

- According to the Nationwide Readmission Database, rates of overall and unique HF patient hospitalizations declined from 2010 to 2014 and then trends reversed, and hospitalizations increased until 2020 when the COVID-19 pandemic temporarily reduced all hospitalization rates (Figure 1).
- For HF patients hospitalized with COVID-19, inpatient mortality rates were notably higher.^{1,2}
- In 2021, there were 1.2 million primary HF hospitalizations in the US among 949,075 unique individuals.
- From the 2004-2018 Nationwide Inpatient Sample the mean age at hospitalization for HF was 72.3 years.³
- Between 2008 and 2018, the median age at hospitalization for HFrEF decreased from 74 to 71 years, and the median age at hospitalization for HFpEF decreased from 78 to 77 years (Table 1).⁴
- Readmission rates have increased between 2010 and 2017.⁵

Figure 1: US Trends for Overall HF Hospitalization, Unique Patient Visits, Post Discharge HF Readmissions and All-Cause 30-Day Readmissions

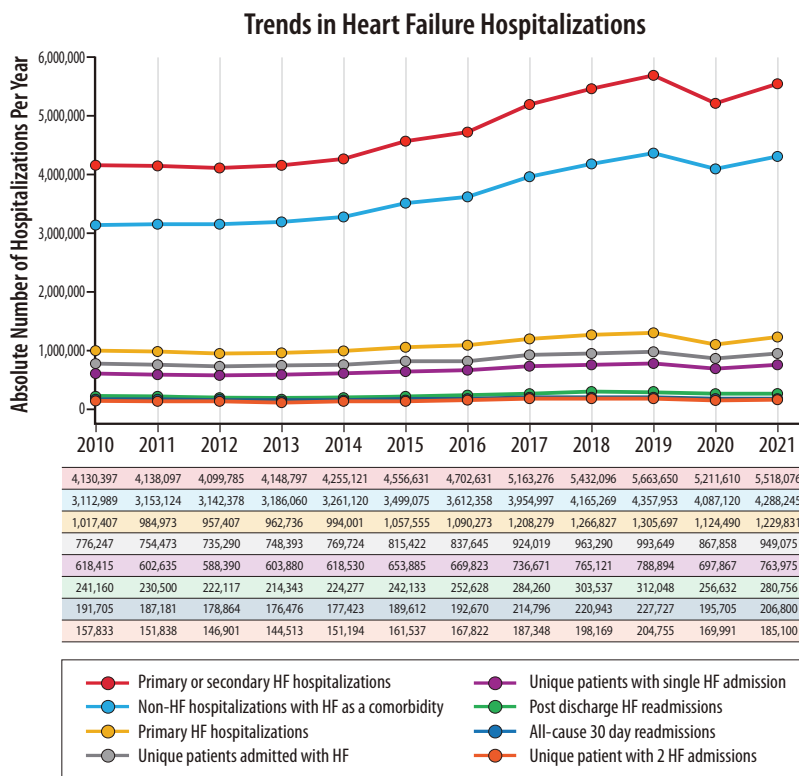


Table 1: Trends in HF Hospitalizations by Age

Category	Timespan	Trend
Age at Hospitalization		median [IQR]
HFrEF	2008-2018	74.0 [74.0-83.0] to 71.0 [59.0-81.0], $p < 0.001$
HFpEF	2008-2018	78.0 [67.0-86.0] to 77.0 [66.0-85.0], $p < 0.001$
Hospitalization Rates		Annual percentage change
Age ≥ 65 years	2004-2014	-4.5%, $p < 0.05$
Age ≥ 65 years	2004-2014	2.8%, $p < 0.05$
Age 18-64 years	2004-2013	-2.3%, $p < 0.05$
Age 18-64 years	2013-2018	7.0%, $p < 0.05$
In-Hospital Mortality		Mortality Rate
Age 18-64 years	2002-2016	2.2% to 1.6%, $p = 0.13$
Age 35-44 years	2002-2016	1.5% to 1.0%, $p = 0.01$
Age 45-54 years	2002-2016	1.7% to 1.3%, $p < 0.001$
Age 55-64 years	2002-2016	2.4% to 1.7%, $p < 0.001$
Age 65-74 years	2002-2016	3.5% to 2.3%, $p < 0.001$
Age ≥ 75 years	2002-2016	5.8% to 3.8%, $p < 0.001$

- HF hospitalization rates among the elderly (age > 80 years) have increased since 2014 (Figure 2) with a greater risk among those with more comorbid chronic conditions.⁶
- The complexity of care has also increased as HF hospitalizations include more comorbid conditions that are also associated with greater costs.

Figure 2: Trends of Primary Heart Failure Hospitalization per 100,000 in Adults Aged ≥ 80 Years in the US, 2004-2018

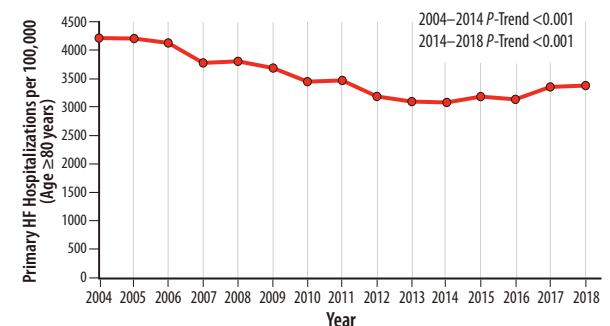
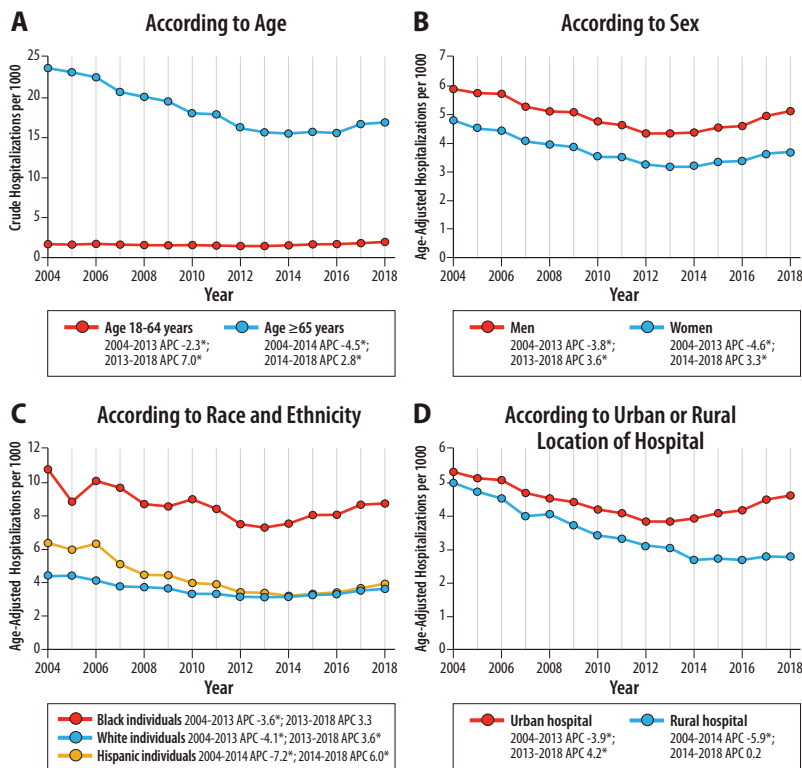


Figure 3a-d: Trends of Hospitalization for Heart Failure Between 2004 and 2018



*means annual percentage change (APC) is significantly different from zero at $\alpha = 0.05$

- HF hospitalization rates have been increasing for both women and men since 2013 (Figure 3b).³
- In general, men have higher HF hospitalization rates than women (Figure 3b).⁶
- HF hospitalization rates vary by racial and ethnic group. Non-Hispanic Black patients have the highest hospitalization rate for HF (Table 2, Figure 3c).
- HF hospitalizations have increased among young adults (18-45 years) since 2013 and Black patients accounted for 50% of these hospitalizations.
- Effective strategies are needed to reduce HF hospitalizations and mortality across racial and ethnic groups.^{7,8}

Table 2: HF Hospitalization Rates Among Medicare Beneficiaries Age 65+ (Per 1000)

	2019-2021	2014-2016	2009-2011	2005-2007
All Races/Ethnicities	15.3	15.8	16.4	19.4
Non-Hispanic Black	25.8	27.2	26.6	30.7
Non-Hispanic White	14.6	15	15.5	18.4
Hispanic	14.5	15.6	18.6	23.3

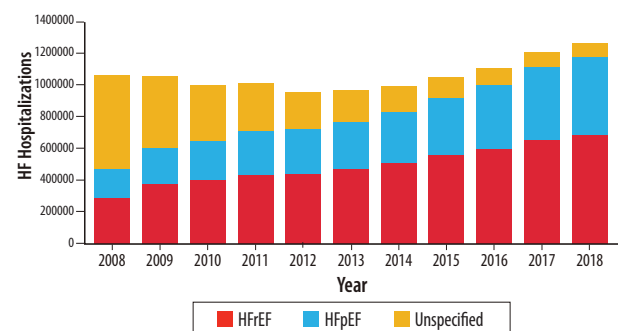
- HF hospitalization rates are significantly higher in urban hospitals compared to rural areas. Rates have been increasing in urban areas since 2013 but steadily decreasing in rural areas (Figure 3d).
- HF mortality rates are significantly higher in rural areas. More than 700 counties in the US lack hospitals, and small community hospitals lack resources for advanced HF therapies.⁹
- HF hospitalization rates vary across regions in the US with higher rates in the South and Midwest when compared with West or Northeast regions (Table 3).¹⁰

Table 3: Hospital Discharges for HFrEF and HFpEF Stratified by Region

Region	All HF (6,403,626)	HFrEF (n= 3,858,341)	HFpEF (n= 2,545,286)
Northeast	21.3%	20.2%	22.9%
Midwest	24.2%	24.1%	24.3%
South	39.2%	40.1%	37.8%
West	15.3%	15.6%	14.9%

- Urban hospitals admit a greater proportion of patients with HFrEF (42.7%) than rural hospitals (38.8%).¹¹
- Hospitalizations for both HFrEF and HFpEF have increased over time (Figure 4), with a majority of patients having HFrEF.⁴

Figure 4: Annual HF Hospitalization Volumes According to EF Phenotypes



For more information visit
<https://hfstats.org/hf-stats>



References:

1. Isath A, Malik A, Bandyopadhyay D, Goel A, Hajra A, Dhand A, et al. COVID-19, Heart Failure Hospitalizations, and Outcomes: A Nationwide Analysis. *Curr Probl Cardiol* 2023 Apr;48(4):101541.
2. Bhatt AS, Jering KS, Vaduganathan M, Claggett BL, Cunningham JW, Rosenthal N, et al. Clinical outcomes in patients with heart failure hospitalized with COVID-19. *JACC Heart Fail* 2021 Jan;9(1):65–73.
3. Salah HM, Minhas AMK, Khan MS, Khan SU, Ambrosy AP, Blumer V, et al. Trends in hospitalizations for heart failure, acute myocardial infarction, and stroke in the United States from 2004 to 2018. *Am Heart J* 2022;243:103–9.
4. Clark KAA, Reinhardt SW, Chouairi F, Miller PE, Kay B, Fuery M, et al. Trends in heart failure hospitalizations in the US from 2008 to 2018. *J Card Fail* 2022;28:171–80.
5. Khan MS, Sreenivasan J, Lateef N, Abougergi MS, Greene SJ, Ahmad T, Anker SD, Fonarow GC, Butler J. Trends in 30- and 90-day readmission rates for heart failure. *Circ Heart Fail* 2021 Apr;14(4):e008335.
6. Minhas AMK, Ijaz SH, Jamal S, Dani SS, Khan MS, Greene SJ, et al. Trends in characteristics and outcomes in primary heart failure hospitalizations among older population in the United States, 2004 to 2018. *Circ Heart Fail* 2022;15:e008943.
7. Breathett K, Lewsey S, Brownell NK, Enright K, Evangelista LS, Ibrahim NE, et al. Implementation Science to Achieve Equity in Heart Failure Care: A scientific statement from the American Heart Association. *Circulation* 2024;149:e1143–63.
8. Maddox TM, Januzzi Jr JL, Allen LA, Breathett K, Brouse S, Butler J, et al. 2024 ACC expert consensus decision pathway for treatment of heart failure with reduced ejection fraction: A report of the American College of Cardiology Solution Set Oversight Committee. *J Am Coll Cardiol* 2024;83:1444–88.
9. Bozkurt B. Concerning Trends of Rising Heart Failure Mortality Rates. *JACC Heart Fail* 2024 May;12(5):970–2.
10. Afzal A, van Zyl J, Nisar T, Kluger AY, Jamil AK, Felius J, et al. Trends in hospital admissions for systolic and diastolic heart failure in the United States between 2004 and 2017. *Am J Cardiol* 2022 May 15;171:99–104.
11. Pierce JB, Ikeaba U, Peters AE, DeVore AD, Chiswell K, Allen LA, et al. Quality of care and outcomes among patients hospitalized for heart failure in rural vs urban us hospitals: The Get With The Guidelines-Heart Failure Registry. *JAMA Cardiol* Apr 1 2023;8(4):376–85.

All information, including graphics, tables, and text in this fact sheet are from the report published in the *Journal of Cardiac Failure*, and should be referenced as follows:
J Card Fail. 2025; 31 P66-116

