

Massachusetts Acute Care Hospital Readmissions Profile: July, 2013 to June, 2014

Merrimack Valley Hospital

May 2016

In February, 2016 the Center for Health Information and Analysis (CHIA) released [Hospital-Wide Adult All-Payer Readmissions in Massachusetts: 2011-2014](#), its second annual report on hospital-wide all cause readmissions in the Commonwealth. That report applied the Hospital-Wide All-Cause Unplanned 30-day Readmission Measure developed by the Centers for Medicare and Medicaid Services (CMS) and the Yale Center for Outcomes Research to the adult all-payer population in the Commonwealth. It included detailed readmission statistics for the state as a whole and hospital-specific readmission rates for 62 acute care hospitals. This readmission profile series provides more in-depth information on each hospital.

This profile contains readmission statistics for Merrimack Valley Hospital presented in the context of the statewide figures and of the patient population that Merrimack Valley serves. CHIA hopes that these reports will be useful to hospitals and to other stakeholders working to reduce readmissions in the Commonwealth. The profile is based on data submitted by Massachusetts acute care hospitals to CHIA's Hospital Discharge Database (see www.chiamass.gov/case-mix-data/). Most of the statistics presented in this profile are available for all Massachusetts acute care hospitals in an Excel workbook from <http://www.chiamass.gov/hospital-wide-adult-all-payer-readmissions-in-massachusetts-2011-2014/>.

It is important to note a few features of the Yale/CMS readmissions methodology as modified by CHIA for Massachusetts reporting.

- The calculations reflect the all-payer population. CMS reports on Medicare Fee-for-Service patients only.
- Readmissions from Merrimack Valley back to Merrimack Valley as well as those back to other acute care hospitals in the Commonwealth are included.
- The calculations exclude primary psychiatric and obstetric discharges.
- The calculations include adults (age 18+) only.
- This profile primarily covers the state fiscal year FY14, from July, 2013 to June, 2014. Some data displays include additional years.
- Breakouts with fewer than 11 data points (e.g. discharges, readmissions, or patients) are suppressed to protect patient privacy.

With the exception of the table on this page and the first figure on the next, the readmission rates reported here are not risk-adjusted. The patterns and trends reported in this profile reflect this hospital's patient case-mix, practice patterns, and any licensure for providing specialized inpatient services. All analyses were based on discharge data as submitted to CHIA by Massachusetts acute care hospitals. Further detail is available in Appendix A of [CHIA's recent second annual statewide readmissions report](#).

This report contains the following information profiling readmissions at Merrimack Valley. Except where indicated below, all displays cover the period from July 2013 to June 2014.

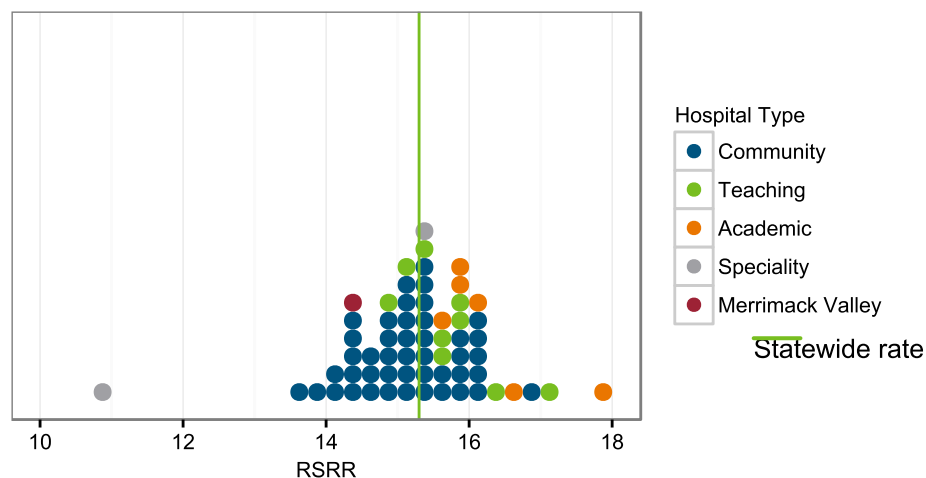
- [Overview readmissions statistics](#)
- [Risk-standardized readmission rates by hospital type](#)
- [Readmission rates by quarter \(July 2010 to June 2014\)](#)
- [Number of readmissions by time since discharge](#)
- [Readmission rates by age](#)
- [Readmission rates by payer type](#)
- [Readmission rates by discharge setting](#)
- [Diagnoses with the highest numbers and rates of readmissions](#)
- [Readmissions to other hospitals](#)
- [Readmissions among frequently hospitalized patients \(July 2011 to June 2014\)](#)

Overview Readmissions Statistics, July 2013 - June 2014

This table contains the overall readmission statistics for Merrimack Valley for state fiscal year 2014. The statewide figures are provided for comparison.

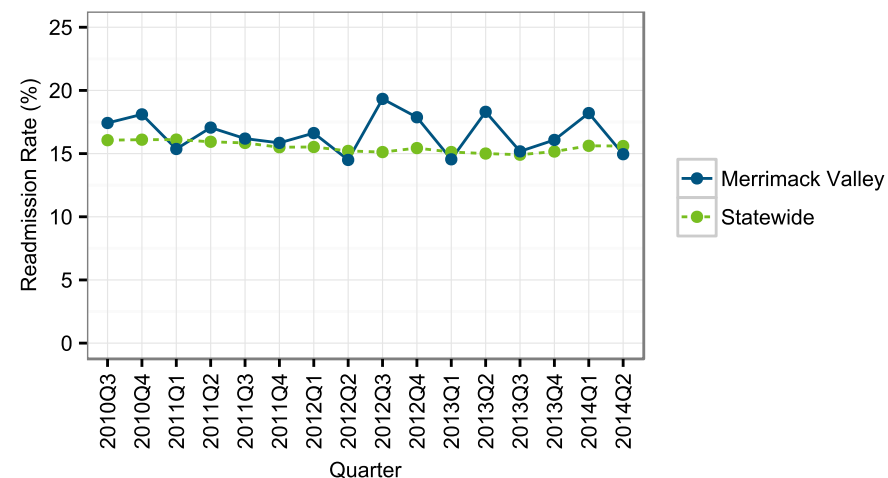
| | Merrimack Valley | Statewide |
|---|------------------|-----------|
| Eligible Discharges | 2,708 | 483,892 |
| Readmissions | 437 | 74,144 |
| Readmission Rate | 16.1% | 15.3% |
| Risk-Standardized Readmission Rate | 14.4% | 15.3% |

All-Payer Risk-Standardized Readmission Rates by Hospital Type, July 2013 to June 2014



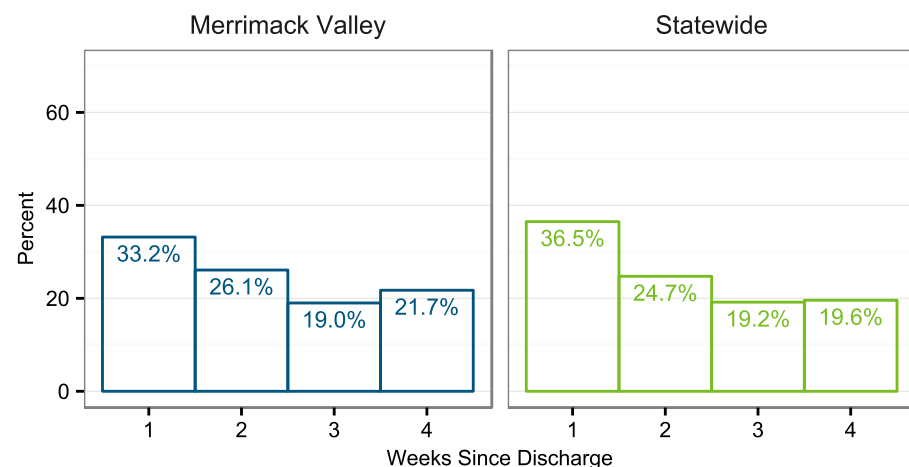
This graph shows the distribution of risk-standardized readmission rates for hospitals. Merrimack Valley is indicated by the red dot. Please see the statewide report for information on how hospital types are defined.

All-Payer Readmission Rate by Quarter, July 2010 to June 2014



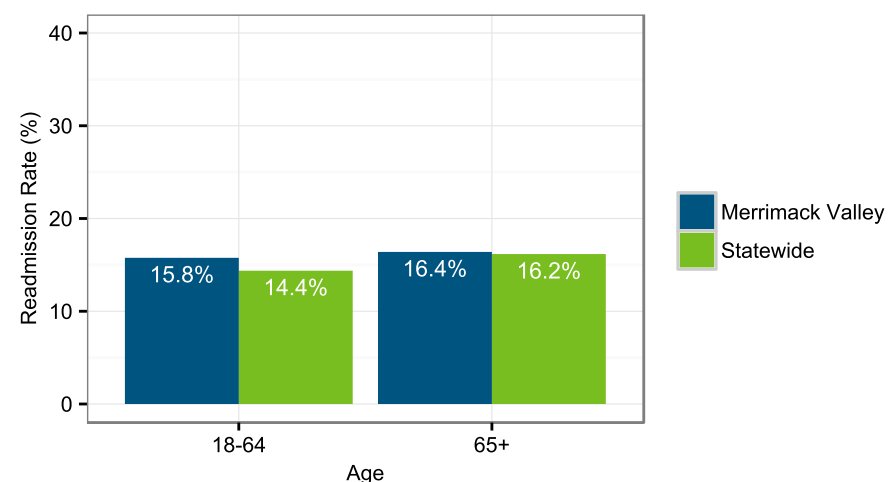
This graph shows the readmission rate for Merrimack Valley over time in comparison to the statewide rate.

Length of Time Between Discharge and Readmission, July 2013 to June 2014



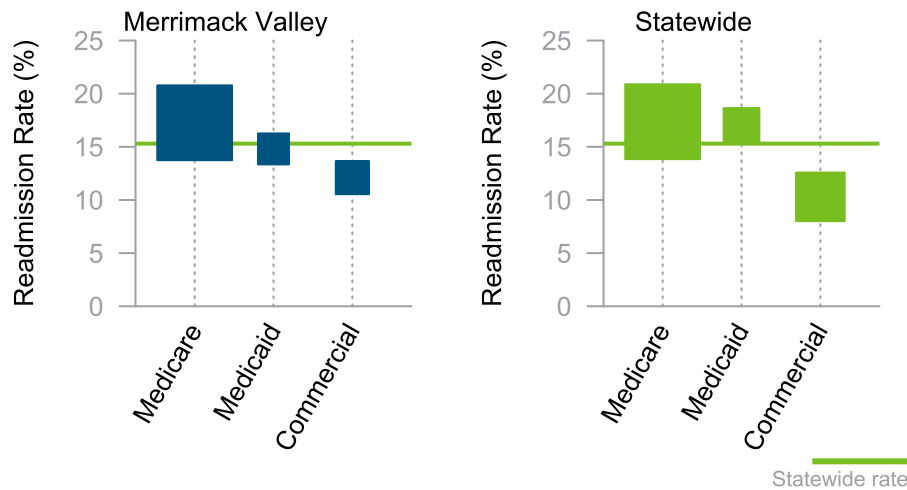
These plots show the percentage of readmissions by week from the time of the initial discharge.

All-Payer Readmission Rates by Age, July 2013 to June 2014



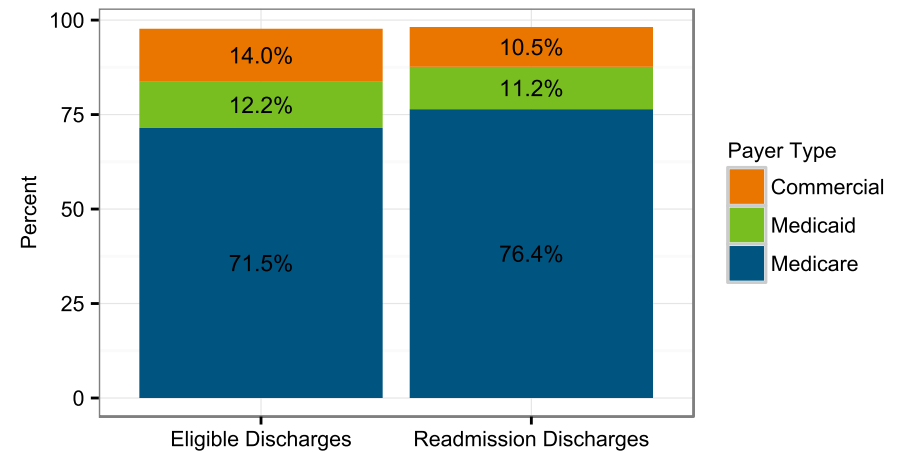
This graph shows readmission rates by age for Merrimack Valley and for the state.

All-Payer Readmission Rate by Payer Type, July 2013 to June 2014



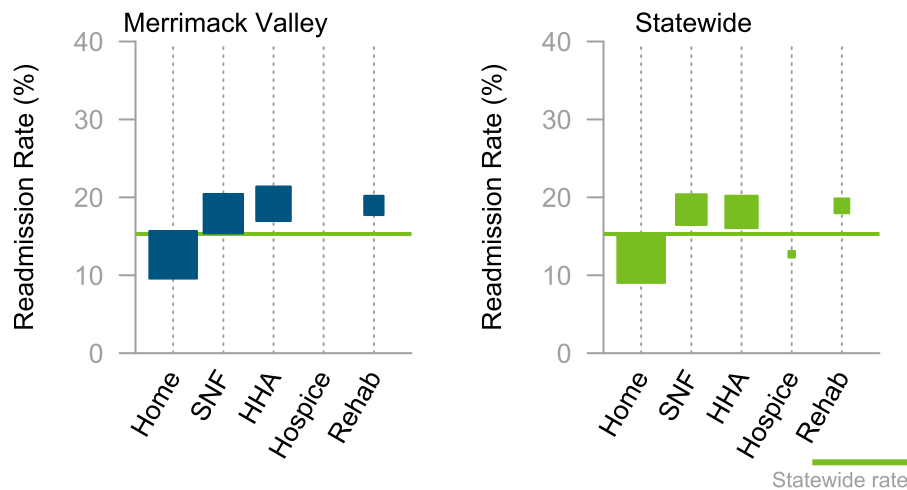
These plots show hospital and statewide readmissions broken out by the expected payer type. Vertical position of the box indicates the rate, and the size of the box is proportional to the number of readmissions.

Payer Type Profile, July 2013 to June 2014



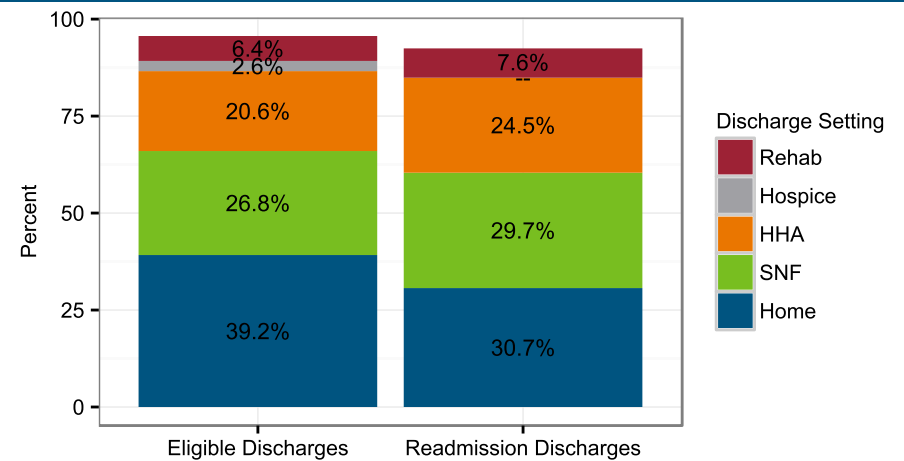
This chart compares the payer profile of discharges from Merrimack Valley that resulted in a readmission to the payer profile of all eligible discharges at Merrimack Valley. Note: "Self-Pay" and "Other" categories not shown.

All-Payer Readmission Rate by Discharge Setting, July 2013 to June 2014



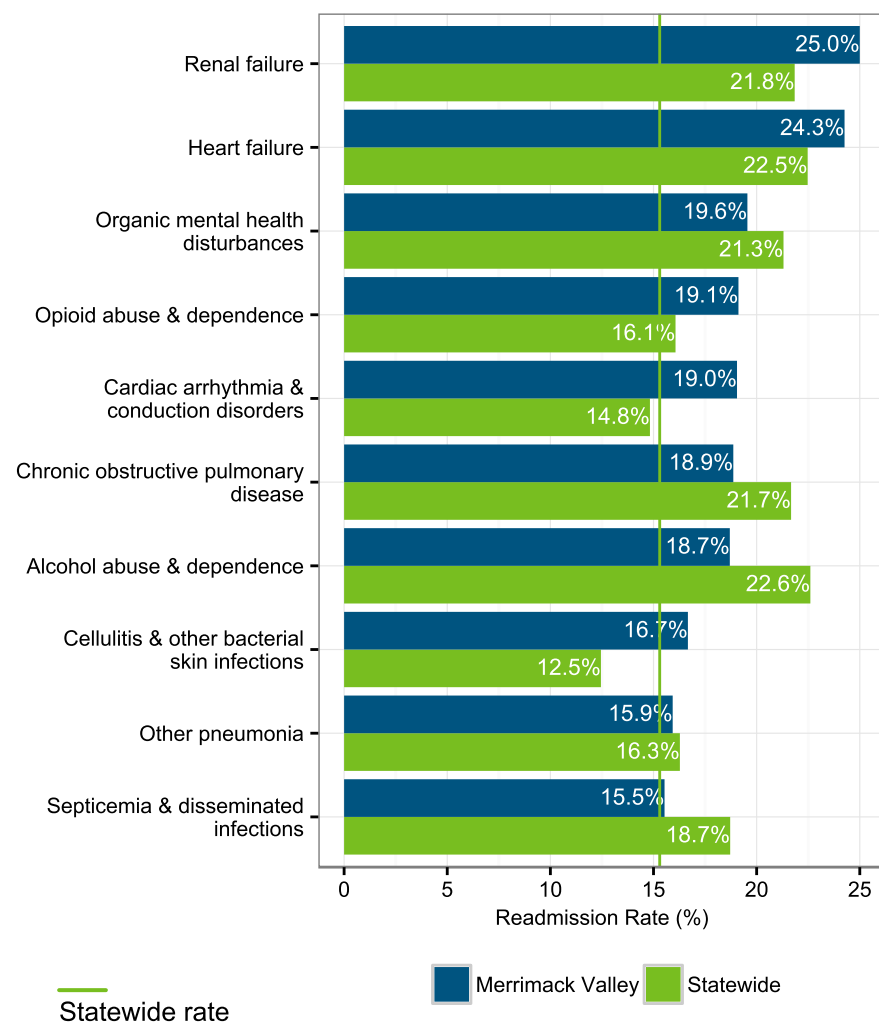
This graph shows readmission rate by the setting to which the patient was originally discharged. Note: SNF = skilled nursing facility, HHA = home with home health agency care.

Discharge Setting Profile, July 2013 to June 2014



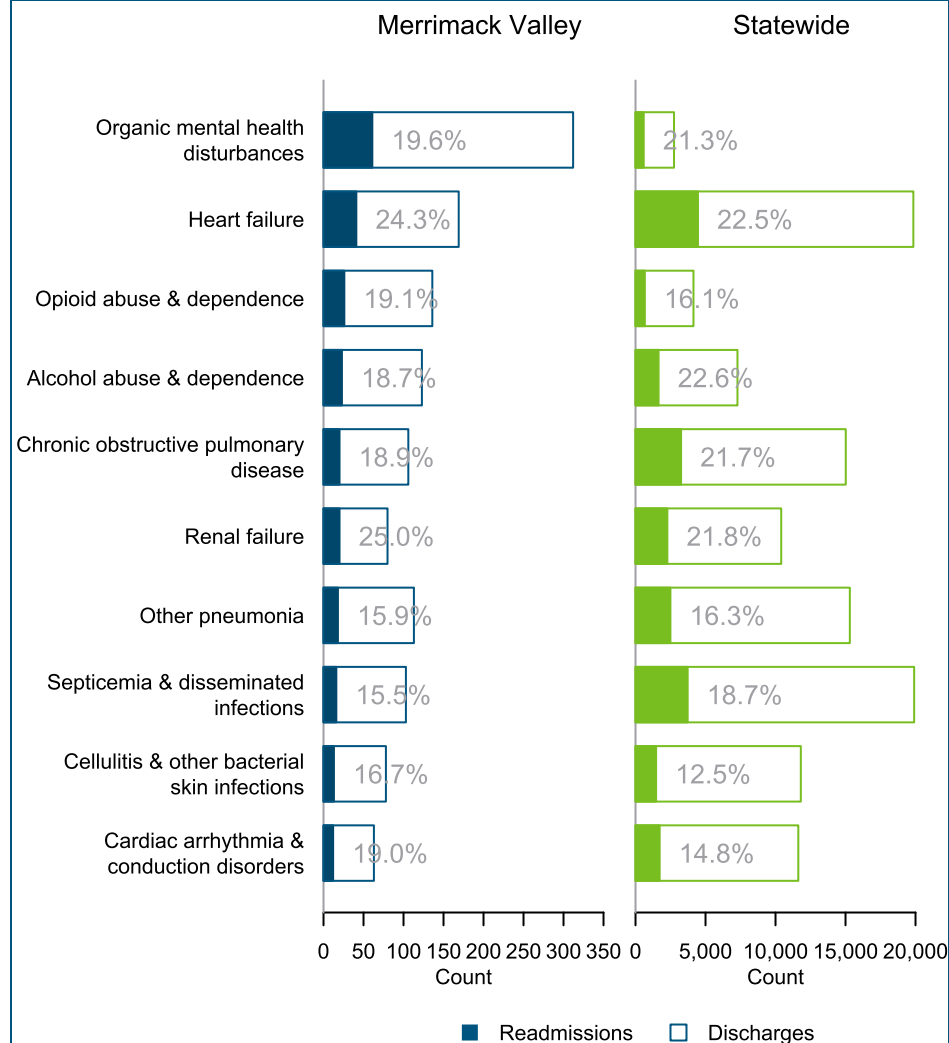
This graph shows the distribution of discharge settings for readmission discharges compared to all the eligible discharges at Merrimack Valley. Cells with < 11 cases are suppressed to protect patient privacy (indicated by "--").

Top Diagnoses with Highest Rates of Readmission, July 2013 to June 2014



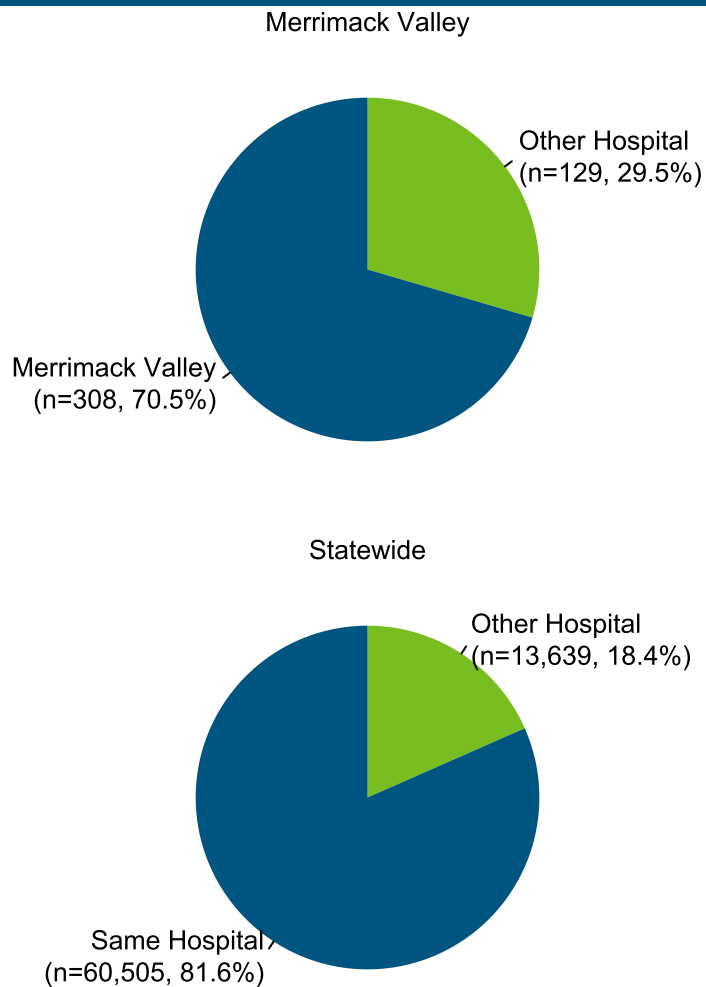
This plot shows the 10 discharge conditions with the highest rates of readmissions for Merrimack Valley and corresponding figures for those conditions statewide. Note: Only conditions with 25 or more discharges and 11 or more readmissions are included.

Top Diagnoses with Highest Numbers of Readmissions, July 2013 to June 2014



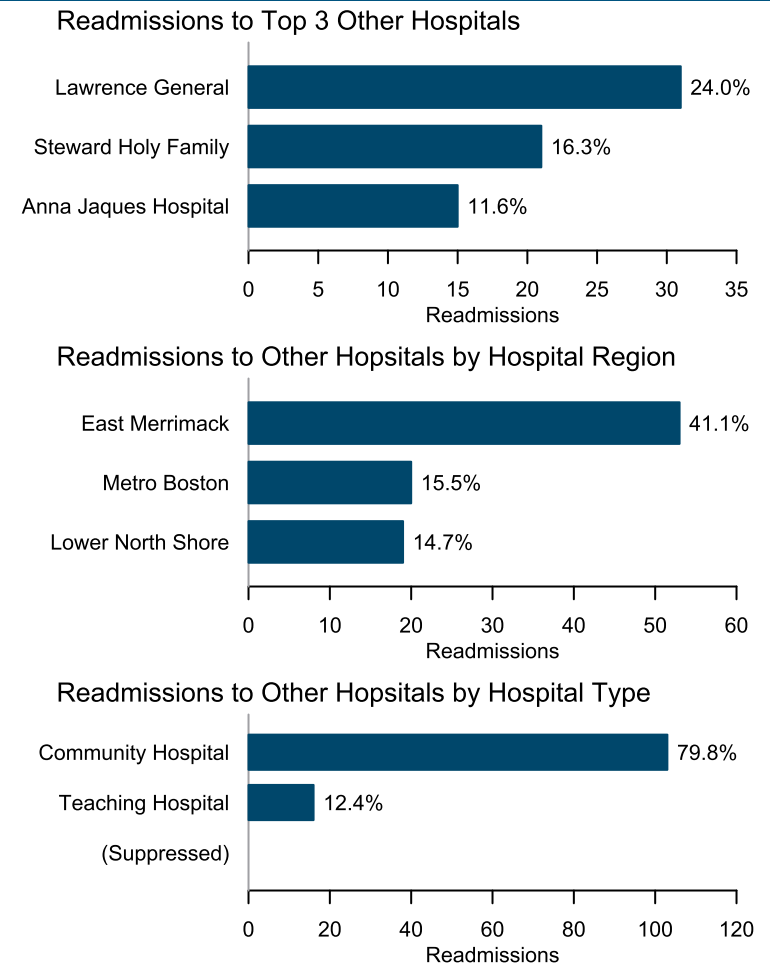
These plots show the 10 discharge conditions with the highest numbers of readmissions at Merrimack Valley and the corresponding figures for those conditions statewide. The outlined bars represent the total number of discharges for each diagnosis, and the filled-in bars show the number of readmissions. The figures next to each bar give the readmissions rate. Note: Only conditions with 25 or more discharges and 11 or more readmissions are included.

Readmissions to Other Hospitals, July 2013 to June 2014



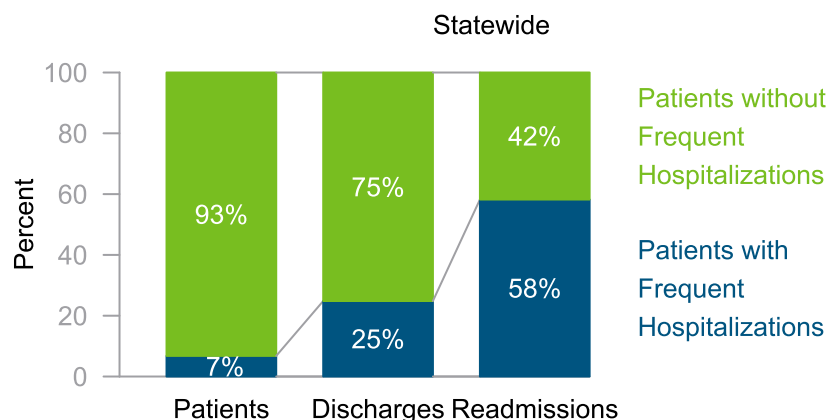
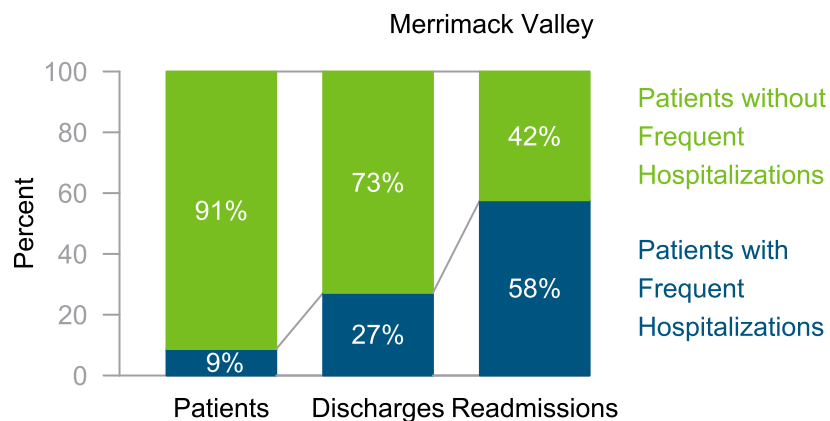
This figure shows the proportion of the readmissions from Merrimack Valley that were to another hospital, along with the corresponding statewide figure.

Characteristics of Readmissions to Other Hospitals, July 2013 to June 2014



This display provides more information on discharges from Merrimack Valley in which the patient was subsequently readmitted to another hospital. The top portion of the figure shows the top three other hospitals to which patients from Merrimack Valley were readmitted. The middle portion shows the regions in which these patients were readmitted. The bottom portion shows the types of hospitals to which they were readmitted. The percentage for each bar represents the percentage that group represents of the total number of readmissions from Merrimack Valley that were readmitted to other hospitals. Due to data privacy concerns, only groups with 11 or more readmissions are listed. For definitions of the geographic regions, please see the statewide report.

All-Payer Readmissions among Frequently Hospitalized Patients, July 2011 to June 2014



In the statewide report, CHIA reported readmissions for frequently hospitalized patients, defined as those with four or more admissions in any one-year period from July 2010 to June 2013. This chart shows the percentage of patients, discharges, and readmissions accounted for by frequently hospitalized patients at Merrimack Valley.

Hospital Readmissions among Frequently Hospitalized Patients by Payer Type, July 2011 to June 2014

| | Number of Patients | Percentage within Group | Number of Discharges | Number of Readmissions | Readmission Rate (%) |
|---|--------------------|-------------------------|----------------------|------------------------|----------------------|
| Patients with Frequent Hospitalizations | 380 | 100.0% | 2,358 | 824 | 34.9% |
| Commercial | 25 | 6.6% | 161 | 52 | 32.3% |
| Medicare | 318 | 83.7% | 1,913 | 665 | 34.8% |
| Medicaid | 29 | 7.6% | 237 | 91 | 38.4% |
| Patients without Frequent Hospitalizations | 3,983 | 100.0% | 6,314 | 605 | 9.6% |
| Commercial | 741 | 18.6% | 1,016 | 72 | 7.1% |
| Medicare | 2,615 | 65.7% | 4,406 | 466 | 10.6% |
| Medicaid | 475 | 11.9% | 681 | 54 | 7.9% |
| Total | 4,363 | | 8,672 | 1,429 | 16.5% |

This table shows the breakdown of patients at Merrimack Valley with frequent hospitalizations by payer type, and the associated readmission rates for these groups. Note: Percentages within groups do not sum to 100 because the table excludes "Self-Pay" and "Other" categories which together sum to less than 5% of discharges. Patients with frequent hospitalizations are defined as those with four or more admissions in any one-year period from July 2011 to June 2014. Cells with fewer than 11 cases are suppressed to protect patient privacy. Additionally, cells that might be used to derive the contents of suppressed cells are also suppressed. All such cells are indicated by "--".



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