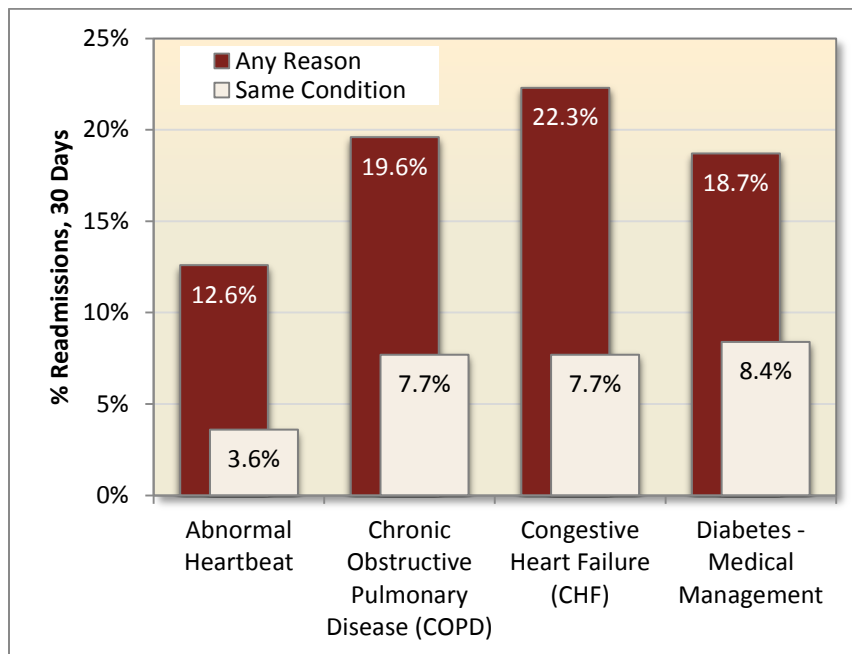


Statewide Statistics and Key Findings

Statewide information about readmissions and the key findings of this report are presented in this section. The study examines hospitalizations from January 1, 2013 through August 31, 2014 that were followed by a readmission within 30 days of discharge for four conditions: abnormal heartbeat, chronic obstructive pulmonary disease (COPD), congestive heart failure (CHF), and diabetes – medical management.

Statewide 30-day readmission rates are shown in Figure 1. For each condition, the overall rate of readmission for any reason is compared to the overall rate of readmission for the same condition.

Figure 1. 30-Day Readmission Rates: Readmissions for Any Reason versus Same Condition



Studying readmissions for the same condition may be of significant interest to both providers and utilizers of health care as this information may help identify frequent and potentially preventable readmissions, especially for chronic conditions.

Other Information about Readmissions from PHC4:

PHC4 has issued a number of other reports and research briefs that highlight hospital readmissions including PHC4's *Hospital Performance Report*, *Cardiac Surgery in Pennsylvania* report, and the *Knee and Hip Replacements* report. PHC4 has also reported readmission data for patients who contracted healthcare-associated infections and released a general overview of readmissions that includes statewide and county rates, along with conditions, reasons, and patient characteristics associated with readmissions. All of these reports are available on PHC4's website at www.phc4.org.

Statewide Statistics and Key Findings

Table 1 examines differences between hospitalizations that were either followed by a readmission within 30 days of discharge or not. Hospitalizations that were followed by readmissions for any reason are compared to hospital stays that were followed by readmissions for the same condition. The information in this table is specific to index hospitalizations only (not readmission hospitalizations). Index hospitalizations are the beginning point for examining readmissions and for this report include adult inpatient discharges for abnormal heartbeat, COPD, CHF, or diabetes – medical management.

Overall, patients with readmissions (for any reason or for the same condition) spent more days in the hospital during their initial stay compared to patients who were not readmitted.

Table 1. Hospitalizations followed by Readmissions within 30 Days January 1, 2013–August 31, 2014 Data							
Condition	Total Index Hospital Stays	Was the Index (Initial) Hospitalization followed by a Readmission?					
		No		Yes			
		Patients without Readmissions		Patients with Readmissions for Any Reason		Patients with Readmissions for Same Condition	
		Number of Index Hospital Stays	Average Length of Stay for the Index Stay	Number of Index Hospital Stays	Average Length of Stay for the Index Stay	Number of Index Hospital Stays	Average Length of Stay for the Index Stay
Abnormal Heartbeat	62,235	54,423	3.2	7,812	4.1	2,247	3.3
COPD	55,398	44,524	4.0	10,874	4.4	4,285	4.1
CHF	63,140	49,034	4.7	14,106	5.2	4,860	5.0
Diabetes – Medical Management	25,257	20,527	3.4	4,730	4.0	2,133	3.5

Focusing on readmissions for the same condition...

The total number of days in the hospital for these readmissions amounted to:

- Readmissions for abnormal heartbeat ... **7,673 additional days** spent in the hospital
- Readmissions for COPD ... **19,340 additional days** spent in the hospital
- Readmissions for CHF ... **26,054 additional days** spent in the hospital
- Readmissions for diabetes – medical management ... **7,854 additional days** spent in the hospital

Statewide Statistics and Key Findings

For these four conditions alone, readmissions for the same condition within 30 days amounted to over \$84 million (\$84,031,378) in Medicare and Medicaid payments for the two-year period 2011-2012 (the most recent payment data available to PHC4).

Condition	Medicare Fee-for-Service	Medicaid Fee-for-Service	Medicaid Managed Care
Abnormal Heartbeat	\$8,651,623	\$173,782	\$700,851
COPD	\$19,252,017	\$1,059,338	\$6,989,916
CHF	\$29,696,224	\$1,065,158	\$4,093,025
Diabetes – Medical Management	\$4,728,456	\$1,849,005	\$5,771,983
Total	\$62,328,320	\$4,147,283	\$17,555,775

While the figures in Table 2 shed some light on the financial impact of readmissions for the same condition for Medicare (fee-for-service) and Medicaid (fee-for-service and managed care), they do not include payments for readmissions covered by other insurance types or for uninsured patients. As an estimate, if payments for these additional readmissions were made at the Medicare fee-for-service rate, an additional \$77 million would be added to the total amount paid in 2011-2012 for these four conditions. Estimated additional payments by condition: abnormal heartbeat = \$12 million; COPD = \$26 million; CHF = \$28 million; diabetes – medical management = \$11 million.

Trends in rates of readmission for the same condition:

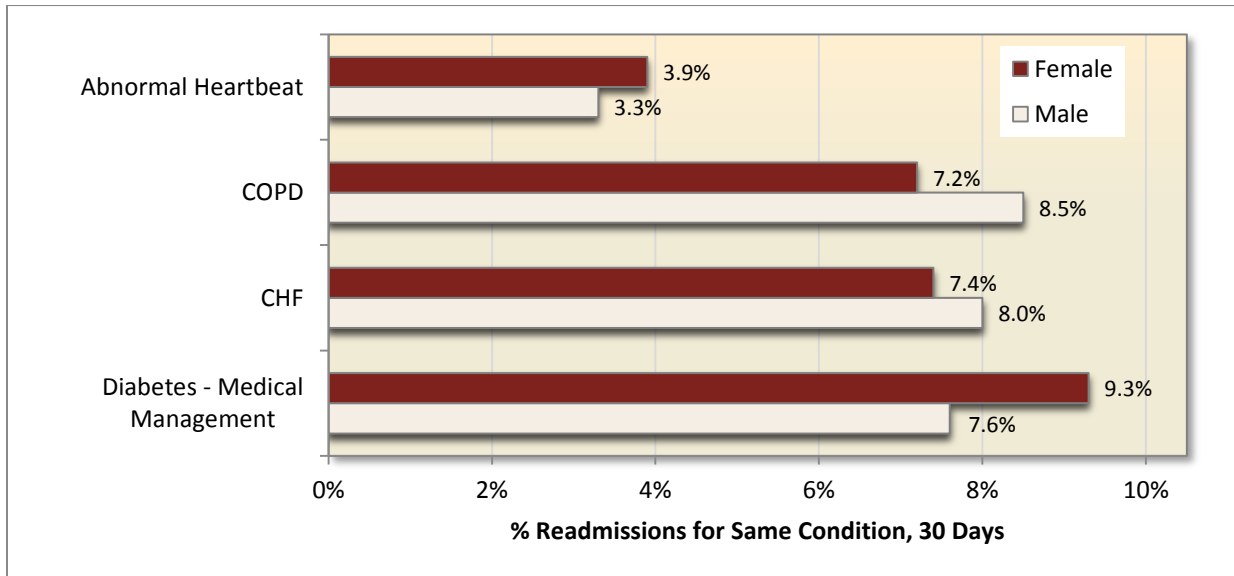
Statewide, looking at years 2008 through the time period covered in this report, there was a significant decline in readmission rates for the same condition for COPD since 2008. For CHF, there was a significant decline starting in 2010. There were no significant changes since 2008 for abnormal heartbeat or diabetes – medical management.

Regionally, there was a significant decline in these readmission rates for COPD in Western PA. Significant declines were seen in CHF since 2010 for each region (Western PA, Central & Northeastern PA, and Southeastern PA). The only significant increase reported was since 2008 for Central & Northeastern PA for the condition diabetes – medical management.

Statewide Statistics and Key Findings

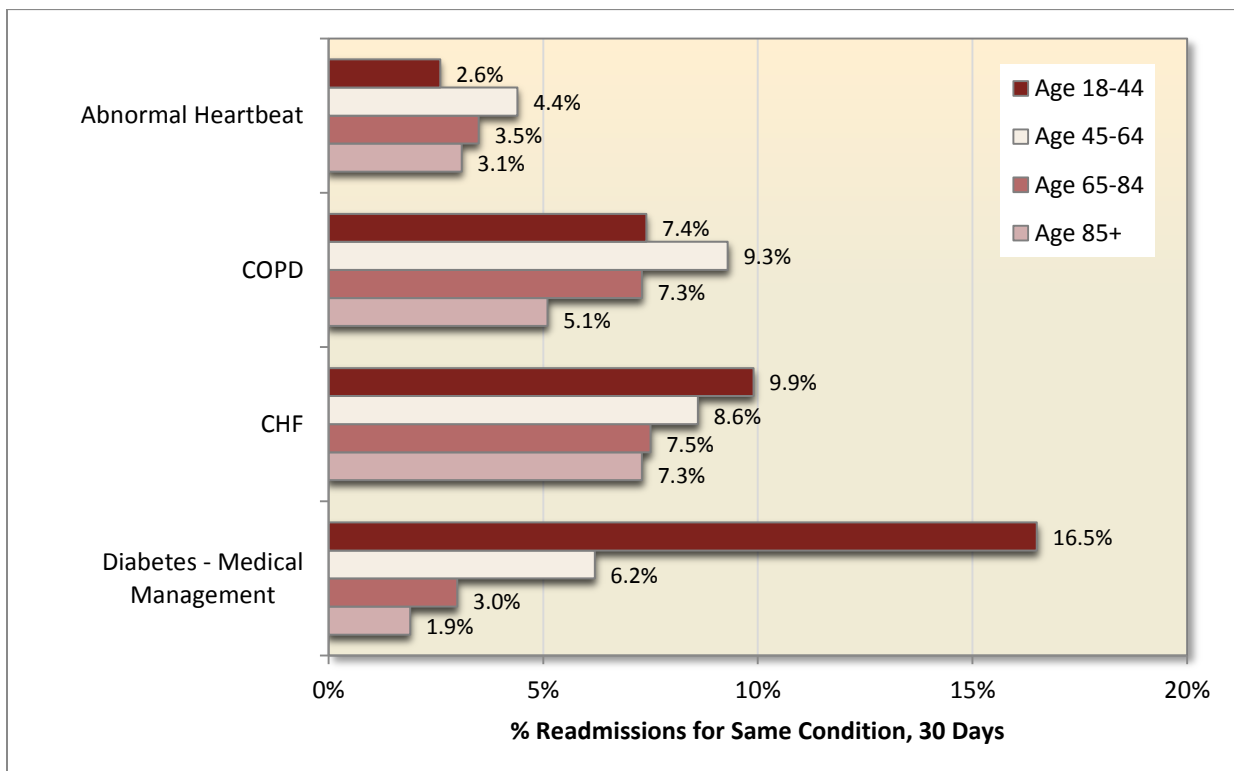
The largest gender difference in the rates of readmission for the same condition occurred for diabetes - medical management, where the rate was over 21% higher for females versus males.

Figure 2. Rates of Readmission for Same Condition, by Gender



The highest rate of readmission for the same condition occurred in the 18-44 age group for diabetes – medical management.

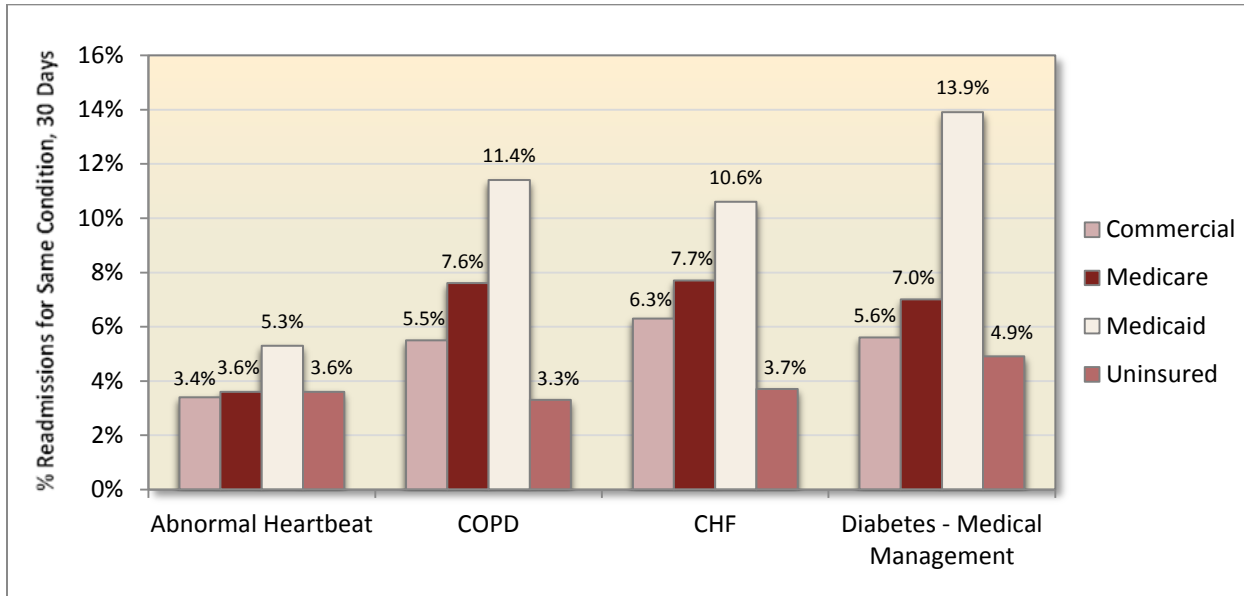
Figure 3. Rates of Readmission for Same Condition, by Age



Statewide Statistics and Key Findings

For all four conditions, the Medicaid category was associated with the highest rates of readmission for the same condition.

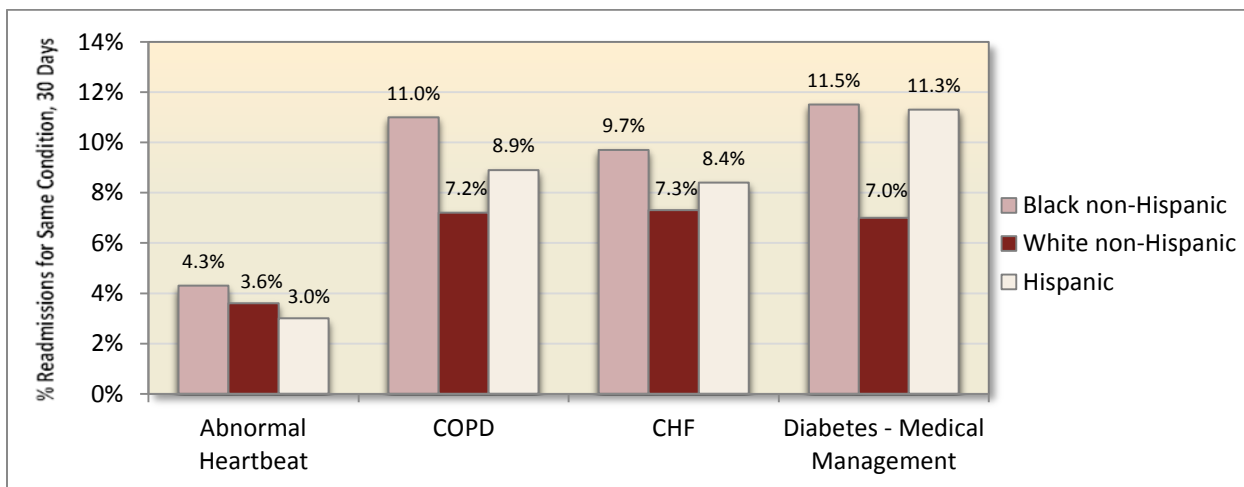
Figure 4. Rates of Readmission for Same Condition, by Payer*



*The payer was identified by the hospital in the discharge record as the anticipated payer and may not necessarily be the organization that ultimately paid the claim. Included in each category are all types of payer organizations such as health maintenance organizations, fee-for-service, preferred provider organizations, etc. Not shown are data for other low-volume payers such as governmental payers or for hospitalizations in which this information was unknown, invalid, or missing.

For all four conditions, the black non-Hispanic category had the highest rates of readmission for the same condition.

Figure 5. Rates of Readmission for Same Condition, by Race/Ethnicity*



*Internal PHC4 analysis suggests Hispanic ethnicity may be underreported. Not shown are data for other low-volume categories of race/ethnicity such as Asian, American Indian, Alaskan Native, Native Hawaiian, etc., or for hospitalizations in which this information was unknown, invalid, or missing.

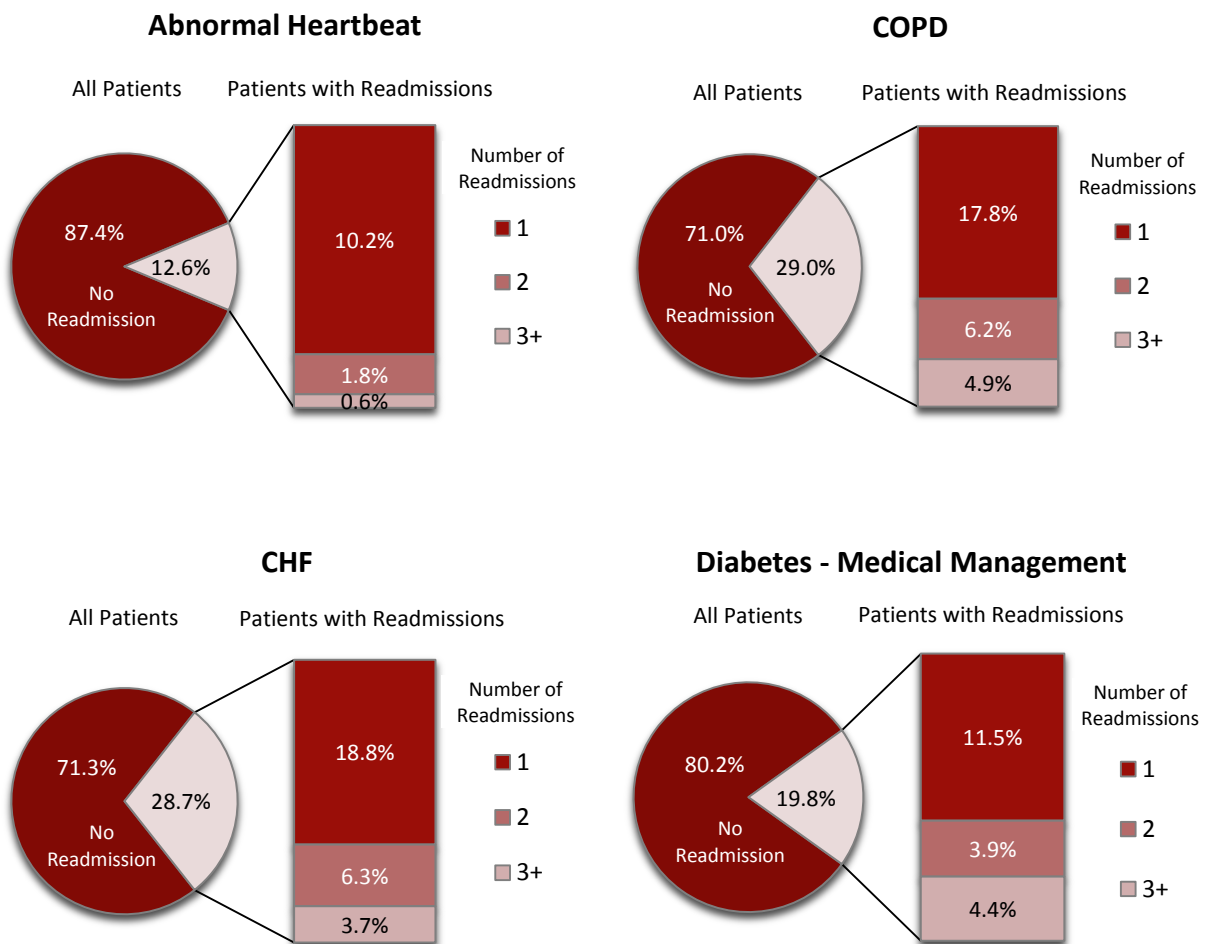
Statewide Statistics and Key Findings

Figure 6 shows the extent of repeat hospitalizations for the same condition over a one year period (2012). Patients hospitalized for abnormal heartbeat, COPD, CHF, or diabetes – medical management were followed for one year and multiple readmissions for the same condition were tallied.

Among these four conditions, patients with COPD had the highest rate, at 29.0%, of repeat hospitalizations (having at least two or more stays for COPD) within one year.

Patients hospitalized for COPD had the highest rate, at 4.9%, of being hospitalized four or more times for their disease.

Figure 6. Multiple Readmissions for the Same Condition within One Year of Initial Discharge, 2012 Data



Note: Figures may not add exactly due to rounding.