WEB APPENDICIES: SUPPLEMENTAL MATERIAL

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Web Appendix Table 1. International Classification of Disease, Ninth Revision, Clinical Modification Codes Used to Define Heart Failure, Acute Myocardial Infarction, and Pneumonia Cohorts

Cohort Name	Constituent ICD-9-CM Codes
Heart failure	402.01, 402.11, 402.91, 404.01, 404.03, 404.11,
	404.13, 404.91, 404.93, 428.xx
Acute myocardial infarction	410.xx excluding those with 410.x2 (acute
	myocardial infarction, subsequent episode of care)
Pneumonia	480.x, 481, 482.xx, 483.x, 485, 486, 487.0, and
	488.11

ICD-9-CM: International Classification of Diseases, Ninth Revision, Clinical Modification

Web Appendix Table 2. Age-Sex-Race Standardized Relative Risks of Hospitalization and Death Comparing Study

Populations to the Medicare Fee-for-Service Population

Discharge Diagnosis	Outcome	Age-Sex-Race Standardized Cumulative Incidence Ratio by Day After Discharge (95% CI)				
		30	60	90	180	365
Heart Failure	Hospitalization	15.8 (15.7-15.9)	11.6 (11.6-11.7)	8.5 (8.4-8.5)	6.0 (6.0-6.0)	3.5 (3.5-3.5)
	Death	17.8 (17.7-18.0)	14.2 (14.1-14.3)	11.0 (11.0-11.1)	8.9 (8.8-8.9)	6.3 (6.3-6.3)
Acute Myocardial Infarction	Hospitalization	11.8 (11.7-11.8)	8.2 (8.1-8.2)	6.4 (6.4-6.5)	4.2 (4.2-4.2)	2.6(2.5-2.6)
	Death	15.9 (15.8-16.1)	11.4 (11.3-11.5)	8.4 (8.4-8.5)	6.4 (6.4-6.4)	4.3 (4.3-4.4)
Pneumonia	Hospitalization	11.5 (11.4-11.5)	8.4 (8.4-8.4)	6.2 (6.2-6.2)	4.6 (4.6-4.6)	2.9 (2.9-2.9)
	Death	18.0 (17.9-18.2)	13.8 (13.7-13.9)	10.4 (10.3-10.4)	8.1 (8.0-8.1)	5.6 (5.6-5.6)

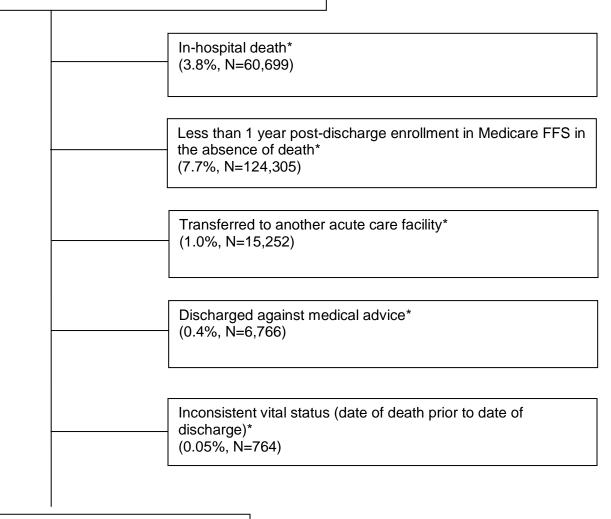
CI: confidence interval

Web Appendix Figure 1: Flow Diagrams Describing Patient Exclusions for Heart Failure,

Acute Myocardial Infarction, and Pneumonia Cohorts.

1) Heart Failure

Total hospitalizations for heart failure among patients \geq 65 years-old in 2008 to 2010 N=1,609,069

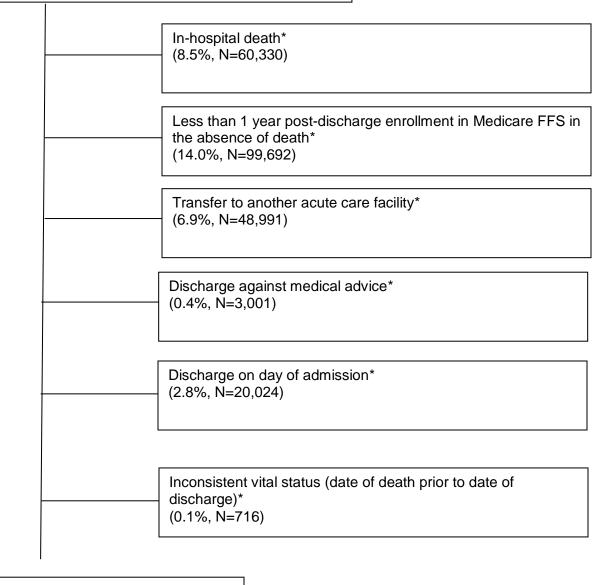


Final cohort N=1,462,453 HF hospitalizations (972,339 unique patients)

*Categories are not mutually exclusive

2) Acute Myocardial Infarction

Total hospitalizations for acute myocardial infarction among patients ≥65 years-old in 2008 to 2010 N=713,446

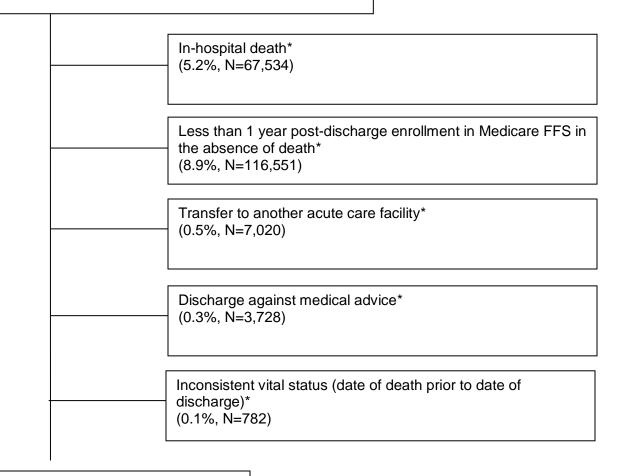


Final cohort N=561,926 AMI hospitalizations (516,380 unique patients)

*Categories are not mutually exclusive

3) Pneumonia

Total hospitalizations for pneumonia among patients \geq 65 years-old in 2008 to 2010 N=1,308,213

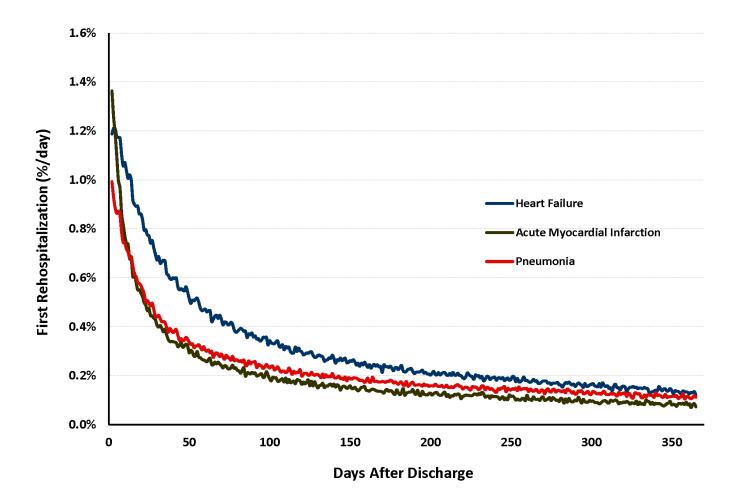


Final cohort N=1,125,234 pneumonia hospitalizations (951,084 patients)

*Categories are not mutually exclusive

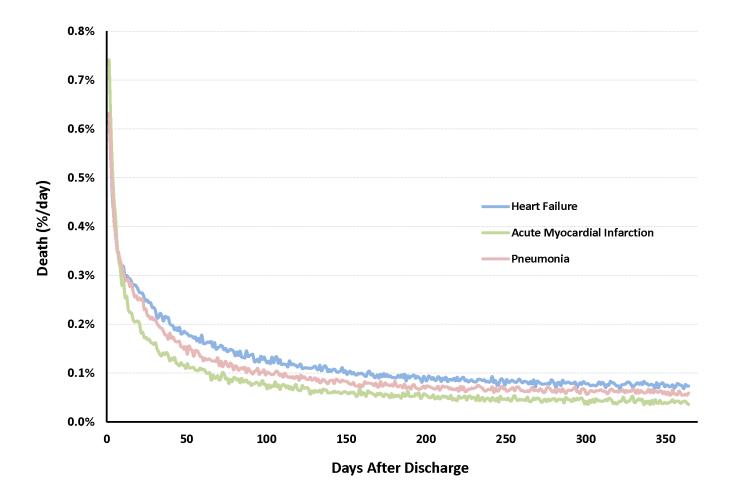
Web Appendix Figure 2. Risk of First Rehospitalization and Death by Day after Hospitalization for Heart Failure, Acute Myocardial Infarction, or Pneumonia

A. First Rehospitalization



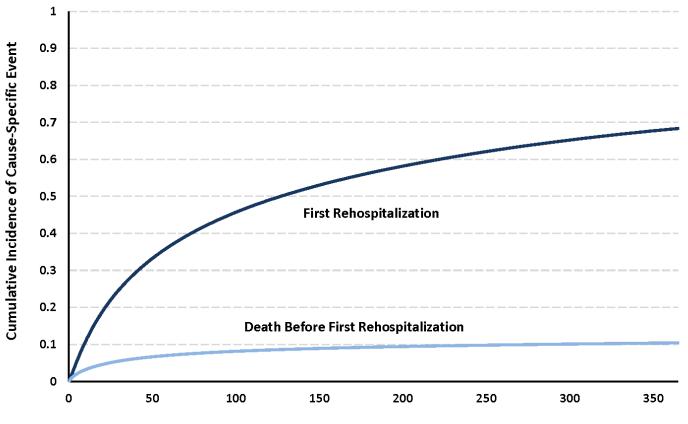
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B. Death



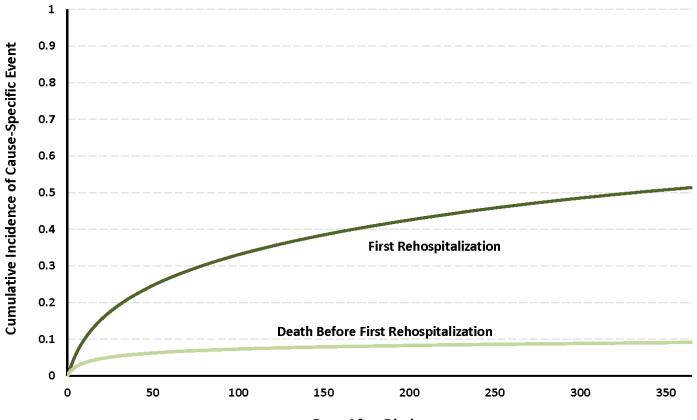
Web Appendix Figure 3. Cumulative Incidence Functions for Competing Risk Analysis of First Rehospitalization by Day After Hospitalization for Heart Failure, Acute Myocardial Infarction, or Pneumonia

A. Heart Failure



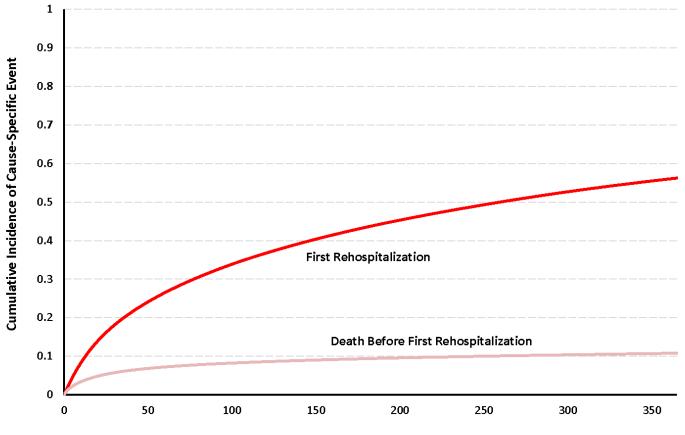
Days After Discharge

B. Acute Myocardial Infarction



Days After Discharge

C. Pneumonia



Days After Discharge