#### PA Health Care Cost Containment Council

# Potentially Preventable Hospitalizations in Pennsylvania



Potentially preventable hospitalizations<sup>†</sup> are inpatient stays for select conditions that might have been avoided with effective primary or preventive care—thereby avoiding the need for a more expensive hospital admission. Continued attention to these hospitalizations is particularly important during the COVID-19 pandemic. Delaying primary and preventive care (e.g., due to the temporary challenges in scheduling outpatient care, concern about visiting physician offices due to COVID-19) could increase the risk of hospitalizations particularly for those suffering from chronic illnesses such as heart failure and diabetes. This brief examines potentially preventable

hospitalizations for Pennsylvania residents aged 18 and older discharged from Pennsylvania acute care hospitals in fiscal year (FY) 2019 (July 1, 2018 through June 30, 2019). These results will serve as a baseline for the continued study of potentially preventable hospitalizations during and after the COVID-19 crisis.

## 1 in 9 Hospitalizations

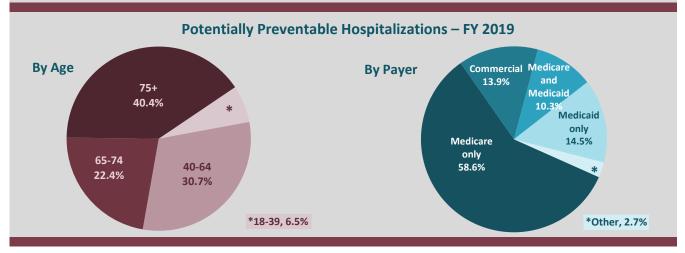
Approximately 1 in 9 hospitalizations (11.7%) were considered potentially preventable in FY 2019. Overall, there were 153,236 potentially preventable hospital admissions during that time period.

## 150.8 per 10,000 Residents

There were 150.8 potentially preventable hospitalizations per 10,000 Pennsylvania residents in FY 2019.

#### 35.7% for Heart Failure

Heart failure was the principal reason for admission in 54,676 (35.7%) of the 153,236 potentially preventable hospitalizations in FY 2019. These heart failure hospitalizations accounted for 284,232 (40.0%) of the 711,298 total hospital days for potentially preventable hospitalizations.



<sup>&</sup>lt;sup>†</sup> Potentially preventable hospitalizations were identified by a set of Prevention Quality Indictors developed by the Agency for Healthcare Research and Quality (AHRQ). It is important to emphasize the phrase "potentially preventable" when examining these hospitalizations. Hospital stays that might be avoidable for younger patients might be less so for older patients in a weakened state. Yet identifying areas within Pennsylvania with higher rates of potentially preventable hospitalizations highlights opportunities where early detection, timely care and patient education might lead to improved outcomes and decreased costs.



# Potentially Preventable Hospitalizations by Condition - FY 2019

Condition	Number of Cases	Percent of Cases	Total Number of Hospital Days
Heart Failure	54,676	35.7%	284,232
COPD¹ or Asthma (adults age 40 and older)	28,742	18.8%	116,136
Pneumonia	20,472	13.4%	87,354
Urinary Tract Infection	13,974	9.1%	51,454
Diabetes – Long-term Complications	10,641	6.9%	61,254
Diabetes – Short-term Complications	8,387	5.5%	29,718
Hypertension	6,142	4.0%	19,430
Diabetes – Uncontrolled	4,824	3.1%	16,288
Lower Extremity Amputation <sup>2</sup>	3,876	2.5%	41,393
Asthma (adults age 18 to 39)	1,502	1.0%	4,039
Total	153,236	100.0%	711,298

<sup>&</sup>lt;sup>1</sup> COPD (Chronic Obstructive Pulmonary Disease)

#### **About PHC4**

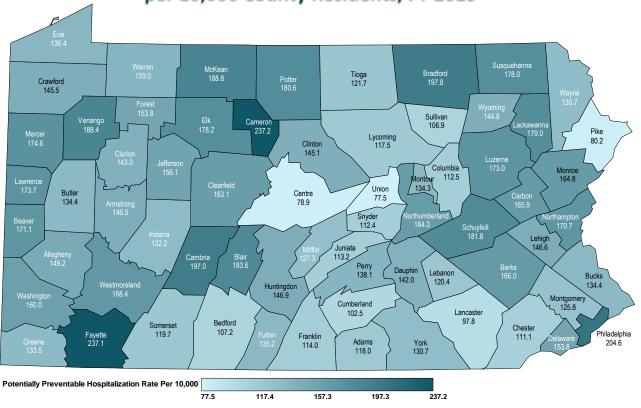
Created by the PA General Assembly in 1986, the PA Health Care Cost Containment Council (PHC4) is an independent state agency charged with collecting, analyzing and reporting information that can be used to improve the quality and restrain the cost of health care in the state. Today, PHC4 is a recognized national leader in public health care reporting. PHC4 is governed by a board of directors representing business, labor, consumers, health care providers, insurers and state government.

Joe Martin, Executive Director 225 Market Street, Suite 400, Harrisburg, PA 17101 717-232-6787 · www.phc4.org



<sup>&</sup>lt;sup>2</sup> Among patients with diabetes.

# Number of Potentially Preventable Hospitalizations per 10,000 County Residents, FY 2019



# Statewide Population-based Rates – FY 2019

Statewide, there were 150.8 potentially preventable admissions per 10,000 Pennsylvania residents in FY 2019. Higher rates for some counties might reflect larger numbers of residents with high-risk characteristics (e.g., factors related to age, race/ethnicity and income). County rates were not adjusted for these population differences so that important effects of these patient characteristics were not masked by such adjustment.

In general, population-based data showed higher rates of potentially preventable hospitalizations among older residents, black (non-Hispanic) residents and lower income residents:

- For residents aged 75 and older, the rate was 603.4 per 10,000.
- For black (non-Hispanic) residents, the rate was 264.7 per 10,000. The rates for white (non-Hispanic) and Hispanic residents were 143.9 and 83.7, respectively.
- For lower income residents of all races, the rate was 263.6 per 10,000.
- The rate was 154.2 for females and 147.3 for males.

**Rate Calculations.** The statewide rate and rates by county, age, race/ethnicity and gender include residents 18 and older and were calculated using PHC4 hospital admission data and US Census Bureau population estimates. Rates by income were based on Census median household income estimates. Lower income residents were defined as those living in areas where the median household income was less than \$30,000 per year.



# Statewide and Regional Rates by Condition - FY 2019

	Rate per 10,000 Residents			
Condition	Statewide	Western PA	Central and Northeastern PA	Southeastern PA
Heart Failure	53.8	56.2	47.7	56.3
COPD¹ or Asthma (adults age 40 and older)	44.1	44.9	34.0	50.7
Pneumonia	20.2	27.0	17.1	17.4
Urinary Tract Infection	13.8	14.0	12.5	14.5
Diabetes – Long-term Complications	10.5	10.7	8.9	11.3
Diabetes – Short-term Complications	8.3	7.3	7.7	9.3
Hypertension	6.0	4.0	5.1	8.1
Diabetes – Uncontrolled	4.7	4.4	3.8	5.6
Asthma (adults age 18 to 39)	4.1	2.8	2.6	6.0
Lower Extremity Amputation <sup>2</sup>	3.8	3.7	3.6	4.0

<sup>&</sup>lt;sup>1</sup> COPD (Chronic Obstructive Pulmonary Disease)

# Statewide and Regional Rates - FY 2019

- Statewide in FY 2019, the rate of potentially preventable hospitalizations was 150.8 per 10,000 residents.
- Western PA had a potentially preventable admissions rate of 158.0 per 10,000 residents.
- Central and Northeastern PA had the lowest rate at 129.4 per 10,000 residents.
- Southeastern PA had the highest rate of potentially preventable admissions at 160.3 per 10,000 residents.



<sup>&</sup>lt;sup>2</sup> Among patients with diabetes.

# Potentially Preventable Hospitalizations by County, FY 2019

	FY 2019		
	Total Number of Hospitalizations	Rate per 10,000 Residents	
Statewide	153,236	150.8	
Adams	971	118.0	
Allegheny	14,779	149.2	
Armstrong	773	146.5	
Beaver	2,282	171.1	
Bedford	416	107.2	
Berks	5,418	166.0	
Blair	1,790	183.6	
Bradford	939	197.8	
Bucks	6,720	134.4	
Butler	2,021	134.4	
Cambria	2,096	197.0	
Cameron	88	237.2	
Carbon	860	165.9	
Centre	1,092	78.9	
Chester	4,489	111.1	
Clarion	451	143.0	
Clearfield	1,059	163.1	
Clinton	448	145.1	
Columbia	606	112.5	
Crawford	982	145.5	
Cumberland	2,055	102.5	
Dauphin	3,050	142.0	
Delaware	6,779	153.8	
Elk	433	178.2	
Erie	2,918	136.4	
Fayette	2,500	237.1	
Forest	100	153.8	
Franklin	1,373	114.0	
Fulton	157	135.2	
Greene	393	133.5	
Huntingdon	544	146.9	
Indiana	915	132.2	
Jefferson	538	156.1	

	FY 2019		
	Total Number of Hospitalizations	Rate per 10,000 Residents	
Juniata	217	113.2	
Lackawanna	3,000	179.0	
Lancaster	4,066	97.8	
Lawrence	1,200	173.7	
Lebanon	1,314	120.4	
Lehigh	4,177	146.6	
Luzerne	4,413	173.0	
Lycoming	1,062	117.5	
McKean	621	188.8	
Mercer	1,558	174.6	
Mifflin	458	127.3	
Monroe	2,245	164.8	
Montgomery	8,179	125.8	
Montour	195	134.3	
Northampton	4,162	170.7	
Northumberland	1,204	164.3	
Perry	501	138.1	
Philadelphia	25,374	204.6	
Pike	368	80.2	
Potter	239	180.6	
Schuylkill	2,074	181.8	
Snyder	360	112.4	
Somerset	727	119.7	
Sullivan	58	106.9	
Susquehanna	589	178.0	
Tioga	397	121.7	
Union	284	77.5	
Venango	778	188.4	
Warren	443	139.0	
Washington	2,673	160.0	
Wayne	559	130.7	
Westmoreland	4,825	168.4	
Wyoming	316	144.8	
York	4,565	130.7	