

Background

- While the rate of discharges to post-acute care (PAC) facilities continues to rise, readmissions from these facilities are common and poorly understood¹
- Patients who are readmitted after surgery experience increased healthcare costs, delays in adjuvant treatment, and are at higher risk for 30-day mortality^{2,3}
- Readmission negatively impacts patient quality of life and perception of their progression⁴
- Reduction of unnecessary readmissions would result in significant improvements in both quality and cost of care in these patients
- We sought to 1) compare 30-day readmission rates for discharges from our Otolaryngology service to PAC facilities vs. other discharge destinations (ODD) and 2) analyze reasons for readmission for patients in each group

Methods

- A retrospective review was conducted on patients who were admitted to the otolaryngology service at a single tertiary academic center from September 2017 to August 2020
- Patient charts were assessed for demographics, discharge destination, and reason for readmission, if a readmission occurred
- Reasons for readmission were grouped into categories: Bleeding; Infection; Medical complication; Wound Breakdown; Functional issue; Pain; Other Surgical Complication
- Discharges to a skilled nursing facility, inpatient rehabilitation facility, or long-term care hospital were classified as a PAC discharge
- Fisher’s Exact Test was used to compare readmission rates and reasons between PAC discharges and ODD

Results

- 1832 patients were discharged over the study period, of which 140 (7.6%) were readmitted within 30 days
- Planned readmissions were excluded (n=4)
- 240 (13.1%) patients were discharged to a PAC facility
- Readmissions occurred at a higher frequency from PAC facilities compared to other destinations (PAC: n = 39 (16.3%); ODD: n = 97 (6.1%), p<0.0001)
- 28.7% of total readmissions occurred from patients discharged to a facility

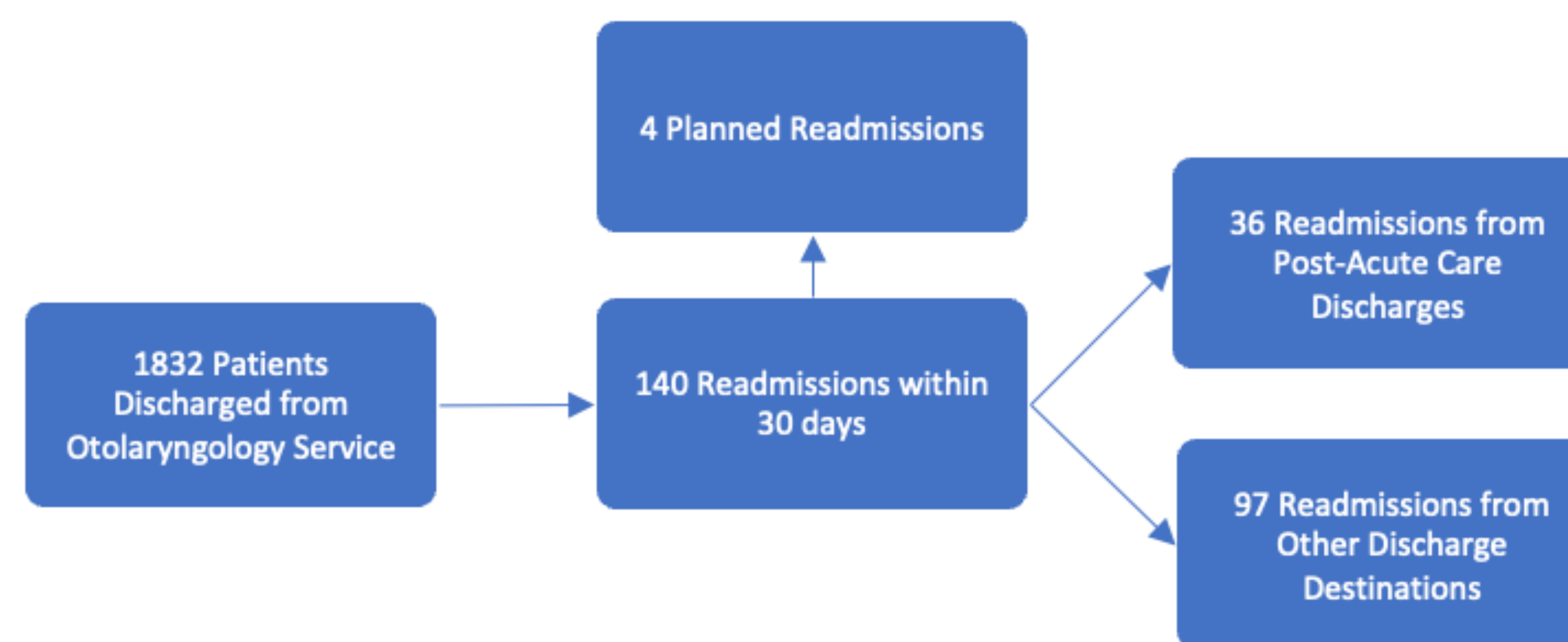


Figure 1: Readmission Numbers and Discharge Location

Reason for Readmission	Post-Acute Care (%)	Other Discharge Destination (%)	p value
Medical Complication	12 (30.8%)	23 (23.7%)	0.3949
Infection	11 (28.2%)	31 (32%)	0.8376
Wound Breakdown	7 (17.9%)	13 (13.4%)	0.5931
Bleeding	5 (12.8%)	9 (9.3%)	0.5427
Functional issue	4 (10.3%)	12 (12.4%)	1
Pain	0 (0%)	5 (5.2%)	0.321
Other Surgical Complication	0 (0%)	4 (4.1%)	0.5782
Total	39	97	

Table 1: Common Reasons for Readmission

Discussion

- Post-acute care represents one-sixth of all Medicare spending, and the proportion of Medicare spending dedicated for post-acute care facilities has been increasing⁵
- Discharge to a post-acute care facility represented a moderate proportion of total discharges (16.3%) but a significant proportion of readmissions (28.7%)
- There were no significant differences in reasons for readmissions between patients discharged to post-acute facilities or other discharge destinations
- Prior research has estimated that close to three-quarters of post-acute care readmissions are potentially avoidable⁶

Conclusions

- Discharges to post-acute care facilities make up a significant portion of unplanned readmissions to a tertiary otolaryngology service
- Readmissions may signify inadequate processes for transitioning care or inadequate matching of patient needs to PAC services
- Further research is needed to identify patients at high risk for readmission

References

1. Weber, Randal S., Carol M. Lewis, Scott D. Eastman, Ehab Y. Hanna, Olubumi Akiwumi, Amy C. Hessel, Stephen Y. Lai, Leslie Kian, Michael E. Kupferman, and Dianna B. Roberts. "Quality and Performance Indicators in an Academic Department of Head and Neck Surgery." *Archives of Otolaryngology-Head & Neck Surgery* 136, no. 12 (December 20, 2010): 1212. <https://doi.org/10.1001/archoto.2010.215>.
2. Chaudhary, Hamad, C. Matthew Stewart, Kimberly Webster, Robert J. Herbert, Kevin D. Frick, David W. Eisele, and Christine G. Gourin. "Readmission Following Primary Surgery for Larynx and Oropharynx Cancer in the Elderly." *The Laryngoscope* 127, no. 3 (March 2017): 631-41. <https://doi.org/10.1002/lary.26311>.
3. Graboyes, Evan M., Dorina Kallogjeri, Mohammed J. Saeed, Margaret A. Olsen, and Brian Nussenbaum. "30-Day Hospital Readmission Following Otolaryngology Surgery: Analysis of a State Inpatient Database." *The Laryngoscope* 127, no. 2 (February 2017): 337-45. <https://doi.org/10.1002/lary.25997>.
4. Kassin, Michael T, Rachel M Owen, Sebastian Perez, Ira Leeds, James C Cox, Kurt Schnier, Vjollca Sadiraj, and John F Sweeney. "Risk Factors for 30-Day Hospital Readmission among General Surgery Patients." *Journal of the American College of Surgeons* 215, no. 3 (September 2012): 322-30. <https://doi.org/10.1016/j.jamcollsurg.2012.05.024>.
5. Mechanic R. Post-Acute Care – The Next Frontier for Controlling Medicare Spending. *New England Journal of Medicine*. 2014;370(8):692-694. doi:10.1056/NEJMp1315607
6. Vasilevskis EE, Ouslander JG, Mixon AS, et al. Potentially Avoidable Readmissions of Patients Discharged to Post-Acute Care: Perspectives of Hospital and Skilled Nursing Facility Staff. *Journal of the American Geriatrics Society*. 2017;65(2):269-276. doi:10.1111/jgs.14557