Late-To-Refill Reminder Calls Have Greater Impact on Medication Adherence in Medicare Part D Patients with a 90-Day Fill

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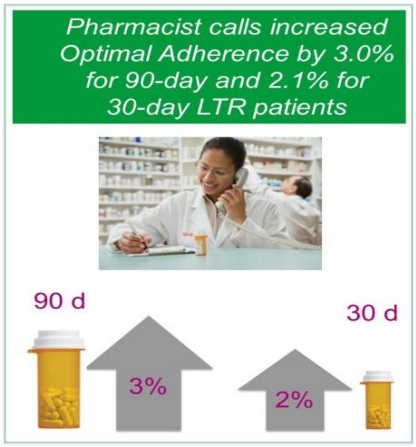
Patients with a 90-day supply of maintenance medications who were late-to-refill (LTR) their maintenance medications for at least three days, experienced larger gains in adherence when they received a LTR reminder call from their local pharmacist compared to patients with a 30-day supply of maintenance medic

ations.



OBJECTIVE

- To study whether late-to-refill reminder calls (LTR) from pharmacists are more effective on medication adherence, in patients with 90-day fill than patients with 30-day fill, within Medicare Part D (Med D) population.

METHODS

- **Study Design:** Randomized control with subgroup analysis
- **Study Population:** Patients who were 3 days late refilling their maintenance medications at Walgreens retail pharmacies in January 2015. Patients in the intervention group received LTR reminder calls from a local pharmacist. Patients in the control group did not receive LTR reminder calls.
- **Subgroups:** Patients were categorized into two subgroups based on days of supply for the prescription that triggered LTR—30-day (28-34 day supply) subgroup and 90-day (84-100 day supply) subgroup. Within each subgroup, the LTR effect is measured as the difference in medication adherence between the intervention and control group.
- **Measurement Period:** 12-month follow-up from the date when patients were 3 days late in refilling their medication in January 2015.
- **Outcome Measures:** Proportion of Days Covered (PDC) and the percent of patients with optimal adherence (OA) PDC≥ 80% over a 365 day period.
- **Statistical Analyses:** Difference-in-difference regressions and Student's t-tests were used to determine differences in the LTR effect on medication adherence between the 90-day and the 30-day subgroups. All statistical analyses were conducted using SAS version 9.3 (SAS Institute, Cary, NC).

RESULTS

- A total of 735,218 Med D patients who were 3 days late for their refills were randomized either into the intervention or control group.
- 395,560 patients were categorized as the 30-day subgroup and 288,211 patients were categorized as the 90-day subgroup.
- The LTR effect on medication adherence was significantly greater for 90-day patients compared to 30-day patients (See Table 1).

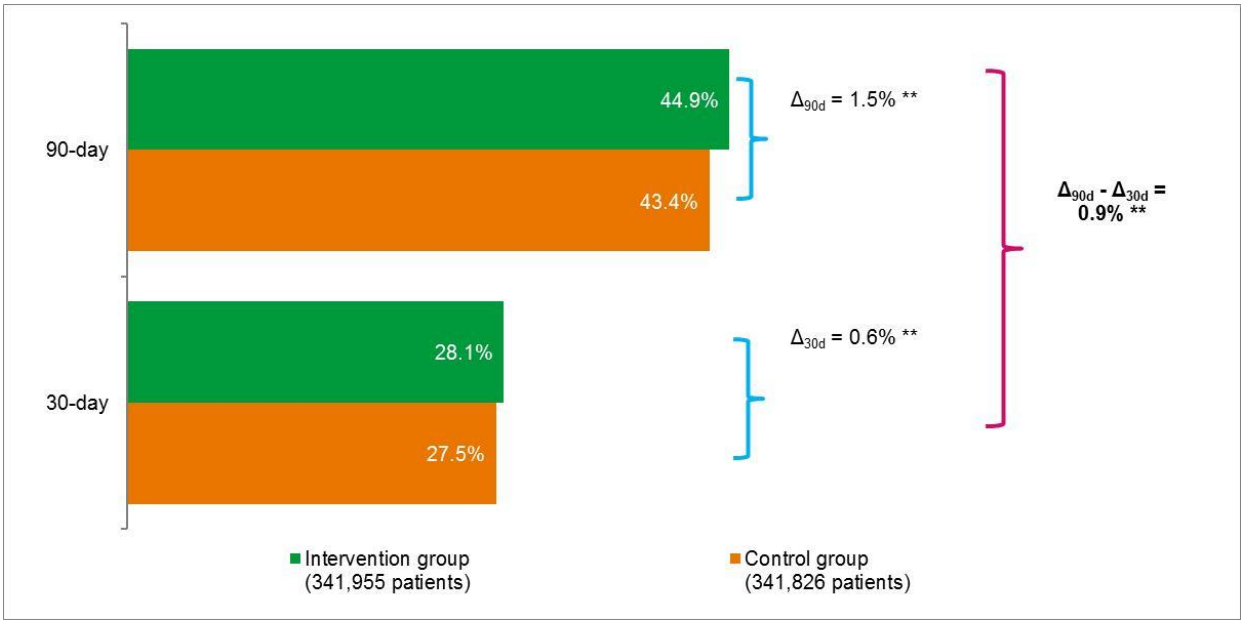
Table 1: LTR impact on Proportion of Days Covered by Subgroup

	Intervention Group (90-day = 144,006) (30-day = 197,949)	Control Group (90-day = 144,215) (30-day = 197,611)	Difference Within Subgroups	Difference-in-difference between subgroups
90-day patients	67.0%	65.9%	1.1%**	0.3%*
30-day patients	49.7%	49.0%	0.8%**	

Notes: (1) P-value <= 0.05 (*); *P-value* <= 0.01 (**); (2) We excluded 51,437 patients (7% of the patients) who were in the intervention and control group since they had a fill that was between 30-day and 90-day fill

- The LTR effect on Optimal Adherence was significantly greater for 90-day patients compared to 30-day patients (See Figure 1).

Figure 1: LTR impact on Optimal Adherence (PDC ≥ 80%) by 90 and 30-day Subgroup



Notes: (1) P-value ≤ 0.05 (*); P-value ≤ 0.01 (**); (2) We excluded 51,437 patients (7% of the patients) who were in the intervention and control group since they had a fill that was between 30-day fill and 90-day fill

CONCLUSION

- This randomized study showed that Late-to-Refill reminder calls had a greater impact on adherence in Medicare Part D patients with 90-day fills than 30-day fills. Retail pharmacy reminder calls are effective at improving medication adherence and even more so with 90-day fills.

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Contributing Authors:
Angshuman Gooptu, MPP; Youbei Lou, Ph.D.; Ying Mu, MS; Alex Rozenbaum, MBA; Michael Taitel, Ph.D.
Walgreens, Deerfield, IL

For more information on this presentation, please contact: research@walgreens.com.
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