudid.)
Intraoperative analgesia 2 dose	(Record the dose of the second analgesia given, do NOT include the measurement scale. E.g. 2 mg is documented as 2. )
Intraoperative analgesia 2 scale	<ul> <li>mcg</li> <li>mg</li> <li>(Record the measurement scale of the second analgesia given)</li> </ul>



Intraoperative morphine equivalent units (in mg)	(http://clincalc.com/Opioids/ **Using the online calculator, calculate the total "morphine equivalent units" (morphine equianalgesic dose) of all opioids given in the operating room combined. Example: fentanyl 100 mcg = equianalgesic dose of morphine 8 mg PLUS hydromorphone 1mg = equianalgesic dose of morphine 3 mg. TOTAL equianalgesic dose of morphine = 8 mg +3 mg =11 mg. So you will enter "11" in this text box (given this example). Note: Equianalgesic conversions used in this calculator are based on the American Pain Society guidelines and critical review papers regarding equianalgesic dosing. There is an overall lack of data regarding most equianalgesic conversions, and there is a significant degree of interpatient variability. This calculation is not being used to guide treatment but, rather, to analyze total opioid dose in a standardized manner.)
Non-narcotic pain medication	<ul> <li>No</li> <li>Yes</li> <li>(Select "yes" is any non-narcotic analgesic medications were given in the operating room: e.g. IV tylenol/acetaminophen, IV Toradol/ketorolac)</li> </ul>
Intraoperative sedation 1 name	(Includes: Benzodiazepines such as Lorazepam (Ativan), Diazepam (Valium), Midazolam (Versed). Record the name of the first benzo sedative given. E.g. Midazolam. )
Intraoperative sedation 1 dose	(Record the dose of the first benzo sedative given. E.g. 2 mg is documented as 2. )
Intraoperative sedation 1 scale	<ul> <li>mcg</li> <li>mg</li> <li>(Record the measurement scale of the first benzo sedative given. )</li> </ul>
Intraoperative sedation 2 name	(Includes: Benzodiazepines such as Lorazepam (Ativan), Diazepam (Valium), Midazolam (Versed). Record the name of the second benzo sedative given. E.g. diazepam. )
Intraoperative sedation 2 dose	(Record the dose of the second benzo sedative given. E.g. 5 mg is documented as 5)
Intraoperative sedation 2 scale	<ul> <li>mcg</li> <li>mg</li> <li>(Record the measurement scale of the second benzo sedative given. )</li> </ul>



Intraoperative benzodiazepine equivalent units	
	(http://clincalc.com/benzodiazepine/ ** Using the online calculator, calculate the total "diazepam equivalent units" (approximate benzodiazepine dosing conversion) of all benzodiazepines given in the operating room combined. Example: lorazepam 2 mg = diazepam equivalent dose of 10 mg PLUS midazolam 2mg = diazepam equivalent dose of 5 mg. TOTAL diazepam equivalent dose = 10 mg +5 mg =15 mg. So you will enter "15" in this text box (given this example). Note: This conversion tool estimates a reasonable equipotent dose between two benzodiazepines. Unlike opioid equipotent dosing, benzodiazepine equivalence is much less evidence-based and poorly described in the literature. In fact, most benzodiazepine equivalence estimates are based on expert opinion, uncited tables in published documents, and clinical practice. This calculation is not being used to guide treatment but, rather, to analyze total benzodiazepine dose in a standardized manner.)
Extubation (airway removal) location	<ul> <li>Operating Room</li> <li>PACU</li> <li>Medical ICU</li> <li>Surgical ICU</li> <li>Med/Surg ICU</li> <li>Ward</li> <li>Other</li> <li>(Typically will be the Operating Room, but could be the PACU or the ICU. Select the correct location from the list.)</li> </ul>
Extubation Location - Other	(type exactly as the location appears in the physician note)
Extubation (airway removal) date	(The date the airway was removed: either the day of surgery (if removed in theOR) or a later date)
Intraoperative fluid intake	(gross cc for the OR time, as documented in anesthesia note. NUMBERS only, in cc)
Intraoperative fluid output	(gross cc for the OR time, as documented in anesthesia note. NUMBERS only, in cc)
Intraoperative net fluid	(gross cc for the OR time, as documented in anesthesia note. May be a positive or negative number: If more fluid in than out = positive; if more fluid out than in = negative. NUMBERS only, in ccs; include the "-" sign for negative numbers. Do NOT include the "+" sign for positive values.)
Total 24 hour fluid intake	(gross cc per first 24 hours post-op, as documented in anesthesia or surgeon's note. NUMBERS only, in ccs)



Total 24 hour fluid output(gross cc per first 24 hours post-op, as<br/>documented in anesthesia or surgeon's note.<br/>NUMBERS only, in ccs)Total 24 hour net fluid(gross cc per first 24 hours post-op, as<br/>documented in anesthesia or surgeon's note. May<br/>be a positive or negative number: If more fluid<br/>in than out = positive; if more fluid out than in<br/>= negative. NUMBERS only, in ccs. If the number<br/>is negative, include the "-" sign. Example:<br/>3,000cc in and 1,500 cc out = 1500)



### Nursing Sensitive Structure - Hospital-Level and Unit-Level

Hospital-Level and Unit-Level Structural Data.

Much of these data will likely remain the same for each site for the duration of the study (at the hospital-level). Exceptions will include Magnet status received during study period, % certification/degree increase/decrease year-over-year. Enter data for the calendar year during which the patient was admitted. For the Unit-Level data, there will be no data for certain years. If this is the case, leave the field blank and enter a comment in the last box. \*Data for each site will be found in the REDCap File Respiratory - look for the xls file that corresponds to the site you are entering data for.

Magnet hospital	<ul> <li>Yes</li> <li>No</li> <li>(Obtain these from Nursing Admin or Magnet Coordinator)</li> </ul>
Number of licensed beds	(Obtain these from Nursing Admin or Magnet Coordinator)
Hospital - Nursing care hours per patient day (for the entire hospital)	Obtain these from Nursing Admin or Magnet Coordinator)
Staffing (type)	<ul> <li>All RN</li> <li>RN and LVN</li> <li>RN and LVN and CNA</li> <li>RN and CNA</li> <li>Other</li> <li>(Obtain these from Nursing Admin or Magnet Coordinator)</li> </ul>
Staffing Type - Other	
Hospital - Percentage of nurses with Bachelors degree or higher (for the entire hospital)	Obtain these from Nursing Admin or Magnet Coordinator. Enter the NUMBER only)
Hospital - Percentage of nurses with professional specialty certification (for the entire hospital)	Obtain these from Nursing Admin or Magnet Coordinator. Enter the NUMBER only)
CALNOC member	<ul> <li>Yes</li> <li>No</li> <li>(Obtain these from Nursing Admin or Magnet Coordinator)</li> </ul>

 Yes
 No
 (Obtain these from Nursing Admin or Magnet Coordinator)

NDNQI member



Page 36 of 78

UHC NQDB member	<ul> <li>Yes</li> <li>No</li> <li>(Obtain these from Nursing Admin or Magnet Coordinator)</li> </ul>
Nursing Unit Name	(Record what the unit is known as or referred to. E.g. Medical ICU, Trauma ICU, D11 Ortho, D6 cardiac stepdown.)
Nursing Unit Type	<ul> <li>Medical ICU (e.g. general, respiratory, cardiac)</li> <li>Surgical ICU (e.g. general, trauma, neuro)</li> <li>Med/Surg Combined ICU</li> <li>Step Down or Telemetry Unit</li> <li>Ward - Surgical</li> <li>Ward - Medical</li> <li>Ward - Mixed Medical and Surgical</li> <li>Other</li> <li>(Select from the dropdown list)</li> </ul>
Nursing Unit Type - Other	
Nursing Unit - Nursing Care Hours Per Patient Day	
Nursing Unit - Percent of Nurses with Professional Certification	(Magnet-recognized only: RN-C, CCRN, etc. (obtain from Magnet Coordinator). Enter the NUMBER only)
Nursing Unit - Percent of Nurses with Bachelor's Degree or Higher	(Magnet-recognized only: BSN, MSN, PhD, etc. (obtain from Magnet Coordinator). Enter the NUMBER only)
Comments for this instrument and this abstraction	



Confidential ally Modifiable Risk Factors Associated with the Agency for Healthcare Research and Quality's Patient Safety Indicator 11 - Postoperative Respiratory Failure

## Nursing Sensitive Process Overall - Post-Operative Days 0-5

#### Nursing Sensitive Process Measures (immediate post-operative period - days 0-5 = POD 0-5) -Patient-Level Data \*Ward or ICU

Lung expansion exercises (by POD 1)	<ul> <li>Not addressed/documented</li> <li>Incentive spirometry</li> <li>Coughing/Deep breathing</li> <li>Other Pulmonary hygiene</li> <li>(Record if documented by Post Op Day (POD) 1 (the day after the surgical procedure). This is a multipick variable - so select all that apply. This will typically be located in the nursing flowsheets.)</li> </ul>
Mobility category (by POD 1)	<ul> <li>Not addressed/documented</li> <li>Range of motion (ROM) active or passive in bed</li> <li>Sits up in bed</li> <li>Sits on side of bed and dangles legs</li> <li>Stands at bedside</li> <li>Transfers to Chair (from bed with or without assist)</li> <li>Ambulates (from bed or chair with assist)</li> <li>Independent (e.g. ambulates without assist)</li> <li>Medical Contraindication per MD order</li> <li>(What level of mobility is the patient receiving by POD 1? Assistance may be from nursing, nursing aid, physical therapy, etc. Check all that apply and are documented by POD 1.)</li> </ul>
Oral Care (by POD 1)	<ul> <li>Not addressed/documented</li> <li>Oral care (includes toothbrushing)</li> <li>Chlorhexidine gluconate (CHG)</li> <li>Medical Contraindication per MD order</li> <li>(Documentation of oral care performed by the RN</li> <li>(ICU) or the patient (Ward) by POD 1? This includes toothbrushing, chlorhexidine (CHG) oral care kit, or other oral care kit. This will typically be located in the nursing flowsheets.)</li> </ul>
Agitation assessment (by POD 1)	<ul> <li>Not addressed/documented</li> <li>Richmond Agitation Sedation Scale (RASS)</li> <li>Sedation Agitation Scale (SAS)</li> <li>Other Agitation Scale documented</li> <li>(Does the patient have a documented RASS or SAS score by POD 1?)</li> </ul>
Delirium assessment (by POD 1)	<ul> <li>Not addressed/documented</li> <li>Confusion Assessment Method for Wards (CAM)</li> <li>Confusion Assessment Method for ICU (CAM-ICU)</li> <li>Intensive Care Delirium Screening Checklist (ICDSC)</li> <li>Other Delirium Scale Documented</li> <li>(Does the patient have a documented CAM, CAM-ICU, or ICDSC Score by POD1?)</li> </ul>





Postoperative Analgesia and Sedation	
Analgesia POD 0	<ul> <li>None</li> <li>PCA - opioid basal (continuous) dose</li> <li>PCA - opioid demand dose with lockout interval</li> <li>Epidural infusion - local anesthetics (e.g. lidocaine, bupivacaine</li> <li>Epidural infusion -opioids</li> <li>Epidural PCEA - local anesthetic(s)</li> <li>Epidural PCEA - opioids</li> <li>Opioid IV (e.g. fentanyl, remifentanil, morphine, hydromorphone) - continuous Infusion</li> <li>Opioid IV bolus dose prn</li> <li>Opioid Intramuscular</li> <li>Opioid Subcutaneous</li> <li>Opioid Oral (e.g. codeine, oxycodone, hydromorphone)</li> <li>Local block</li> <li>Regional block</li> <li>IV Acetaminophen (with or without opioid)</li> <li>IV NSAIDs (e.g. ketorolac, ibuprofen, diclofenac)</li> <li>Oral NSAIDs</li> <li>Anticonvulsants (e.g. gabapentin, pregabalin)</li> <li>Methadone</li> <li>Other</li> <li>(multi-pick - select all modes of pain medication in place on this POD)</li> </ul>
Analgesia POD 1	<ul> <li>None</li> <li>PCA - opioid basal (continuous) dose</li> <li>PCA - opioid demand dose with lockout interval</li> <li>Epidural infusion - local anesthetics (e.g. lidocaine, bupivacaine</li> <li>Epidural infusion -opioids</li> <li>Epidural PCEA - local anesthetic(s)</li> <li>Epidural PCEA - opioids</li> <li>Opioid IV (e.g. fentanyl, remifentanil, morphine, hydromorphone) - continuous Infusion</li> <li>Opioid IV bolus dose prn</li> <li>Opioid Subcutaneous</li> <li>Opioid Transdermal</li> <li>Opioid Oral (e.g. codeine, oxycodone, hydromorphone)</li> <li>Local block</li> <li>Regional block</li> <li>IV Acetaminophen (with or without opioid)</li> <li>IV NSAIDs (e.g. ketorolac, ibuprofen, diclofenac)</li> <li>Oral NSAIDs</li> <li>Anticonvulsants (e.g. gabapentin, pregabalin)</li> <li>Methadone</li> <li>Other</li> <li>N/A - patient discharged on prior day (multi-pick - select all modes of pain medication in place on this POD)</li> </ul>



Analgesia POD 2

Analgesia POD 3

None

- 🔲 PCA opioid basal (continuous) dose
- □ PCA opioid demand dose with lockout interval
- Epidural infusion local anesthetics (e.g.
- lidocaine, bupivacaine
- Epidural infusion -opioids
- Epidural PCEA local anesthetic(s)
- Epidural PCEA opioids
- Opioid IV (e.g. fentanyl, remifentanil, morphine, hydromorphone) - continuous Infusion
- Opioid IV bolus dose prn
- Opioid Intramuscular
- Opioid Subcutaneous
- Opioid Transdermal
   Opioid Oral (a g and
- Opioid Oral (e.g. codeine, oxycodone, hydromorphone)
- Local block
- Regional block
- IV Acetaminophen
- Oral Acetaminophen (with or without opioid)
- □ IV NSAIDs (e.g. ketorolac, ibuprofen, diclofenac)
- Anticonvulsants (e.g. gabapentin, pregabalin)
   Methadone
- $\square$  N/A patient discharged on prior day
- (multi-pick select all modes of pain medication in place on this POD)

#### □ None

- PCA opioid basal (continuous) dose
- PCA opioid demand dose with lockout interval
- Epidural infusion local anesthetics (e.g.
- lidocaine, bupivacaine
- Epidural infusion -opioids
- Epidural PCEA local anesthetic(s)
- Epidural PCEA opioids
- Opioid IV (e.g. fentanyl, remifentanil, morphine, hydromorphone) - continuous Infusion
- Opioid IV bolus dose prn
- Opioid Intramuscular
- Opioid Subcutaneous
- Opioid Transdermal
- Opioid Oral (e.g. codeine, oxycodone, hydromorphone)
- Local block
- Regional block
- □ IV Acetaminophen
- □ Oral Acetaminophen (with or without opioid)
- □ IV NSAIDs (e.g. ketorolac, ibuprofen, diclofenac)
- Anticonvulsants (e.g. gabapentin, pregabalin)
   Methadone
- Other
- $\square$  N/A patient discharged on prior day
- (multi-pick select all modes of pain medication in place on this POD)



Analgesia POD 4

Analgesia POD 5

□ None

- 🗍 PCA opioid basal (continuous) dose
- □ PCA opioid demand dose with lockout interval
- Epidural infusion local anesthetics (e.g.
- lidocaine, bupivacaine
- Epidural infusion -opioids
- Epidural PCEA local anesthetic(s)
- Epidural PCEA opioids
- Opioid IV (e.g. fentanyl, remifentanil, morphine, hydromorphone) - continuous Infusion
- Opioid IV bolus dose prn
- Opioid Intramuscular
- Opioid Subcutaneous
- Opioid Transdermal
- Opioid Oral (e.g. codeine, oxycodone, hydromorphone)
- Local block
- Regional block
- IV Acetaminophen
- Oral Acetaminophen (with or without opioid)
- UNSAIDs (e.g. ketorolac, ibuprofen, diclofenac)
- Oral NSAIDs
- Anticonvulsants (e.g. gabapentin, pregabalin)
- Methadone
- Other
- □ N/A patient discharged on prior day

(multi-pick - select all modes of pain medication in place on this POD)

#### □ None

- PCA opioid basal (continuous) dose
- PCA opioid demand dose with lockout interval
- Epidural infusion local anesthetics (e.g.
- lidocaine, bupivacaine
- Epidural infusion -opioids
- □ Epidural PCEA local anesthetic(s)
- Epidural PCEA opioids
- Opioid IV (e.g. fentanyl, remifentanil, morphine, hydromorphone) - continuous Infusion
- Opioid IV bolus dose prn
- Opioid Intramuscular
- Opioid Subcutaneous
- Opioid Transdermal
- Opioid Oral (e.g. codeine, oxycodone, hydromorphone)
- Local block
- Regional block
- □ IV Acetaminophen
- □ Oral Acetaminophen (with or without opioid)
- □ IV NSAIDs (e.g. ketorolac, ibuprofen, diclofenac)
- Oral NSAIDs
- Anticonvulsants (e.g. gabapentin, pregabalin)
   Methadone
- Other
- $\square$  N/A patient discharged on prior day
- (multi-pick select all modes of pain medication in place on this POD)



Sedation POD 0	<ul> <li>None</li> <li>Benzodiazepine (e.g. diazepam, midazolam, lorazepam) - continuous infusion</li> <li>Benzodiazepine (e.g. diazepam, midazolam, lorazepam) - IV bolus prn</li> <li>Propofol infusion</li> <li>Dexmedetomidine infusion</li> <li>Other</li> <li>(multi-pick, select all that were in place on this POD)</li> </ul>
Sedation POD 1	<ul> <li>None</li> <li>Benzodiazepine (e.g. diazepam, midazolam, lorazepam) - continuous infusion</li> <li>Benzodiazepine (e.g. diazepam, midazolam, lorazepam) - IV bolus prn</li> <li>Propofol infusion</li> <li>Dexmedetomidine infusion</li> <li>Other</li> <li>N/A - patient discharged on prior day (multi-pick, select all that were in place on this POD)</li> </ul>
Sedation POD 2	<ul> <li>None</li> <li>Benzodiazepine (e.g. diazepam, midazolam, lorazepam) - continuous infusion</li> <li>Benzodiazepine (e.g. diazepam, midazolam, lorazepam) - IV bolus prn</li> <li>Propofol infusion</li> <li>Dexmedetomidine infusion</li> <li>Other</li> <li>N/A - patient discharged on prior day (multi-pick, select all that were in place on this POD)</li> </ul>
Sedation POD 3	<ul> <li>None</li> <li>Benzodiazepine (e.g. diazepam, midazolam, lorazepam) - continuous infusion</li> <li>Benzodiazepine (e.g. diazepam, midazolam, lorazepam) - IV bolus prn</li> <li>Propofol infusion</li> <li>Dexmedetomidine infusion</li> <li>Other</li> <li>N/A - patient discharged on prior day (multi-pick, select all that were in place on this POD)</li> </ul>
Sedation POD 4	<ul> <li>None</li> <li>Benzodiazepine (e.g. diazepam, midazolam, lorazepam) - continuous infusion</li> <li>Benzodiazepine (e.g. diazepam, midazolam, lorazepam) - IV bolus prn</li> <li>Propofol infusion</li> <li>Dexmedetomidine infusion</li> <li>Other</li> <li>N/A - patient discharged on prior day (multi-pick, select all that were in place on this POD)</li> </ul>

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Sedation I	OD 5
------------	------

- None
- Benzodiazepine (e.g. diazepam, midazolam, lorazepam) - continuous infusion
- Benzodiazepine (e.g. diazepam, midazolam, lorazepam) - IV bolus prn
- Propofol infusion
- Dexmedetomidine infusion
- 🗌 Other
- N/A patient discharged on prior day
- (multi-pick, select all that were in place on this POD)

#### **Hospital Acquired Complications**

Venous thromboembolism (VTE) during hospitalization? (includes deep vein thrombosis [DVT] and pulmonary embolism [PE])

Ventilator Associated Pneumonia (VAP) (includes ventilator associated event [VAE] continuum)

Catheter Associated Urinary Track Infection (CAUTI)

Central Line Associated Blood Stream Infection (CLABSI)

Surgical Site Infection (SSI)

O No

⊖ Yes

O Not addressed/documented

(Is there documentation of this complication during this admission (in the MD progress notes most likely in the Discharge Summary))

○ No ○ Yes

Not addressed/documented (Is there documentation of this complication during this admission (in the MD progress notes most likely in the Discharge Summary))

O No

Yes
 Not addressed/documented

(Is there documentation of this complication during this admission (in the MD progress notes most likely in the Discharge Summary). \*\*\*CAUTI, CLABSI, and SSI presence and dates are most readily found in the UHC/Vizient xls file ~columns ADR-ADX for cases and AJH-AJN for controls.)

🔿 No

⊖ Yes

 Not addressed/documented
 (Is there documentation of this complication during this admission (in the MD progress notes most likely in the Discharge Summary) \*\*\*CAUTI, CLABSI, and SSI presence and dates are most readily found in the UHC/Vizient xls file
 ~columns ADR-ADX for cases and AJH-AJN for controls.)

O No

⊖ Yes

Not addressed/documented (Is there documentation of this complication during this admission (in the MD progress notes most likely in the Discharge Summary). \*\*\*CAUTI, CLABSI, and SSI presence and dates are most readily found in the UHC/Vizient xls file ~columns ADR-ADX for cases and AJH-AJN for controls.)



Comments for this instrument and this abstraction

(\*\*Include comments for "other" analgesia and "other" sedation)



### Nursing Sensitive Process Overall - Pre-Diagnosis Days 0-5

## These data fields are ONLY collected if the patient: 1) has a procedure diagnosis code date AND 2) the procedure code is NOT dated within the first 5 PODs.

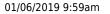
Procedure/Diagnosis Code Date - present in UHC data file AND occurs outside of POD 0-5?

 No - diagnosis code only, no date present
 Yes - procedure code present, with date
 Yes - procedure code present AND outside of POD 0-5 (There will be a procedure code date for: 9604, 9672, 9671, and 9670. There will be no date for diagnosis codes 51851 and 51853.)

Pre-Diagnosis Analgesia and Sedation: pre-diagnosis day 0 = date of diagnosis; pre-diagnosis day 1 = day before diagnosis, etc. Data are collected for days 0-5 pre-diagnosis. \*\*Note: only collect data for the dates that DO NOT overlap with POD 0-5. For example, if POD 5 is the same day as Pre-Diagnosis day 3, only collect the data for this day in the POD instrument. Make a note in the comments of the overlap - e.g. "Pre Dx day 3 = POD 5"

Analgesia Pre-Diagnosis 0 (the day of the diagnosis)

None PCA - opioid basal (continuous) dose	
<ul> <li>PCA - opioid demand dose with lockout inte</li> <li>Epidural infusion - local anesthetics (e.g.</li> </ul>	rval
lidocaine, bupivacaine  Epidural infusion -opioids	
$\square$ Epidural PCEA - local anesthetic(s)	
Epidural PCEA - opioids	
🔲 Opioid IV (e.g. fentanyl, remifentanil, morph	nine,
hydromorphone) - continuous Infusion	
Opioid IV bolus dose prn     Opioid Internet of the second s	
Opioid Intramuscular Opioid Subcutaneous	
Opioid Transdermal	
Opioid Oral (e.g. codeine, oxycodone,	
hydromorphone)	
🗌 Local block	
Regional block	
□ IV Acetaminophen	N
<ul> <li>Oral Acetaminophen (with or without opioid</li> <li>IV NSAIDs (e.g. ketorolac, ibuprofen, diclofe</li> <li>Oral NSAIDs</li> </ul>	
<ul> <li>Anticonvulsants (e.g. gabapentin, pregabali</li> <li>Methadone</li> </ul>	n)
☐ Other	
(multi-pick - select all modes of pain medication in place on this day)	on





Analgesia Pre-Diagnosis Day 1 (the day before the diagnosis)

Analgesia Pre-Diagnosis Day 2 (2 days before the

diagnosis)

	None
--	------

- PCA opioid basal (continuous) dose
- PCA opioid demand dose with lockout interval
- Epidural infusion local anesthetics (e.g.
- lidocaine, bupivacaine
- Epidural infusion -opioids
- Epidural PCEA local anesthetic(s)
- Epidural PCEA opioids
- Opioid IV (e.g. fentanyl, remifentanil, morphine, hydromorphone) - continuous Infusion
- Opioid IV bolus dose prn
- Opioid Intramuscular
- Opioid Subcutaneous
- Opioid Transdermal
- Opioid Oral (e.g. codeine, oxycodone, hydromorphone)
- Local block
- Regional block
- IV Acetaminophen
- Oral Acetaminophen (with or without opioid)
- □ IV NSAIDs (e.g. ketorolac, ibuprofen, diclofenac) □ Oral NSAIDs
- Anticonvulsants (e.g. gabapentin, pregabalin)
- ☐ Methadone
- Other
- □ N/A patient discharged on prior day
- □ N/A patient day overlaps with a pre-operative day (and data have already been entered)

(multi-pick - select all modes of pain medication in place on this day)

🗌 None

- PCA opioid basal (continuous) dose
- PCA opioid demand dose with lockout interval
- Epidural infusion local anesthetics (e.g. lidocaine, bupivacaine
- Epidural infusion -opioids
- □ Epidural PCEA local anesthetic(s)
- Epidural PCEA opioids
- Opioid IV (e.g. fentanyl, remifentanil, morphine, hydromorphone) - continuous Infusion
- Opioid IV bolus dose prn
- Opioid Intramuscular
- Opioid Subcutaneous
- Opioid Transdermal
- Opioid Oral (e.g. codeine, oxycodone, hydromorphone)
- Local block
- Regional block
- □ IV Acetaminophen
- Oral Acetaminophen (with or without opioid)
- □ IV NSAIDs (e.g. ketorolac, ibuprofen, diclofenac)
- Oral NSAIDs
- Anticonvulsants (e.g. gabapentin, pregabalin)
- Methadone
- 🗌 Other
- □ N/A patient discharged on prior day
- □ N/A patient day overlaps with a pre-operative day (and data have already been entered)
- (multi-pick select all modes of pain medication in place on this day)



Analgesia Pre-Diagnosis Day 3 (3 days before the diagnosis)

Analgesia Pre-Diagnosis Day 4 (4 days before the

diagnosis)

	None
--	------

- PCA opioid basal (continuous) dose
- PCA opioid demand dose with lockout interval
- Epidural infusion local anesthetics (e.g.
- lidocaine, bupivacaine
- Epidural infusion -opioids
   Epidural PCEA local anesthetic(s)
- Epidural PCEA local allesti
- Epidural PCEA opioids
   Opioid IV (o g fontanyl r
- Opioid IV (e.g. fentanyl, remifentanil, morphine, hydromorphone) - continuous Infusion
- Opioid IV bolus dose prn
- Opioid Intramuscular
- Opioid Subcutaneous
- Opioid Transdermal
   Opioid Oral (a g
- Opioid Oral (e.g. codeine, oxycodone, hydromorphone)
- Local block
- Regional block
- IV Acetaminophen
- Oral Acetaminophen (with or without opioid)
- □ IV NSAIDs (e.g. ketorolac, ibuprofen, diclofenac) □ Oral NSAIDs
- Anticonvulsants (e.g. gabapentin, pregabalin)
   Methadone
- ☐ Other
- N/A patient discharged on prior day
- N/A patient day overlaps with a pre-operative day (and data have already been entered)

(multi-pick - select all modes of pain medication in place on this day)

None
------

- PCA opioid basal (continuous) dose
- PCA opioid demand dose with lockout interval
- Epidural infusion local anesthetics (e.g. lidocaine, bupivacaine
- Epidural infusion -opioids
- □ Epidural PCEA local anesthetic(s)
- Epidural PCEA opioids
- Opioid IV (e.g. fentanyl, remifentanil, morphine, hydromorphone) continuous Infusion
- Opioid IV bolus dose prn
- 🗌 Opioid Intramuscular
- Opioid Subcutaneous
- Opioid Transdermal
- Opioid Oral (e.g. codeine, oxycodone, hydromorphone)
- Local block
- Regional block
- □ IV Acetaminophen
- □ Oral Acetaminophen (with or without opioid)
- □ IV NSAIDs (e.g. ketorolac, ibuprofen, diclofenac)
- Oral NSAIDs
- Anticonvulsants (e.g. gabapentin, pregabalin)
- Methadone
- 🗌 Other
- □ N/A patient discharged on prior day
- □ N/A patient day overlaps with a pre-operative day (and data have already been entered)
- (multi-pick select all modes of pain medication in place on this day)



Analgesia Pre-Diagnosis Day 5 (5 days before the diagnosis)

None
------

- PCA opioid basal (continuous) dose
- PCA opioid demand dose with lockout interval
- Epidural infusion local anesthetics (e.g.
- lidocaine, bupivacaine
- Epidural infusion -opioids
- Epidural PCEA local anesthetic(s)
- Epidural PCEA opioids
- Opioid IV (e.g. fentanyl, remifentanil, morphine, hydromorphone) - continuous Infusion
- Opioid IV bolus dose prn
- Opioid Intramuscular

Opioid Subcutaneous

- Opioid Transdermal
- Opioid Oral (e.g. codeine, oxycodone, hydromorphone)
- Local block
- Regional block
- IV Acetaminophen
- Oral Acetaminophen (with or without opioid)
- □ IV NSAIDs (e.g. ketorolac, ibuprofen, diclofenac) □ Oral NSAIDs
- Anticonvulsants (e.g. gabapentin, pregabalin)
- Methadone
- Other
- N/A patient discharged on prior day
- N/A patient day overlaps with a pre-operative day (and data have already been entered)

(multi-pick - select all modes of pain medication in place on this day)

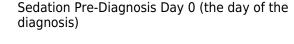
- Benzodiazepine (e.g. diazepam, midazolam, lorazepam) - continuous infusion
- Benzodiazepine (e.g. diazepam, midazolam, lorazepam) - IV bolus prn
- Propofol infusion
- Dexmedetomidine infusion
- Other

(multi-pick, select all that were in place on this day)

None

- Benzodiazepine (e.g. diazepam, midazolam, lorazepam) - continuous infusion
- Benzodiazepine (e.g. diazepam, midazolam, lorazepam) - IV bolus prn
- Propofol infusion
- Dexmedetomidine infusion
- Other
- N/A patient discharged on prior day
- □ N/A patient day overlaps with a pre-operative day (and data have already been entered)

(multi-pick, select all that were in place on this day)



Sedation	Pre-Diagnosis	Day 1	(1 day	before	the
diagnosis	5)	-	-		



Sedation Pre-Diagnosis	Day	2 (2	days	before	the
diagnosis)	-		-		

Sedation Pre-Diagnosi	s Day	3 (3	days	before	the
diagnosis)	-		-		

Sedation P	re-Diagnosis	Day 4 (4	days	before	the
diagnosis)	-	-	-		

Sedation	<b>Pre-Diagnosis</b>	Day 5 (!	5 days	before	the
diagnosis	5)	-	-		

Comments for this instrument and this abstraction

- Benzodiazepine (e.g. diazepam, midazolam, lorazepam) continuous infusion
- Benzodiazepine (e.g. diazepam, midazolam, lorazepam) - IV bolus prn
- Propofol infusion
- Dexmedetomidine infusion
- 🗌 Other
- □ N/A patient discharged on prior day
- N/A patient day overlaps with a pre-operative day (and data have already been entered)

(multi-pick, select all that were in place on this day)

🗌 None

- Benzodiazepine (e.g. diazepam, midazolam, lorazepam) - continuous infusion
- Benzodiazepine (e.g. diazepam, midazolam, lorazepam) - IV bolus prn
- Propofol infusion
- Dexmedetomidine infusion
- 🗌 Other
- □ N/A patient discharged on prior day
- □ N/A patient day overlaps with a pre-operative day (and data have already been entered)

(multi-pick,	select all	that	were i	n place	on	this
day)						

□ None

- Benzodiazepine (e.g. diazepam, midazolam, lorazepam) continuous infusion
- Benzodiazepine (e.g. diazepam, midazolam, lorazepam) - IV bolus prn
- Propofol infusion
- Dexmedetomidine infusion
- Other
- $\square$  N/A patient discharged on prior day
- N/A patient day overlaps with a pre-operative day (and data have already been entered)

(multi-pick, select all that were in place on this day)

🗌 None

- Benzodiazepine (e.g. diazepam, midazolam, lorazepam) - continuous infusion
- Benzodiazepine (e.g. diazepam, midazolam, lorazepam) - IV bolus prn
- Propofol infusion
- Dexmedetomidine infusion
- 🗌 Other
- □ N/A patient discharged on prior day
- N/A patient day overlaps with a pre-operative day (and data have already been entered)

(multi-pick, select all that were in place on this day)

(\*\*Include comments for "other" analgesia and "other" sedation)

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## Nursing Sensitive Process ICU Ventilator - Post-Operative Days 0-5

#### Nursing Sensitive Process Measures - IHI Ventilator Bundle for ICU patients ONLY. \*\*Please complete the matrix and then use it as a worksheet to complete the variables below the matrix.

	Post Op Day 0 (POD 0)	POD 1	POD 2	POD 3	POD 4	POD 5
HOB elevated >=30 degrees						
Oral Care						
Sedation interruption (SI) and spontaneous breathing trial (SBT)/readiness to extubate						
Stress ulcer disease prophylaxis						
Deep venous thrombosis prophylaxis						
Vent Bundle All Items Complete						

#### Postoperative Day 0 (POD 0)

HOB elevated >=30 degrees POD 0	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 0)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that HOB was elevated at least once on POD 0)</li> </ul>
Oral Care POD 0	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 0)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that oral care was done at least once on POD 0)</li> </ul>
Sedation Interruption (SI) and Assessment of Readiness to Extubate/Spontaneous Breathing Trial (SBT) POD 0	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 0)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that SI and SBT were done at least once on POD 0)</li> </ul>
Stress Ulcer Disease (SUD) Prophylaxis POD 0	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 0)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that SUD prophylaxis was given at least once on POD 0)</li> </ul>



Deep Vein Thrombosis (DVT) Prophylaxis POD 0	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 0)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that DVT prophylaxis (mechanical leg pressure devices and/or anticoagulant medication) was given at least once on POD 0)</li> </ul>
Postoperative Day 1 (POD 1)	
HOB elevated >=30 degrees POD 1	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 1)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that HOB was elevated at least once on POD 1)</li> </ul>
Oral Care POD 1	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 1)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that oral care was done at least once on POD 1)</li> </ul>
Sedation Interruption (SI) and Assessment of Readiness to Extubate/Spontaneous Breathing Trial (SBT) POD 1	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 1)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that SI and SBT were done at least once on POD 1)</li> </ul>
Stress Ulcer Disease (SUD) Prophylaxis POD 1	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 1)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that SUD prophylaxis was given at least once on POD 1)</li> </ul>
Deep Vein Thrombosis (DVT) Prophylaxis POD 1	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 1)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that DVT prophylaxis (mechanical leg pressure devices and/or anticoagulant medication) was given at least once on POD 1)</li> </ul>

#### Postoperative Day 2 (POD 2)

HOB elevated >=30 degrees POD 2

 $\bigcirc$  No 🔿 Yes

 $\bigcirc$  N/A (pt discharged or extubated POD 2) O Medical Contraindication per MD order (documentation that HOB was elevated at least once on POD 2)



	Page 52 of 78
Oral Care POD 2	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 2)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that oral care was done at least once on POD 2)</li> </ul>
Sedation Interruption (SI) and Assessment of Readiness to Extubate/Spontaneous Breathing Trial (SBT) POD 2	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 2)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that SI and SBT were done at least once on POD 2)</li> </ul>
Stress Ulcer Disease (SUD) Prophylaxis POD 2	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 2)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that SUD prophylaxis was given at least once on POD 2)</li> </ul>
Deep Vein Thrombosis (DVT) Prophylaxis POD 2	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 2)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that DVT prophylaxis (mechanical leg pressure devices and/or anticoagulant medication) was given at least once on POD 2)</li> </ul>
Postoperative Day 3 (POD 3)	
HOB elevated >=30 degrees POD 3	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 3)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that HOB was elevated at least once on POD 3)</li> </ul>
Oral Care POD 3	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 3)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that oral care was done at least once on POD 3)</li> </ul>
Sedation Interruption (SI) and Assessment of Readiness to Extubate/Spontaneous Breathing Trial (SBT) POD 3	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 3)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that SI and SBT were done at least once on POD 3)</li> </ul>
Stress Ulcer Disease (SUD) Prophylaxis POD 3	○ No ○ Yes

 Yes
 N/A (pt discharged or extubated POD 3)
 Medical Contraindication per MD order
 (documentation that SUD prophylaxis was given at least once on POD 3)



Deep Vein Thrombosis (DVT) Prophylaxis POD 3	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 3)</li> <li>Medical Contraindication per MD order (documentation that DVT prophylaxis (mechanical leg pressure devices and/or anticoagulant medication) was given at least once on POD 3)</li> </ul>
Postoperative Day 4 (POD 4)	
HOB elevated >=30 degrees POD 4	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 4)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that HOB was elevated at least once on POD 4)</li> </ul>
Oral Care POD 4	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 4)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that oral care was done at least once on POD 4)</li> </ul>
Sedation Interruption (SI) and Assessment of Readiness to Extubate/Spontaneous Breathing Trial (SBT) POD 4	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 4)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that SI and SBT were done at least once on POD 4)</li> </ul>
Stress Ulcer Disease (SUD) Prophylaxis POD 4	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 4)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that SUD prophylaxis was given at least once on POD 4)</li> </ul>
Deep Vein Thrombosis (DVT) Prophylaxis POD 4	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 4)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that DVT prophylaxis (mechanical leg pressure devices and/or anticoagulant medication) was given at least once on POD 4)</li> </ul>

#### Postoperative Day 5 (POD 5)

HOB elevated >=30 degrees POD 5

O No

Yes
 N/A (pt discharged or extubated POD 5)
 Medical Contraindication per MD order
 (documentation that HOB was elevated at least once on POD 5)



Oral Care POD 5	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 5)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that oral care was done at least once on POD 5)</li> </ul>
Sedation Interruption (SI) and Assessment of Readiness to Extubate/Spontaneous Breathing Trial (SBT) POD 5	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 5)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that SI and SBT were done at least once on POD 5)</li> </ul>
Stress Ulcer Disease (SUD) Prophylaxis POD 5	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 5)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that SUD prophylaxis was given at least once on POD 5)</li> </ul>
Deep Vein Thrombosis (DVT) Prophylaxis POD 5	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated POD 5)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that DVT prophylaxis (mechanical leg pressure devices and/or anticoagulant medication) was given at least once on POD 5)</li> </ul>

#### **Overall Ventilator Bundle Compliance and Information**

Ventilator bundle - all or none (as applicable to POD 0-5)	<ul> <li>No</li> <li>Yes</li> <li>N/A - patient not on ventilator on unit POD 0-5 ("All or none" is compliance with each element of the ventilator bundle each POD the patient was intubated (POD 0-5) - as noted by check boxes above. Medical contraindications documented by the MD count as "compliant")</li> </ul>
Ventilator bundle elements for this hospital	<ul> <li>None/No formal bundle</li> <li>Daily sedation safety screen</li> <li>Daily sedation interruption</li> <li>Daily breathing trial safety screen</li> <li>Daily assessment of readiness to wean from the ventilator</li> <li>Head of bed elevation &gt;=30 degrees</li> <li>Daily oral care with chlorhexidine gluconate</li> <li>Subglottic suctioning</li> <li>Continuous subglottic suction endotracheal tubes</li> <li>Endotracheal tube care - monitor cuff pressures</li> </ul>

Endotracheal tube care - monitor cuff pressures
 Endotracheal tube care - depth monitored



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Ventilator POD 6	
Ventilator POD 6	<ul> <li>No</li> <li>Yes</li> <li>N/A patient discharged prior to POD 6</li> <li>(IS the patient still intubated and on the ventilator on POD 6?)</li> </ul>
Ventilator POD 6 reasons	<ul> <li>neurologic reason - e.g. need for sedation to manage ICP</li> <li>cardiac reason - e.g. unstable cardiac rhythm (Afib with RVR, VT)</li> <li>fluid overload - e.g. fluid balance impacting lungs (pulmonary edema, effusions, etc.)</li> <li>sepsis - e.g. unstable and requires multiple vasoactive medications and IV fluids</li> <li>pain - e.g. requires large doses of opioids for pain control</li> <li>other</li> <li>(check all that apply (e.g. are documented by the MD on the POD 6 progress note for patients who remain on the ventilator) )</li> </ul>
Comments for this instrument and this abstraction	



## Nursing Sensitive Process ICU Ventilator - Pre-Diagnosis Days 0-5

These data fields are ONLY collected if the patient: 1) has a procedure diagnosis code date AND 2) the procedure code is NOT dated within the first 5 PODs AND 3) the patient is in the ICU on a ventilator.

	Pre-Diagnosis Day 0 (Predx	Pre-Diagnosis Day 1	Pre-Diagnosis Day 2	Pre-Diagnosis Day 3	Pre-Diagnosis Day 4	Pre-Diagnosis Day 5
HOB elevated $>=30$ degrees	$\theta$					
Oral Care						
Sedation interruption (SI) and spontaneous breathing trial (SBT)/readiness to extubate						
Stress ulcer disease prophylaxis						
Deep venous thrombosis prophylaxis						
Vent Bundle All Items Complete						

These data fields are ONLY collected if the patient: 1) has a procedure diagnosis code date AND 2) the procedure code is NOT dated within the first 5 PODs AND 3) the patient is in the ICU. \*\*Note: only collect data for the dates that DO NOT overlap with POD 0-5. For example, if POD 5 is the same day as Pre-Diagnosis day 3, only collect the data for this day in the POD instrument. Make a note in the comments of the overlap - e.g. "Pre Dx day 3 = POD 5"

Procedure/Diagnosis Code Date - present in UHC data file AND occurs outside of POD 0-5?

 No - diagnosis code only, no date present
 Yes - procedure code present, with date
 Yes - procedure code present AND outside of POD 0-5 (There will be a procedure code date for: 9604, 9672, 9671, and 9670. There will be no date for diagnosis codes 51851 and 51853.)

#### Pre-Diagnosis Day 0 (predx 0) - the day of the qualifying procedure code

HOB elevated >=30 degrees Pre-Diagnosis Day 0 (predx 0) - the day of the qualifying procedure code

 No
 Yes
 N/A (pt discharged or extubated predx 0)
 Medical Contraindication per MD order (documentation that HOB was elevated at least once on this day)



Oral Care Pre-Diagnosis Day 0 (predx 0) - the day of the qualifying procedure code

Sedation Interruption (SI) and Assessment of Readiness to Extubate/Spontaneous Breathing Trial (SBT) Pre-Diagnosis Day 0 (predx 0) - the day of the qualifying procedure code

Stress Ulcer Disease (SUD) Prophylaxis Pre-Diagnosis Day 0 (predx 0) - the day of the qualifying procedure code

Deep Vein Thrombosis (DVT) Prophylaxis Pre-Diagnosis Day 0 (predx 0) - the day of the qualifying procedure code  N/A (pt discharged or extubated predx 0)
 Medical Contraindication per MD order (documentation that oral care was done at least once on this day)

⊖ No

⊖ Yes

 N/A (pt discharged or extubated predx 0)
 Medical Contraindication per MD order (documentation that SI and SBT were done at least once on this day)

O No

⊖ Yes

N/A (pt discharged or extubated predx 0)
 Medical Contraindication per MD order
 (documentation that SUD prophylaxis was given at least once on this day)

O No

Yes
 N/A (pt discharged or extubated predx 0)
 Medical Contraindication per MD order
 (documentation that DVT prophylaxis (mechanical leg pressure devices and/or anticoagulant medication) was given at least once on this day)

#### Pre-Diagnosis Day 1 (predx 1) - the day before the qualifying procedure code

HOB elevated >=30 degrees Pre-Diagnosis Day 1 (predx 1) - the day before the qualifying procedure code

Oral Care Pre-Diagnosis Day 1 (predx 1) - the day before the qualifying procedure code

Sedation Interruption (SI) and Assessment of Readiness to Extubate/Spontaneous Breathing Trial (SBT) Pre-Diagnosis Day 1 (predx 1) - the day before the qualifying procedure code

Stress Ulcer Disease (SUD) Prophylaxis Pre-Diagnosis Day 1 (predx 1) - the day before the qualifying procedure code

- ⊖ No
- ⊖ Yes

 $\bigcirc$  N/A (pt discharged or extubated predx1)

O Medical Contraindication per MD order

(documentation that HOB was elevated at least once on predx1)

$\odot$	Nc
Õ	V-

⊖ Yes

 N/A (pt discharged or extubated predx1)
 Medical Contraindication per MD order (documentation that oral care was done at least once on predx1)

○ No○ Yes

 N/A (pt discharged or extubated predx1)
 Medical Contraindication per MD order (documentation that SI and SBT were done at least once on predx1)

O No

Ŏ Yes

 $\bigcirc$  N/A (pt discharged or extubated predx1)

Medical Contraindication per MD order

(documentation that SUD prophylaxis was given at least once on predx1)



Deep Vein Thrombosis (DVT) Prophylaxis Pre-Diagnosis
Day 1 (predx 1) - the day before the qualifying
procedure code

Yes
 N/A (pt discharged or extubated predx1)
 Medical Contraindication per MD order
 (documentation that DVT prophylaxis (mechanical leg pressure devices and/or anticoagulant medication) was given at least once on predx1)

#### Pre-Diagnosis Day 2 (predx 2) - two days before the qualifying procedure code

HOB elevated >=30 degrees Pre-Diagnosis Day 2 (predx 2) - two days before the qualifying procedure code	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated predx2)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that HOB was elevated at least once on perdx2)</li> </ul>
Oral Care Pre-Diagnosis Day 2 (predx 2) - two days before the qualifying procedure code	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated predx2)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that oral care was done at least once on predx2)</li> </ul>
Sedation Interruption (SI) and Assessment of Readiness to Extubate/Spontaneous Breathing Trial (SBT) Pre-Diagnosis Day 2 (predx 2) - two days before the qualifying procedure code	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated predx2)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that SI and SBT were done at least once on predx2)</li> </ul>
Stress Ulcer Disease (SUD) Prophylaxis Pre-Diagnosis Day 2 (predx 2) - two days before the qualifying procedure code	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated predx2)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that SUD prophylaxis was given at least once on predx2)</li> </ul>
Deep Vein Thrombosis (DVT) Prophylaxis Pre-Diagnosis Day 2 (predx 2) - two days before the qualifying procedure code	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated predx2)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that DVT prophylaxis (mechanical leg pressure devices and/or anticoagulant medication) was given at least once on predx2)</li> </ul>

#### Pre-Diagnosis Day 3 (predx 3) - three days before the qualifying procedure code

HOB elevated >=30 degrees Pre-Diagnosis Day 3 (predx 3) - three days before the qualifying procedure code

No
 Yes
 N/A (pt discharged or extubated predx3)
 Medical Contraindication per MD order
 (documentation that HOB was elevated at least once on predx3)



Oral Care Pre-Diagnosis Day 3 (predx 3) - three days before the qualifying procedure code

Sedation Interruption (SI) and Assessment of Readiness to Extubate/Spontaneous Breathing Trial (SBT) Pre-Diagnosis Day 3 (predx 3) - three days before the qualifying procedure code

Stress Ulcer Disease (SUD) Prophylaxis Pre-Diagnosis Day 3 (predx 3) - three days before the qualifying procedure code

Deep Vein Thrombosis (DVT) Prophylaxis Pre-Diagnosis Day 3 (predx 3) - three days before the qualifying procedure code

⊖ No

⊖ Yes

 $\bigcirc$  N/A (pt discharged or extubated predx3) O Medical Contraindication per MD order (documentation that oral care was done at least once on predx3)

 $\bigcirc$  No

⊖ Yes

 $\bigcirc$  N/A (pt discharged or extubated predx3) ○ Medical Contraindication per MD order (documentation that SI and SBT were done at least once on predx3)

 $\bigcirc$  No

⊖ Yes

 $\bigcirc$  N/A (pt discharged or extubated predx3) O Medical Contraindication per MD order (documentation that SUD prophylaxis was given at least once on predx3)

 $\bigcirc$  No

⊖ Yes

 $\bigcirc$  N/A (pt discharged or extubated predx3) O Medical Contraindication per MD order (documentation that DVT prophylaxis (mechanical leg pressure devices and/or anticoagulant medication) was given at least once on predx3)

#### Pre-Diagnosis Day 4 (predx 4) - four days before the qualifying procedure code

HOB elevated >= 30 degrees Pre-Diagnosis Day 4 (predx 4) - four days before the qualifying procedure code

Oral Care Pre-Diagnosis Day 4 (predx 4) - four days

before the qualifying procedure code

Sedation Interruption (SI) and Assessment of Readiness to Extubate/Spontaneous Breathing Trial (SBT) Pre-Diagnosis Day 4 (predx 4) - four days before the qualifying procedure code

Stress Ulcer Disease (SUD) Prophylaxis Pre-Diagnosis Day 4 (predx 4) - four days before the qualifying procedure code

- $\bigcirc$  No
- ⊖ Yes

 $\bigcirc$  N/A (pt discharged or extubated predx4)

O Medical Contraindication per MD order

(documentation that HOB was elevated at least once on predx4)

$\bigcirc$	No
ŏ	Vac

) Yes

 $\bigcirc$  N/A (pt discharged or extubated predx4) ○ Medical Contraindication per MD order (documentation that oral care was done at least once on predx4)

⊖ No ⊖ Yes

 $\bigcirc$  N/A (pt discharged or extubated predx4) O Medical Contraindication per MD order (documentation that SI and SBT were done at least once on predx4)

 $\bigcirc$  No

⊖ Yes

 $\bigcirc$  N/A (pt discharged or extubated predx4)

O Medical Contraindication per MD order

(documentation that SUD prophylaxis was given at least once on predx4)



Deep Vein Thrombosis (DVT) Prophylaxis Pre-Diagnosis Day 4 (predx 4) - four days before the qualifying procedure code

Yes
 N/A (pt discharged or extubated predx4)
 Medical Contraindication per MD order
 (documentation that DVT prophylaxis (mechanical leg pressure devices and/or anticoagulant medication) was given at least once on predx4)

#### Pre-Diagnosis Day 5 (predx 5) - five days before the qualifying procedure code

HOB elevated >=30 degrees Pre-Diagnosis Day 5 (predx 5) - five days before the qualifying procedure code	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated predx5)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that HOB was elevated at least once on predx5)</li> </ul>
Oral Care Pre-Diagnosis Day 5 (predx 5) - five days before the qualifying procedure code	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated predx5)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that oral care was done at least once on predx5)</li> </ul>
Sedation Interruption (SI) and Assessment of Readiness to Extubate/Spontaneous Breathing Trial (SBT) Pre-Diagnosis Day 5 (predx 5) - five days before the qualifying procedure code	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated predx5)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that SI and SBT were done at least once on predx5)</li> </ul>
Stress Ulcer Disease (SUD) Prophylaxis Pre-Diagnosis Day 5 (predx 5) - five days before the qualifying procedure code	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated predx5)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that SUD prophylaxis was given at least once on predx5)</li> </ul>
Deep Vein Thrombosis (DVT) Prophylaxis Pre-Diagnosis Day 5 (predx 5) - five days before the qualifying procedure code	<ul> <li>No</li> <li>Yes</li> <li>N/A (pt discharged or extubated predx5)</li> <li>Medical Contraindication per MD order</li> <li>(documentation that DVT prophylaxis (mechanical leg pressure devices and/or anticoagulant</li> </ul>

#### **Overall Ventilator Bundle Compliance and Information**

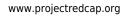
Ventilator bundle - all or none (as applicable to Pre-Diagnosis Days 0-5

⊖ No ⊖ Yes

N/A - patient not on ventilator on unit predx 0-5 ("All or none" is compliance with each element of the ventilator bundle each predx day the patient was intubated (predx 0-5) - as noted by check boxes above. Medical contraindications documented by the MD count as "compliant")

medication) was given at least once on predx5)







# Nursing Sensitive Process ICU Mobility - Post-Operative Days 0-5

Nursing Sensitive Process Measures - SCCM ICU Liberation Bundle for ICU patients ONLY. \*\*Please complete the matrix and then use it as a worksheet to complete the variables below the matrix.

\*\* This section covers the ABCDE portions of the bundle. F for family was added later and is not included here.

	Post Op Day 0 (POD 0)	POD 1	POD 2	POD 3	POD 4	POD 5
Pain assessed daily						
Pain high? (NRS>3; BPS>5; or CPOT>2)						
Agitation assessed daily						
Sedation at target? (RASS -2, -1, or 0) or (SAS 3, or 4)						
Delirium assessed daily						
Delirium at target? (negative) (CAM-ICU negative) or (ICDSC < =4)						
Sedation interruption or light sedation protocol daily						
Early Mobility daily						

#### Postoperative Day 0 (POD 0)

Pain assessed POD 0	<ul> <li>Not addressed/documented</li> <li>NRS (Numerical Rating Scale with patient self-report)</li> <li>BPS (Behavioral Pain Scale)</li> <li>CPOT (Critical Care Pain Observation Tool)</li> <li>N/A patient discharged from ICU on this POD (Check one to indicate the validated pain scale documented at least once on this POD)</li> </ul>
Pain high POD 0	<ul> <li>No</li> <li>Yes (NRS&gt;3, BPS&gt;5, or CPOT&gt;2)</li> <li>(Check "yes" if pain documented as NRS&gt;3, BPS&gt;5, or CPOT&gt;2 at least once on this POD)</li> </ul>
Agitation assessed POD 0	<ul> <li>Not addressed/documented</li> <li>RASS (Richmond Agitation Sedation Scale)</li> <li>SAS (Sedation Agitation Scale)</li> <li>N/A patient discharged from ICU on this POD (Check one to indicate the validated agitation scale documented at least once on this POD)</li> </ul>



Sedation at target POD 0	<ul> <li>No - (RASS -3, -4, -5, +1, +2, +3, +4) or (SAS 1, 2, 5, 6, 7)</li> <li>Yes - (RASS -2, -1, or 0) or (SAS 3, or 4)</li> <li>(Check one based on worst score of the day. Worst score = most outside of desired range on this POD)</li> </ul>
Delirium assessed POD 0	<ul> <li>Not addressed/documented</li> <li>CAM-ICU (Confusion Assessment Method for the ICU)</li> <li>ICDSC (Intensive Care Delirium Screening Checklist)</li> <li>N/A patient discharged from ICU on this POD</li> <li>(Check one to indicate if delirium was documented as present at least once on this POD)</li> </ul>
Delirium at target POD 0	$\bigcirc$ No - (CAM-ICU positive) or (ICDSC >4) $\bigcirc$ Yes - (CAM-ICU negative) or (ICDSC < =4) (Check one to indicate if delirium was documented as present at least once on this POD)
Sedation interruption or Light sedation protocol POD 0	<ul> <li>Not addressed/documented</li> <li>Sedation Interruption (SI) documented</li> <li>Light Sedation Protocol (LSP) documented</li> <li>N/A patient discharged from ICU on this POD</li> <li>Medical Contraindication per MD order</li> <li>(Check one to indicate sedation interruption or light sedation protocol documented at least once on this POD)</li> </ul>
Mobility or Exercise POD 0	<ul> <li>Not documented/addressed</li> <li>Passive range of motion</li> <li>Sits up in bed</li> <li>Sits on edge of bed and dangles legs</li> <li>Transfers from bed to chair (with or without assist)</li> <li>Ambulates with assist</li> <li>Independent (ambulates without assist)</li> <li>N/A patient discharged from ICU on this POD</li> <li>Medical Contraindication per MD order (Check one to indicate the highest level of mobility documented at least once on this POD)</li> </ul>
POD 1	
Pain assessed POD 1	<ul> <li>Not addressed/documented</li> <li>NRS (Numerical Rating Scale with patient self-report)</li> <li>BPS (Behavioral Pain Scale)</li> <li>CPOT (Critical Care Pain Observation Tool)</li> <li>N/A patient discharged from ICU on this POD (Check one to indicate the validated pain scale documented at least once on this POD)</li> </ul>
Pain high POD 1	<ul> <li>No</li> <li>Yes (NRS&gt;3, BPS&gt;5, or CPOT&gt;2)</li> <li>(Check "yes" if pain documented as NRS&gt;3, BPS&gt;5, or CPOT&gt;2 at least once on this POD)</li> </ul>



Agitation assessed POD 1	<ul> <li>Not addressed/documented</li> <li>RASS (Richmond Agitation Sedation Scale)</li> <li>SAS (Sedation Agitation Scale)</li> <li>N/A patient discharged from ICU on this POD (Check one to indicate the validated agitation scale documented at least once on this POD)</li> </ul>
Sedation at target POD 1	<ul> <li>No - (RASS -3, -4, -5, +1, +2, +3, +4) or (SAS 1, 2, 5, 6, 7)</li> <li>Yes - (RASS -2, -1, or 0) or (SAS 3, or 4)</li> <li>(Check one based on worst score of the day. Worst score = most outside of desired range on this POD)</li> </ul>
Delirium assessed POD 1	<ul> <li>Not addressed/documented</li> <li>CAM-ICU (Confusion Assessment Method for the ICU)</li> <li>ICDSC (Intensive Care Delirium Screening Checklist)</li> <li>N/A patient discharged from ICU on this POD</li> <li>(Check one to indicate if delirium was documented as present at least once on this POD)</li> </ul>
Delirium at target POD 1	$\bigcirc$ No - (CAM-ICU positive) or (ICDSC >4) $\bigcirc$ Yes - (CAM-ICU negative) or (ICDSC < =4) (Check one to indicate if delirium was documented as present at least once on this POD)
Sedation interruption or Light sedation protocol POD 1	<ul> <li>Not addressed/documented</li> <li>Sedation Interruption (SI) documented</li> <li>Light Sedation Protocol (LSP) documented</li> <li>N/A patient discharged from ICU on this POD</li> <li>Medical Contraindication per MD order</li> <li>(Check one to indicate sedation interruption or light sedation protocol documented at least once on this POD)</li> </ul>
Mobility or Exercise POD 1	<ul> <li>Not documented/addressed</li> <li>Passive range of motion</li> <li>Sits up in bed</li> <li>Sits on edge of bed and dangles legs</li> <li>Transfers from bed to chair (with or without assist)</li> <li>Ambulates with assist</li> <li>Independent (ambulates without assist)</li> <li>N/A patient discharged from ICU on this POD</li> <li>Medical Contraindication per MD order (Check one to indicate the highest level of mobility documented at least once on this POD)</li> </ul>

#### POD 2

Pain assessed POD 2

- $\bigcirc$  Not addressed/documented
- NRS (Numerical Rating Scale with patient self-report)
- BPS (Behavioral Pain Scale)
- CPOT (Critical Care Pain Observation Tool)
- N/A patient discharged from ICU on this POD (Check one to indicate the validated pain scale documented at least once on this POD)



Pain high POD 2	<ul> <li>No</li> <li>Yes (NRS&gt;3, BPS&gt;5, or CPOT&gt;2)</li> <li>(Check "yes" if pain documented as NRS&gt;3, BPS&gt;5, or CPOT&gt;2 at least once on this POD)</li> </ul>
Agitation assessed POD 2	<ul> <li>Not addressed/documented</li> <li>RASS (Richmond Agitation Sedation Scale)</li> <li>SAS (Sedation Agitation Scale)</li> <li>N/A patient discharged from ICU on this POD (Check one to indicate the validated agitation scale documented at least once on this POD)</li> </ul>
Sedation at target POD 2	<ul> <li>No - (RASS -3, -4, -5, +1, +2, +3, +4) or (SAS 1, 2, 5, 6, 7)</li> <li>Yes - (RASS -2, -1, or 0) or (SAS 3, or 4)</li> <li>(Check one based on worst score of the day. Worst score = most outside of desired range on this POD)</li> </ul>
Delirium assessed POD 2	<ul> <li>Not addressed/documented</li> <li>CAM-ICU (Confusion Assessment Method for the ICU)</li> <li>ICDSC (Intensive Care Delirium Screening Checklist)</li> <li>N/A patient discharged from ICU on this POD</li> <li>(Check one to indicate if delirium was documented as present at least once on this POD)</li> </ul>
Delirium at target POD 2	$\bigcirc$ No - (CAM-ICU positive) or (ICDSC >4) $\bigcirc$ Yes - (CAM-ICU negative) or (ICDSC < =4) (Check one to indicate if delirium was documented as present at least once on this POD)
Sedation interruption or Light sedation protocol POD 2	<ul> <li>Not addressed/documented</li> <li>Sedation Interruption (SI) documented</li> <li>Light Sedation Protocol (LSP) documented</li> <li>N/A patient discharged from ICU on this POD</li> <li>Medical Contraindication per MD order</li> <li>(Check one to indicate sedation interruption or light sedation protocol documented at least once on this POD)</li> </ul>
Mobility or Exercise POD 2	<ul> <li>Not documented/addressed</li> <li>Passive range of motion</li> <li>Sits up in bed</li> <li>Sits on edge of bed and dangles legs</li> <li>Transfers from bed to chair (with or without assist)</li> <li>Ambulates with assist</li> <li>Independent (ambulates without assist)</li> <li>N/A patient discharged from ICU on this POD</li> <li>Medical Contraindication per MD order</li> <li>(Check one to indicate the highest level of mobility documented at least once on this POD)</li> </ul>

#### POD 3

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Pain assessed POD 3	<ul> <li>Not addressed/documented</li> <li>NRS (Numerical Rating Scale with patient self-report)</li> <li>BPS (Behavioral Pain Scale)</li> <li>CPOT (Critical Care Pain Observation Tool)</li> <li>N/A patient discharged from ICU on this POD (Check one to indicate the validated pain scale documented at least once on this POD)</li> </ul>
Pain high POD 3	<ul> <li>No</li> <li>Yes (NRS&gt;3, BPS&gt;5, or CPOT&gt;2)</li> <li>(Check "yes" if pain documented as NRS&gt;3, BPS&gt;5, or CPOT&gt;2 at least once on this POD)</li> </ul>
Agitation assessed POD 3	<ul> <li>Not addressed/documented</li> <li>RASS (Richmond Agitation Sedation Scale)</li> <li>SAS (Sedation Agitation Scale)</li> <li>N/A patient discharged from ICU on this POD (Check one to indicate the validated agitation scale documented at least once on this POD)</li> </ul>
Sedation at target POD 3	<ul> <li>No - (RASS -3, -4, -5, +1, +2, +3, +4) or (SAS 1, 2, 5, 6, 7)</li> <li>Yes - (RASS -2, -1, or 0) or (SAS 3, or 4)</li> <li>(Check one based on worst score of the day. Worst score = most outside of desired range on this POD)</li> </ul>
Delirium assessed POD 3	<ul> <li>Not addressed/documented</li> <li>CAM-ICU (Confusion Assessment Method for the ICU)</li> <li>ICDSC (Intensive Care Delirium Screening Checklist)</li> <li>N/A patient discharged from ICU on this POD</li> <li>(Check one to indicate if delirium was documented as present at least once on this POD)</li> </ul>
Delirium at target POD 3	$\bigcirc$ No - (CAM-ICU positive) or (ICDSC >4) $\bigcirc$ Yes - (CAM-ICU negative) or (ICDSC < =4) (Check one to indicate if delirium was documented as present at least once on this POD)
Sedation interruption or Light sedation protocol POD 3	<ul> <li>Not addressed/documented</li> <li>Sedation Interruption (SI) documented</li> <li>Light Sedation Protocol (LSP) documented</li> <li>N/A patient discharged from ICU on this POD</li> <li>Medical Contraindication per MD order</li> <li>(Check one to indicate sedation interruption or light sedation protocol documented at least once on this POD)</li> </ul>
Mobility or Exercise POD 3	<ul> <li>Not documented/addressed</li> <li>Passive range of motion</li> <li>Sits up in bed</li> <li>Sits on edge of bed and dangles legs</li> <li>Transfers from bed to chair (with or without assist)</li> <li>Ambulates with assist</li> <li>Independent (ambulates without assist)</li> <li>N/A patient discharged from ICU on this POD</li> <li>Medical Contraindication per MD order (Check one to indicate the highest level of mobility documented at least once on this POD)</li> </ul>



POD 4

Pain assessed POD 4	<ul> <li>Not addressed/documented</li> <li>NRS (Numerical Rating Scale with patient self-report)</li> <li>BPS (Behavioral Pain Scale)</li> <li>CPOT (Critical Care Pain Observation Tool)</li> <li>N/A patient discharged from ICU on this POD (Check one to indicate the validated pain scale documented at least once on this POD)</li> </ul>
Pain high POD 4	$\bigcirc$ No $\bigcirc$ Yes (NRS>3, BPS>5, or CPOT>2) (Check "yes" if pain documented as NRS>3, BPS>5, or CPOT>2 at least once on this POD)
Agitation assessed POD 4	<ul> <li>Not addressed/documented</li> <li>RASS (Richmond Agitation Sedation Scale)</li> <li>SAS (Sedation Agitation Scale)</li> <li>N/A patient discharged from ICU on this POD (Check one to indicate the validated agitation scale documented at least once on this POD)</li> </ul>
Sedation at target POD 4	<ul> <li>No - (RASS -3, -4, -5, +1, +2, +3, +4) or (SAS 1, 2, 5, 6, 7)</li> <li>Yes - (RASS -2, -1, or 0) or (SAS 3, or 4)</li> <li>(Check one based on worst score of the day. Worst score = most outside of desired range on this POD)</li> </ul>
Delirium assessed POD 4	<ul> <li>Not addressed/documented</li> <li>CAM-ICU (Confusion Assessment Method for the ICU)</li> <li>ICDSC (Intensive Care Delirium Screening Checklist)</li> <li>N/A patient discharged from ICU on this POD</li> <li>(Check one to indicate if delirium was documented as present at least once on this POD)</li> </ul>
Delirium at target POD 4	$\bigcirc$ No - (CAM-ICU positive) or (ICDSC >4) $\bigcirc$ Yes - (CAM-ICU negative) or (ICDSC < =4) (Check one to indicate if delirium was documented as present at least once on this POD)
Sedation interruption or Light sedation protocol POD 4	<ul> <li>Not addressed/documented</li> <li>Sedation Interruption (SI) documented</li> <li>Light Sedation Protocol (LSP) documented</li> <li>N/A patient discharged from ICU on this POD</li> <li>Medical Contraindication per MD order</li> <li>(Check one to indicate sedation interruption or light sedation protocol documented at least once on this POD)</li> </ul>



Mobility or Exercise POD 4	<ul> <li>Not documented/addressed</li> <li>Passive range of motion</li> <li>Sits up in bed</li> <li>Sits on edge of bed and dangles legs</li> <li>Transfers from bed to chair (with or without assist)</li> <li>Ambulates with assist</li> <li>Independent (ambulates without assist)</li> <li>N/A patient discharged from ICU on this POD</li> <li>Medical Contraindication per MD order</li> <li>(Check one to indicate the highest level of mobility documented at least once on this POD)</li> </ul>
POD 5	
Pain assessed POD 5	<ul> <li>Not addressed/documented</li> <li>NRS (Numerical Rating Scale with patient self-report)</li> <li>BPS (Behavioral Pain Scale)</li> <li>CPOT (Critical Care Pain Observation Tool)</li> <li>N/A patient discharged from ICU on this POD (Check one to indicate the validated pain scale documented at least once on this POD)</li> </ul>
Pain high POD 5	$\bigcirc$ No $\bigcirc$ Yes (NRS>3, BPS>5, or CPOT>2) (Check "yes" if pain documented as NRS>3, BPS>5, or CPOT>2 at least once on this POD)
Agitation assessed POD 5	<ul> <li>Not addressed/documented</li> <li>RASS (Richmond Agitation Sedation Scale)</li> <li>SAS (Sedation Agitation Scale)</li> <li>N/A patient discharged from ICU on this POD</li> <li>(Check one to indicate the validated agitation scale documented at least once on this POD)</li> </ul>
Sedation at target POD 5	<ul> <li>No - (RASS -3, -4, -5, +1, +2, +3, +4) or (SAS 1, 2, 5, 6, 7)</li> <li>Yes - (RASS -2, -1, or 0) or (SAS 3, or 4)</li> <li>(Check one based on worst score of the day. Worst score = most outside of desired range on this POD)</li> </ul>
Delirium assessed POD 5	<ul> <li>Not addressed/documented</li> <li>CAM-ICU (Confusion Assessment Method for the ICU)</li> <li>ICDSC (Intensive Care Delirium Screening Checklist)</li> <li>N/A patient discharged from ICU on this POD</li> <li>(Check one to indicate if delirium was documented as present at least once on this POD)</li> </ul>
Delirium at target POD 5	$\bigcirc$ No - (CAM-ICU positive) or (ICDSC >4) $\bigcirc$ Yes - (CAM-ICU negative) or (ICDSC < =4) (Check one to indicate if delirium was documented as present at least once on this POD)

Sedation interruption or Light sedation protocol POD 5	<ul> <li>Not addressed/documented</li> <li>Sedation Interruption (SI) documented</li> <li>Light Sedation Protocol (LSP) documented</li> <li>N/A patient discharged from ICU on this POD</li> <li>Medical Contraindication per MD order</li> <li>(Check one to indicate sedation interruption or light sedation protocol documented at least once on this POD)</li> </ul>
Mobility or Exercise POD 5	<ul> <li>Not documented/addressed</li> <li>Passive range of motion</li> <li>Sits up in bed</li> <li>Sits on edge of bed and dangles legs</li> <li>Transfers from bed to chair (with or without assist)</li> <li>Ambulates with assist</li> <li>Independent (ambulates without assist)</li> <li>N/A patient discharged from ICU on this POD</li> <li>Medical Contraindication per MD order (Check one to indicate the highest level of mobility documented at least once on this POD)</li> </ul>
Comments for this instrument and this abstraction	



## Nursing Sensitive Process ICU Mobility - Pre-Diagnosis Days 0-5

These data fields are ONLY collected if the patient: 1) has a procedure diagnosis code date AND 2) the procedure code is NOT dated within the first 5 PODs AND 3) the patient is in the ICU.

Pain assessed daily	Pre-Diagnosis Day 0 (Predx	Pre-Diagnosis Day 1 (Predx 赴	Pre-Diagnosis Day 2 (Predx	Pre-Diagnosis Day 3 (Predx	Pre-Diagnosis Day 4 (Predx <del>4)</del>	Pre-Diagnosis Day 5 (Predx <del>5)</del>
Pain high? (NRS>3; BPS>5; or CPOT>2)						
Agitation assessed daily						
Sedation at target? (RASS -2, -1, or 0) or (SAS 3, or 4)						
Delirium assessed daily						
Delirium at target? (negative) (CAM-ICU negative) or (ICDSC < =4)						
Sedation interruption or light sedation protocol daily						
Early Mobility daily						

These data fields are ONLY collected if the patient: 1) has a procedure diagnosis code date AND 2) the procedure code is NOT dated within the first 5 PODs AND 3) the patient is in the ICU. \*\*Note: only collect data for the dates that DO NOT overlap with POD 0-5. For example, if POD 5 is the same day as Pre-Diagnosis day 3, only collect the data for this day in the POD instrument. Make a note in the comments of the overlap - e.g. "Pre Dx day 3 = POD 5"

Procedure/Diagnosis Code Date - present in UHC data file AND occurs outside of POD 0-5?

 No - diagnosis code only, no date present
 Yes - procedure code present, with date
 Yes - procedure code present AND outside of POD 0-5 (There will be a procedure code date for: 9604, 9672, 9671, and 9670. There will be no date for diagnosis codes 51851 and 51853.)



#### Pre-Diagnosis Day 0 (Predx 0) - the day of the procedure code diagnosis

Pain Pre-Diagnosis Day 0 (Predx 0)	<ul> <li>Not addressed/documented</li> <li>NRS (Numerical Rating Scale with patient self-report)</li> <li>BPS (Behavioral Pain Scale)</li> <li>CPOT (Critical Care Pain Observation Tool)</li> <li>N/A patient discharged from ICU on this day (Check one to indicate the validated pain scale documented at least once on this day)</li> </ul>
Pain high Predx 0	$\bigcirc$ No $\bigcirc$ Yes (NRS>3, BPS>5, or CPOT>2) (Check "yes" if pain documented as NRS>3, BPS>5, or CPOT>2 at least once on this day)
Agitation assessed Predx 0	<ul> <li>Not addressed/documented</li> <li>RASS (Richmond Agitation Sedation Scale)</li> <li>SAS (Sedation Agitation Scale)</li> <li>N/A patient discharged from ICU on this day</li> <li>(Check one to indicate the validated agitation scale documented at least once on this day)</li> </ul>
Sedation at target Predx 0	$\bigcirc$ No - (RASS -3, -4, -5, +1, +2, +3, +4) or (SAS 1, 2, 5, 6, 7) $\bigcirc$ Yes - (RASS -2, -1, or 0) or (SAS 3, or 4) (Check one based on worst score of the day. Worst score = most outside of desired range on this day)
Delirium assessed Predx 0	<ul> <li>Not addressed/documented</li> <li>CAM-ICU (Confusion Assessment Method for the ICU)</li> <li>ICDSC (Intensive Care Delirium Screening Checklist)</li> <li>N/A patient discharged from ICU on this day</li> <li>(Check one to indicate if delirium was documented as present at least once on this day)</li> </ul>
Delirium at target Predx 0	$\bigcirc$ No - (CAM-ICU positive) or (ICDSC >4) $\bigcirc$ Yes - (CAM-ICU negative) or (ICDSC < =4) (Check one to indicate if delirium was documented as present at least once on this day)
Sedation interruption or Light sedation protocol Predx 0	<ul> <li>Not addressed/documented</li> <li>Sedation Interruption (SI) documented</li> <li>Light Sedation Protocol (LSP) documented</li> <li>N/A patient discharged from ICU on this day</li> <li>Medical Contraindication per MD order</li> <li>(Check one to indicate sedation interruption or light sedation protocol documented at least once on this day)</li> </ul>



#### Mobility or Exercise Predx 0

- $\bigcirc$  Not documented/addressed
- O Passive range of motion
- $\bigcirc$  Sits up in bed
- $\bigcirc$  Sits on edge of bed and dangles legs
- Transfers from bed to chair (with or without assist)
- Ambulates with assist
- $\bigcirc$  Independent (ambulates without assist)
- N/A patient discharged from ICU on this day
- Medical Contraindication per MD order

(Check one to indicate the highest level of mobility documented at least once on this day)

#### Pre-Diagnosis Day 1 (Predx 1) - the day before the procedure code diagnosis

Pain assessed Predx 1	<ul> <li>Not addressed/documented</li> <li>NRS (Numerical Rating Scale with patient self-report)</li> <li>BPS (Behavioral Pain Scale)</li> <li>CPOT (Critical Care Pain Observation Tool)</li> <li>N/A patient discharged from ICU on this day (Check one to indicate the validated pain scale documented at least once on this day)</li> </ul>
Pain high Predx 1	<ul> <li>No</li> <li>Yes (NRS&gt;3, BPS&gt;5, or CPOT&gt;2)</li> <li>(Check "yes" if pain documented as NRS&gt;3, BPS&gt;5, or CPOT&gt;2 at least once on this day)</li> </ul>
Agitation assessed Predx 1	<ul> <li>Not addressed/documented</li> <li>RASS (Richmond Agitation Sedation Scale)</li> <li>SAS (Sedation Agitation Scale)</li> <li>N/A patient discharged from ICU on this day (Check one to indicate the validated agitation scale documented at least once on this day)</li> </ul>
Sedation at target Predx 1	$\bigcirc$ No - (RASS -3, -4, -5, +1, +2, +3, +4) or (SAS 1, 2, 5, 6, 7) $\bigcirc$ Yes - (RASS -2, -1, or 0) or (SAS 3, or 4) (Check one based on worst score of the day. Worst score = most outside of desired range on this day)
Delirium assessed Predx 1	<ul> <li>Not addressed/documented</li> <li>CAM-ICU (Confusion Assessment Method for the ICU)</li> <li>ICDSC (Intensive Care Delirium Screening Checklist)</li> <li>N/A patient discharged from ICU on this day</li> <li>(Check one to indicate if delirium was documented as present at least once on this day)</li> </ul>
Delirium at target Predx 1	$\bigcirc$ No - (CAM-ICU positive) or (ICDSC >4) $\bigcirc$ Yes - (CAM-ICU negative) or (ICDSC < =4) (Check one to indicate if delirium was documented as present at least once on this day)

Sedation interruption or Light sedation protocol Predx 1	<ul> <li>Not addressed/documented</li> <li>Sedation Interruption (SI) documented</li> <li>Light Sedation Protocol (LSP) documented</li> <li>N/A patient discharged from ICU on this day</li> <li>Medical Contraindication per MD order</li> <li>(Check one to indicate sedation interruption or light sedation protocol documented at least once on this day)</li> </ul>
Mobility or Exercise Predx 1	<ul> <li>Not documented/addressed</li> <li>Passive range of motion</li> <li>Sits up in bed</li> <li>Sits on edge of bed and dangles legs</li> <li>Transfers from bed to chair (with or without assist)</li> <li>Ambulates with assist</li> <li>Independent (ambulates without assist)</li> <li>N/A patient discharged from ICU on this day</li> <li>Medical Contraindication per MD order (Check one to indicate the highest level of mobility documented at least once on this day)</li> </ul>

#### Pre-Diagnosis Day 2 (Predx 2) - two days before the procedure code diagnosis

Pain assessed Predx 2	<ul> <li>Not addressed/documented</li> <li>NRS (Numerical Rating Scale with patient self-report)</li> <li>BPS (Behavioral Pain Scale)</li> <li>CPOT (Critical Care Pain Observation Tool)</li> <li>N/A patient discharged from ICU on this day (Check one to indicate the validated pain scale documented at least once on this day)</li> </ul>
Pain high Predx 2	<ul> <li>No</li> <li>Yes (NRS&gt;3, BPS&gt;5, or CPOT&gt;2)</li> <li>(Check "yes" if pain documented as NRS&gt;3, BPS&gt;5, or CPOT&gt;2 at least once on this day)</li> </ul>
Agitation assessed Predx 2	<ul> <li>Not addressed/documented</li> <li>RASS (Richmond Agitation Sedation Scale)</li> <li>SAS (Sedation Agitation Scale)</li> <li>N/A patient discharged from ICU on this day (Check one to indicate the validated agitation scale documented at least once on this day)</li> </ul>
Sedation at target Predx 2	<ul> <li>No - (RASS -3, -4, -5, +1, +2, +3, +4) or (SAS 1, 2, 5, 6, 7)</li> <li>Yes - (RASS -2, -1, or 0) or (SAS 3, or 4)</li> <li>(Check one based on worst score of the day. Worst score = most outside of desired range on this day)</li> </ul>
Delirium assessed Predx 2	<ul> <li>Not addressed/documented</li> <li>CAM-ICU (Confusion Assessment Method for the ICU)</li> <li>ICDSC (Intensive Care Delirium Screening Checklist)</li> <li>N/A patient discharged from ICU on this day</li> <li>(Check one to indicate if delirium was documented as present at least once on this day)</li> </ul>



Delirium at target Predx 2	$\bigcirc$ No - (CAM-ICU positive) or (ICDSC >4) $\bigcirc$ Yes - (CAM-ICU negative) or (ICDSC < =4) (Check one to indicate if delirium was documented as present at least once on this day)
Sedation interruption or Light sedation protocol Predx 2	<ul> <li>Not addressed/documented</li> <li>Sedation Interruption (SI) documented</li> <li>Light Sedation Protocol (LSP) documented</li> <li>N/A patient discharged from ICU on this day</li> <li>Medical Contraindication per MD order</li> <li>(Check one to indicate sedation interruption or light sedation protocol documented at least once on this day)</li> </ul>
Mobility or Exercise Predx 2	<ul> <li>Not documented/addressed</li> <li>Passive range of motion</li> <li>Sits up in bed</li> <li>Sits on edge of bed and dangles legs</li> <li>Transfers from bed to chair (with or without assist)</li> <li>Ambulates with assist</li> <li>Independent (ambulates without assist)</li> <li>N/A patient discharged from ICU on this day</li> <li>Medical Contraindication per MD order (Check one to indicate the highest level of mobility documented at least once on this day)</li> </ul>

#### Pre-Diagnosis Day 3 (Predx 3) - three days before the procedure code diagnosis

Pain assessed Predx 3	<ul> <li>Not addressed/documented</li> <li>NRS (Numerical Rating Scale with patient self-report)</li> <li>BPS (Behavioral Pain Scale)</li> <li>CPOT (Critical Care Pain Observation Tool)</li> <li>N/A patient discharged from ICU on this day (Check one to indicate the validated pain scale documented at least once on this day)</li> </ul>
Pain high Predx 3	<ul> <li>No</li> <li>Yes (NRS&gt;3, BPS&gt;5, or CPOT&gt;2)</li> <li>(Check "yes" if pain documented as NRS&gt;3, BPS&gt;5, or CPOT&gt;2 at least once on this day)</li> </ul>
Agitation assessed Predx 3	<ul> <li>Not addressed/documented</li> <li>RASS (Richmond Agitation Sedation Scale)</li> <li>SAS (Sedation Agitation Scale)</li> <li>N/A patient discharged from ICU on this day (Check one to indicate the validated agitation scale documented at least once on this day)</li> </ul>
Sedation at target Predx 3	<ul> <li>No - (RASS -3, -4, -5, +1, +2, +3, +4) or (SAS 1, 2, 5, 6, 7)</li> <li>Yes - (RASS -2, -1, or 0) or (SAS 3, or 4)</li> <li>(Check one based on worst score of the day. Worst score = most outside of desired range on this day)</li> </ul>



Delirium assessed Predx 3	<ul> <li>Not addressed/documented</li> <li>CAM-ICU (Confusion Assessment Method for the ICU)</li> <li>ICDSC (Intensive Care Delirium Screening Checklist)</li> <li>N/A patient discharged from ICU on this day</li> <li>(Check one to indicate if delirium was documented as present at least once on this day)</li> </ul>
Delirium at target Predx 3	$\bigcirc$ No - (CAM-ICU positive) or (ICDSC >4) $\bigcirc$ Yes - (CAM-ICU negative) or (ICDSC < =4) (Check one to indicate if delirium was documented as present at least once on this day)
Sedation interruption or Light sedation protocol Predx 3	<ul> <li>Not addressed/documented</li> <li>Sedation Interruption (SI) documented</li> <li>Light Sedation Protocol (LSP) documented</li> <li>N/A patient discharged from ICU on this day</li> <li>Medical Contraindication per MD order</li> <li>(Check one to indicate sedation interruption or light sedation protocol documented at least once on this day)</li> </ul>
Mobility or Exercise Predx 3	<ul> <li>Not documented/addressed</li> <li>Passive range of motion</li> <li>Sits up in bed</li> <li>Sits on edge of bed and dangles legs</li> <li>Transfers from bed to chair (with or without assist)</li> <li>Ambulates with assist</li> <li>Independent (ambulates without assist)</li> <li>N/A patient discharged from ICU on this day</li> <li>Medical Contraindication per MD order (Check one to indicate the highest level of mobility documented at least once on this day)</li> </ul>

#### Pre-Diagnosis Day 4 (Predx 4) - four days before the procedure code diagnosis

Pain assessed Predx 4	<ul> <li>Not addressed/documented</li> <li>NRS (Numerical Rating Scale with patient self-report)</li> <li>BPS (Behavioral Pain Scale)</li> <li>CPOT (Critical Care Pain Observation Tool)</li> <li>N/A patient discharged from ICU on this day (Check one to indicate the validated pain scale documented at least once on this day)</li> </ul>
Pain high Predx 4	<ul> <li>No</li> <li>Yes (NRS&gt;3, BPS&gt;5, or CPOT&gt;2)</li> <li>(Check "yes" if pain documented as NRS&gt;3, BPS&gt;5, or CPOT&gt;2 at least once on this day)</li> </ul>
Agitation assessed Predx 4	<ul> <li>Not addressed/documented</li> <li>RASS (Richmond Agitation Sedation Scale)</li> <li>SAS (Sedation Agitation Scale)</li> <li>N/A patient discharged from ICU on this day (Check one to indicate the validated agitation</li> </ul>



Sedation at target Predx 4	<ul> <li>No - (RASS -3, -4, -5, +1, +2, +3, +4) or (SAS 1, 2, 5, 6, 7)</li> <li>Yes - (RASS -2, -1, or 0) or (SAS 3, or 4)</li> <li>(Check one based on worst score of the day. Worst score = most outside of desired range on this day)</li> </ul>
Delirium assessed Predx 4	<ul> <li>Not addressed/documented</li> <li>CAM-ICU (Confusion Assessment Method for the ICU)</li> <li>ICDSC (Intensive Care Delirium Screening Checklist)</li> <li>N/A patient discharged from ICU on this day</li> <li>(Check one to indicate if delirium was documented as present at least once on this day)</li> </ul>
Delirium at target Predx 4	$\bigcirc$ No - (CAM-ICU positive) or (ICDSC >4) $\bigcirc$ Yes - (CAM-ICU negative) or (ICDSC < =4) (Check one to indicate if delirium was documented as present at least once on this day)
Sedation interruption or Light sedation protocol Predx 4	<ul> <li>Not addressed/documented</li> <li>Sedation Interruption (SI) documented</li> <li>Light Sedation Protocol (LSP) documented</li> <li>N/A patient discharged from ICU on this day</li> <li>Medical Contraindication per MD order</li> <li>(Check one to indicate sedation interruption or light sedation protocol documented at least once on this day)</li> </ul>
Mobility or Exercise Predx 4	<ul> <li>Not documented/addressed</li> <li>Passive range of motion</li> <li>Sits up in bed</li> <li>Sits on edge of bed and dangles legs</li> <li>Transfers from bed to chair (with or without assist)</li> <li>Ambulates with assist</li> <li>Independent (ambulates without assist)</li> <li>N/A patient discharged from ICU on this day</li> <li>Medical Contraindication per MD order (Check one to indicate the highest level of mobility documented at least once on this day)</li> </ul>

#### Pre-Diagnosis Day 5 (Predx 5) - five days before the procedure code diagnosis

Pain assessed Predx 5	<ul> <li>Not addressed/documented</li> <li>NRS (Numerical Rating Scale with patient self-report)</li> <li>BPS (Behavioral Pain Scale)</li> <li>CPOT (Critical Care Pain Observation Tool)</li> <li>N/A patient discharged from ICU on this day (Check one to indicate the validated pain scale documented at least once on this day)</li> </ul>
Pain high Predx 5	<ul> <li>No</li> <li>Yes (NRS&gt;3, BPS&gt;5, or CPOT&gt;2)</li> <li>(Check "yes" if pain documented as NRS&gt;3, BPS&gt;5, or CPOT&gt;2 at least once on this day)</li> </ul>



Agitation assessed Predx 5	<ul> <li>Not addressed/documented</li> <li>RASS (Richmond Agitation Sedation Scale)</li> <li>SAS (Sedation Agitation Scale)</li> <li>N/A patient discharged from ICU on this day (Check one to indicate the validated agitation scale documented at least once on this day)</li> </ul>
Sedation at target Predx 5	<ul> <li>No - (RASS -3, -4, -5, +1, +2, +3, +4) or (SAS 1, 2, 5, 6, 7)</li> <li>Yes - (RASS -2, -1, or 0) or (SAS 3, or 4)</li> <li>(Check one based on worst score of the day. Worst score = most outside of desired range on this day)</li> </ul>
Delirium assessed Predx 5	<ul> <li>Not addressed/documented</li> <li>CAM-ICU (Confusion Assessment Method for the ICU)</li> <li>ICDSC (Intensive Care Delirium Screening Checklist)</li> <li>N/A patient discharged from ICU on this day</li> <li>(Check one to indicate if delirium was documented as present at least once on this day)</li> </ul>
Delirium at target Predx 5	$\bigcirc$ No - (CAM-ICU positive) or (ICDSC >4) $\bigcirc$ Yes - (CAM-ICU negative) or (ICDSC < =4) (Check one to indicate if delirium was documented as present at least once on this day)
Sedation interruption or Light sedation protocol Predx 5	<ul> <li>Not addressed/documented</li> <li>Sedation Interruption (SI) documented</li> <li>Light Sedation Protocol (LSP) documented</li> <li>N/A patient discharged from ICU on this day</li> <li>Medical Contraindication per MD order</li> <li>(Check one to indicate sedation interruption or light sedation protocol documented at least once on this day)</li> </ul>
Mobility or Exercise Predx 5	<ul> <li>Not documented/addressed</li> <li>Passive range of motion</li> <li>Sits up in bed</li> <li>Sits on edge of bed and dangles legs</li> <li>Transfers from bed to chair (with or without assist)</li> <li>Ambulates with assist</li> <li>Independent (ambulates without assist)</li> <li>N/A patient discharged from ICU on this day</li> <li>Medical Contraindication per MD order (Check one to indicate the highest level of mobility documented at least once on this day)</li> </ul>

Comments for this instrument and this abstraction



Confidential ally Modifiable Risk Factors Associated with the Agency for Healthcare Research and Quality's Patient Safety Indicator 11 - Postoperative Respiratory Failure

## Comments

Enter any general/overall comments for this chart abstraction

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Page 78 of 78