

Supplemental Online Content

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eAppendix. Supplemental Methods

eTable 1. DAAs Included in Analysis

eTable 2. DAA Courses by Year and by Branded Product

This supplemental material has been provided by the authors to give readers additional information about their work.

eAppendix. Supplemental Methods

Data Source

We conducted a cross-sectional analysis using national prescription claims data from January 2013 through December 2025 from the Symphony Health Metys database. Symphony Health compiles pharmacy claims from retail, mail-order, and specialty pharmacies across the United States. Prior available documentation reports coverage of approximately 85% of retail pharmacy prescriptions, 72% of mail-order pharmacy prescriptions, and 67% of specialty pharmacy activity.ⁱ Claims include prescriptions reimbursed by commercial insurance, Medicare, Medicaid, and uninsured payers; Symphony estimates are adjusted to reflect 100% of U.S. population among these payers.

Data are aggregated at the county-month level and stratified by age group (10-year intervals), sex (as reported in the dataset), payer type, prescriber specialty, and drug product. Individual prescriptions are not linkable at the patient level, and longitudinal refill patterns cannot be assessed.

The analytic dataset included 1,807,837 rows representing 2,284 distinct US counties across all 50 states and the District of Columbia. US territories (Guam, Puerto Rico, US Virgin Islands, and Northern Mariana Islands) were excluded. No missing values were present in analytic variables.

Outcome Definition

The primary outcome was the estimated number of direct-acting antiviral (DAA) treatment courses dispensed. Because prescriptions are not linkable at the individual level, treatment courses were estimated by dividing total dispensed tablet quantities by agent-specific standard treatment durations (eTable 1). This approach estimates completed courses but cannot account for treatment non-persistence or early discontinuation.

Geographic and Population Measures

County-level population estimates were obtained from the US Census Population Estimates Program and linked using Federal Information Processing Standard (FIPS) codes to calculate treatment courses per 100,000 population.ⁱⁱ Rurality was classified using Rural-Urban Continuum Codes (RUCC) from the US Department of Agriculture Economic Research Service.ⁱⁱⁱ

Statistical Analysis

Analyses were descriptive and evaluated annual trends in DAA dispensing overall and stratified by age group, sex, payer type, prescriber specialty, drug agent, and rurality. No hypothesis testing was performed given the national scope of the dataset.

All analyses were conducted in R version 4.5.2 (R Foundation). This study followed the STROBE reporting guideline for cross-sectional studies. Use of deidentified data was deemed not human participants research by the Mass General Brigham Institutional Review Board.

eTable 1. DAAs Included in Analysis

Generic Drug Name	Brand Name	Manufacturer	Recommended Duration	Tablets Per Treatment Course	Date of FDA Approval	Net Sales
Sofosbuvir	Sovaldi	Gilead	1 pill daily for 12 weeks	84	December 2013	\$13.0B
Sofosbuvir-ledipasvir	Harvoni	Gilead	1 pill daily for 12 weeks	84	October 2014	\$21.2B
Elbasvir-grazoprevir	Zepatier	Merck	1 pill daily for 12 weeks	84	January 2016	\$1.4B
Sofosbuvir-velpatasvir	Epclusa	Gilead, Asegua	1 pill daily for 12 weeks	84	June 2016	\$7.6B
Sofosbuvir-velpatasvir-voxilaprevir	Vosevi	Gilead	1 pill daily for 12 weeks	84	July 2017	\$840M
Glecaprevir-pibrentasvir	Mavyret	AbbVie	3 pills daily for 8 weeks	168	August 2017	\$7.1B
Ombitasvir-paritaprevir-ritonavir	Technivie	AbbVie	2 pills daily for 12 weeks	168	July 2015	Unavailable
Ombitasvir-paritaprevir-ritonavir-dasabuvir	Viekira	AbbVie	Viekira Pak - 2 ombitasvir, paritaprevir, ritonavir tablets once daily and 1 dasabuvir tablet twice daily for 12-24 weeks. Viekira XR - 3 pills daily for 12 weeks	Viekira Pak - 336**. Viekira XR - 252	Viekira Pak: December 2014; Viekira XR: July 2016	\$1.3B

*Net sales were tabulated from quarterly financial reports as aggregated by SSR Health

** Note Viekira Pak course duration varied from 12-24 weeks based on HCV genotype and presence of cirrhosis. We calculated the number of courses using the shortest treatment duration, which may overestimate the true number of Viekira courses.

eTable 2. DAA Courses by Year and By Branded Product

Drug Name	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Drug Total
Sovaldi	782	85,352	35,088	27,465	3,530	273	72	63	43	28	37	41	27	152,801
Harvoni	0	14,065	138,580	98,714	66,690	35,661	15,304	5,256	3,018	1,780	1,205	885	500	381,658
Viekira Pak	0	16	11,860	7,989	1,402	69	0	0	0	0	0	0	0	21,336
Technivie	0	0	149	90	31	2	0	0	0	0	0	0	0	272
Epclusa	0	0	0	16,017	41,845	31,306	30,078	23,155	21,763	20,116	20,689	18,107	12,534	235,610
Viekira XR	0	0	0	669	1,949	238	0	0	0	0	0	0	0	2,856
Zepatier	0	0	0	8,898	21,085	2,453	663	388	276	89	87	217	221	34,377
Mavyret	0	0	0	0	9,363	60,540	59,724	36,057	33,553	32,628	31,932	27,602	29,065	320,464
Vosevi	0	0	0	0	2,116	3,931	2,414	1,817	1,503	1,354	1,150	1,167	1,148	16,600
Ledipasvir-sofosbuvir	0	0	0	0	0	0	2,034	1,317	904	811	530	292	283	6,171
Sofosbuvir-velpatasvir	0	0	0	0	0	0	13,455	21,163	21,321	23,818	25,226	26,083	24,745	155,811
Annual Total	782	99,433	185,677	159,842	148,011	134,473	123,744	89,216	82,381	80,624	80,856	74,394	68,523	1,327,956

*Note Epclusa (sofosbuvir-velpatasvir) and Harvoni (Ledipasvir-sofosbuvir) had authorized generic formulations available starting in 2019

ⁱSymphony Health. <https://web.archive.org/web/20250320060429/https://www.iconplc.com/solutions/real-world-intelligence/symphony-health>. Accessed February 22, 2026.

ⁱⁱ Population and Housing Unit Estimates. United States Census Bureau. <https://www.census.gov/programs-surveys/popest.html>. Accessed February 18, 2026.

ⁱⁱⁱ Rural-Urban Continuum Codes. Economic Research Service: U.S. Department of Agriculture. <https://www.ers.usda.gov/data-products/rural-urban-continuum-codes>. Accessed February 18, 2026.