DEVELOPMENT OF COMPUTER-BASED ADHERENCE MONITORING OF IMMUNOSUPPRESSANT ADHERENCE IN KIDNEY TRANSPLANT PATIENTS

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HIGHLIGHTS

- Transplant pharmacists with access to outpatient pharmacy data are **uniquely positioned to integrate clinical and pharmacy data** to **develop a comprehensive assessment of medication adherence** in kidney transplant patients.
- The novel computer-based adherence monitoring (CBAM) developed **capitalizes on clinical and pharmacy data** to empower **targeted adherence monitoring and outreach**, resulting in **a reduction in non-adherence**.
- **The high rate of misidentified non-adherence reasons** highlights the **challenge of using Proportion of Days Covered (PDC) alone** as an indicator of adherence.

PURPOSE

This study evaluated the effect of utilizing CBAM on patients with poor adherence to immunosuppressant therapy (12-month PDC ≤80% and 4-month PDC ≤80% at each quarter)

METHODS

Setting	**Outpatient transplant pharmacy at a large academic hospital**
Sample	**Adult patients with a kidney transplant who filled immunosuppressants at the center from 1/1/2022 - 6/30/23**
Analysis	**Descriptive statistics were used to evaluate:** • **The percent of enrolled high-risk at each quarter over 18 months of using CBAM (1/1/2022-6/30/2023)** • **Reasons for high-risk CBAM were described.**

CBAM was developed to continuously calculate patients' PDC → Pharmacists reviewed CBAM for patients with immunosuppressant PDC ≤80% over 4-month period. → Pharmacists determined if patient was high-risk, if further patient outreach was needed, and reasons for low PDC. → Patients were enrolled and unenrolled from high-risk monitoring based on continued need and engagement in care.

Results

Figure 1: All High-Risk Patients with PDC Below 80% (N=305)

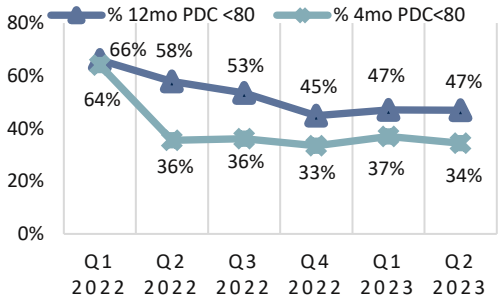


Figure 2: Patients with PDC Below 80% Serviced by VUMC Pharmacy (N=305)

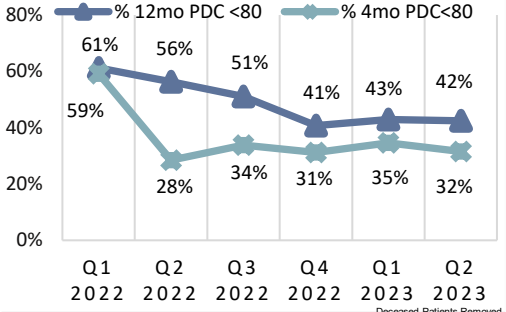


Figure 3: High Risk Reasons (N=305)

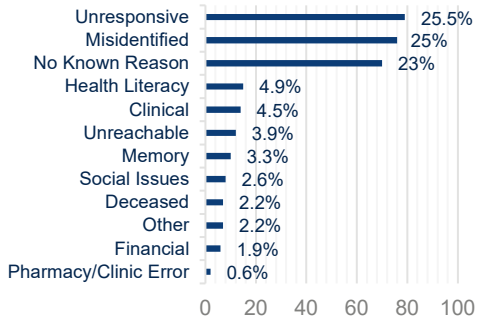
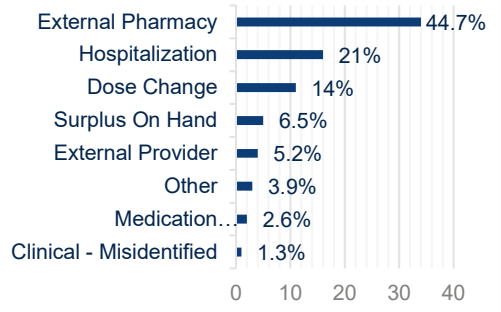


Figure 3: High Risk Misidentified Reasons (N=76)



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