

# Inpatient Population & Sampling Abstraction Tools

*Specifications Manual for National Hospital Inpatient Quality Measures, Version 3.2b*  
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## Acute Myocardial Infarction (AMI) Initial Patient Population

Patients admitted to the hospital for inpatient acute care with an *ICD-9-CM Principal Diagnosis Code* for AMI as defined in Appendix A, Table 1.1, a Patient Age (*Admission Date* minus *Birth Date*) greater than or equal to 18 years, and a Length of Stay (*Discharge Date* minus *Admission Date*) less than or equal to 120 days are included in the AMI Initial Patient Population and are eligible to be sampled.

### 4<sup>th</sup> Quarter 2010 – 1<sup>st</sup> Quarter 2011 Inpatient Discharges

AMI Quarterly Sampling		AMI Monthly Sampling	
Average Quarterly Initial Inpt Population	Minimum Required Sample Size	Initial Inpt Population	Minimum Sample Size
≥ 1551	311	≥ 516	104
391 – 1550	20% of Initial Inpatient Population	131 – 515	20% of Initial Inpatient Population
78 – 390	78	26 – 130	26
6 – 77	100% of Initial Inpatient Population	< 26	100% of Initial Inpatient Population
0 – 5	Submission encouraged; if submission occurs, CMS requires 1–5 cases, TJC requires 100%.		

## Heart Failure (HF) Initial Patient Population

Patients admitted to the hospital for inpatient acute care with an *ICD-9-CM Principal Diagnosis Code* for HF as defined in Appendix A, Table 2.1, no *ICD-9-CM Principal or Other Procedure Code* of Left Ventricular Assistive Device (LVAD) or Heart Transplant as defined in Appendix A, Table 2.2, a Patient Age (*Admission Date* minus *Birthdate*) greater than or equal to 18 years, and a Length of Stay (*Discharge Date* minus *Admission Date*) less than or equal to 120 days are included in the HF Initial Patient Population and are eligible to be sampled.

### 4<sup>th</sup> Quarter 2010 – 1<sup>st</sup> Quarter 2011 Inpatient Discharges

HF Quarterly Sampling		HF Monthly Sampling	
Average Quarterly Initial Inpt Population	Minimum Required Sample Size	Initial Inpt Population	Minimum Sample Size
≥ 1516	304	≥ 506	102
381 – 1515	20% of Initial Inpatient Population	131 – 505	20% of Initial Inpatient Population
76 – 380	76	26 – 130	26
6 – 75	100% of Initial Inpatient Population	< 26	100% of Initial Inpatient Population
0 – 5	Submission encouraged; if submission occurs, CMS requires 1–5 cases, TJC requires 100%.		

## Pneumonia (PN) Initial Patient Population

Patients admitted to the hospital for inpatient acute care are included in the PN Initial Patient Population and are eligible to be sampled if they have:

An *ICD-9-CM Principal Diagnosis Code* for PN as defined in Appendix A, Table 3.1, **NO ICD-9-CM Other Diagnosis Code** of Cystic Fibrosis as defined in Appendix A, Table 3.4, a Patient Age (*Admission Date* minus *Birth Date*) greater than or equal to 18 years, and a Length of Stay (*Discharge Date* minus *Admission Date*) less than or equal to 120 days

**OR**

An *ICD-9-CM Principal Diagnosis Code* of Septicemia or Respiratory Failure as defined in Appendix A, Table 3.2 and Table 3.3 accompanied by an *ICD-9-CM Other Diagnosis Code* of PN as defined in Appendix A, Table 3.1, **NO ICD-9-CM Other Diagnosis Code** of Cystic Fibrosis as defined in Appendix A, Table 3.4, a Patient Age (*Admission Date* minus *Birth Date*) greater than or equal to 18 years, and a Length of Stay (*Discharge Date* minus *Admission Date*) less than or equal to 120 days

### 4<sup>th</sup> Quarter 2010 – 1<sup>st</sup> Quarter 2011 Inpatient Discharges

PN Quarterly Sampling		PN Monthly Sampling	
Average Quarterly Initial Inpt Population	Minimum Required Sample Size	Initial Inpt Population	Minimum Sample Size
≥ 1201	241	≥ 401	81
301 – 1200	20% of Initial Inpatient Population	101 – 400	20% of Initial Inpatient Population
60 – 300	60	20 – 100	20
6 – 59	100% of Initial Inpatient Population	< 20	100% of Initial Inpatient Population
0 – 5	Submission encouraged; if submission occurs, CMS requires 1–5 cases, TJC requires 100%.		

## Surgical Care Improvement Project (SCIP) Initial Patient Population

The SCIP Topic Population (common to all SCIP measures) is defined as patients admitted to the hospital for inpatient acute care with an *ICD-9-CM Principal Procedure Code* for SCIP as defined in Appendix A, Table 5.10 and a Length of Stay (*Discharge Date minus Admission Date*) less than or equal to 120 days. There are eight distinct strata or sub-populations within the SCIP Topic Population, each identified by a specific group of procedure codes. The patients in each stratum are counted in the Initial Patient Population of multiple measures.

Patients admitted to the hospital for inpatient acute care are included in one of the SCIP ICD Strata Populations and are eligible to be sampled if they have:

- 1 – CABG stratum** – Patients with an *ICD-9-CM Principal Procedure Code* as defined in Appendix A, Table 5.01 and a Length of Stay (*Discharge Date minus Admission Date*) less than or equal to 120 days.
- 2 – Other Cardiac Surgery stratum** – Patients with an *ICD-9-CM Principal Procedure Code* as defined in Appendix A, Table 5.02 and a Length of Stay (*Discharge Date minus Admission Date*) less than or equal to 120 days.
- 3 – Hip Arthroplasty stratum** – Patients with an *ICD-9-CM Principal Procedure Code* as defined in Appendix A, Table 5.04 and a Length of Stay (*Discharge Date minus Admission Date*) less than or equal to 120 days.
- 4 – Knee Arthroplasty stratum** – Patients with an *ICD-9-CM Principal Procedure Code* as defined in Appendix A, Table 5.05 and a Length of Stay (*Discharge Date minus Admission Date*) less than or equal to 120 days.
- 5 – Colon Surgery stratum** – Patients with an *ICD-9-CM Principal Procedure Code* as defined in Appendix A, Table 5.03 and a Length of Stay (*Discharge Date minus Admission Date*) less than or equal to 120 days.
- 6 – Hysterectomy stratum** – Patients with an *ICD-9-CM Principal Procedure Code* as defined in Appendix A, on either Table 5.06 (Abdominal) or Table 5.07 (Vaginal) and a Length of Stay (*Discharge Date minus Admission Date*) less than or equal to 120 days.
- 7 – Vascular Surgery stratum** – Patients with an *ICD-9-CM Principal Procedure Code* as defined in Appendix A, Table 5.08 and a Length of Stay (*Discharge Date minus Admission Date*) less than or equal to 120 days.
- 8 – Other Major Surgery stratum** – Patients with an *ICD-9-CM Principal Procedure Code* as defined in Appendix A, Table 5.25 (Other Major Surgery for Sampling) and a Length of Stay (*Discharge Date minus Admission Date*) less than or equal to 120 days.

### 4<sup>th</sup> Quarter 2010 – 1<sup>st</sup> Quarter 2011 Inpatient Discharges

SCIP Quarterly Sampling (per stratum)		SCIP Monthly Sampling (per stratum)	
Average Quarterly Initial Inpt Population	Minimum Required Sample Size	Initial Inpt Population	Minimum Sample Size
≥ 481	49	≥ 151	16
171 – 480	10% of Initial Inpatient Population	61 – 150	10% of Initial Inpatient Population
17 – 170	17	6 – 60	6
< 17	100% of Initial Inpatient Population	< 6	100% of Initial Inpatient Population
0–5 for <b>ALL STRATA COMBINED</b>	Submission not required; if submission occurs, 100% Initial Patient Population required.		

## Emergency Department (ED) Initial Patient Population

(Voluntary Submission Beginning with 4<sup>th</sup> Quarter 2010 Discharges)

All patients discharged from acute inpatient care are included in the ED Initial Patient Population and are eligible to be sampled if they have a valid *ICD-9-CM Principal Diagnosis Code* and a Length of Stay (*Discharge Date minus Admission Date*) less than or equal to 120 days.

### 4<sup>th</sup> Quarter 2010 - 1<sup>st</sup> Quarter 2011 Inpatient Discharges

ED Quarterly Sampling		ED Monthly Sampling	
Average Quarterly Initial Inpt Population	Minimum Required Sample Size	Initial Inpt Population	Minimum Sample Size
≥ 1000	200	≥ 333	67
250 – 999	20% of Initial Inpatient Population	85 – 332	20% of Initial Inpatient Population
50 – 249	50	18 – 84	18
6 – 49	100% of Initial Inpatient Population	< 18	100% of Initial Inpatient Population
0 – 5	Submission encouraged; if submission occurs, 1–5 cases of the initial inpatient population may be submitted.		

**Note:** The Initial Patient Population for the new ED measures includes **both** ED and non-ED cases. This means that the cases that are in your sample (or the cases that will need to be pulled for abstraction) will also be composed of both ED and non-ED admissions. If you look at the analytic flowcharts for each measure, the first data element in the flowchart is *ED Patient*. If you abstract “no” to this data element, the case is excluded and therefore not in the denominator for that measure. Abstraction will stop at that point for that case.

Ideally, non-ED cases would be excluded from the Initial Patient Population; however, unlike the other populations (AMI, HF, PN, and SCIP), there are no ICD-9-CM codes that define ED patients. The measure developers are looking at other standardized codes, such as the Revenue Codes used for billing, to determine the appropriate population; however there are still issues with doing this.



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