

Data & Methods: Prescription Contraception Workforce Tracker

Introduction

The U.S. Prescription Contraception Workforce Tracker monitors the location, clinician specialty, and distribution/clinician density of the prescription contraception workforce, with the goal of providing evidence-based support for policies and programs that can address gaps in contraceptive equity. The tracker allows researchers and others to compare the workforce prescribing contraception across states and counties, clinician types, and over time.

Language note: In the tracker and this document, we use the term “female” to describe the population utilizing contraception services. We recognize that women are not the only people who need contraception services and seek to be inclusive of all genders. However, the datasets that this tool is based on use a binary indicator for sex.

Data Sources

IQVIA

IQVIA is a proprietary health information company that aggregates data from multiple sources for healthcare analysis and business solutions. The LRx dataset are retail prescription claims derived from multiple sources, including pharmacy billing software and pharmaceutical clearing houses. The dataset covers an estimated 92-94% of retail prescription claims nationally in 2019 - 2022. We obtained full-year clinician month-level counts of new and retail prescriptions for contraceptive products (the contraceptive pill, patch, and ring). IQVIA also provided the NPI and specialty of all clinicians that appeared in the full LRx dataset for 2019 - 2022 (we refer to this as the 'All Rx' file).

National Plan & Provider Enumeration System (NPPES)

NPPES is a national registry for which all healthcare clinicians who conduct HIPAA-covered electronic transactions are required. NPPES contains information on mailing and practice address, healthcare clinician credentials, clinician taxonomy (specialty), and state license information. We used NPPES to obtain the number of clinicians by specialty, county, state and year.

American Community Survey (ACS) 5-Year Estimates

The ACS is an annual survey conducted by the US Census Bureau. The 5-year sample combines the most recent 5 years to provide more accurate estimates for smaller, less populated geographies. We used 2019 - 2022 county-level estimates for the number of females of reproductive age (15-44) by county and state.

Database Construction

Clinician Specialty

We collapsed the nearly 300 different specialties in IQVIA into 8 key categories of interest for this project: OBGYN, family medicine, internal medicine, pediatrics, other physician, advanced practice registered nurse (APRN), physician assistant, and other health profession. On the tracker, we do not show other physicians or other health professionals. Prescribing patterns for these provider types are available in the downloadable dataset (available upon request [here](#)). We included all specialties, however remote the possibility of providing contraception services (e.g., dentist), with the single exception of veterinarians, which we dropped from the dataset.

Clinician Location

We geocoded clinician address in the IQVIA LRx dataset to map clinicians to counties. We excluded prescribers outside of the 50 states and the District of Columbia. For the few addresses that we could not geocode, we used the Housing and Urban Development (HUD) Zip to County Crosswalk to match clinician zip code to a county.

Clinician Density

Using ACS estimates, we determined county and state female population of reproductive age (15-44) in 2019 - 2022. We used this as the denominator for the estimates of state- and county-level prescription contraception clinicians per 10,000 population. We then calculated rankings for states and counties, excluding counties with no contraception prescribers.

Volume Threshold

We used the IQVIA LRx dataset to identify prescribers of the birth control pill, patch, and ring in 2019 - 2022. We included both new and refill prescriptions and limited our analysis to clinicians who prescribed 10 or more total contraception prescriptions (of the pill, patch, and/or ring) during the calendar year (2019 - 2022). The minimum of 10 prescriptions was used to exclude clinicians who were rare contraception prescribers, possibly prescribing contraception outside the scope of their normal practice.

Non-Prescribers

We calculated the total number of clinicians who did not prescribe at least 10 total prescriptions for the pill, patch, and/or ring by adding together two groups of clinicians:

1. The clinicians in the IQVIA LRx 2019-2022 data without at least 10 total prescriptions for the pill, patch, and/or ring by specialty, county, and year
2. The clinicians in the All Rx 2019-2022 file from IQVIA (who were not already in the IQVIA LRx data). We matched these clinicians using NPI to NPPES to get practice and/or mailing address, and then used the HUD Zip to County crosswalk to match clinicians with county. These clinicians were then aggregated by specialty, county, and year.

These counts of non-prescribers are accessible through a [request for access](#) to the downloadable dataset.

Data Limitations

IQVIA

From IQVIA's analysis, the LRx dataset has an average of 92-94% coverage of retail prescription claims, with varying state-level coverage. The LRx dataset likely does not include prescriptions dispensed by insurers who operate their own medical centers and pharmacies (e.g., Kaiser). For states with a large market share of HMO pharmacies (e.g., California, Oregon, Washington), we may be undercounting the number of prescribers.

NPPES

While the NPPES dataset is one of the most comprehensive lists of both physicians and non-physicians, the information is not updated systematically and is self-reported. Therefore, it includes clinicians who may have retired or who no longer work in active practice (e.g., in pharmaceutical or policy settings). A further limitation of the NPPES data is the more limited inclusion of non-physician healthcare workers, such as nurses, social workers, and counselors.

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