Data Sources

IQVIA Xponent Prescription Data. IQVIA Xponent reports prescription drug dispensing by prescriber. Information is available on all pharmaceutical products dispensed in the retail, mail, and long-term care channels. Reports are designed for specific products/markets of interest. The dispensed prescriptions are summarized at the prescribers' primary office location. Data are acquired electronically for every day of the month. IQVIA captures 92% of retail prescriptions from 48,900 out of 56,800 retail pharmacies. To account for the 8% of non-sampled prescriptions, IQVIA uses a proprietary projection methodology. Data can be stratified by geographic areas such as state, metropolitan statistical area, zip-code, and prescriber location.

State licensure data. To develop a roster of individuals licensed to provide clinical behavioral health services, state licensure data was obtained for psychologists, licensed professional counselors (LPCs), licensed clinical social workers (LCSWs), and licensed marriage and family therapists (MFT). Data requests were made to all 50 states and the District of Columbia.

Analysis

Identifying behavioral health prescribers. Using 2017 – 2021 IQVIA Xponent data, we identified prescribers who prescribed more than 11 total prescriptions (new prescriptions or refills) for psychotropic medications and/or medications for opioid use disorder (MOUD). The medications include those with the following drug label indications: depression, MOUD, psychosis, anxiety, bipolar disorder, mood stabilizers, antipsychotics, and other behavioral health conditions (see data dictionary for complete list). For these medications, we applied the following restrictions:

- We dropped medications used for dual indications (e.g., buprenorphine prescriptions written by pain management prescribers).
- We excluded medications for insomnia and ADHD in our behavioral drug list as the purpose of this database is to identify prescribers who fall squarely within the realm of mental health and/or substance use disorder. While prescribers of these medications may miss some individuals, those who exclusively prescribed these medications account for less than 1% of total prescribers.
- We identified prescribers with prescriptions for anti-psychotics and mood stabilizers. Mood stabilizers were only counted for psychiatric specialists since mood stabilizers can be used by primary care clinicians and other non-behavioral health specialists to treat seizures.
- We only counted prescribers of buprenorphine if they were DATA-waivered in the month and year that the prescription was dispensed by matching DEA numbers to NPI numbers in the IQVIA data.

The profession and specialty type for each prescriber is included in the IQVIA data. Practice locations in the IQVIA data were aggregated to the county level using their zip

code. Due to the low numbers of addiction medicine specialists and addiction psychiatrists in the IQVIA data, especially compared to other national counts, if prescribers' specialty was listed in the Federation of State Medical Boards (FSMB) Physician Data Center files or NPPES as addiction medicine or addiction psychiatry and not listed in IQVIA as such, we changed their specialty in IQVIA. Both require specialty training and/or certification, so we wanted to give credit to those prescribers who chose to report their specialty as these certificates. By doing so, our numbers for addiction medicine and addiction psychiatry are very similar to those reported by the American Board of Medical Specialties.

Identifying licensed counselors, therapists, and psychologists. For 2020 data, we include fully licensed counselors, therapists, and psychologists with active licenses as of January 1, 2020. For 2021 data, we include those with active licenses as of January 1, 2022. For the states where state licensure data was not available, address information was not included, or zip code information was missing for more than 30% of licenses, we used NPPES data (see data dictionary for states and relevant taxonomy codes and credentials used to identify licensed individuals). Locations were mapped according to the address included in the state licensure data (or NPPES) and aggregated at the county level. About 23% (2020) and 16% (2021) of practitioners had addresses outside of the state where they are licensed or were missing zip code information and could not be mapped. These individuals were excluded from the county-level counts but are included in the state-level counts.

Limitations

IQVIA Xponent Prescription Data. While IQVIA Xponent data captures 92% of retail prescriptions, it does not include prescriptions dispensed by insurers who operate their own medical centers and pharmacies (i.e., Kaiser). Therefore, we may be undercounting the number of prescribers in states with a large market share of HMO pharmacies. We also only counted prescribers with at least 11 behavioral health prescriptions, but this may exclude specialists who may work primarily in academic settings and have a low number of prescriptions filled in the retail channel, despite being active prescribers. We are currently unable to separate psychiatric nurse practitioners (NPs) and physician assistants (PAs) from general NPs/PAs because of IQVIA specialty designation

State licensure data. We were unable to obtain state licensure data for 3 – 4 states depending on the profession. To address this gap, we supplemented with NPPES, although this likely undercounts the workforce in those states as many psychologists, LCSWs, LPCs, and MFTs are not registered with NPPES.