A centralized utilization management model's impact on medication access

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Background

- Although timely access to rheumatology therapy is essential for disease control, utilization management (UM) and prior authorization (PA) for high-cost rheumatology medications often delay treatment and increase administrative burden.[1,2]
- Despite research on PA burden and cost sharing, few studies evaluate centralized UM models within independent rheumatology care delivery organizations (CDOs). [2,3]
- To enhance the UM process, a centralized UM team was created to complete all specialty UM tasks for a rheumatology CDO remotely (Figure 1.).

Objectives

Evaluate how a centralized UM model affects PA and appeal approval rates as well as operational efficiency to therapy compared to a traditional, clinic-based utilization management model.

Methods

- **Study design:** Retrospective, observational cohort study at a rheumatology CDO with clinics across the United States.
- **Inclusion criteria:** Eligible patients included those receiving new or refill prescriptions for specialty medications on the UM medication list within the centralized UM model from February 17–August 4, 2025. This did not include patients receiving infusion therapy.
  - Participant group: Patients receiving services through the centralized UM model.
  - Control group: Similarly sized private rheumatology CDO using a standard clinic-based UM model in conjunction with a specialty mail-order pharmacy.
- **Data source:** Summit Rheumatology™ electronic medical records (EMRs) and Optum Specialty Pharmacy prescription dispensing database.
- **Statistical analysis:** Chi-square test was utilized for PA and appeal approval rate.
  - PA approval rate = PAs approved/all PAs submitted.
  - Appeal approval rate = appeals approved/all appeals submitted.
  - Two-sample t-test was used for efficiency outcomes through turnaround time.
  - Referral to PA initiation = PA initiation date–referral date (new patients only).
  - PA initiation to PA approval = PA approval date–PA initiation date.
  - Alpha was set to 0.05 with a p-value of < 0.05 considered statistically significant.

Results

Figure 1: Centralized UM model workflow

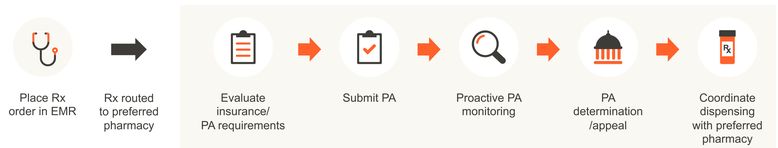
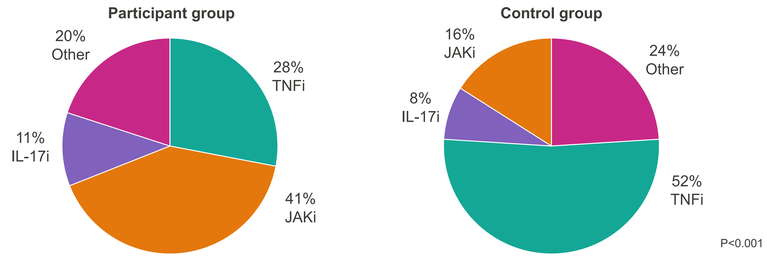


Figure 2. Drug Class Breakout by Cohort



Tumor necrosis factor inhibitor (TNFi) | Janus kinase inhibitor (JAKi) | Interleukin-17 inhibitor (IL-17i)

Table 1. PA outcomes

Metric	Participant group (N= 631)	Control group (N= 681)	p-value
PA approval rate, %	83.0	62.9	<0.0001
Mean PA initiation to PA Approval, days	4.0	5.4	<0.0001

Table 2. PA referral to PA initiation

Metric	Participant group (N= 393)	Control group (N= 164)	p-value
Mean Referral to PA Initiation, days	4.8	17.4	<0.0001

Table 2. Appeal outcomes

Metric	Participant group (N= 105)	Control group (N= 23)	p-value
Appeal approval rate, %	90.5	65.2	<0.005

Conclusion

- Significantly more patients were on newer drug classes to treat rheumatology conditions in the participant group (P<0.001).
- This centralized UM model significantly improved PA and appeal approval rates, with 20.2% higher PA approval and 25.3% higher appeal approval rate compared to control (P<0.0001, <0.005 respectively).
- The centralized UM model significantly improved operational efficiency, including 12.6 days faster PA initiation for new patients and 1.4 days faster PA approvals for new and refill patients (P<0.0001).
- These positive improvements on the quality and efficiency of the centralized UM model may translate to reduced therapy delays, decreased patient abandonment risk and earlier disease control and may also support potential expansion to other CDOs.
- Future research can evaluate provider satisfaction and time savings at CDO.

Limitations

- This study may not be generalizable beyond rheumatology or centralized UM-affiliated sites. These metrics may not fully capture the broader administrative or clinical effects of UM processes in other specialties.
- This UM framework focuses primarily on access and efficiency outcomes. It does not fully assess patient-level outcomes such as adherence, disease control or satisfaction.

Learn more

References

1. Wallace ZS, Harkness T, Fu X, et al. Treatment delays associated with prior authorization for infusible medications: a cohort study. *Arthritis care & research.* 2020; 72(11):1543–1549.
2. Levenson D. The burden imposed by prior authorization requirements. *The Rheumatologist.* February 9, 2025.
3. Ismail WW, Witry MJ, Urmie JM. The association between cost sharing, prior authorization, and specialty drug utilization: a systemic review. *J Manag Care Spec Pharm.* 2023; 29(5):449–463.

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