

SUPPLEMENTAL MATERIAL

Supplemental Table I: ICD-9-CM codes used to define heart failure.

Code	Description
398.91	Rheumatic heart failure (congestive)
402.01	Malignant hypertensive heart disease with heart failure
402.11	Benign hypertensive heart disease with heart failure
402.91	Unspecified hypertensive heart disease with heart failure
404.01	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage i through stage iv, or unspecified
404.03	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage v or end stage renal disease
404.11	Hypertensive heart and chronic kidney disease, benign, with heart failure and with chronic kidney disease stage i through stage iv, or unspecified
404.13	Hypertensive heart and chronic kidney disease, benign, with heart failure and chronic kidney disease stage v or end stage renal disease
404.91	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and with chronic kidney disease stage i through stage iv, or unspecified
404.93	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and chronic kidney disease stage v or end stage renal disease
428.0	Congestive heart failure unspecified
428.1	Left heart failure
428.20	Unspecified systolic heart failure
428.21	Acute systolic heart failure
428.22	Chronic systolic heart failure
428.23	Acute on chronic systolic heart failure
428.30	Unspecified diastolic heart failure
428.31	Acute diastolic heart failure
428.32	Chronic diastolic heart failure
428.33	Acute on chronic diastolic heart failure
428.40	Unspecified combined systolic and diastolic heart failure
428.41	Acute combined systolic and diastolic heart failure
428.42	Chronic combined systolic and diastolic heart failure
428.43	Acute on chronic combined systolic and diastolic heart failure
428.9	Heart failure unspecified

Supplemental Table II: HF patient characteristics and comorbidities nationally by sex for 2002, 2007, 2013 from the National Inpatient Sample.

	2002		2007		2013	
	Male	Female	Male	Female	Male	Female
Age	70.49	74.90	69.86	74.97	69.98	74.64
<u>Race/Ethnicity</u>						
White	70.51%	70.31%	65.82%	67.25%	67.22%	67.93%
Black	17.65%	18.31%	20.41%	19.79%	19.93%	20.13%
Hispanic	7.18%	7.08%	8.07%	7.59%	7.91%	7.33%
Asian/PI	1.68%	1.52%	1.78%	1.83%	2.01%	1.93%
<u>Census Region</u>						
New England	4.72%	4.81%	6.36%	6.77%	4.85%	5.11%
Mid Atlantic	16.26%	16.34%	13.27%	12.92%	14.95%	15.12%
East North Central	15.99%	16.77%	18.15%	18.79%	16.31%	17.20%
West North Central	7.10%	7.34%	5.78%	6.33%	6.13%	6.23%
South Atlantic	26.73%	25.95%	25.40%	24.75%	22.07%	21.77%
East South Central	5.41%	6.40%	4.37%	4.59%	7.29%	8.12%
West South Central	8.03%	7.83%	10.28%	10.58%	11.32%	11.26%
Mountain	2.12%	1.95%	4.04%	3.29%	4.58%	3.79%
Pacific	13.65%	12.62%	12.36%	11.98%	12.50%	11.40%
<u>Hospital Size</u>						
Small	12.20%	13.02%	12.71%	14.37%	14.48%	15.85%
Medium	25.29%	26.44%	26.28%	27.38%	26.73%	27.31%
Large	62.51%	60.54%	61.01%	58.25%	58.79%	56.84%
<u>Hospital Location</u>						
Rural	17.60%	19.81%	14.52%	16.78%	13.22%	15.19%
Urban, nonteaching	45.48%	45.81%	44.54%	45.37%	38.88%	39.68%
Urban, teaching	36.92%	34.38%	40.94%	37.85%	47.90%	45.14%
<u>Primary Payer</u>						
Medicare	72.66%	79.41%	69.88%	78.14%	70.27%	79.63%
Medicaid	6.18%	6.88%	7.54%	7.38%	8.64%	7.49%
Private insurance	15.77%	10.90%	15.20%	10.50%	13.12%	8.96%
Self-pay	3.11%	1.62%	4.28%	2.33%	4.59%	2.32%
No charge	0.27%	0.16%	0.52%	0.30%	0.51%	0.24%
Other	1.93%	1.00%	2.41%	1.23%	2.70%	1.24%
<u>Comorbidities†</u>						
HTN	57.08%	60.42%	64.73%	66.04%	70.96%	70.55%
CAD	30.55%	24.20%	32.00%	26.62%	34.92%	28.39%
Atrial fibrillation	14.55%	10.92%	17.02%	12.33%	19.54%	14.91%
Obese	17.35%	20.39%	19.65%	20.90%	30.97%	34.50%
Valve disease	15.60%	18.36%	18.70%	21.71%	21.57%	23.76%
VT	6.24%	3.67%	7.56%	4.31%	8.49%	5.09%
AMI	1.72%	1.62%	1.96%	1.72%	2.36%	2.00%
PVD	4.25%	4.14%	5.05%	4.84%	6.77%	6.51%
DM	30.85%	36.26%	32.79%	38.55%	37.67%	40.88%
COPD	18.26%	16.37%	18.13%	17.30%	17.62%	17.97%
Anemia	15.40%	24.16%	18.56%	28.57%	25.91%	36.56%
Fluid/electrolyte	18.86%	19.20%	23.25%	24.99%	31.69%	31.97%

PI = Pacific Islander, HTN = hypertension, CAD = coronary artery disease, VT = ventricular tachycardia, AMI = acute myocardial infarction, PVD = peripheral vascular disease, DM = diabetes mellitus, COPD = chronic obstructive pulmonary disease.

† Age-standardized proportions to 2000 U.S. standard population.

Supplemental Table III: HF patient characteristics and comorbidities nationally by race/ethnicity for 2002, 2007, 2013 from the National Inpatient Sample.

	2002				2007				2013			
	White	Black	Hispanic	Asian	White	Black	Hispanic	Asian	White	Black	Hispanic	Asian
<i>Age</i>	75.67	63.96	69.28	72.57	76.06	62.93	67.62	71.90	75.39	63.36	68.96	71.53
<i>Female</i>	54.67%	55.65%	54.37%	52.28%	51.88%	50.56%	49.78%	51.97%	49.28%	49.41%	47.17%	47.98%
<i>Census Region</i>												
<i>New England</i>	5.85%	1.88%	2.90%	1.82%	8.49%	2.48%	3.40%	2.14%	6.21%	2.00%	3.50%	2.43%
<i>Mid Atlantic</i>	18.63%	11.04%	8.40%	5.91%	12.98%	13.12%	12.94%	10.59%	15.05%	14.62%	13.39%	10.84%
<i>East North Central</i>	17.12%	16.46%	11.15%	11.86%	18.57%	21.90%	10.34%	10.79%	17.92%	18.01%	5.74%	8.51%
<i>West North Central</i>	7.92%	7.51%	1.55%	1.84%	7.36%	4.26%	1.55%	2.35%	7.42%	4.28%	1.93%	2.32%
<i>South Atlantic</i>	24.50%	36.82%	21.53%	8.60%	23.68%	33.07%	19.91%	12.26%	19.47%	34.30%	17.56%	7.19%
<i>East South Central</i>	5.70%	8.77%	2.56%	1.47%	4.84%	3.87%	2.01%	1.31%	9.50%	5.82%	0.78%	0.66%
<i>West South Central</i>	6.32%	7.25%	23.42%	5.44%	9.49%	11.31%	17.82%	3.72%	9.76%	12.28%	21.67%	5.26%
<i>Mountain</i>	2.23%	1.12%	1.75%	1.83%	3.83%	2.04%	5.24%	2.65%	4.48%	1.81%	7.01%	4.02%
<i>Pacific</i>	11.74%	9.14%	26.73%	61.21%	10.76%	7.95%	26.79%	54.19%	10.18%	6.90%	28.41%	58.74%
<i>Hospital Size</i>												
<i>Small</i>	13.92%	8.56%	9.23%	21.12%	14.98%	10.85%	8.55%	14.30%	16.47%	11.97%	11.88%	14.28%
<i>Medium</i>	25.00%	27.87%	31.51%	25.39%	26.63%	26.78%	27.22%	36.18%	26.75%	27.39%	29.79%	24.91%
<i>Large</i>	61.09%	63.57%	59.25%	53.49%	58.39%	62.37%	64.23%	49.53%	56.78%	60.64%	58.33%	60.80%
<i>Hospital Location</i>												
<i>Rural</i>	21.33%	12.26%	11.71%	11.69%	18.36%	10.50%	7.33%	3.69%	17.40%	7.47%	5.59%	5.84%
<i>Urban, nonteaching</i>	47.97%	35.99%	49.08%	49.17%	48.54%	34.49%	44.82%	44.77%	41.23%	30.41%	44.87%	47.42%
<i>Urban, teaching</i>	30.70%	51.76%	39.21%	39.14%	33.11%	55.01%	47.85%	51.54%	41.38%	62.12%	49.54%	46.73%
<i>Primary Payer</i>												
<i>Medicare</i>	81.85%	60.86%	66.99%	64.88%	81.41%	57.35%	59.88%	66.59%	81.30%	59.70%	63.61%	65.27%
<i>Medicaid</i>	3.50%	14.70%	13.13%	13.68%	3.29%	15.41%	19.18%	14.93%	4.05%	17.06%	16.15%	15.12%
<i>Private Insurance</i>	12.15%	16.56%	12.96%	16.84%	11.87%	16.18%	11.74%	13.95%	13.79%	9.98%	12.72%	11.63%
<i>Self-Pay</i>	1.24%	5.14%	4.61%	3.02%	1.74%	7.31%	5.62%	3.02%	2.25%	6.19%	6.73%	4.42%
<i>No Charge</i>	0.10%	0.54%	0.35%	0.10%	0.20%	0.84%	1.01%	0.15%	0.21%	0.78%	0.70%	0.29%
<i>Other</i>	1.12%	2.14%	1.93%	1.50%	1.44%	2.71%	2.54%	1.31%	1.76%	2.36%	2.73%	2.14%
<i>Comorbidities †</i>												
<i>HTN</i>	44.72%	72.02%	57.60%	58.87%	53.73%	74.46%	68.13%	65.84%	63.51%	79.13%	69.70%	67.57%
<i>CAD</i>	29.79%	22.88%	28.54%	29.92%	32.43%	25.76%	29.34%	29.33%	34.73%	28.83%	31.55%	32.40%
<i>Atrial Fibrillation</i>	15.96%	8.72%	11.54%	19.52%	18.58%	10.85%	13.01%	20.78%	20.80%	13.80%	14.78%	18.80%
<i>Obese</i>	17.20%	20.43%	15.75%	12.72%	19.98%	22.02%	16.18%	14.89%	31.78%	33.65%	29.96%	23.59%
<i>Valve Disease</i>	19.43%	13.63%	16.78%	19.82%	20.48%	19.00%	17.38%	20.69%	23.99%	20.27%	20.98%	23.56%
<i>VT</i>	5.63%	5.20%	4.72%	2.94%	6.66%	6.33%	4.87%	3.90%	8.05%	6.79%	4.96%	5.72%
<i>AMI</i>	1.81%	1.26%	2.12%	3.12%	2.43%	1.42%	1.68%	3.15%	2.66%	1.55%	2.90%	2.86%
<i>PVD</i>	4.58%	3.58%	4.23%	2.78%	5.30%	4.23%	4.93%	4.00%	7.52%	5.56%	6.64%	6.17%
<i>DM</i>	31.91%	33.93%	38.82%	34.10%	33.20%	34.94%	42.36%	40.50%	37.08%	39.16%	45.00%	46.80%
<i>COPD</i>	20.48%	14.62%	12.29%	11.64%	21.14%	15.52%	12.21%	9.25%	21.07%	15.49%	11.67%	10.44%
<i>Anemia</i>	15.36%	22.42%	19.09%	19.70%	19.38%	24.11%	25.85%	20.22%	26.05%	33.64%	31.78%	31.31%
<i>Fluid/Electrolyte</i>	18.52%	19.94%	16.79%	19.60%	25.12%	23.29%	25.25%	26.28%	31.54%	31.69%	32.87%	29.23%

PI = Pacific Islander, HTN = hypertension, CAD = coronary artery disease, VT = ventricular tachycardia, AMI = acute myocardial infarction, PVD = peripheral vascular disease, DM = diabetes mellitus, COPD = chronic obstructive pulmonary disease.

† Age-standardized proportions to 2000 U.S. standard population.

Supplemental Table IV: National trends in disposition after a primary heart failure admission from the National Inpatient Sample.

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<i>National (unadjusted)</i>												
<i>LOS (mean)</i>	5.59	5.54	5.49	5.38	5.30	5.26	5.29	5.26	5.20	5.13	5.22	5.28
<i>Died</i>	4.26%	4.07%	3.95%	3.78%	3.50%	3.24%	3.29%	3.21%	3.05%	3.05%	3.09%	3.01%
<i>Home/Home health</i>	74.13%	74.56%	73.11%	73.08%	73.69%	73.11%	73.23%	73.22%	72.85%	72.13%	72.77%	72.83%
<i>SNF/ICF</i>	16.85%	16.69%	18.09%	18.63%	18.43%	19.29%	19.34%	19.35%	19.97%	20.60%	20.11%	20.04%
<i>Short-term hospital</i>	3.65%	3.51%	3.81%	3.45%	3.25%	3.17%	2.98%	3.06%	2.94%	3.02%	2.94%	2.94%
<i>Other</i>	1.11%	1.16%	1.03%	1.06%	1.13%	1.19%	1.16%	1.17%	1.19%	1.19%	1.10%	1.19%
<i>National (age-standardized)</i>												
<i>Died</i>	2.46%	2.36%	2.22%	1.90%	2.00%	2.04%	1.97%	2.09%	1.82%	1.85%	1.96%	1.77%
<i>Home/Home health</i>	84.45%	85.19%	83.94%	84.22%	84.45%	84.15%	85.13%	83.78%	84.90%	84.33%	84.77%	84.80%
<i>SNF/ICF</i>	5.71%	5.78%	6.31%	6.28%	6.33%	6.56%	6.27%	6.59%	6.53%	6.88%	6.78%	6.93%
<i>Short-term hospital</i>	4.54%	4.01%	4.79%	4.61%	4.17%	4.03%	3.86%	4.29%	3.54%	3.90%	3.83%	3.50%
<i>Other</i>	2.84%	2.67%	2.74%	3.00%	3.04%	3.22%	2.77%	3.25%	3.21%	3.04%	2.67%	3.00%

Supplemental Table V: National trends in disposition after a primary heart failure admission by sex from the NIS.

<i>Male (unadjusted)</i>	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<i>LOS (mean)</i>	5.51	5.44	5.36	5.25	5.19	5.17	5.21	5.24	5.16	5.10	5.24	5.28
<i>Died</i>	4.46%	4.11%	3.99%	3.77%	3.40%	3.13%	3.28%	3.19%	3.01%	3.06%	3.12%	3.07%
<i>Home/Home health</i>	77.10%	78.01%	76.55%	76.86%	77.31%	76.88%	76.95%	76.68%	76.52%	75.59%	76.10%	75.84%
<i>SNF/ICF</i>	12.86%	12.50%	13.73%	13.93%	14.01%	14.75%	14.86%	15.08%	15.49%	16.26%	15.98%	16.06%
<i>Short-term hospital</i>	4.08%	3.90%	4.26%	3.89%	3.63%	3.57%	3.29%	3.39%	3.29%	3.41%	3.23%	3.33%
<i>Other</i>	1.51%	1.48%	1.47%	1.56%	1.65%	1.68%	1.62%	1.66%	1.69%	1.67%	1.57%	1.69%
<i>Male (age-standardized)</i>												
<i>Died</i>	2.79%	2.36%	2.39%	2.14%	2.19%	2.21%	2.01%	2.18%	2.01%	1.67%	2.15%	2.01%
<i>Home/Home health</i>	83.55%	85.19%	83.68%	83.71%	84.02%	84.30%	82.88%	84.03%	84.87%	84.91%	84.66%	84.71%
<i>SNF/ICF</i>	5.43%	5.11%	5.67%	5.65%	5.83%	6.16%	5.54%	6.13%	5.62%	5.96%	6.16%	6.48%
<i>Short-term hospital</i>	4.97%	4.20%	4.97%	4.95%	4.48%	3.85%	4.25%	4.13%	3.79%	3.98%	4.03%	3.61%
<i>Other</i>	3.26%	3.15%	3.30%	3.56%	3.48%	3.48%	5.33%	3.53%	3.71%	18.25%	3.00%	3.19%
<i>Female (unadjusted)</i>												
<i>LOS (mean)</i>	5.67	5.62	5.60	5.49	5.40	5.35	5.36	5.27	5.24	5.16	5.20	5.28
<i>Died</i>	4.09%	4.04%	3.92%	3.80%	3.59%	3.34%	3.31%	3.21%	3.09%	3.05%	3.05%	2.94%
<i>Home/Home health</i>	71.68%	71.63%	70.06%	69.60%	70.30%	69.54%	69.66%	69.82%	69.16%	68.74%	69.43%	69.69%
<i>SNF/ICF</i>	20.15%	20.23%	21.97%	22.95%	22.59%	23.59%	23.62%	23.54%	24.47%	24.87%	24.26%	24.17%
<i>Short-term hospital</i>	3.29%	3.19%	3.42%	3.05%	2.88%	2.80%	2.69%	2.74%	2.60%	2.63%	2.64%	2.53%
<i>Other</i>	0.78%	0.90%	0.63%	0.59%	0.65%	0.72%	0.72%	0.69%	0.68%	0.71%	0.62%	0.67%
<i>Female (age-standardized)</i>												
<i>Died</i>	2.05%	2.31%	2.12%	1.74%	1.75%	1.71%	2.04%	2.05%	1.61%	2.24%	1.67%	1.46%
<i>Home/Home health</i>	85.70%	85.46%	84.59%	85.07%	85.50%	84.51%	85.51%	83.60%	84.75%	83.85%	85.25%	84.96%
<i>SNF/ICF</i>	6.00%	6.48%	6.82%	6.74%	6.78%	6.94%	7.14%	7.09%	7.90%	7.85%	7.55%	7.66%
<i>Short-term hospital</i>	4.02%	3.63%	4.54%	4.40%	3.58%	4.11%	3.34%	4.54%	3.31%	3.86%	3.41%	3.27%
<i>Other</i>	2.24%	2.12%	1.93%	2.05%	2.40%	2.73%	1.98%	2.72%	2.42%	2.20%	2.12%	2.65%

LOS = length of stay, Home/Home health = discharged home or with home health care services, SNF/ICF = discharged to skilled nursing facility, intermediate care facility, or another type of facility, Transfer short-term, Other = includes missing, against medical advice, discharged to court/law enforcement

Supplemental Table VI: National trends in disposition after a primary heart failure admission by race/ethnicity from the NIS.

White (unadjusted)	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<i>LOS (mean)</i>	5.58	5.60	5.46	5.41	5.25	5.21	5.25	5.20	5.17	5.09	5.16	5.23
<i>Died</i>	4.84%	4.61%	4.44%	4.31%	3.97%	3.73%	3.73%	3.72%	3.58%	3.57%	3.58%	3.44%
<i>Home/Home health</i>	71.14%	71.55%	70.19%	70.11%	70.58%	69.60%	70.15%	69.93%	68.95%	68.33%	69.15%	69.21%
<i>SNF/ICF</i>	19.34%	19.24%	20.67%	21.22%	21.32%	22.49%	22.13%	22.34%	23.54%	24.00%	23.34%	23.30%
<i>Short-term hospital</i>	3.84%	3.71%	3.95%	3.55%	3.39%	3.34%	3.16%	3.25%	3.13%	3.21%	3.12%	3.18%
<i>Other</i>	0.84%	0.90%	0.75%	0.81%	0.73%	0.83%	0.82%	0.75%	0.80%	0.89%	0.80%	0.87%
White (age-standardized)												
<i>Died</i>	3.03%	2.32%	2.85%	2.42%	2.37%	2.00%	2.62%	2.66%	2.22%	2.66%	2.22%	1.89%
<i>Home/Home health</i>	81.16%	84.19%	81.83%	82.79%	84.64%	83.05%	84.09%	82.88%	83.08%	81.49%	83.11%	82.97%
<i>SNF/ICF</i>	6.06%	6.53%	6.90%	7.06%	6.33%	6.73%	6.53%	7.05%	6.90%	7.88%	7.38%	7.65%
<i>Short-term hospital</i>	7.05%	5.06%	6.22%	5.45%	4.48%	5.67%	4.62%	4.88%	5.22%	5.76%	4.83%	4.63%
<i>Other</i>	2.70%	1.90%	2.21%	2.29%	2.18%	2.54%	2.14%	2.53%	2.58%	2.21%	2.47%	2.87%
Black (unadjusted)												
<i>LOS (mean)</i>	5.59	5.67	5.47	5.29	5.40	5.31	5.30	5.30	5.23	5.19	5.33	5.40
<i>Died</i>	2.55%	2.41%	2.36%	2.07%	2.05%	1.97%	1.89%	1.75%	1.72%	1.72%	1.76%	1.69%
<i>Home/Home health</i>	82.41%	82.48%	80.80%	81.26%	81.33%	81.03%	81.57%	81.30%	81.24%	80.45%	80.97%	81.25%
<i>SNF/ICF</i>	10.57%	10.67%	11.94%	3.09%	11.87%	12.28%	12.26%	12.27%	12.64%	2.90%	13.03%	12.86%
<i>Short-term hospital</i>	2.78%	2.67%	3.12%	2.95%	2.63%	2.65%	2.23%	2.42%	2.39%	2.48%	2.42%	2.21%
<i>Other</i>	1.69%	1.76%	1.78%	10.62%	2.12%	2.07%	2.04%	2.27%	2.02%	12.45%	1.81%	2.00%
Black (age-standardized)												
<i>Died</i>	1.87%	2.12%	1.78%	1.50%	1.55%	1.71%	1.37%	1.78%	1.41%	1.42%	1.41%	1.28%
<i>Home/Home health</i>	87.30%	86.78%	85.31%	85.40%	85.07%	84.92%	86.55%	85.24%	86.26%	85.84%	86.53%	86.84%
<i>SNF/ICF</i>	5.34%	5.35%	5.83%	6.08%	6.61%	6.54%	6.21%	6.31%	6.16%	6.41%	6.43%	6.23%
<i>Short-term hospital</i>	2.62%	2.92%	3.94%	3.55%	3.41%	3.35%	2.62%	3.12%	2.35%	2.89%	2.94%	2.36%
<i>Other</i>	2.87%	2.83%	3.14%	3.46%	3.36%	3.48%	3.25%	3.55%	3.81%	3.43%	2.69%	3.28%

Continued Supplemental Table VI

<i>Hispanic (unadjusted)</i>	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<i>LOS (mean)</i>	5.52	5.93	5.63	5.33	5.38	5.43	5.64	5.49	5.33	5.23	5.22	5.26
<i>Died</i>	3.17%	3.34%	3.28%	2.64%	2.88%	2.27%	2.62%	2.30%	2.17%	2.32%	2.31%	2.56%
<i>Home/Home health</i>	81.10%	81.46%	79.60%	78.36%	80.63%	80.89%	79.55%	80.00%	80.65%	80.12%	80.58%	80.32%
<i>SNF/ICF</i>	10.38%	10.14%	11.56%	11.12%	11.69%	12.40%	13.00%	13.13%	12.66%	13.21%	12.77%	13.03%
<i>Short-term hospital</i>	3.81%	3.23%	3.99%	3.09%	3.00%	2.75%	2.74%	2.63%	2.45%	2.90%	2.68%	2.45%
<i>Other</i>	1.53%	1.82%	1.57%	4.78%	1.80%	1.68%	2.09%	1.94%	2.07%	1.45%	1.66%	1.64%
<i>Hispanic (age-standardized)</i>												
<i>Died</i>	3.75%	2.63%	1.78%	1.98%	2.46%	2.00%	2.11%	1.72%	1.09%	1.21%	1.70%	3.10%
<i>Home/Home health</i>	84.74%	83.15%	85.94%	82.28%	84.58%	87.30%	85.58%	84.86%	87.28%	86.62%	88.17%	85.83%
<i>SNF/ICF</i>	4.16%	4.78%	4.88%	4.63%	4.46%	5.02%	5.21%	5.84%	5.14%	4.61%	4.76%	5.53%
<i>Short-term hospital</i>	4.38%	4.05%	4.29%	4.98%	4.14%	2.62%	4.29%	3.54%	3.70%	4.28%	2.59%	2.76%
<i>Other</i>	2.96%	5.39%	3.10%	6.13%	4.37%	3.06%	2.81%	4.04%	2.79%	3.29%	2.78%	2.78%
<i>Asian/PI (unadjusted)</i>												
<i>LOS (mean)</i>	5.79	6.21	5.90	5.55	6.11	5.62	5.42	5.52	5.26	5.20	5.47	5.17
<i>Died</i>	3.96%	3.53%	4.10%	3.42%	3.31%	3.37%	3.46%	2.73%	2.96%	3.06%	2.52%	3.31%
<i>Home/Home health</i>	81.42%	79.89%	77.00%	78.28%	78.68%	77.87%	77.38%	79.40%	77.83%	58.05%	79.51%	78.29%
<i>SNF/ICF</i>	13.54%	4.14%	13.53%	13.74%	13.94%	14.34%	15.21%	14.09%	15.25%	14.73%	14.17%	13.65%
<i>Short-term hospital</i>	3.25%	11.08%	4.13%	3.85%	3.07%	2.93%	2.88%	2.59%	2.81%	2.78%	2.58%	3.49%
<i>Other</i>	-2.16%	1.36%	1.24%	0.72%	1.01%	1.48%	1.07%	1.18%	1.15%	21.38%	1.22%	1.27%
<i>Asian/PI (age-standardized)</i>												
<i>Died</i>	2.37%	1.68%	2.09%	1.27%	1.10%	3.37%	1.78%	1.93%	5.77%	2.05%	1.43%	2.27%
<i>Home/Home health</i>	83.58%	88.54%	86.16%	85.51%	87.85%	84.05%	87.13%	85.28%	82.67%	88.28%	87.46%	86.72%
<i>SNF/ICF</i>	4.73%	4.14%	5.31%	5.55%	4.38%	5.19%	5.43%	4.92%	5.64%	4.79%	4.52%	4.37%
<i>Short-term hospital</i>	4.77%	4.31%	5.27%	5.95%	3.64%	2.82%	4.09%	5.83%	3.55%	2.65%	3.60%	4.03%
<i>Other</i>	4.54%	1.34%	1.17%	1.72%	3.04%	4.57%	1.58%	2.04%	2.38%	2.24%	3.00%	2.61%

LOS = length of stay, Home/Home health = discharged home or with home health care services, SNF/ICF = discharged to skilled nursing facility, intermediate care facility, or another type of facility, Transfer short-term, Other = includes missing, against medical advice, discharged to court/law enforcement

Supplemental Table VII: Race/Ethnic classification of HF hospitalizations for 2002 and 2013 pre- and post-imputation from the National Inpatient Sample.

	2002		2013	
	<u>Pre-imputation</u>	<u>Post-imputation</u>	<u>Pre-imputation</u>	<u>Post-imputation</u>
<i>White</i>	70.69%	70.93%	67.46%	67.69%
<i>Black</i>	18.06%	18.14%	20.16%	20.06%
<i>Hispanic</i>	7.44%	7.18%	7.72%	7.64%
<i>Asian/PI</i>	1.66%	1.61%	2.00%	1.97%

Supplemental Table VIII: Measures of difference in the crude HF hospitalization rate by sex and race/ethnicity from the National Inpatient Sample.

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	P-trend
Male													
<i>Ratio</i>	0.88	0.90	0.94	0.97	0.99	1.00	1.01	1.03	1.06	1.04	1.06	1.10	0.001
<i>Excess</i>	-66.35	-56.05	-32.45	-14.52	-3.91	-0.18	3.81	14.44	26.22	16.52	24.22	36.30	0.002
Male †													
Black													
<i>Ratio</i>	1.57	1.59	1.73	1.39	1.77	1.94	1.71	1.77	2.11	1.96	1.91	1.91	0.015
<i>Excess</i>	289.71	304.92	374.92	204.96	380.99	419.34	322.85	339.18	442.03	380.06	340.61	342.96	0.203
Hispanic													
<i>Ratio</i>	0.55	0.69	0.59	0.62	0.62	0.61	0.50	0.55	0.57	0.56	0.52	0.56	0.073
<i>Excess</i>	-226.50	-161.50	-212.17	-197.26	-187.46	-174.49	-224.51	-201.60	-171.36	-175.18	-178.92	-167.56	0.139
Asian/PI													
<i>Ratio</i>	0.40	0.43	0.39	0.31	0.36	0.42	0.40	0.40	0.42	0.35	0.40	0.42	0.703
<i>Excess</i>	-304.78	-293.79	-311.00	-359.61	-316.95	-256.51	-273.26	-267.40	-232.81	-259.83	-225.73	-218.80	0.008
Female ‡													
Black													
<i>Ratio</i>	2.11	2.07	2.19	1.73	2.23	2.37	2.12	2.19	2.54	2.40	2.31	2.30	0.054
<i>Excess</i>	450.85	436.45	465.76	283.28	437.06	442.33	363.49	371.37	431.54	399.88	354.83	347.42	0.154
Hispanic													
<i>Ratio</i>	0.89	1.04	0.90	0.86	0.99	0.90	0.75	0.83	0.79	0.76	0.70	0.72	0.007
<i>Excess</i>	-46.21	17.95	-39.94	-52.36	-2.82	-32.18	-79.82	-53.23	-60.19	-67.47	-79.73	-75.40	0.024
Asian/PI													
<i>Ratio</i>	0.50	0.52	0.51	0.38	0.51	0.57	0.54	0.53	0.52	0.41	0.47	0.48	0.619
<i>Excess</i>	-203.13	-197.53	-190.03	-238.50	-173.59	-137.62	-150.77	-147.08	-134.98	-170.17	-142.73	-137.38	0.014

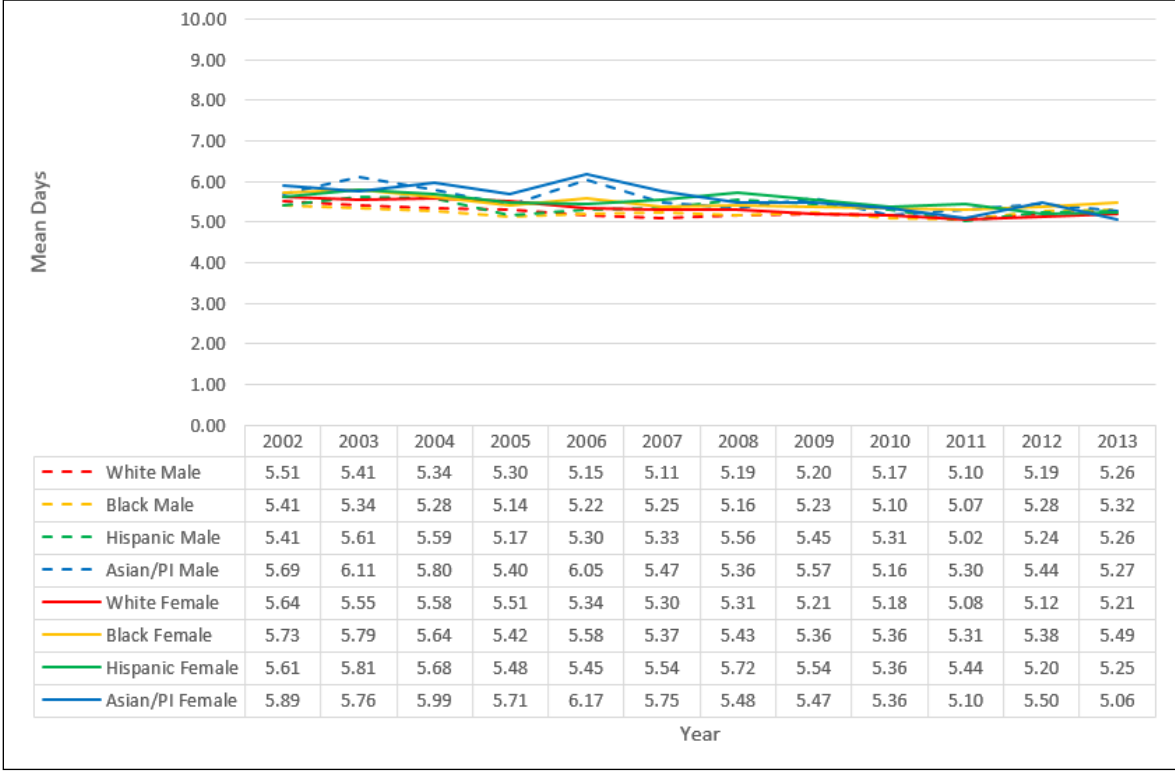
Values are presented as ratios or excess number of admissions per 100,000.

PI = Pacific Islander, Ratio = ratio of crude hospitalization rate over reference, Excess = difference in crude hospitalization between subgroup and reference.

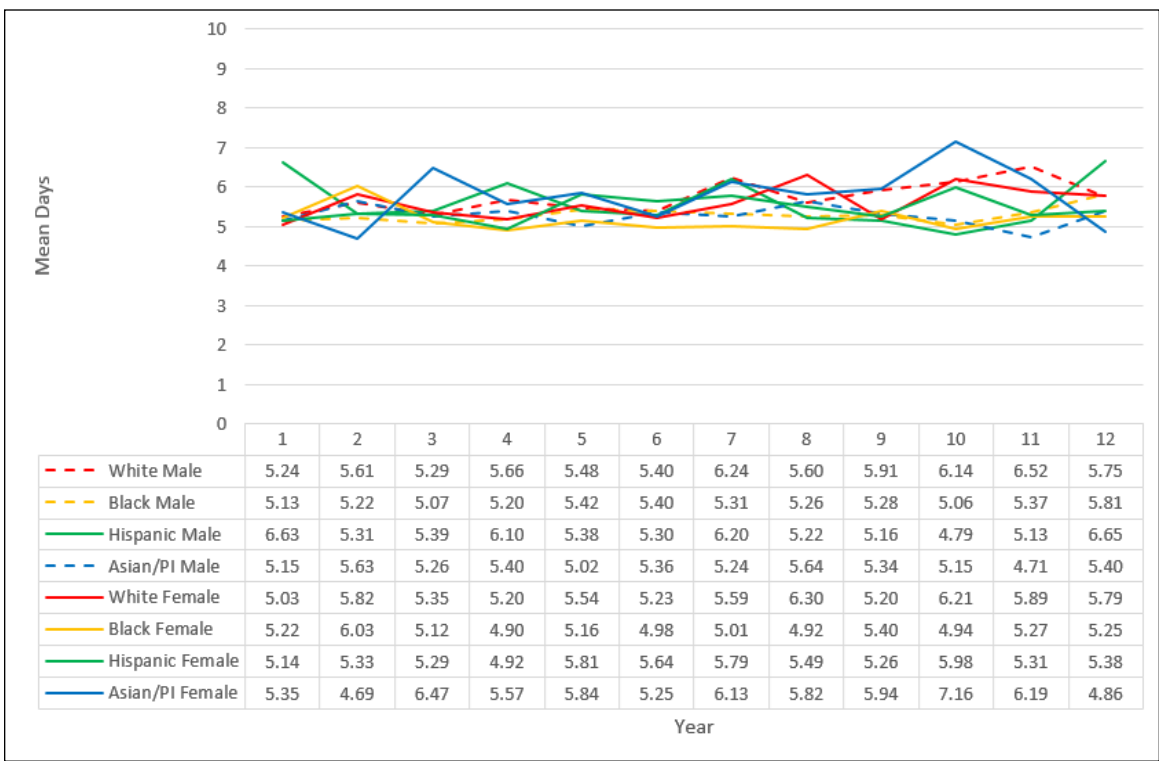
† reference group is female

‡ reference group is white

Supplemental Figure IA: Mean length of stay (unadjusted) by sex and race/ethnicity from the National Inpatient Sample.

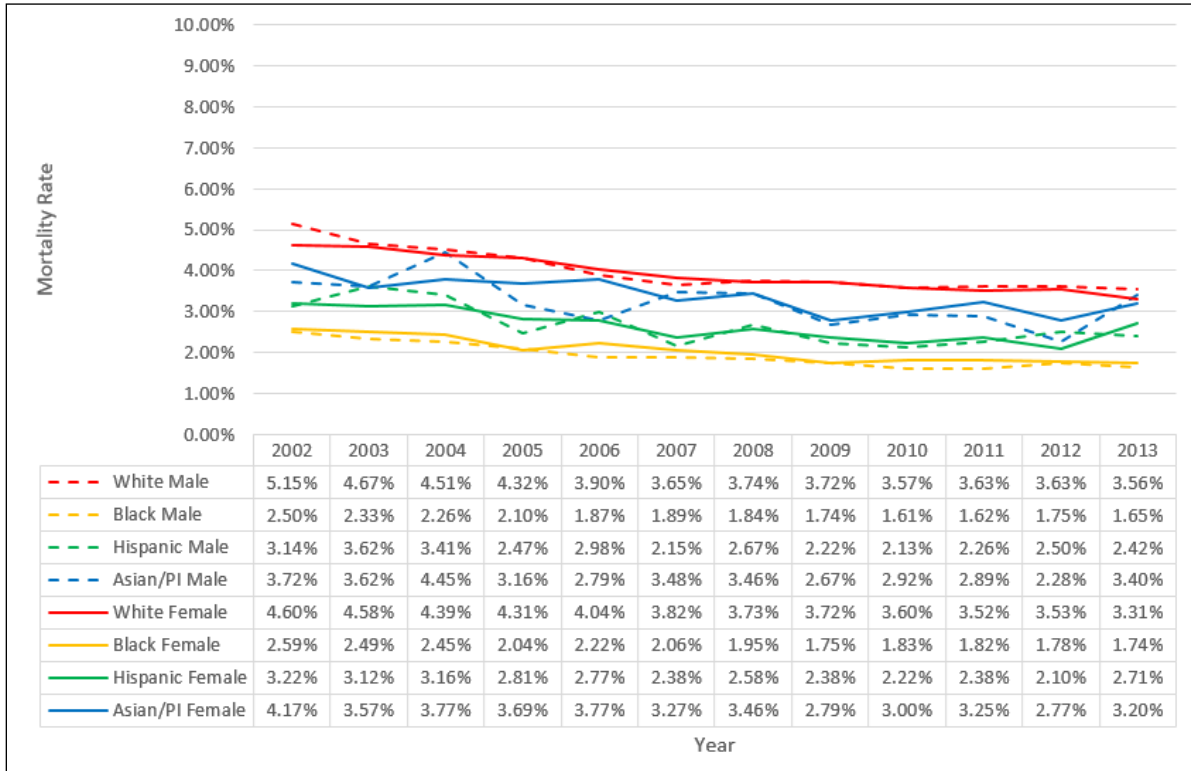


Supplemental Figure IB: Mean length of stay (age-adjusted) by sex and race/ethnicity from the National Inpatient Sample.

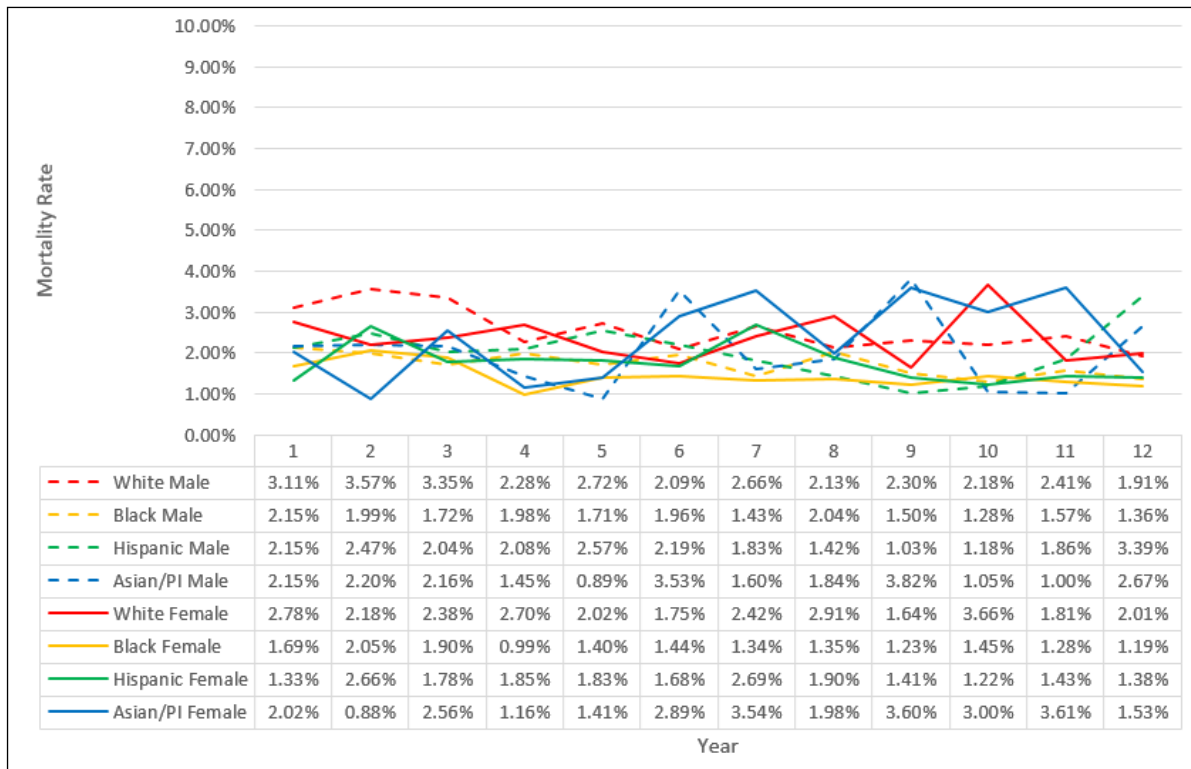


PI = Pacific Islander

Supplemental Figure IIA: Inpatient mortality rate (unadjusted) by sex and race/ethnicity from the National Inpatient Sample.

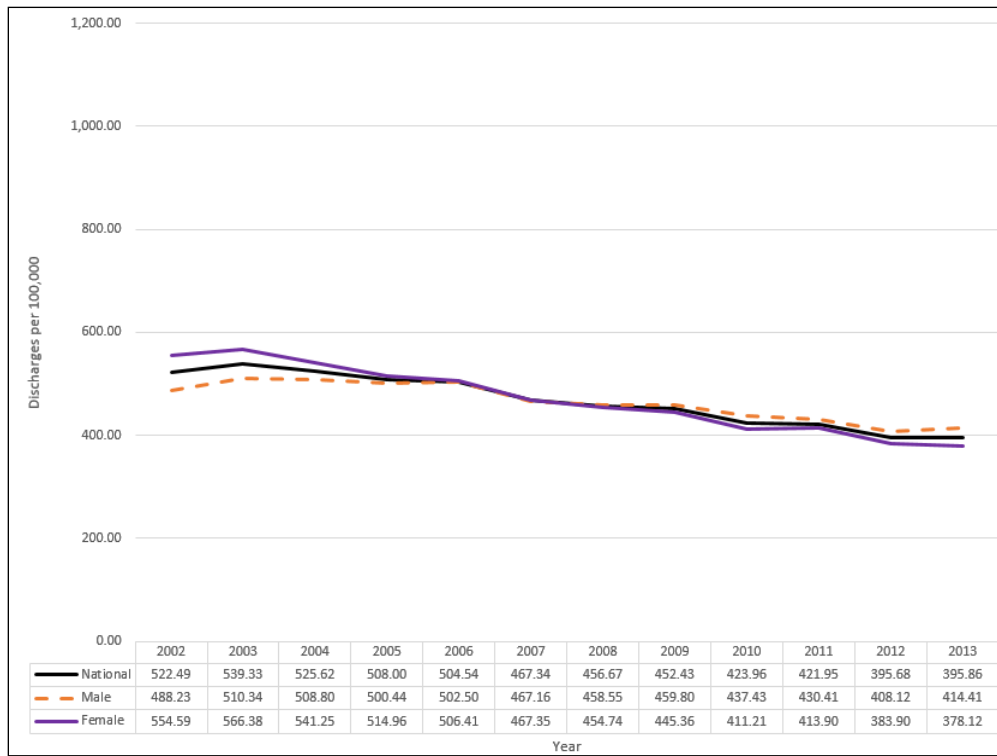


Supplemental Figure IIB: Inpatient mortality rate (age-adjusted) by sex and race/ethnicity from the National Inpatient Sample.

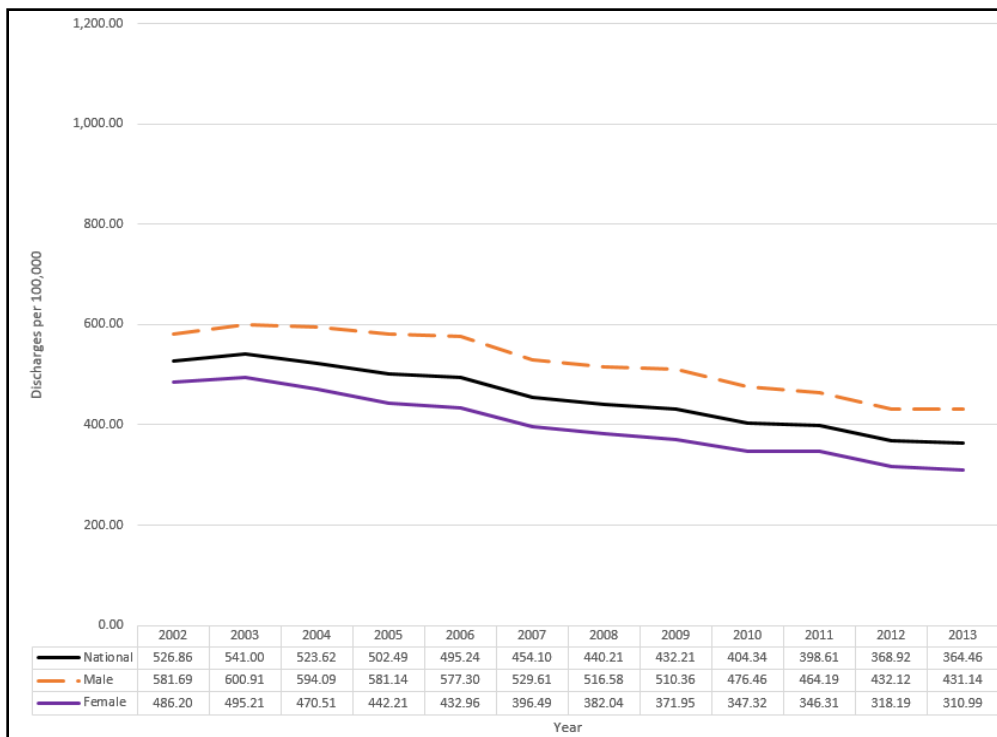


PI = Pacific Islander

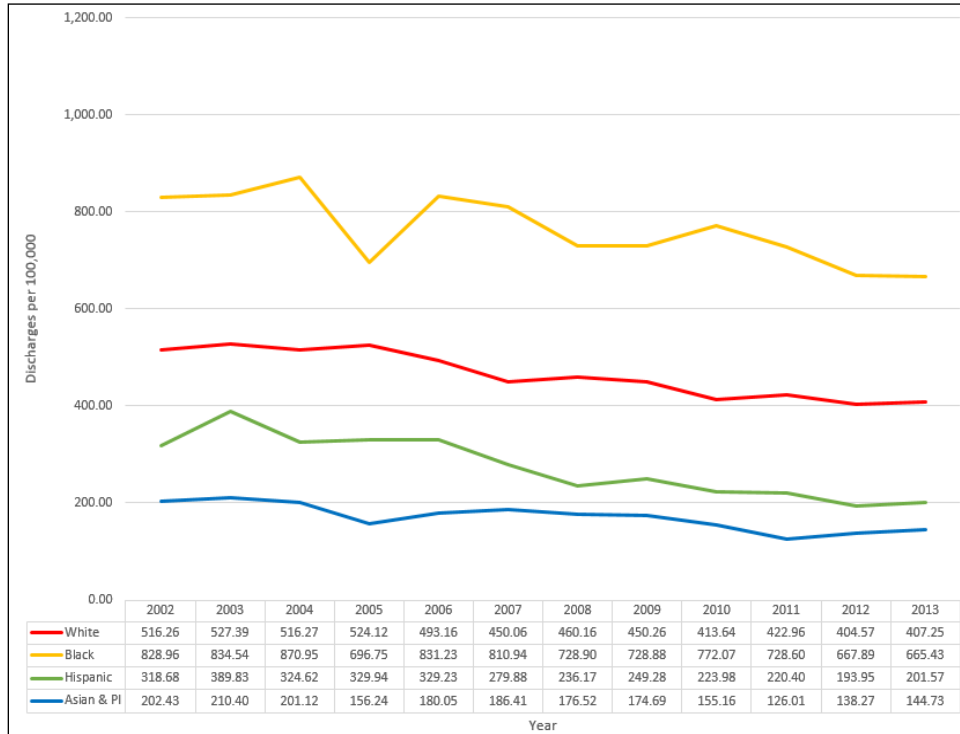
Supplemental Figure IIIA: National crude hospitalization rate by sex from the National Inpatient Sample.



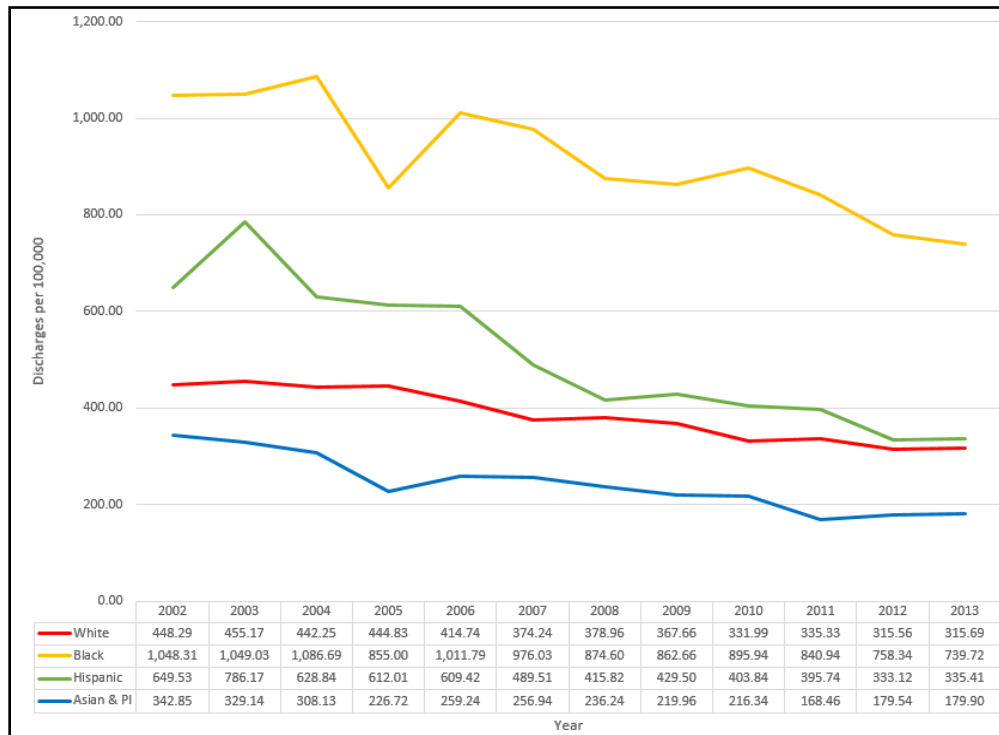
Supplemental Figure IIIB: National age-standardized hospitalization rate by sex from the National Inpatient Sample.



Supplemental Figure IVA: National crude hospitalization rate by race/ethnicity from the National Inpatient Sample.



Supplemental Figure IVB: National age-standardized hospitalization rate by race/ethnicity from the National Inpatient Sample.



PI = Pacific Islander