

BACKGROUND

- Primary medication non-adherence (PMN) occurs when a new medication is prescribed, but not obtained by the patient within an acceptable time period.¹
- Reasons for PMN are complex and may not be accurately captured using only prescription claims data.²
- The aim of this study was to identify reasons for PMN in adult patients prescribed specialty oral oncolytic agents.

METHODS

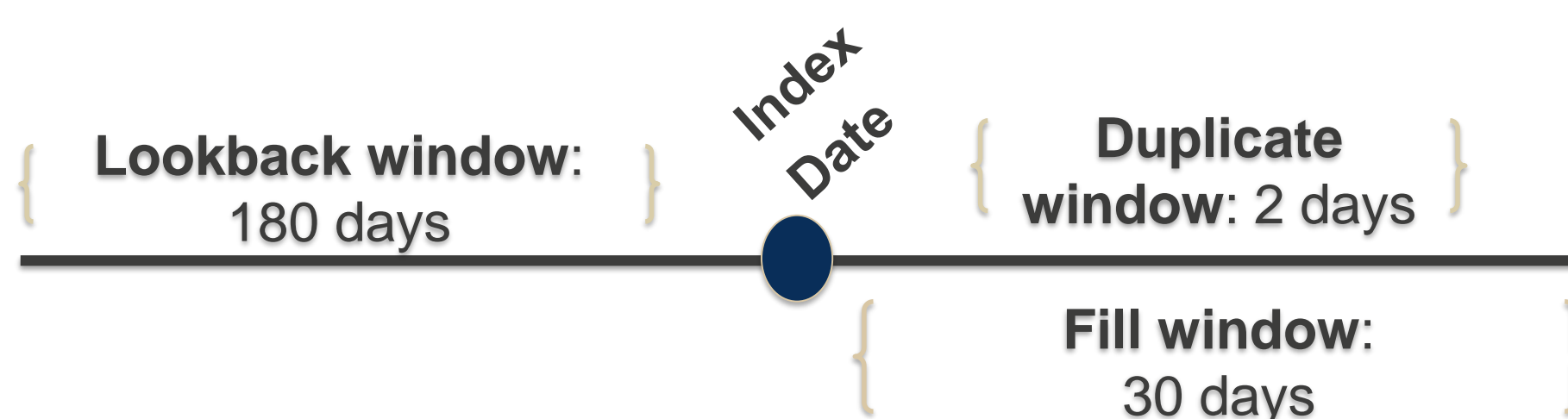
Single-center, retrospective cohort analysis of prescriptions for specialty oral oncolytic agents that were:

- Prescribed by a Vanderbilt University Medical Center provider
- Prescribed to an adult patient
- Sent to Vanderbilt Specialty Pharmacy (VSP)
- Between January-December 2018

Table 1. PMN Parameter Definitions

Lookback window (LBW)	Minimum length of time prior to the index prescription in which a patient may revert to naïve status, and thus be a potential instance of PMN
Duplicate window (DW)	Length of time in which 2 sequential prescriptions can be considered duplicate
Fill window (FW)	Duration of time a fill of an eligible prescription needs to occur in order to not be considered a case of PMN
PMN-eligible prescription	No fill of any oncology medication in 180 day LBW No duplicate prescription sent within 2 days No prescription reroute to external specialty pharmacy (SP) within 2 days

Figure 1. Primary medication non-adherence model



$$\text{Rate of PMN} = \frac{\text{Number of prescriptions with PMN status}}{\text{Total number of eligible prescriptions}}$$

RESULTS

Figure 3. Prescription Eligibility and PMN Rates

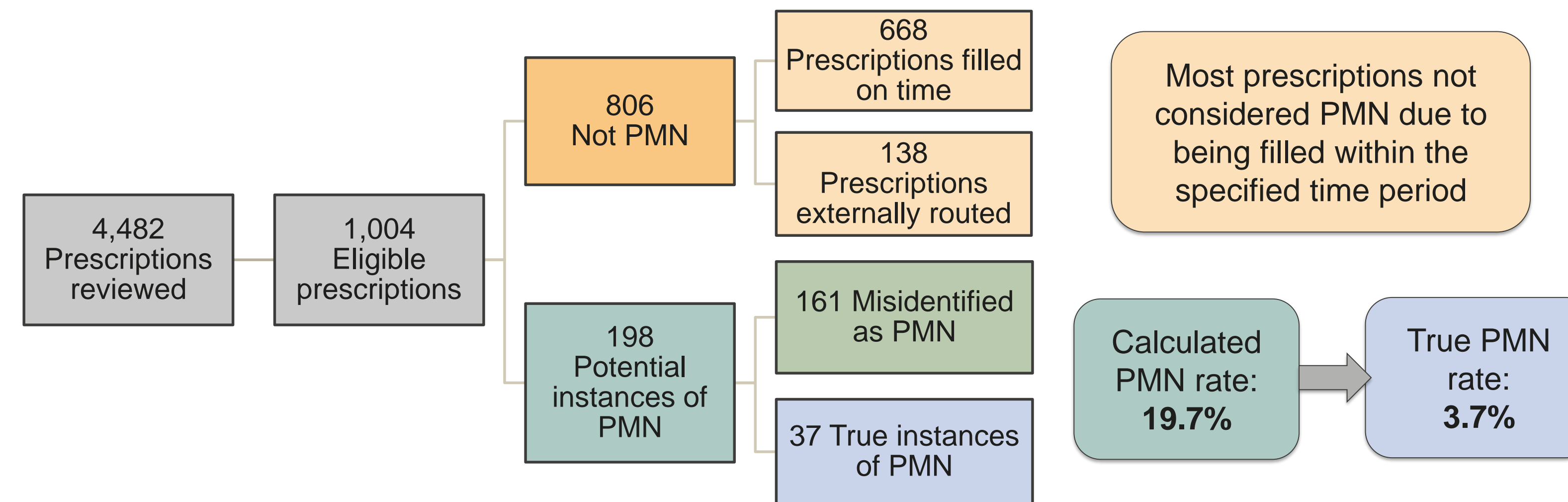
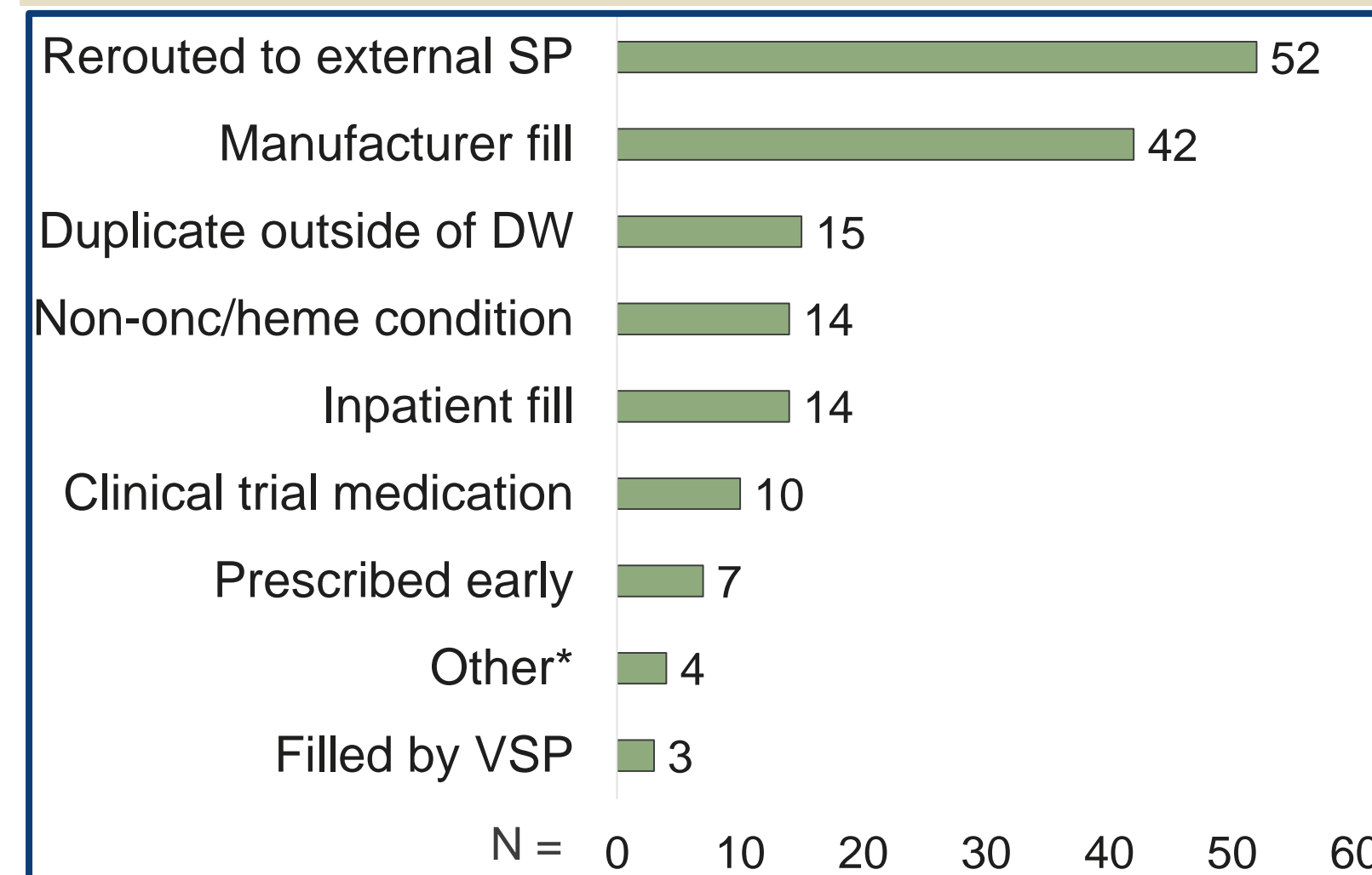


Table 2. Demographics for True PMN Cases

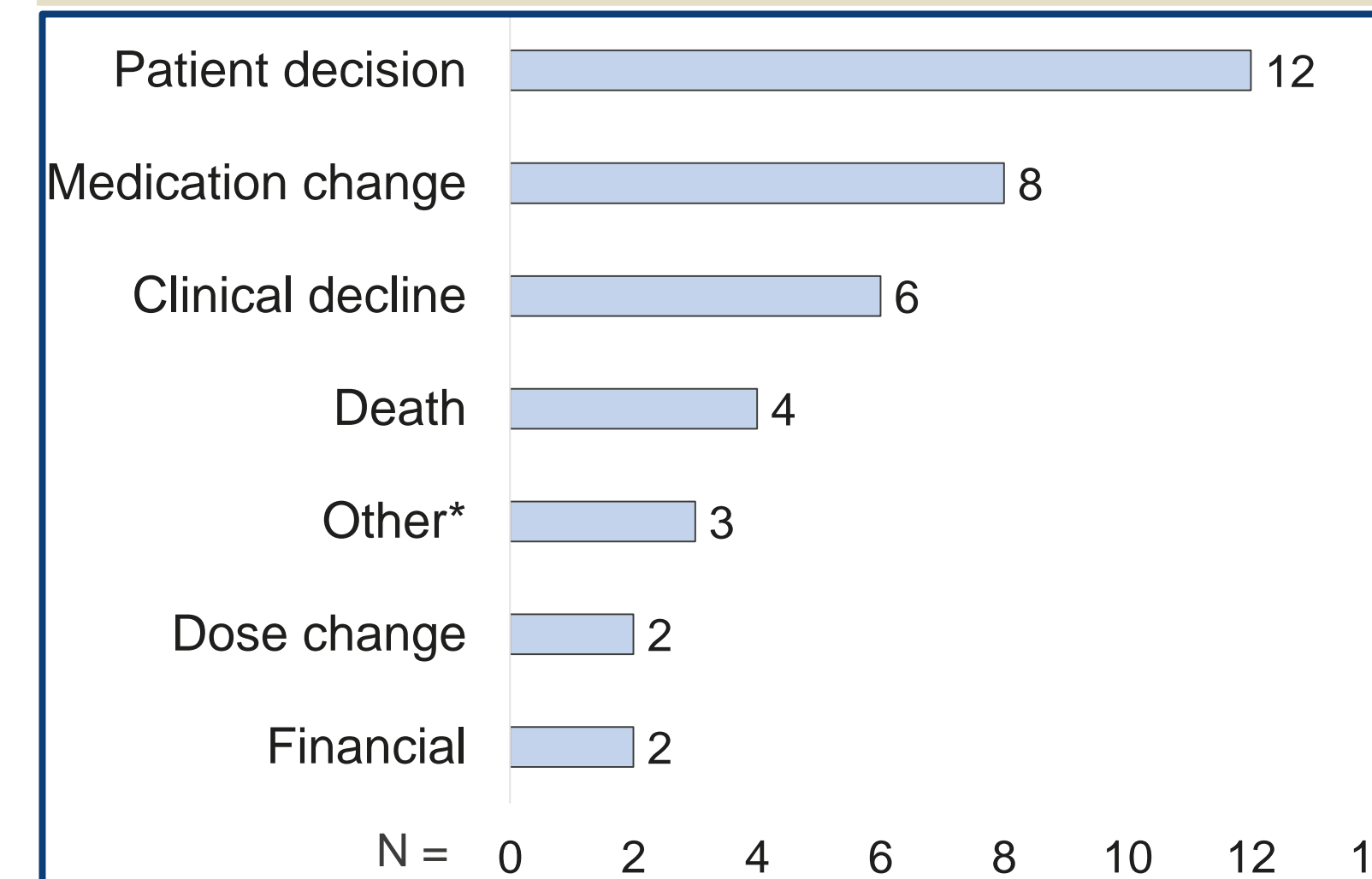
Baseline Characteristics (n=37)	M ± SD or n (%)
Age, years	65 ± 16
Gender, Male	25 (68)
Race, Caucasian	32 (87)
Alcohol use (past 6 months)	12 (32)
Current or former smoker	24 (65)
Charlson Comorbidity Index Score	7.1 ± 3.6
Hospitalization 3 months prior to prescription	8 (22)
Surgery 6 months prior to prescription	3 (8)
Treatments 3 months prior to prescription	
None	19 (51)
Radiation	2 (5)
Infusion	1 (3)
Other treatment	15 (41)

Figure 4. Reasons for Misidentified PMN (N=161)



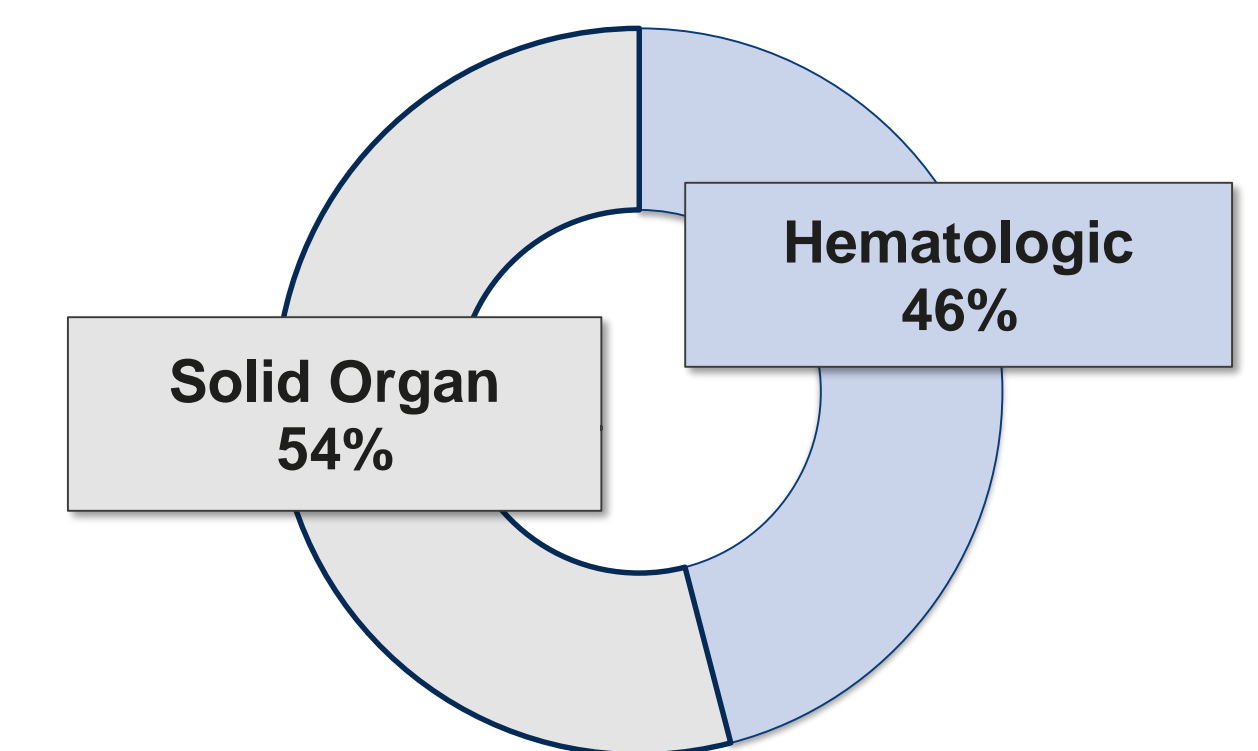
*Other reasons for misidentified PMN: prescribed to cover a shipment delay, patient already on therapy with enough medication on-hand, erroneous automated refill and erroneous prescription

Figure 5. Reasons for True PMN (N=37)



*Other reasons for PMN: medication no longer clinically appropriate, patient unreachable and medication held for imaging

Figure 2: Cancer Type for True PMN



CONCLUSIONS

- The algorithm by which PMN is traditionally defined grossly overestimates the true rate of primary medication non-adherence.
- As only 19% of potential PMN prescriptions were true PMN, there is an inherent limitation in using only raw PMN as a quality metric for specialty pharmacies.

REFERENCES

- Adams AJ, Stolpe SF. Defining and Measuring Primary Medication Nonadherence: Development of a Quality Measure. *Journal of Managed Care & Specialty Pharmacy*. 2016;22(5):516-523. doi:10.18553/jmcp.2016.22.5.516.2.
- Fischer MA, Stedman MR, Lii J, et al. Primary Medication Non-Adherence: Analysis of 195,930 Electronic Prescriptions. *Journal of General Internal Medicine*. 2010;25(4):284-290. doi:10.1007/s11606-010-1253-9.