Increases in Medication Use after New Membership in DaVita Rx

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Introduction

- Poor adherence to prescribed medications is a common problem in dialysis patients.
- Lack of physical and financial access to medication may limit utilization and adherence.
- The Medicare Part D low-income subsidy greatly reduces out-of-pocket costs for many dialysis patients, but patients may still be challenged by the need for multiple trips to pharmacies.
- DaVita Rx is a full-service pharmacy that delivers medication to dialysis facilities and offers integrated pharmacy services. including telephonic medication therapy management and refill management.
- Hypothetically, the receipt of integrated pharmacy services would result in positive changes in utilization and adherence.
- In this study, we used a pre/post design to compare medication utilization during the 6-month intervals immediately before and after new enrollment in DaVita Rx.
 - We also compared changes in DaVita Rx members with corresponding changes in matched controls.

Due to refinements in study design since May 2014, some estimates in this poster differ from corresponding estimates reported in the abstract. However, differences are small and qualitative conclusions remain the same

RESEARCH GROUP

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from DaVita

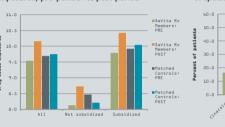
Methods

- United States Renal Data System (USRDS) records were linked with DaVita records.
- The exposed cohort comprised new DaVita Rx members (first medication filled by a DaVita Rx pharmacy) between January 1, 2007, and December 31, 2010.
- All members had Medicare Parts A. B. and D coverage for ≥ 6 months before the date of new DaVita Rx enrollment.
- For each member, we identified 1 matched control among patients at withinstate DaVita dialysis facilities, according to an 81-factor propensity score of new DaVita Rx enrollment.
- Candidate controls were identified on the corresponding member's date of new DaVita Rx enrollment.
- Controls were sampled without replacement.
- We followed patients until the earliest of death, kidney transplant, or December 31, 2010, and retained pairs in which DaVita Rx member and matched control were each followed for >6 months.
- We ascertained medication utilization during 6-month intervals immediately before and after the start of follow-up.
- Medication data, including dates of dispensing and days supplied, were ascertained from Medicare Part D claims

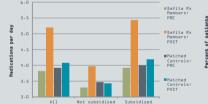
Results

- We identified 13,600 matched pairs.
- Among DaVita Rx members, medication utilization increased significantly after enrollment.
 - Δ in number of Medicare Part D drug class exposures = +0.62
 - Δ in number of medications per day in capsule or tablet form = +1.38
 - Δ in supplied pills per day = +5.31
- Pre/post differences were significantly larger among DaVita Rx members vs. matched controls.
- In patients without pre-period use of each of 6 specified medication classes, DaVita Rx members were significantly more likely than matched controls to use medications in those classes in the post-period.
- In patients with pre-period use of each of 6 specified medication classes, DaVita Rx members were significantly more likely than matched controls to use medications in those classes in the post-period.
 - The proportion of days covered (PDC) in the post-period was significantly greater in DaVita Rx members vs. matched controls.
 - Across the classes, differences in pre/post PDC between DaVita Rx members and matched controls ranged from +13% to +20%.

Mean number of Medicare Part D drug class exposures, pre-period vs. post-period



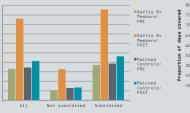
Mean number of medications per day in capsule or tablet form, pre-period vs. post-period



Mean number of supplied pills per day,

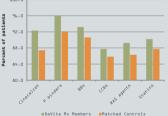
pre-period vs. post-period

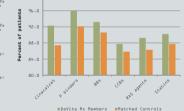
> 14.0



Proportion of days covered in post-period, given use of specified classes during the pre-period

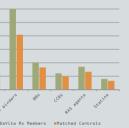








Percentage of patients treated, given no use of specified classes during the pre-period



Percentage of patients treated, given use of specified classes during the pre-period

Conclusions

- Receiving integrated pharmacy services from DaVita Rx led to immediate changes in medication possession.
- New DaVita Rx members were dispensed more medication classes. more medications per day, and more pills per day after vs. before the enrollment, relative to matched controls.
- Among patients who had not used medications in specified classes or had discontinued use for ≥ 6 months, new DaVita Rx members were much more likely to use phosphate binders than were matched controls.
- Among patients who had used medications in specified classes before the start of follow-up, new DaVita Rx members had consistently larger proportions of days covered, particularly regarding bone and mineral disease medications.
- Whether increases in proportions of days covered represent increases merely in days supplied or increases in actual medication adherence is uncertain and necessitates further investigation.
- Administrative databases, such as Part D claims, cannot be used to directly assess intake of medication.
- In either case, DaVita Rx clearly improves access to medication for dialysis patients.