Impact of clinical digital assessments on patient engagement and clinician administrative burden

Lauren Lawler, PharmD, MBA, CSP; Jessica Vinckier, PharmD, CSP; Truman Crafts, PharmD; Derek Fisackerly; Kelly Mathews, PharmD, CSP

Optum® Specialty Pharmacy

Background

- Adherence is a critical challenge in specialty pharmacy, with nonadherence contributing to poor outcomes and increased costs.[1]
- Clinical management programs (CMP) are pharmacist-led assessments with ongoing monitoring designed to improve patient engagement and adherence. Phone-based CMP assessments are resource-intensive and do not honor patient communication preferences.[2]
- Optum® Specialty Pharmacy recently launched digital CMP assessments via a patient portal, offering an alternative to phone-based CMP assessments. (Figure 1.)

Objectives

Primary objective: Evaluate the CMP assessment completion rate by communication method

Secondary objective: Evaluate communication switch rate and clinician time spent by communication method.

Methods

Study design: Retrospective, observational cohort study at Optum Specialty Pharmacy between April 1–December 31, 2025. This study was deemed exempt by the UnitedHealth Group® Institutional Review Board (IRB).

Inclusion criteria: Patients with completed CMP assessments within programs that offer an option to complete follow-ups digitally. Patients may be eligible for multiple CMPs and were stratified by communication method of phone or portal.

Portal eligible group = at least one portal login within 90 days before the CMP assessment

Phone group = any patient receiving phone CMP outreach during study time frame

- **Data source:** Optum Specialty Pharmacy patient management clinical platform

Statistical analysis: Analyses were completed using Chi-squared test. Clinician time was measured using sample time series.

- CMP completion rate = Completed CMP assessment by communication method divided by total CMP assessments presented to eligible patients
- Channel switching = Number and percentage of patients who switch between communication channels in study period
- Clinician time = Total CMP assessment time (phone) or total time reviewing patient responses and completing any needed clinical interventions (portal)
- Alpha was set to 0.05 with a p-value of < 0.05 considered statistically significant
- Post-hoc analysis: Descriptive analytics were used to calculate rates of intervention and intervention success for digitally completed assessments

Results

Figure 1: Clinical management programs workflow

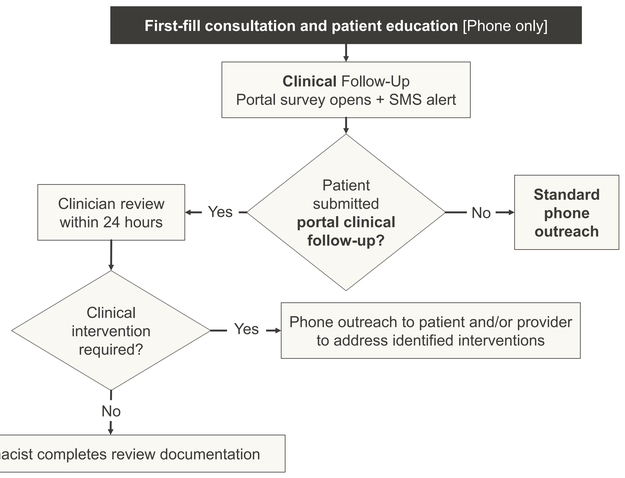


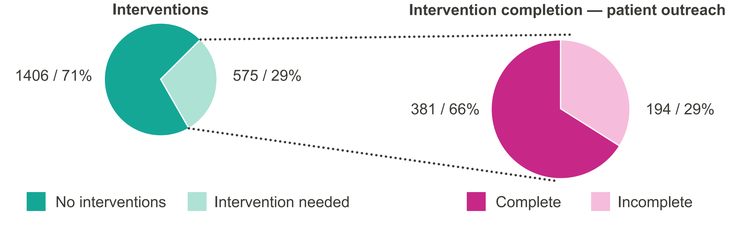
Table 1: Patient baseline characteristics

Variables	Portal (n= 7,659)	Phone (n= 42,779)	p-value
Age, years (mean ± SD)	51 ± 17.1	56.4 ± 18.9	<0.001
Females, %	64.3	60.7	<0.001

Table 2: Primary and secondary objectives

Outcome	Portal (n= 9,499)	Phone (n= 44,632)	p-value
Clinical management program completion rate, %	12.4	13.6	<0.01
Channel switching, % (N)	27.4 (20/73)	72.6 (53/73)	<0.001
Mean clinician time, minutes	4	9	

Figure 2: Post-hoc analysis — Rates of intervention and intervention success



Discussion

- Patients in the portal group were 5 years younger (p<0.001) with 3.6% more females (p<0.001) than those in the phone group.
- Phone-based outreach demonstrated higher completion rates, but the absolute difference was modest.
- Overall, patients who engaged digitally were doing well; only 29% required clinical intervention, and of those who did need that support, 66% were responsive to phone outreach.
- Few patients changed their method of completion, but of those who switched communication channel, 73% changed from phone to portal.
- Portal-based CMP assessments reduced clinician time by ~5 minutes per completion. For the 1,406 portal CMP reviewed that did not require phone intervention, portal CMP assessments saved 117 hours of clinician time.
- While overall engagement via portal is marginally lower, each digital completion offsets clinician workload, supporting the scalability of these clinical services.
- Future research can evaluate patient outcomes such as adherence, persistence and satisfaction.

Limitations

- Comparative analyses were restricted to portal-eligible patients
- Portal eligibility required evidence of recent portal activity, potentially favoring patients already engaged in the digital portal
- Retrospective observation may introduce selection bias and unmeasured confounders

Learn more

References

1. Bryan ED, Renfro CP, Anguiano RH, et al. Evaluating patient-reported adherence and outcomes in specialty disease states: A dual-site initiative. J Manag Care Spec Pharm. 2024; 30(7):710–718.
2. Kibbons AM, Moore R, Choi L, et al. Patient-Tailored Interventions to Improve Specialty Medication Adherence: Results from a Prospective Randomized Controlled Trial. The Am J Med. 2023; 136(7):694–701.e1.

Acknowledgements: The authors thank Optum technology and capabilities teams who implemented our vision to deliver digital clinical assessments

Disclosure: Authors of this study are full-time employees of Optum.

Corresponding author: Lauren Lawler (Lauren.Lawler1@optum.com)

©2026 Optum, Inc. All rights reserved. WF22933559_260720