

How frequently do healthcare providers change insurance network participation?

Healthcare providers change insurance network participation at substantial rates, with primary care physicians in Medicaid managed care experiencing approximately 12% annual turnover and 21-34% cumulative exit rates over five to six years, though rates vary considerably by specialty, practice structure, and network type.

Abstract

Healthcare provider network participation exhibits substantial fluidity, with longitudinal studies documenting annual turnover rates of approximately 12% for primary care physicians in Medicaid managed care, translating to cumulative exit rates of 21-34% over five to six years. Network structure significantly influences these rates: plans with narrow provider networks experience turnover 20 percentage points higher than broader networks over five years. Cross-sectional evidence indicates that 22% of primary care physicians have experienced at least one contract denial or termination from managed care organizations. Participation patterns vary markedly by specialty, with psychiatrists demonstrating acceptance rates of only 55.3% for any health insurance compared to 88.7% for other specialists, and just 43.1% accepting Medicaid.

Multiple factors drive these participation changes, including provider quality scores, solo practice status, reimbursement levels relative to administrative burden, and market concentration. The consequences of network instability are substantial: patients experiencing forced physician changes score significantly lower on all measured dimensions of primary care quality, and provider exits create access barriers including longer wait times and higher out-of-pocket costs for out-of-network care. However, the evidence base is limited by the inability to distinguish voluntary exits from plan-initiated terminations and geographic concentration in specific markets, constraining generalizable conclusions about participation change frequency across the broader healthcare system.

Paper search

We performed a semantic search using the query "How frequently do healthcare providers change insurance network participation?" across over 138 million academic papers from the Elicit search engine, which includes all of Semantic Scholar and OpenAlex.

We retrieved the 50 papers most relevant to the query.

Screening

We screened in sources based on their abstracts that met these criteria:

- **Network Participation Changes:** Does this study measure, report, or analyze the frequency, rate, or patterns of insurance network participation changes?
- **Healthcare Provider Population:** Does this study examine healthcare providers who participate in insurance networks?
- **Frequency Data Focus:** Does this study report actual frequency or rates of network participation changes (rather than only examining factors influencing participation decisions)?
- **Network Participation Changes vs Initial Enrollment:** Does this study measure subsequent network participation changes (rather than examining only initial network enrollment decisions)?
- **Provider Type Scope:** Does this study include individual healthcare providers (physicians, specialists, nurse practitioners, physician assistants, etc.) and examine any type of insurance network?

- **Study Design Appropriateness:** Is this study a quantitative study, qualitative study with quantifiable data on network changes, systematic review, or meta-analysis?
- **Individual Provider Focus:** Does this study include individual healthcare providers (rather than focusing exclusively on hospital or facility network participation)?
- **Empirical Data Availability:** Does this study provide empirical data on frequency patterns (rather than being an opinion piece, editorial, commentary article, or case study without broader frequency data)?

We considered all screening questions together and made a holistic judgement about whether to screen in each paper.

Data extraction

We asked a large language model to extract each data column below from each paper. We gave the model the extraction instructions shown below for each column.

- **Change Frequencies:**

Extract all quantitative data about network participation changes including:

- Specific percentages/rates of providers entering, exiting, or changing networks
- Absolute numbers if provided
- Time period over which changes were measured
- Type of change (voluntary exit, termination, new entry, re-entry, contract denial)
- Whether changes were measured as point-in-time or longitudinal rates
- Any breakdowns by subgroups (e.g., specialty, practice size, geographic area)

- **Study Methodology:**

Extract details about how network changes were measured and studied including:

- Study design (cross-sectional, longitudinal, administrative data analysis)
- Data sources (surveys, administrative records, network directories)
- How 'network participation change' was defined and operationalized
- Follow-up period for longitudinal studies
- Sampling method and response rates
- Any limitations in measuring network changes mentioned by authors

- **Provider Characteristics:**

Extract information about the healthcare providers studied including:

- Provider types (primary care, specialists, hospitals, etc.)
- Practice characteristics (solo, group, size, ownership)
- Geographic location and setting (urban, rural, state/region)
- Provider demographics if associated with network changes
- Sample size and representativeness

- **Network Types:**

Extract details about the insurance networks/plans studied including:

- Type of insurance (Medicaid, Medicare, private, managed care)
- Network structure (HMO, PPO, IPA, ACO)
- Market characteristics (number of plans, competitiveness)

- Any specific network policies or practices mentioned (annual bidding, selective contracting)
- **Change Drivers:**
Extract factors identified as reasons for or predictors of network participation changes including:
 - Payment/reimbursement issues (fee levels, payment delays, administrative costs)
 - Quality or performance measures
 - Patient population characteristics (payer mix, demographics)
 - Administrative burden or requirements
 - Market factors (competition, consolidation)
 - Policy changes (fee bumps, new regulations)
 - Provider-specific factors (practice size, location, specialty)
- **Change Impacts:**
Extract information about consequences or effects of network participation changes including:
 - Impact on patient access to care
 - Effects on continuity of care
 - Changes in service utilization patterns
 - Quality of care implications
 - Effects on remaining providers in network
 - Patient outcomes or satisfaction
 - Cost implications

Characteristics of Included Studies

This systematic review identified 10 sources examining healthcare provider network participation changes across various insurance markets and provider types. The studies employed diverse methodological approaches and focused on different aspects of network dynamics.

Study	Full text retrieved?	Study Design	Provider Type	Insurance Type	Geographic Scope
Katherine Piwnica-Worms et al., 2020	Yes	Longitudinal observational study	Primary care, specialists	Medicaid managed care	Tennessee
Janet R. Cummings et al., 2015	Yes	Cross-sectional analysis	Psychiatrists, other specialists	Medicaid, private insurance	National
C. Ndumele et al., 2018	No	Longitudinal analysis	Primary care physicians	Medicaid managed care	14 states
A. Bindman et al., 1998	No	Cross-sectional survey	Primary care physicians	Managed care (HMO, IPA)	13 California counties
A. Carlo et al., 2023	No	Longitudinal analysis	Psychiatrists, nonpsychiatrist physicians	Private and public insurance	National

Study	Full text retrieved?	Study Design	Provider Type	Insurance Type	Geographic Scope
S. Busch et al., 2021	No	Cross-sectional survey	Mental health and medical providers	Private insurance	Not specified
S. Flocke et al., 1997	No	Cross-sectional study	Primary care physicians	Managed care (IPA/PPO)	Community-based
Loren	Yes	Systematic review	Primary care providers	Medicaid	Multiple states
Saulsberry et al., 2019					
J. Graves et al., 2020	No	Cross-sectional study	Physicians, hospitals	Multiple (employer, marketplace, Medicare Advantage, Medicaid)	National
A. Short et al., 2001	No	Cross-sectional observational	Physicians, hospitals, other caregivers	Not specified	12 communities

The included studies span nearly three decades (1997-2023) and utilize both primary data collection and administrative data analysis. Five studies employed cross-sectional designs, while three used longitudinal approaches tracking changes over multiple years. One study was a systematic review synthesizing prior longitudinal research. Data sources included administrative claims and network directories, national surveys such as the National Ambulatory Medical Care Survey, and physician surveys with response rates reaching 71%.

Network Participation Change Frequencies

Only four studies provided specific quantitative data on the frequency of network participation changes, with considerable variation based on provider type, insurance market, and measurement approach.

Study	Change Metric	Rate	Time Period	Provider/Network Type
Katherine Piwnica-Worms et al., 2020	Provider exit from at least one plan	21%	2010-2016	All providers in Medicaid managed care
Katherine Piwnica-Worms et al., 2020	Total plan exits	2,799 exits among 1,992 unique providers	2010-2016	Medicaid managed care
C. Ndumele et al., 2018	Annual turnover rate	12%	2010-2015	Primary care physicians
C. Ndumele et al., 2018	Cumulative 5-year exit rate	34%	2010-2015	Primary care physicians

Study	Change Metric	Rate	Time Period	Provider/Network Type
C. Ndumele et al., 2018	Turnover difference (narrow vs. non-narrow networks)	3 percentage points higher after 1 year; 20 percentage points higher after 5 years	2010-2015	Primary care physicians in Medicaid managed care
A. Bindman et al., 1998	Contract denial or termination	22%	Cross-sectional (point-in-time)	Primary care physicians with IPAs/HMOs
Janet R. Cummings et al., 2015	Insurance acceptance rate	55.3% (psychiatrists) vs. 88.7% (other specialists)	2009/2010	Office-based physicians
Janet R. Cummings et al., 2015	Medicaid acceptance rate	43.1%	2009/2010	Psychiatrists

The most robust longitudinal evidence comes from Medicaid managed care studies. In Tennessee, 21% of providers exited at least one Medicaid managed care plan over a six-year period, with adult primary care providers more likely to exit than pediatricians . A multi-state analysis found a 12% annual turnover rate among primary care physicians, translating to approximately one-third of physicians exiting within five years . This turnover was substantially higher in narrow networks, with a 20 percentage-point difference in cumulative exit rates compared to non-narrow networks after five years .

The cross-sectional evidence reveals that contract denials and terminations are common experiences. Approximately 22% of primary care physicians in California reported having been denied or terminated from at least one managed care contract . However, this did not preclude most physicians from participating in managed care, as 87% of office-based primary care physicians maintained at least one IPA or direct HMO contract .

Specialty-specific patterns show marked variation in network participation. Psychiatrists demonstrated substantially lower insurance acceptance rates than other specialists, with only 55.3% accepting any health insurance compared to 88.7% for other specialists . The gap was particularly pronounced for Medicaid, where only 43.1% of psychiatrists accepted patients . The rate of participation in health insurance networks declined faster among psychiatrists than among other specialists in recent years .

Factors Associated with Network Participation Changes

Multiple interconnected factors influence the frequency and patterns of network participation changes across provider types and insurance markets.

Factor Category	Specific Factors	Evidence
Provider Performance	Lower quality scores among exiting providers	Exiting providers performed 3.8 percentage points worse on HEDIS quality metrics

Factor Category	Specific Factors	Evidence
Practice Structure	Solo practice status	Strong predictor of contract denials/terminations ; psychiatrists in solo practices less likely to accept insurance
Geographic Location	Metropolitan vs. non-metropolitan	Psychiatrists in metropolitan areas less likely to accept insurance
Payment/Reimbursement	Medicaid fee levels relative to Medicare/private payers	Fee increases associated with improved provider participation
Payment/Reimbursement	Reimbursement structure for psychiatric services	Lower reimbursement for psychotherapy vs. medication management affects participation
Administrative Burden	Contract negotiation, claims processing	Small practices face disproportionate administrative costs
Patient Population	Payer mix and demographics	Physicians in managed care had lower percentages of uninsured and nonwhite patients
Network Structure	Narrow vs. broad networks	Narrow networks associated with higher physician turnover
Market Factors	Insurance and provider market concentration	Less concentrated markets had narrower and more exclusive networks
Policy Changes	Fee bumps, regulatory changes	Temporary Medicaid fee increases influenced participation rates

Provider quality appears to play a role in network exits. Providers exiting Medicaid managed care plans performed significantly worse on quality measures, scoring 3.8 percentage points lower on a HEDIS composite compared to remaining providers . However, quality-based exits were not comprehensive: 22% of exiting providers actually performed above average in both quality and cost, while only 29% exhibited the pattern of lower quality and higher costs that plans would theoretically want to eliminate .

Practice structure consistently influences network participation across studies. Solo practice status was the strongest predictor of contract denials and terminations , and psychiatrists in solo practices were significantly less likely to accept any form of insurance . This pattern likely reflects the substantial administrative burden that insurance participation imposes, including contract negotiation, prior authorization processing, and claims recovery, which requires additional staff that may not be financially viable for small practices .

Payment and reimbursement issues emerged as central drivers, particularly in Medicaid programs where physician fees are often set lower than Medicare and private payers . Systematic review evidence indicates that fee increases are associated with improved provider participation, with three of seven studies examining fee changes finding positive effects on providers' likelihood of accepting Medicaid patients . For psychiatrists specifically, the relative reimbursement rates for psychotherapy versus medication management create incentives that may be at odds with clinicians' preferred practice patterns .

Consequences of Network Participation Changes

Network participation changes produce cascading effects on patients, providers, and healthcare systems.

Impact Domain	Findings	Sources
Patient access to care	Long wait times or inability to find in-network providers ; severed patient-provider relationships ; reduced access due to provider dropouts	Multiple studies
Continuity of care	Forced discontinuity associated with lower primary care quality on all five measured dimensions ; 34% of PCPs exiting within 5 years disrupts ongoing relationships	Flocke et al., 1997; Ndumele et al., 2018
Quality of care	Patients experiencing forced physician changes scored significantly lower on physician knowledge, communication, coordination, continuity, and preference measures	Flocke et al., 1997
Care affordability	Consumers may face higher costs for out-of-network care when providers exit ; higher out-of-pocket costs for out-of-network psychiatric services	Multiple studies
Service utilization	Mixed evidence on fee increases and utilization; some studies found positive associations with office-based visits while others found no significant effects	Saulsberry et al., 2019

The impact on continuity of care is particularly well-documented. Patients with managed care insurance were four times more likely to report a forced change in their primary care physician compared to those with fee-for-service coverage . Critically, individuals who experienced forced discontinuity scored significantly lower on all five measured indicators of primary care quality, including physician knowledge of the patient, interpersonal communication, coordination of care, continuity of care, and patient preference to see their regular physician . This suggests that the quality of primary care depends less on the payment system than on maintaining the patient-physician relationship .

High turnover rates in narrow networks raise particular concerns. With 34% of primary care physicians exiting within five years and even higher rates in narrow networks , patients in these plans face recurring disruptions to established care relationships . The combination of limited provider choice and high turnover creates a structural tension between cost control objectives and care continuity.

For psychiatric care, low network participation rates create access barriers that may undermine policy efforts to ex-

pand mental health coverage. The shortage of in-network psychiatrists results in long wait times for appointments and difficulty finding providers accepting new patients . Patients who must use out-of-network psychiatrists face higher out-of-pocket costs through elevated deductibles, copayments, coinsurance, and balance billing . These barriers are particularly acute in Medicaid, which serves individuals with severe and disabling mental health disorders .

Synthesis

The available evidence suggests that healthcare provider network participation is characterized by substantial fluidity, with annual turnover rates approximating 12% for primary care physicians in Medicaid managed care and cumulative exit rates reaching 21-34% over five to six years . However, the interpretation of these figures requires attention to several contextual factors that explain variation across studies and settings.

The divergence between psychiatrists and other specialists illustrates how specialty-specific factors shape participation patterns. Psychiatrists demonstrate acceptance rates 30+ percentage points lower than other specialists , a gap that cannot be attributed solely to reimbursement levels. The structure of psychiatric practice—with more than half in solo settings —interacts with administrative burden to create participation barriers that are less pronounced in larger group practices. Additionally, the severe shortage of psychiatrists in three-quarters of U.S. counties reduces competitive pressure to join insurance networks, as demand for services exists regardless of network status.

Network structure itself influences turnover dynamics. Plans with narrow networks experience 3 percentage points higher annual turnover and 20 percentage points higher cumulative turnover over five years compared to broader networks . This may reflect a selection effect where narrow networks are more likely to terminate underperforming providers, but it also suggests that the very strategy intended to improve quality and efficiency—selective contracting—generates the continuity disruptions that harm care quality .

The relationship between quality and network exit is more complex than simple performance-based selection. While exiting providers do score lower on quality measures on average , only 29% fit the profile of low quality and high cost that plans would theoretically target . The substantial proportion of high-performing providers who exit (22%) suggests that factors beyond measurable quality—including reimbursement rates, administrative requirements, and practice preferences—drive participation decisions. This finding indicates that network optimization does not reliably improve plan-level quality through selective retention of superior providers.

Payment policy represents the most consistently modifiable factor influencing participation. Systematic review evidence demonstrates that Medicaid fee increases improve provider participation and patient access to care, with five of five studies examining access measures finding positive associations with outcomes such as having a usual source of care or appointment availability . However, the temporary nature of policy interventions like the ACA's 2013-2014 primary care fee bump, combined with implementation challenges including payment delays and lack of provider awareness , may limit sustained effects on network composition.

The evidence base has notable limitations that constrain conclusions about participation change frequency. Most studies cannot distinguish between voluntary provider exits and plan-initiated terminations , making it difficult to determine whether observed turnover reflects provider choices about practice structure or plan decisions about network composition. Cross-sectional designs capture point-in-time participation but cannot track the dynamic patterns of entry, exit, and re-entry that characterize network participation over time. Geographic concentration of evidence in specific states or markets limits generalizability to other contexts.

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