An Increase in Single-Tablet Regimen (STR) Utilization for People Living With HIV (PLWH) Enrolled in Medicaid Had Minimal Impact on Pharmacy Costs

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Key Takeaways

- **From 2016 to 2020, use of single-tablet regimens (STR) increased among people living with HIV (PLWH) enrolled in Medicaid in the United States (US)**
- **Despite an increase in STR use, there was minimal impact on pharmacy costs**

Introduction

- Use of STR is associated with higher rates of antiretroviral therapy (ART) adherence compared with use of multiple-tablet regimens (MTR); however, in the US, the shift to STR utilization has been slower among PLWH covered by Medicaid vs commercial insurance[1-4]
- In the US, states can offer Medicaid benefits via 2 methods[5]
  - In the Medicaid Fee-for-Service (FFS) model, the state directly pays providers for covered services received by the beneficiary
  - In a Medicaid Managed Care plan, the state pays a fee per beneficiary to the Managed Care plan, which will then pay providers for covered services received by the beneficiary
- In this study, STR and MTR utilization and pharmacy costs were examined over a 5-year period for PLWH enrolled in Medicaid

Methods

- Using IQVIA's Prescription Claims (Rx) data, 2 mutually exclusive cohorts based on STR or MTR use within each of 5 calendar years were identified (2016-2020)
- For the STR cohort, the date of the first STR claim in each calendar year was termed the index date
- For the MTR cohort, the date of the first MTR drug in the first observed complete MTR regimen in each calendar year was termed the index date; a window of 5 days between prescription fills for the agents used in an MTR regimen was allowed
- The regimen received on the index date was used to assign the study cohort for each year, and study measures were reported for each of the 5 calendar years
- Additional eligibility criteria included:
  - Evidence of having received an STR or MTR in the Rx data in the calendar year
  - Age ≥18 years at index date
  - Medicaid FFS or Medicaid Managed Care as payer type at index date
    - PLWH with both plans at index date were not eligible
  - Patient activity, defined as ≥1 prescription in 1 to 6 months and 7 to 12 months (including index date)
  - Pharmacy stability, defined as consistent reporting of data from the pharmacy associated with the index prescription for each month over the calendar year

Results

STR or MTR Use by Medicaid Plan Type

- The final STR cohort included 47,140 (14.5% of the initial sample) PLWH in 2016 and 73,111 (14.0%) in 2020 (Figure 1)
- The final MTR cohort included 36,007 (15.5%) PLWH in 2016 and 20,264 (13.5%) in 2020 (Figure 1)

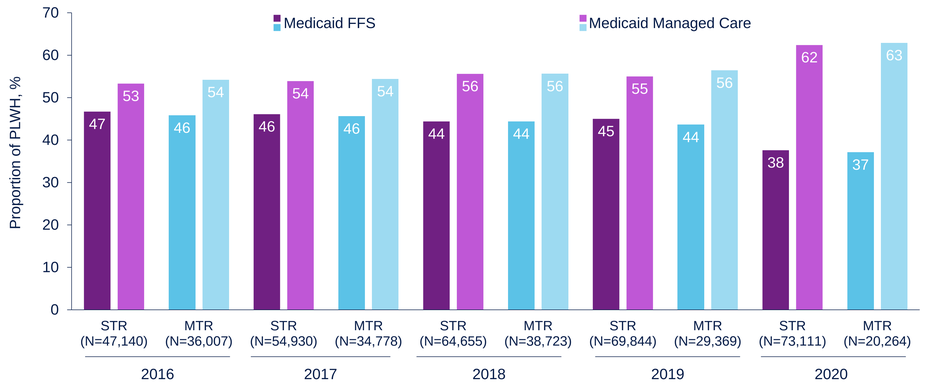
Figure 1. Attrition of the Study Sample From 2016 to 2020

	2016 (N, %)		2017 (N, %)		2018 (N, %)		2019 (N, %)		2020 (N, %)	
	STR	MTR	STR	MTR	STR	MTR	STR	MTR	STR	MTR
PLWH with evidence of having received STR or MTR in the Rx data in the calendar year[a]	324,636 (100)	232,232 (100)	367,874 (100)	222,530 (100)	405,122 (100)	222,253 (100)	473,050 (100)	194,115 (100)	521,927 (100)	149,824 (100)
≥18 years of age at index	319,527 (98.4)	225,997 (97.3)	361,950 (98.4)	215,938 (97.0)	402,021 (99.2)	217,771 (98.0)	470,217 (99.4)	190,152 (98.0)	519,270 (99.5)	146,763 (98.0)
Payer type at index is Medicaid FFS or Medicaid Managed Care	71,631 (22.1)	57,775 (24.9)	82,641 (22.5)	56,137 (25.2)	92,226 (22.8)	58,189 (26.2)	105,452 (22.3)	47,597 (24.5)	117,193 (22.5)	36,295 (24.2)
Patient activity, defined as ≥1 prescription in 1-6 months and 7-12 months (including index date)	56,910 (17.5)	46,295 (19.9)	66,916 (18.2)	45,005 (20.2)	74,404 (18.4)	47,063 (21.2)	84,883 (17.9)	38,472 (19.8)	96,397 (18.5)	29,745 (19.9)
Pharmacy stability[b] over the calendar year	48,268 (14.9)	38,890 (16.7)	55,661 (15.1)	36,470 (16.4)	66,298 (16.4)	41,739 (18.8)	71,847 (15.2)	32,573 (16.8)	75,060 (14.4)	22,581 (15.1)
Final sample[c]	**47,140 (14.5)**	**36,007 (15.5)**	**54,930 (14.9)**	**34,778 (15.6)**	**64,655 (16.0)**	**38,723 (17.4)**	**69,844 (14.8)**	**29,369 (15.1)**	**73,111 (14.0)**	**20,264 (13.5)**
Medicaid FFS	22,037 (46.7)	16,474 (45.8)	25,309 (46.1)	15,859 (45.6)	28,682 (44.4)	17,176 (44.4)	31,409 (45.0)	12,809 (43.6)	27,465 (37.6)	7,528 (37.1)
Medicaid Managed Care	25,103 (53.3)	19,533 (54.2)	29,621 (53.9)	18,919 (54.4)	35,973 (55.6)	21,547 (55.6)	38,435 (55.0)	16,560 (56.4)	45,646 (62.4)	12,736 (62.9)

[a]The first observed STR or MTR in the calendar year determined the cohort, using a 5-day window from the first observed ART; the first claim was termed the index date. [b]Pharmacy stability was defined as consistent reporting of data from the pharmacy associated with the index prescription for each month over the calendar year. [c]Without data quality issues, evidence of PrEP or PEP only, and without both Medicaid FFS and Medicaid Managed Care associated with index regimen claims.

- From 2016 to 2019, the distribution of PLWH with Medicaid FFS (44%-47%) or Medicaid Managed Care plans (53%-56%) was generally similar by year for both the STR and MTR cohorts; however, in 2020, Medicaid Managed Care enrollment for both cohorts increased (62%-63%; Figure 2)

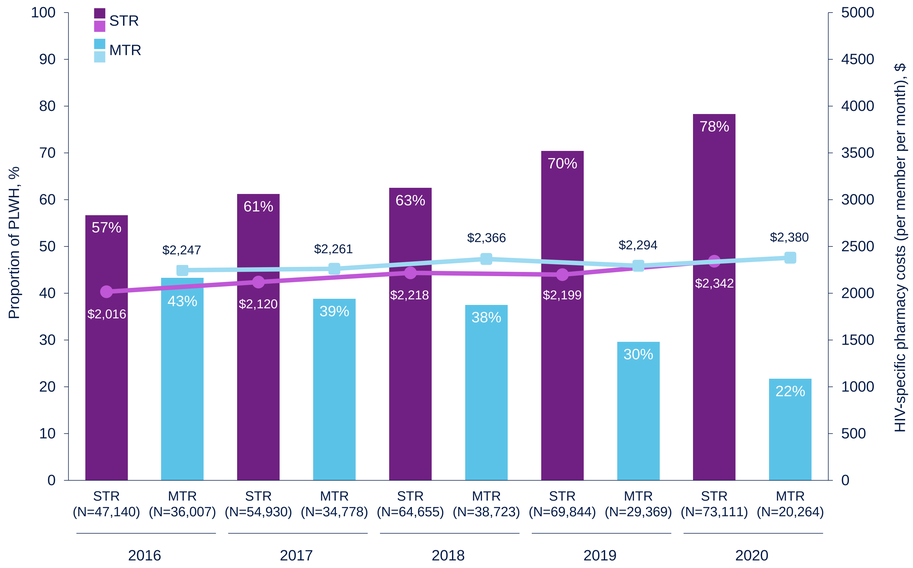
Figure 2. Proportion of PLWH Receiving STR or MTR Enrolled in Medicaid by Plan Type



STR or MTR Use and HIV-Specific Pharmacy Costs Among PLWH Enrolled in Medicaid

- Among PLWH, STR use increased annually from 57% in 2016 to 78% in 2020 (Figure 3)
- Conversely, MTR use decreased from 43% to 22% over the same period
- The increase in STR utilization over time was consistent for both Medicaid plan types
- Despite the shift to STR from MTR over time, mean HIV-specific per-member per-month pharmacy costs were similar across years for both cohorts, ranging from $2,016 to $2,342 for the STR cohort and $2,247 to $2,380 for the MTR cohort (Figure 3)

Figure 3. Distribution of PLWH Enrolled in Medicaid Receiving STR or MTR and HIV-Specific Pharmacy Costs



Conclusions

- Despite an increase in STR use among PLWH enrolled in Medicaid in the US from 2016 to 2020, there was minimal impact on pharmacy costs during this same time period
- Between 2019 and 2020, PLWH enrolled in Medicaid shifted from FFS to Managed Care, which includes the majority of Medicaid enrollees but accounts for just over half of Medicaid benefit spending[5]
- Limitations include an unmatched study design and lack of statistical methods to account for differences between groups

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