NYU | WAGNER

BROOKINGS

Innovation, Technology and Measurement in the Behavioral Health Workforce

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Outline

- Puzzling through the problem
- Measures of mismatch
- Observations
- Policy levers - measurement

PUZZLING THROUGH THE PROBLEM

In the back of our heads…

Workforce needed = (population * incidence* intensity)/(capacity of professional)

Table 3. Variation in number of surgical procedures performed per 10,000 persons for the 13 Vermont hospital service areas and comparison populations, Vermont, 1969. (Rates adjusted to Vermont age composition.)

Surgical procedure	Lowest two areas		Entire state	Highest two areas	
Tonsillectomy	13	32	43	85	151
Appendectomy	10	15	18	27	32
Hemorrhoidectomy	2	4	6	9	10
Males					
Hernioplasty	29	38	41	47	48
Prostatectomy	11	13	20	28	38
Females					
Cholecystectomy	17	19	27	46	57
Hysterectomy	20	22	30	34	60
Mastectomy	12	14	18	28	33
Dilation and curettage	30	42	55	108	141
Varicose veins	6	7	12	24	28

Wennberg, John, and Alan Gittelsohn. "Small area variations in health care delivery: a population-based health information system can guide planning and regulatory decision-making." *Science* 182, no. 4117 (1973): 1102-1108.

Exhibit 1: Behavioral Health Workforce Practitioner Database, 2020

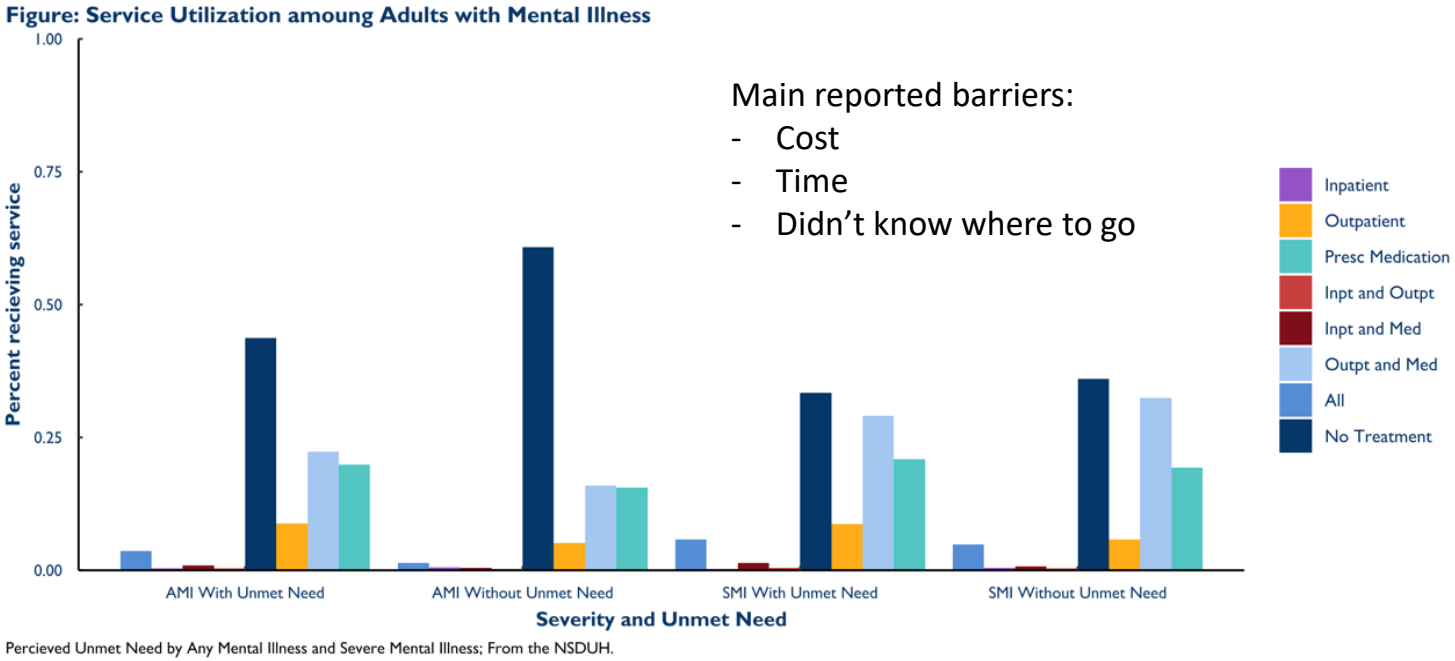
Provider Type	Count of Providers
Behavioral Health Specialists	612,447
Psychiatrists and Addiction Medicine Specialists[1,2]	**51,614**
Addiction Medicine	3,847
Addiction Psychiatry	918
Psychiatry	39,017
Child and Adolescent Psychiatry	7,832
Psychologists (PhD, PsyD, EdD)[3]	**102,004**
Counselors and Therapists[4]	**458,829**
Licensed Marriage and Family Therapists	64,592
Licensed Professional Counselors	172,446
Licensed Clinical Social Workers	221,791
Other Providers Prescribing BH Medications	574,745
Primary Care Physicians[1]	**207,833**
Family Medicine/General Practice	105,003
Internal Medicine	68,686
Pediatrics	34,144
Advanced Practice Providers[1,2]	**193,356**
Nurse Practitioners	*142,112*
Physician Assistant	*51,244*
Other Physicians[1]	**173,556**
Total Behavioral Health Workforce	1,187,192

Luo E, Chong N, Schenk E, Salsberg E, and Erikson C. Behavioral Health Workforce Tracker: Data and Methods. Fitzhugh Mullan Institute for Health Workforce Equity. Washington, DC: George Washington University, 2022.

(300,000,000 (population)* 0.2 (annual prevalence) * 5 (visits or hours of treatment)/ 1400 (annual hours of patient care – 48 weeks, 30 visits/hours) = 215,000 providers

MEPS estimate is 138,000,000 visits annually with mental health treatment – about 50% of that

Weak Concordance between Self-Reported Unmet Need and Use

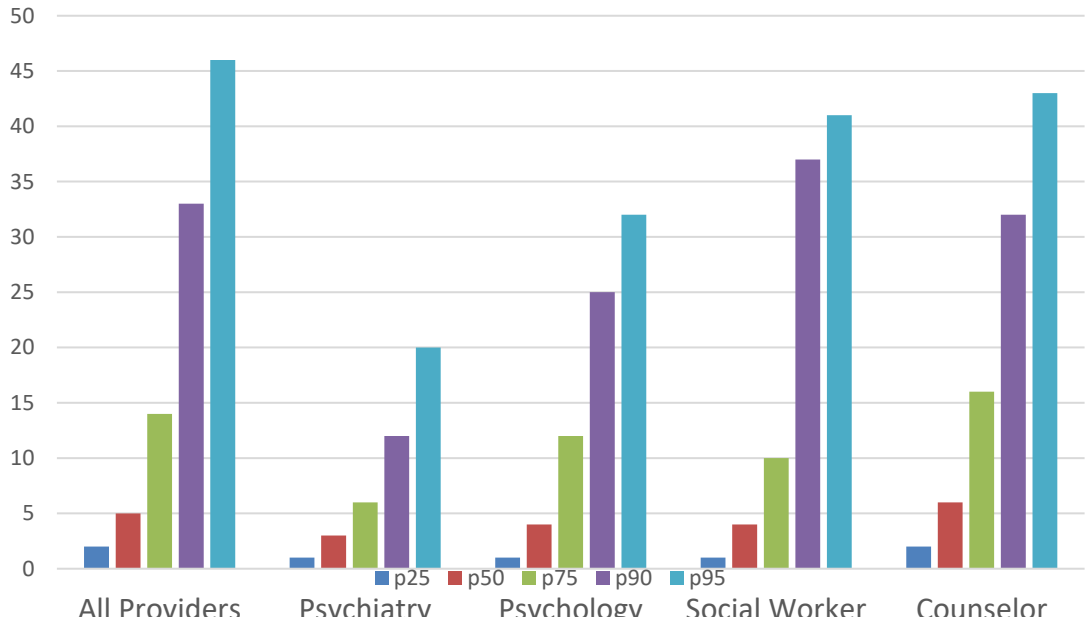


Percieved Unmet Need by Any Mental Illness and Severe Mental Illness; From the NSDUH.

Main reported barriers:

- Cost
- Time
- Didn't know where to go

Distribution of Visit Frequency Among those with Any Service Use



- Over 25% have a single visit
  - Unlikely to be therapeutically useful (may have other functions)
- Median is high – 5 visits
  - Average per capita physician visits of all sorts = 2.6

MEPS 1 year – after 3 month washout

By services needed

By geography

By therapeutic alliance

CHALLENGE: MATCHING PROVIDERS TO PATIENTS

Conditions/Providers/Treatments

Conditions

- Major Depressive Episode
- Schizophrenia
- Bipolar Disorder
- Anxiety Disorders
- Posttraumatic Stress Disorder
- Obsessive Compulsive Disorder
- Borderline Personality Disorder

Providers

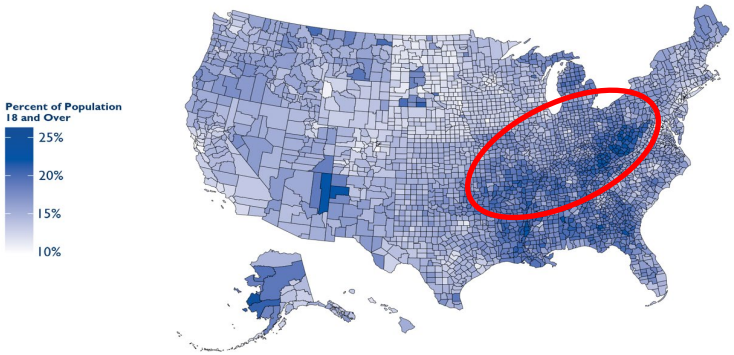
- psychiatrists
- psychologists
- social workers
- advanced practice nurses
- clinical nurse specialists
- primary care physicians and NPs
- counselors
- Peers
- Behavioral health aides

Treatments

- Medication treatment
- Psychodynamic therapy
- Cognitive behavioral therapy
- Interpersonal therapy
- Dialectical behavioral therapy
- Supportive therapy

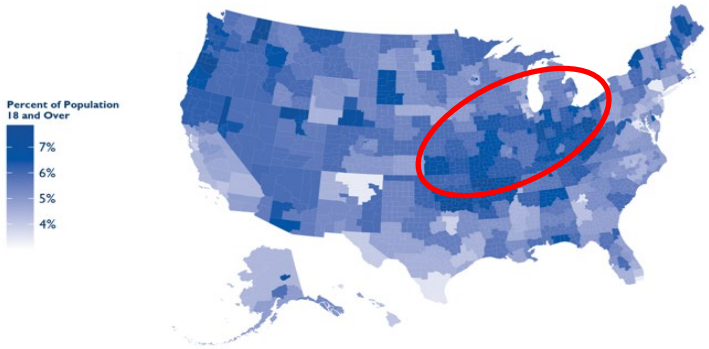
Geography: Poor Mental Health Days, Adult SMI Rates, Suicide and Overdose Rates

Percent of Adults with High 'Poor Mental Health Days' by County, 2018 and 2019



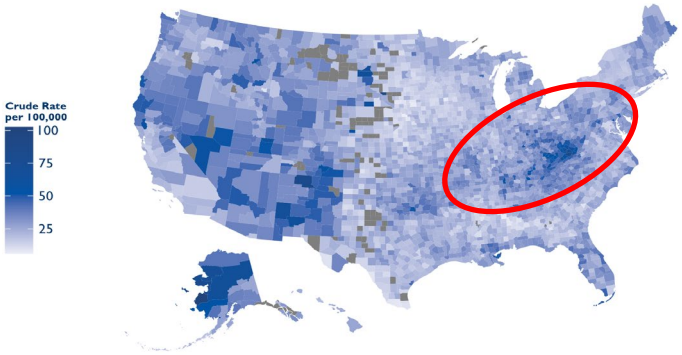
Percent of population 18 years and over per county who reported 14 or more 'poor mental health days' during the past 30 days.
Data from the 2019 Behavioral Risk Factor Surveillance System. Data for New Jersey taken from

Prevalence of Serious Mental Illness in 2018-2020 by Substate



Percent of adults 18 and over who reported symptoms of serious mental illness from 2018-2020 based on the NSDUH.
Data on the substate level. Substates made up of counties. For Los Angeles, the District of Columbia, and Cook County multiple substates make up a county. For MA, CT, and RI estimates are on the state level.

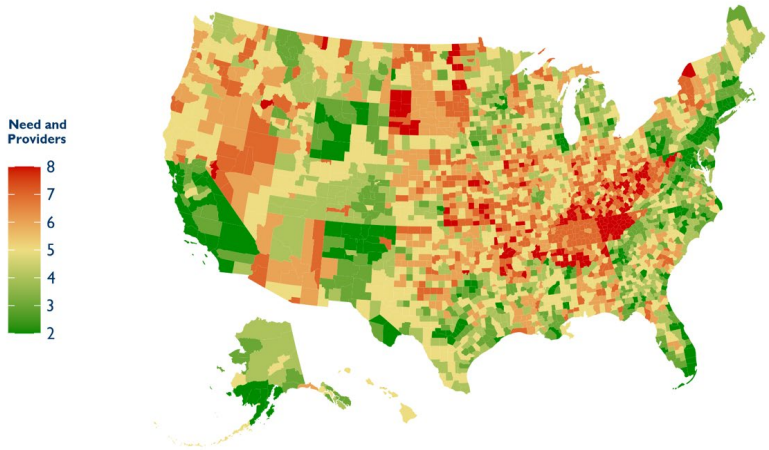
Rate of Suicide and Overdose from 1999-2020 by County



Number of suicide and overdose deaths per 100,000 people per county from 1999-2020.
Data are suppressed for any county with less than 10 deaths in this time period.
Data are from the Multiple Cause of Death Files, Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, Mortality 1999-2020 via CDC WONDER Online Database.

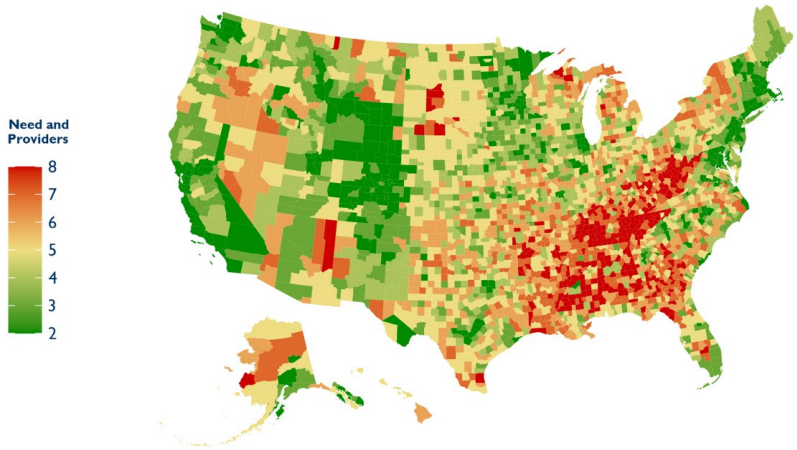
Weak Concordance between Burden and Supply

County-to-Substate Match of SMI Burden and Behavioral Health Specialist Providers



High-need/low-services counties/substates, value of 8: in the highest quartile of serious mental illness (SMI) and in the lowest quartile (highest inverse quartile) of rate of behavioral health specialist providers (psychiatrists, addiction medicine physicians, psychologists, counselors, and therapists) per 100,000 people by county.
Low-need/high-services counties/substates, value of 2: in the lowest quartile of adult SMI and the highest quartile (lowest inverse quartile) of rate of behavioral health specialist providers.

County-level Match of Poor Mental Health Days and Behavioral Health Specialist Providers



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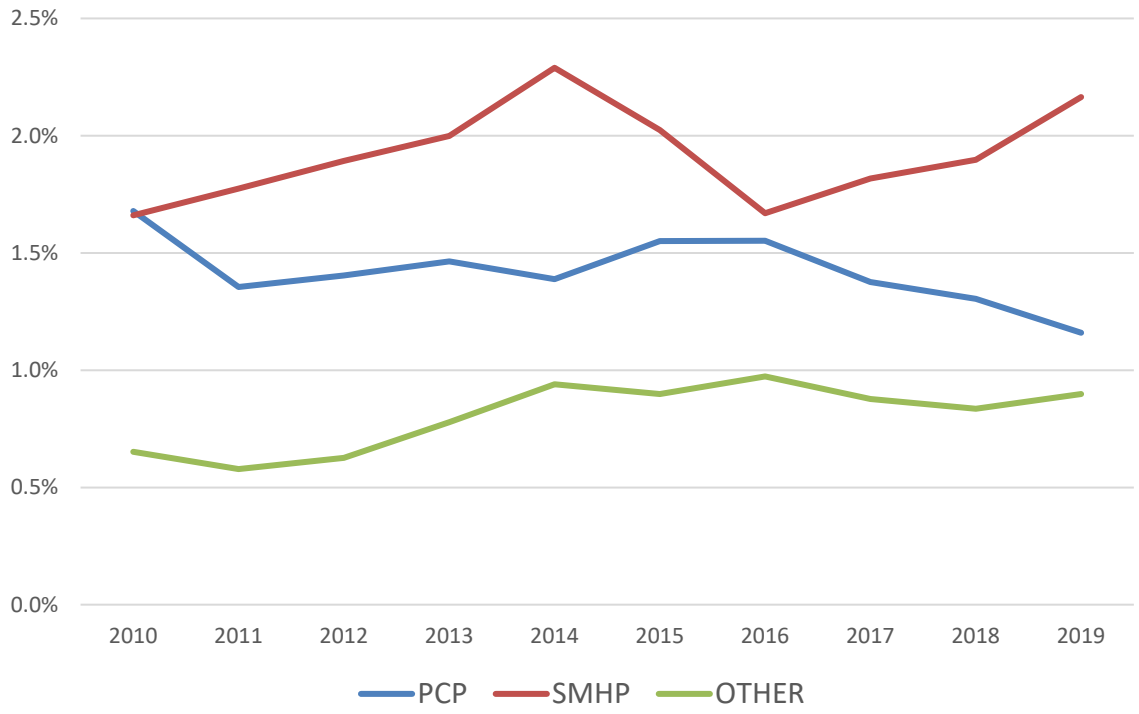
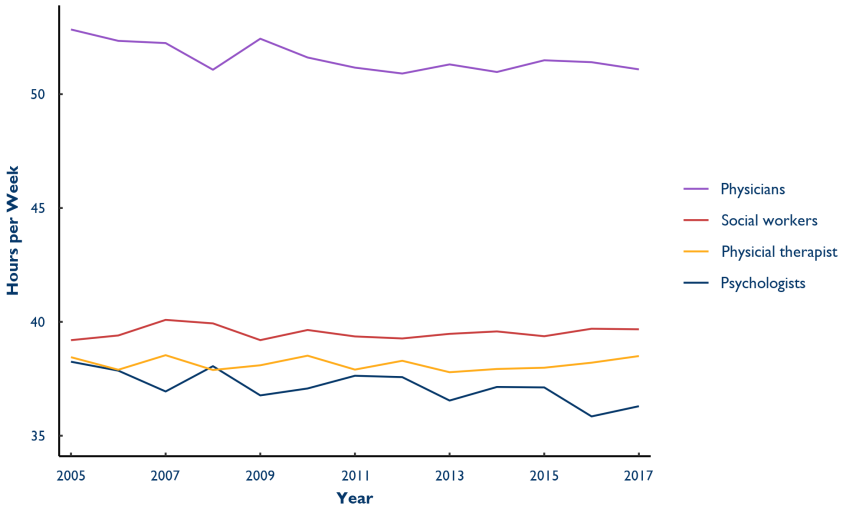
Primary Care MD Rx Declining -- Share of adults with a mental health Rx by provider type (MEPS)



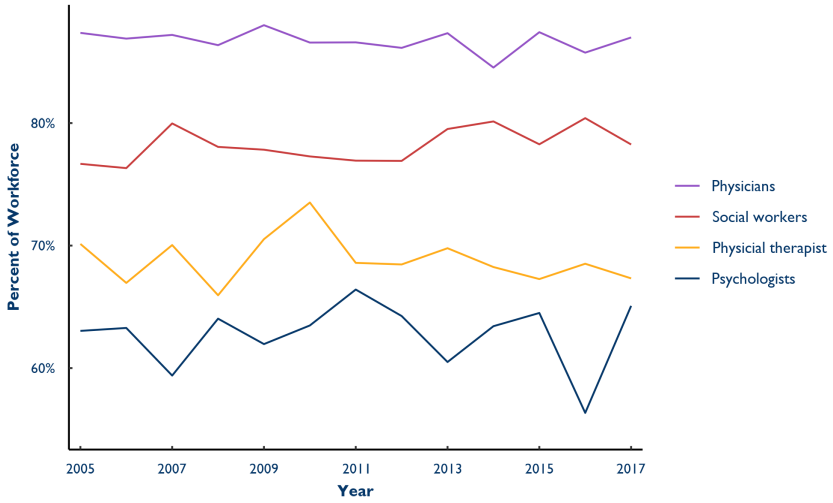
Limited Evidence of Supply Response on Intensive Margin -- Psychologists

Average Hours Worked per Week by Profession Type, 2005-2017



Hours worked per week on average in the last year for those who were currently employed and occupation type according to data from the American Community Survey from 2005 to 2017.

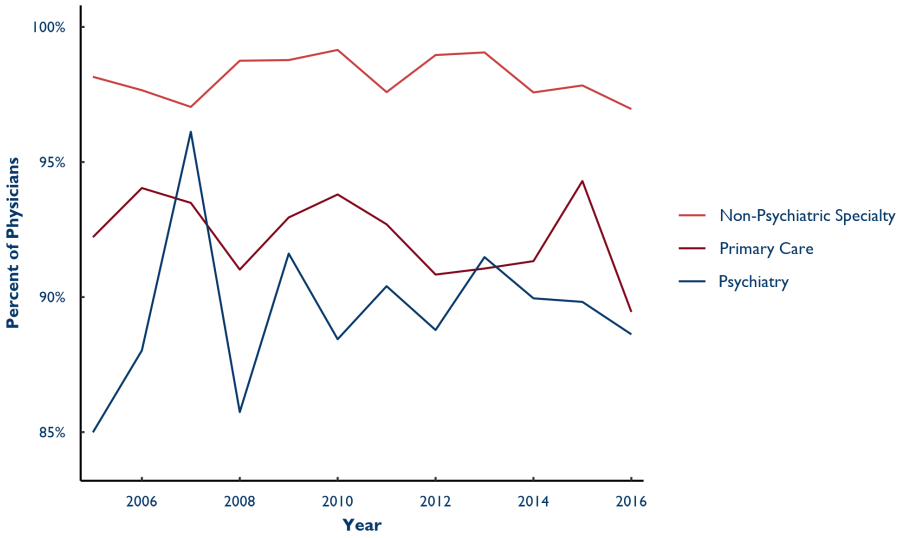
Percent Working on Average 40+ Hours per Week by Profession Type, 2005-2017



Hours worked per week on average in the last year and profession type among those who were currently employed according to data from the American Community Survey from 2005 to 2017.

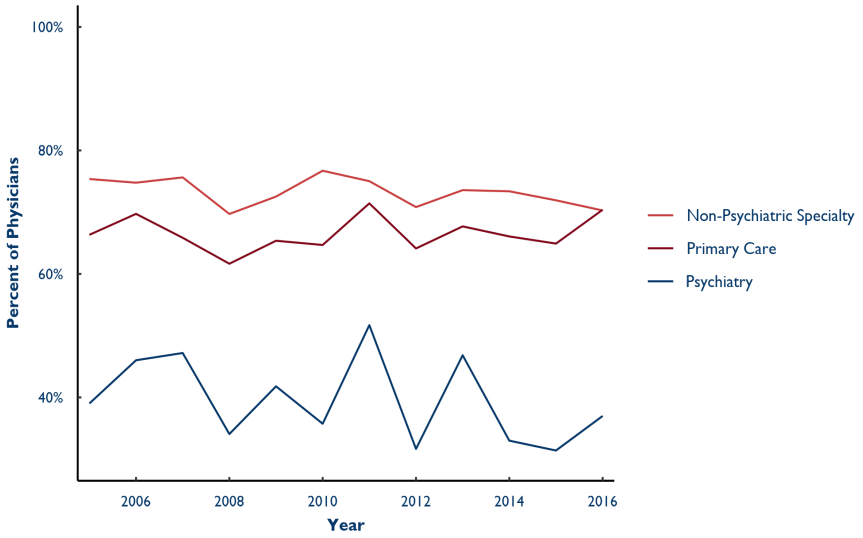
No Change in Share Accepting New Patients – Medicaid Always Especially Bad

Percent of Physicians Accepting New Patients by Physician Type, 2005-2016



Yes or no to accepting new patients and physician specialty as reported by physician through the National Ambulatory Medical Care Survey from 2007 through 2016.

Percent of Physicians Accepting New Medicaid Patients by Physician Type, 2005-2016



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OBSERVATIONS

Tasks and Needs

- Division by provider type not optimal for policy
  - Which providers can prescribe maintenance medications to people with SMI?
    - In which areas are there people with SMI who lack these providers?
    - Do areas have substitutes for these providers who could be supported (e.g., through tele-consultation)?
    - Is this what patients want?
  - Which providers can provide counseling to people with episodic anxiety?
    - In which areas are there people with anxiety who lack access to such providers?
- What is the least cost way (especially in terms of training time) to generate additional providers of specific tasks at the national level?
- What is the most efficient way to deliver these tasks at the local level?
  - Telemedicine
  - Teleconsultation
  - Salary/bonus/loan forgiveness etc. for under-resourced areas

Can More be Done on the Intensive Margin – Increasing Provision by those Already Trained?

- Telehealth as a way to address maldistribution:
  - Geographic
  - Temporal (morning and evening hours) – time for care is an important barrier
  - Increase pools for therapeutic alliance
- Supervision and teams as a way to address maldistribution
  - Primary care – limited appetite
  - Peers/Community health workers – which needs do they fill?

POLICY LEVERS

Policy Levers

SHORT RUN

- Telehealth payment policy in Medicare (and Medicaid)
- Network adequacy standards
- Cross-border practice rules post-PHE
- Research (and tied funding)
  - Measurement of unmet need
  - Measurement of access adequacy
- Scope of practice in Medicare (and Medicaid)
- Direct funding for Community Health Workers, Peer Support, etc.
  - May be a useful adjunct to current care, but not likely a substitute
- Direct funding of health professions

LONG RUN

Network Adequacy

- Counts are a terrible way to measure network adequacy
- What is the question?
  - How many people would need to *change* providers?
    - Providers who continue to care for existing patients – but won't accept new ones
  - How many providers will accept new patients?
    - Secret shoppers – costly and intrusive for independent practicies
- Current CMS quality measure inventories are not keyed to this goal

New Measures – Built from Administrative Data

- Develop utilization and outcome-related measures
  - Percentage of overall health spend on behavioral healthcare (a measure of parity compliance).
  - Number of providers that have billed the plan five times or more in the prior year per 1000 covered lives (a measure of network breadth)
  - Share of total listed providers who have billed five times (an indication of real, rather than ghost, participation)
  - Percentage of those who see an outpatient BH provider who engage in a fourth visit to that provider (an industry standard indicator of continued engagement and quality of the providers).
  - the number of providers who billed last year, but did not bill this year (an indicator of provider network churn, which may indicate burdensome prior authorizationrequirements and/or low reimbursement).

Measuring Unmet Need +

- Unmet need is a complicated concept
- Would like to see estimates of “unrealized need” – psychiatric emergency department visits, substance use and alcohol use hospitalizations, suicide attempts (limited data publicly available)
  - Do these correlate with unmet need? With supply? With supply of what?
- Add questions about lack of availability as a reason people aren’t getting services

THANK YOU