



## PSI #11 Postoperative Respiratory Failure

### Provider-Level Indicator

#### Numerator

Discharges among cases meeting the inclusion and exclusion rules for the denominator with ICD-9-CM codes for acute respiratory failure in any secondary diagnosis field.

#### OR

Discharges among cases meeting the inclusion and exclusion rules for the denominator with ICD-9-CM codes as follows:

- *Mechanical Ventilation for 96 consecutive hours or more* - zero or more days after the major operating room procedure code
- *Mechanical Ventilation for less than 96 consecutive hours or undetermined* - two or more days after the major operating room procedure code
- *Reintubation* - one or more days after the major operating room procedure code

*ICD-9-CM Acute Respiratory Failure diagnosis codes:*

51881 ACUTE RESPIRATORY FAILURE                      51884 ACUTE & CHRONIC RESP FAIL

*ICD-9-CM Mechanical Ventilation for 96 consecutive hours or more procedure code:*

9672 CONTINUOUS MECHANICAL VENTILATION  
FOR 96 CONSECUTIVE HRS OR MORE

*ICD-9-CM Mechanical Ventilation procedure codes:*

9670 CONTINUOUS MECHANICAL VENTILATION OF UNSPEC DURATION                      9671 CONTINUOUS MECHANICAL VENTILATION FOR LESS THAN 96 CONSECUTIVE HRS

*ICD-9-CM Reintubation procedure code:*

9604 INSERT OF ENDOTRACHEAL TUBE

#### Denominator

All elective\* surgical discharges age 18 and older defined by specific DRGs or MS-DRGs and an ICD-9-CM code for an operating room procedure.

\*Elective - SID Admission type # is recorded as elective (Admission Type = 3)

See *Patient Safety Indicators Appendices:*

- Appendix A – Operating Room Procedure Codes

- Appendix D – Surgical Discharge DRGs
- Appendix E – Surgical Discharge MS-DRGs

Exclude cases:

- with principal diagnosis of acute respiratory failure or secondary diagnosis present on admission
- with ICD-9-CM diagnosis code of neuromuscular disorder
- where a procedure for tracheostomy is the only operating room procedure
- where a procedure for tracheostomy occurs before the first operating room procedure.  
*Note: If day of procedure is not available in the input data file, the rate may be slightly lower than if the information was available.*
- with any diagnosis code of craniofacial anomalies with
  - 1) a procedure code for laryngeal or pharyngeal surgery or
  - 2) a procedure on face
- MDC 14 (pregnancy, childbirth, and puerperium)
- MDC 4 (diseases/disorders of respiratory system)
- MDC 5 (diseases/disorders of circulatory system)

*ICD-9-CM Neuromuscular Disorder codes:*

3570	AC INFECT POLYNEURITIS	35923	MYOTONIC CHONDRODYSTRPHY
35800	MYSTHNA GRVS W/O AC EXAC	3593	FAMIL PERIODIC PARALYSIS
35801	MYASTHNA GRAVS W AC EXAC	3594	TOXIC MYOPATHY
3581	MYASTHENIA IN OTH DIS	3595	MYOPATHY IN ENDOCRIN DIS
3582	TOXIC MYONEURAL DISORDER	3596	INFL MYOPATHY IN OTH DIS
3588	MYONEURAL DISORDERS NEC	35971	INCLUSION BODY MYOSITIS IBM OCT09-
3589	MYONEURAL DISORDERS NOS	35979	OTHER INFLAMMATORY AND IMMUNE MYOPATHIES, NEC OCT09-
3590	CONG HERED MUSC DYSTRPHY	35981	CRITICAL ILLNESS MYOPATHY
3591	HERED PROG MUSC DYSTRPHY	35989	MYOPATHIES NEC
3592	MYOTONIC DISORDERS	3599	MYOPATHY NOS
35922	MYOTONIA CONGENITA		

*ICD-9-CM Tracheostomy procedure codes:*

3121	MEDIASTINAL TRACHEOSTOMY	3174	REVISION OF TRACHEOSTOMY
3129	OTHER PERM TRACHEOSTOMY		

*ICD-9-CM Laryngeal or pharyngeal surgery codes:*

253	COMPLETE GLOSSECTOMY	3029	OTHER PARTIAL LARYNGECTOMY
254	RADICAL GLOSSECTOMY	303	COMPLETE LARYNGECTOMY
2731	LOCAL EXCISION OR DESTRUCTION OF LESION OR TISSUE OF BONY PALATE	304	RADICAL LARYNGECTOMY
290	PHARYNGOTOMY	313	OTHER INCISION OF LARYNX OR TRACHEA
2933	PHARYNGECTOMY (PARTIAL)	315	LOCAL EXCISION OR DESTRUCTION OF LESION OR TISSUE OF TRACHEA
2939	OTHER EXCISION OR DESTRUCTION OF LESION OR TISSUE OF PHARYNX	3169	OTHER REPAIR OF LARYNX
294	PLASTIC OPERATION ON PHARYNX	3173	CLOSURE OF OTHER FISTULA OF TRACHEA
2953	CLOSURE OF OTHER FISTULA OF PHARYNX	3175	RECONSTRUCTION OF TRACHEA AND CONSTRUCTION OF ARTIFICIAL LARYNX
2959	OTHER REPAIR OF PHARYNX	3179	OTHER REPAIR AND PLASTIC OPERATIONS ON TRACHEA
2991	DILATION OF PHARYNX	3198	OTHER OPERATIONS ON LARYNX
3009	OTHER EXCISION OR DESTRUCTION OF LESION OR TISSUE OF LARYNX	3199	OTHER OPERATIONS ON TRACHEA
3021	EPIGLOTTIDECTOMY		
3022	VOCAL CORDECTOMY		

*ICD-9-CM Procedure on face codes:*

252	PARTIAL GLOSSECTOMY
-----	---------------------

2559	OTHER REPAIR AND PLASTIC OPERATIONS ON TONGUE	7665	SEGMENTAL OSTEOPLASTY [OSTEOTOMY] OF MAXILLA
2732	WIDE EXCISION OR DESTRUCTION OF LESION OR TISSUE OF BONY PALATE	7666	TOTAL OSTEOPLASTY [OSTEOTOMY] OF MAXILLA
2762	CORRECTION OF CLEFT PALATE	7646	OTHER RECONSTRUCTION OF OTHER FACIAL BONE
2763	REVISION OF CLEFT PALATE REPAIR	7669	OTHER FACIAL BONE REPAIR
2769	OTHER PLASTIC REPAIR OF PALATE	7691	BONE GRAFT TO FACIAL BONE
2931	CRICOPHARYNGEAL MYOTOMY		

*ICD-9-CM Craniofacial abnormality diagnosis codes:*

74483	MACROSTOMIA	7483	CONGENITAL ANOMALIES OF SKULL AND FACE BONES
74484	MICROSTOMIA		
7449	UNSPECIFIED ANOMALIES OF FACE AND NECK	7560	TRACHEOMALACIA AND CONGENITAL TRACHEAL STENOSIS