DNP Capstone

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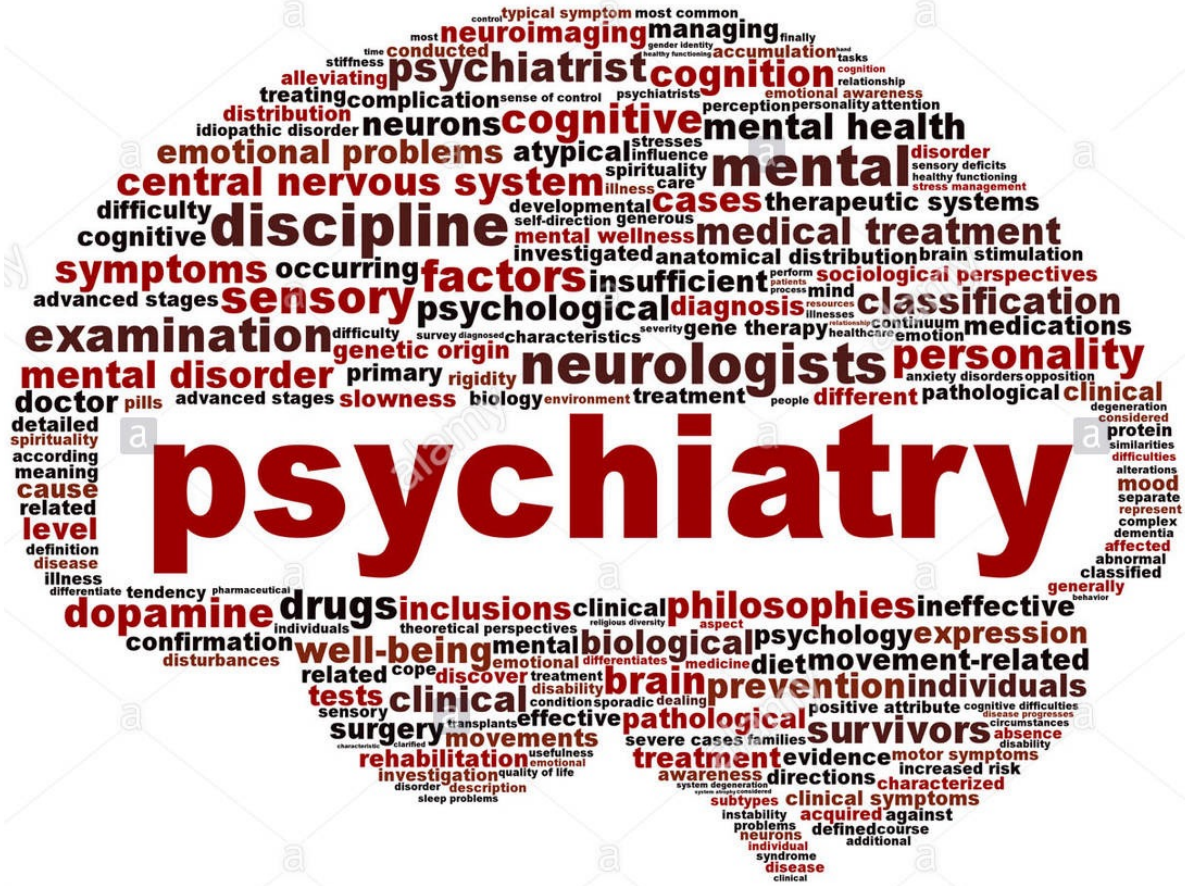
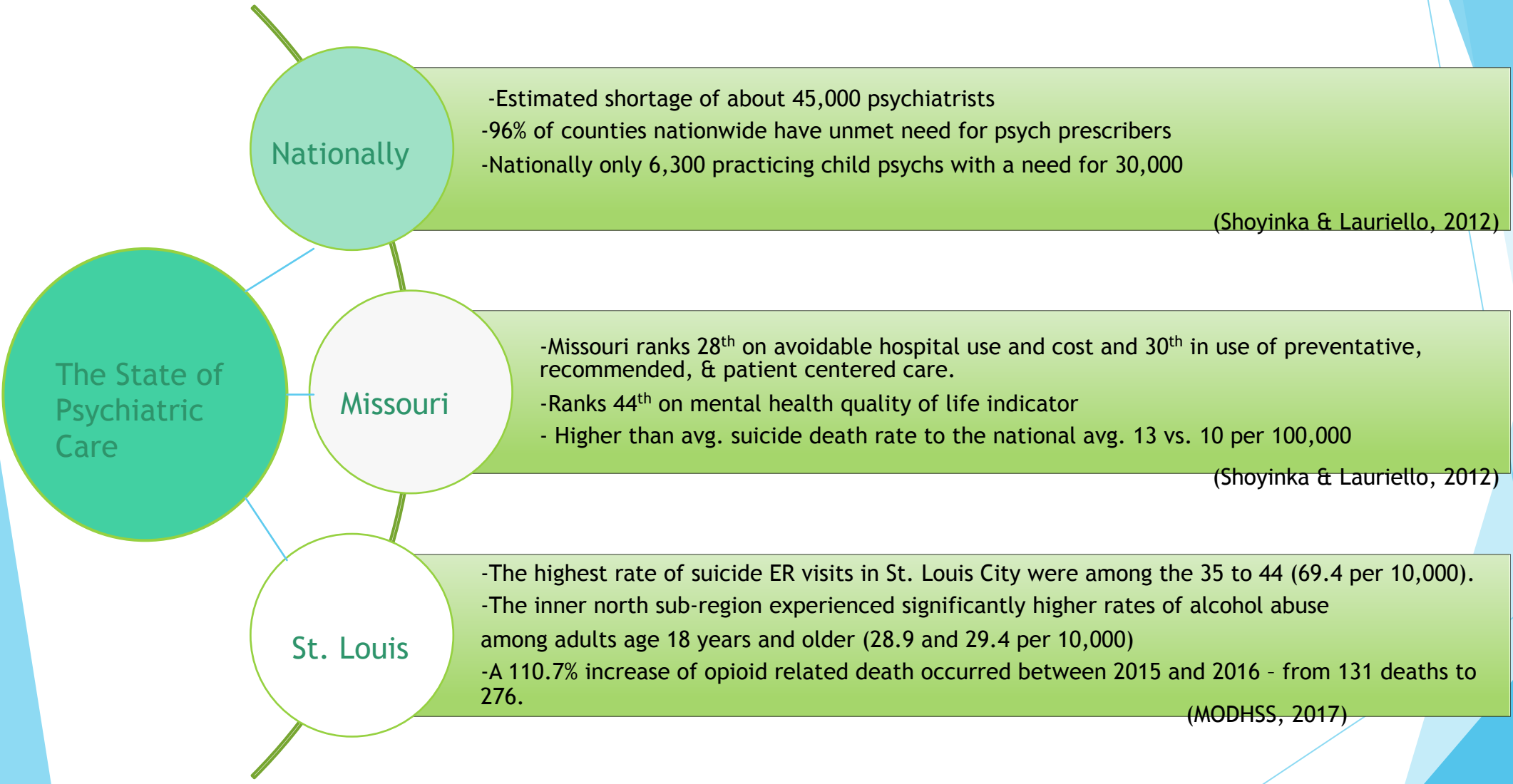


Figure 1: Psychiatry (Alamy, n.d.)

Background & Significance

Introduction to Outpatient Psychiatry



Gateway Psychiatric Group

Infastructure

- 3 psychiatric practitioners all individual proprietors of their own outpatient psychiatric practices.
- Two nurse practitioners, 1 physician
- Culture of Care with emphasis on quality
- All ages treated from children to older adults
- Multiple psychiatric specialties

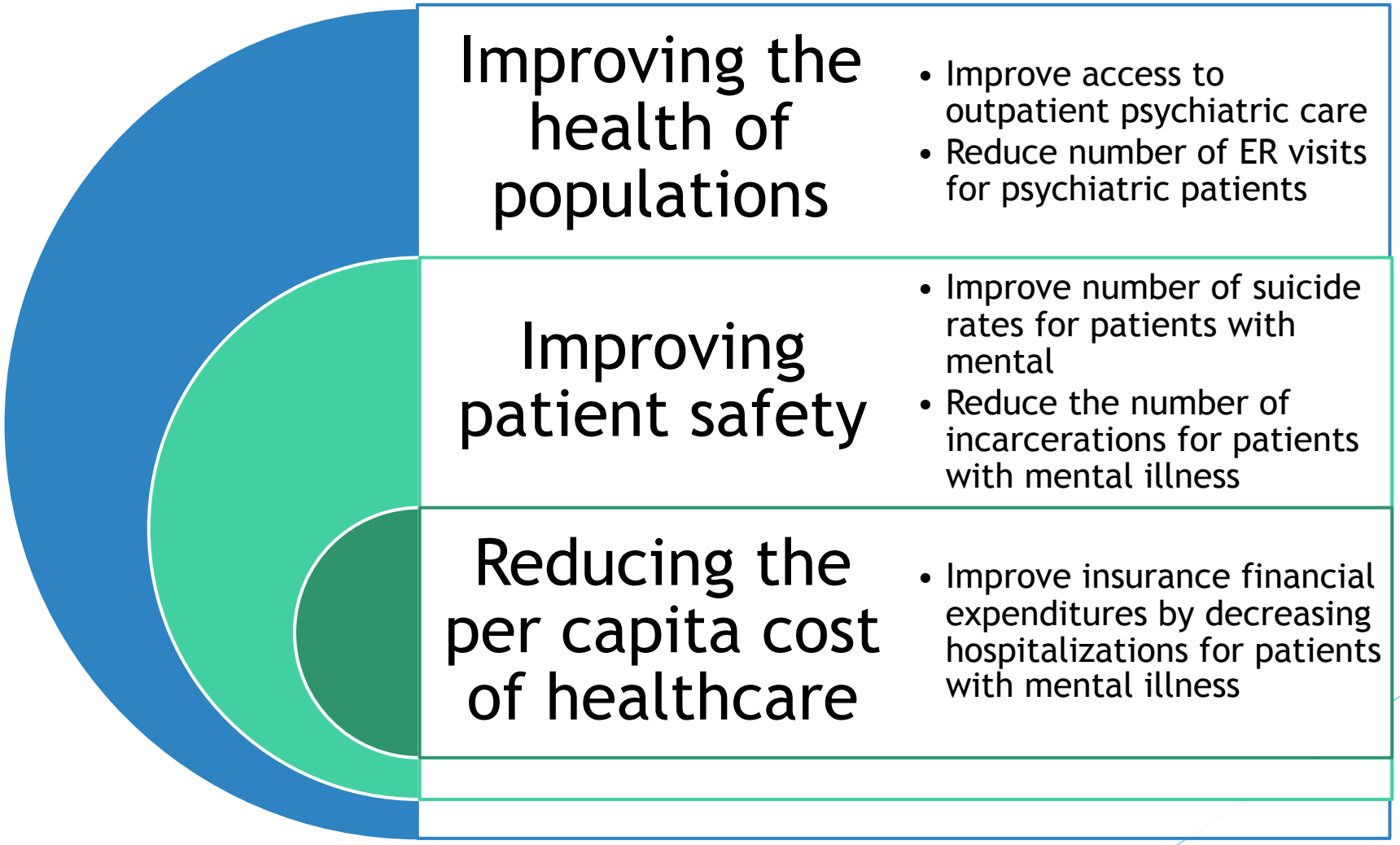
Vision: To provide Gateway Psychiatric patients individualized, high quality, evidence-based care while achieving the best outcomes for psychiatry in the outpatient setting.

Mission: To improve the health of psychiatric patients by providing access to the best psychiatric services in psychiatry in the outpatient setting and demonstrating the best outcomes.

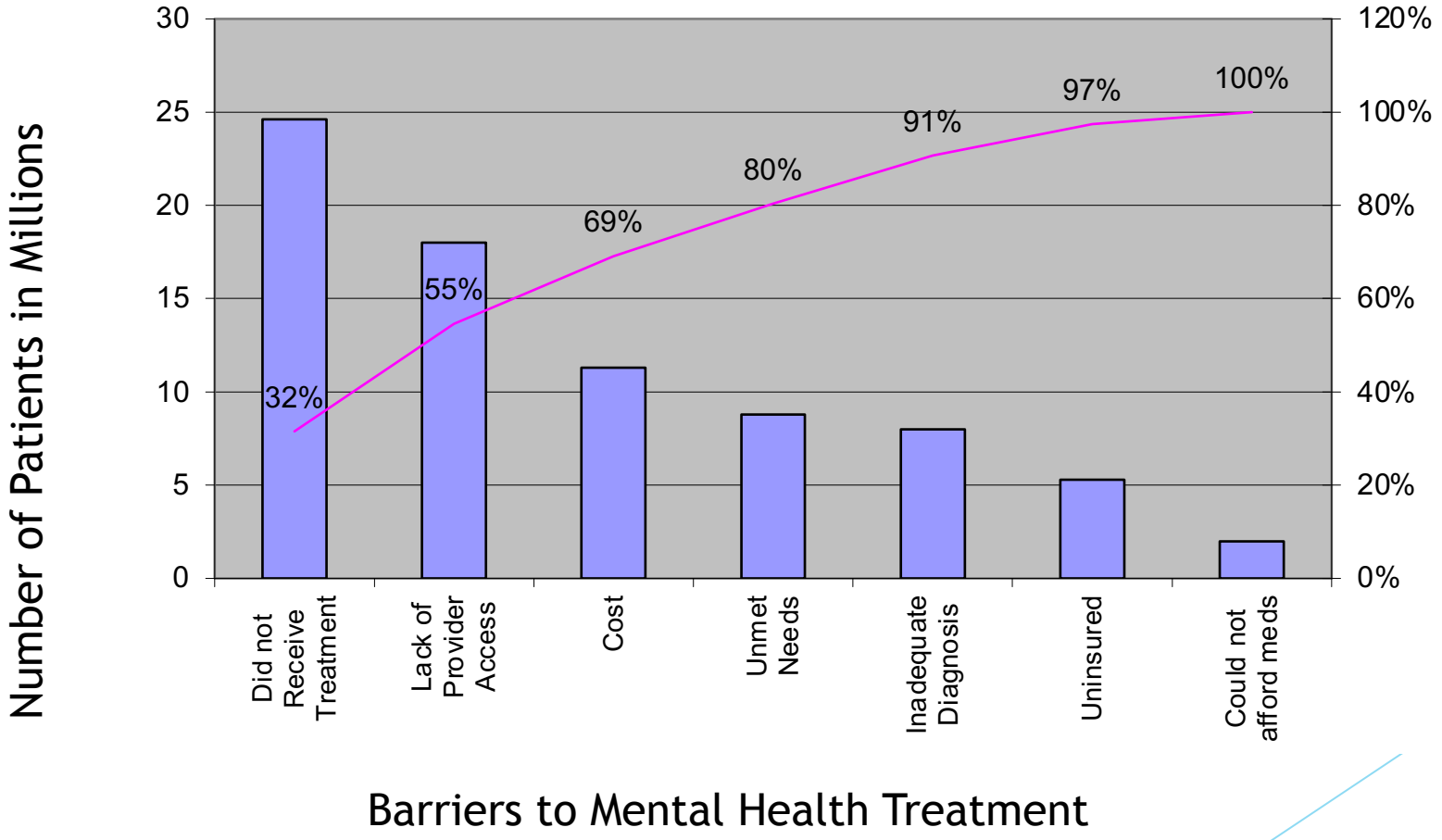
Values: Respect; Excellence; Innovation, Individualized Medicine

Processes to Be Improved

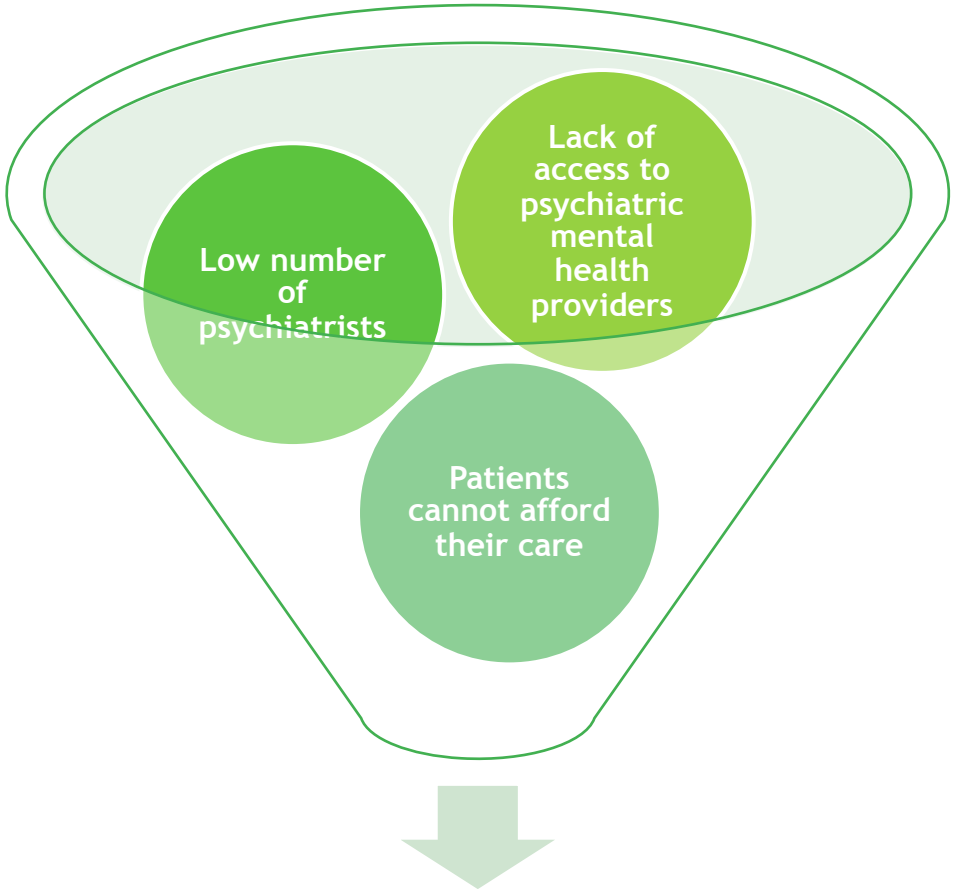
Institute of Medicine Three Dimensions of Performance



Pareto Chart: Barriers to Mental Healthcare

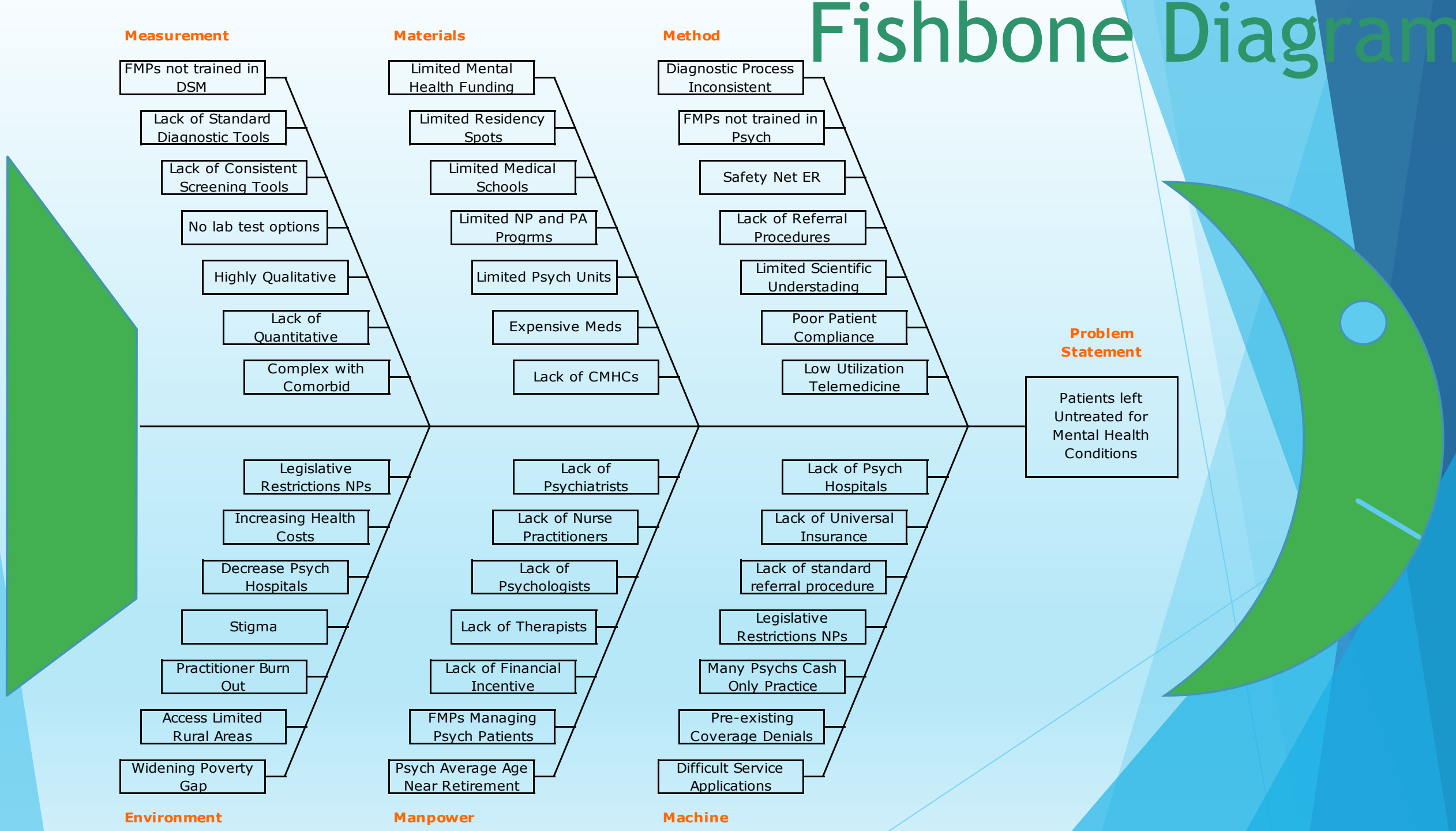


Top Three Major Issues of the Case



Poor health outcomes for psych mental health patients

Fishbone Diagram



AIMS

Purpose (AIMS) of the Project

AIM= Compare the psychiatric patients aged 18-60 in an outpatient psychiatric office that are treated by a physician and those treated by a nurse practitioner to demonstrate quality and efficacy of nurse practitioner led care in order to improve restrictive legislation limiting Nurse Practitioner care and further limiting access to mental health services.

- **S**= Systematically identify all patients aged 18-60 who were seen in an outpatient psychiatric office between February 1, 2019 and March 31, 2019.,
- **M**= Measure the three most common diagnoses treated, the percentage of ethnic backgrounds treated, the number of psychiatric comorbid conditions, the number of medical comorbid condition, and the number of ED visits over 6 months.
- **A**= Attainable: make sure data collection is achievable in the given timeframe and not overzealous
- **R=** Relevant: Important to identifying differences between psychiatrist and nurse practitioner practices. Establish / demonstrate that NPs offer similar and or equal care to psychiatrists.
- **T = Timely: Timeframe is between February 1, 2019 and March 31, 2019.**

PICOT Questions

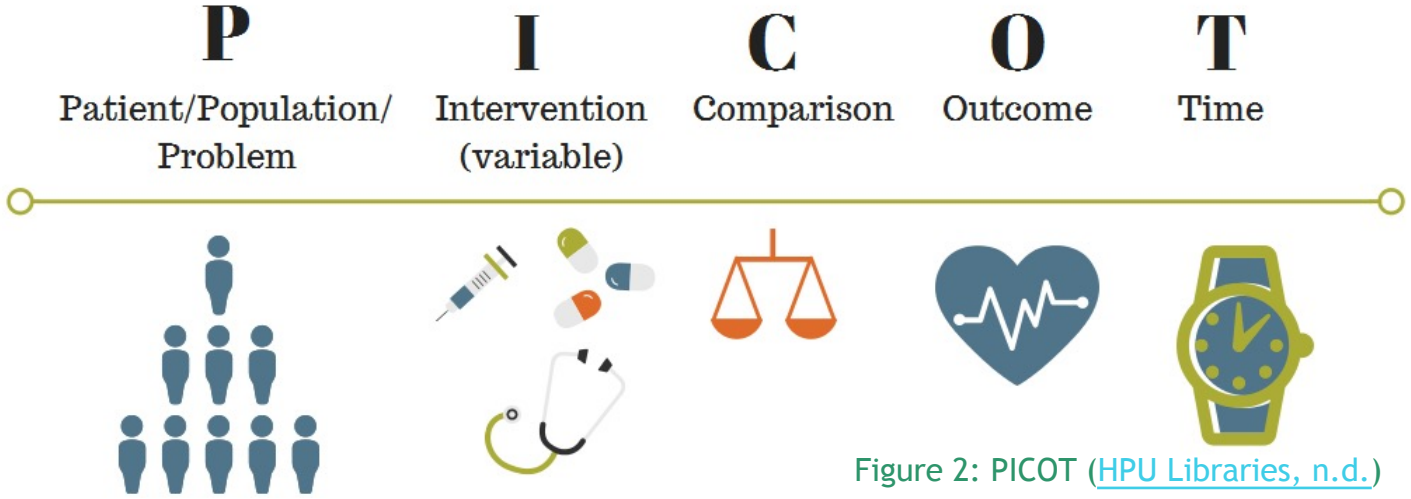


Figure 2: PICOT (HPU Libraries, n.d.)

- In psychiatric outpatients aged 18-60 years who are treated in a private outpatient mental health setting between February 1, 2019 through March 31st 2019 (P):
  - What are the three most common diagnoses managed by a psychiatric nurse practitioner when compared to a psychiatrist?
  - What are the racial/ethnic backgrounds of a psychiatric nurse practitioner when compared to a psychiatrist?
  - What is the payor mix for patients managed by a psychiatric nurse practitioner when compared to a psychiatrist?
  - What are the types and number of comorbid psychiatric conditions in patient treated by a psychiatric nurse practitioner when compared to a psychiatrist?
  - What are the types and average number of health comorbid medical conditions in patients treated by the nurse practitioner in when compared to a psychiatrist?
  - What is the average number of (ED) visits (all causes) by patients treated by a psychiatric nurse practitioner when compared to a psychiatrist?

Interventions

Institute of Medicines (IOMs) Six Aims

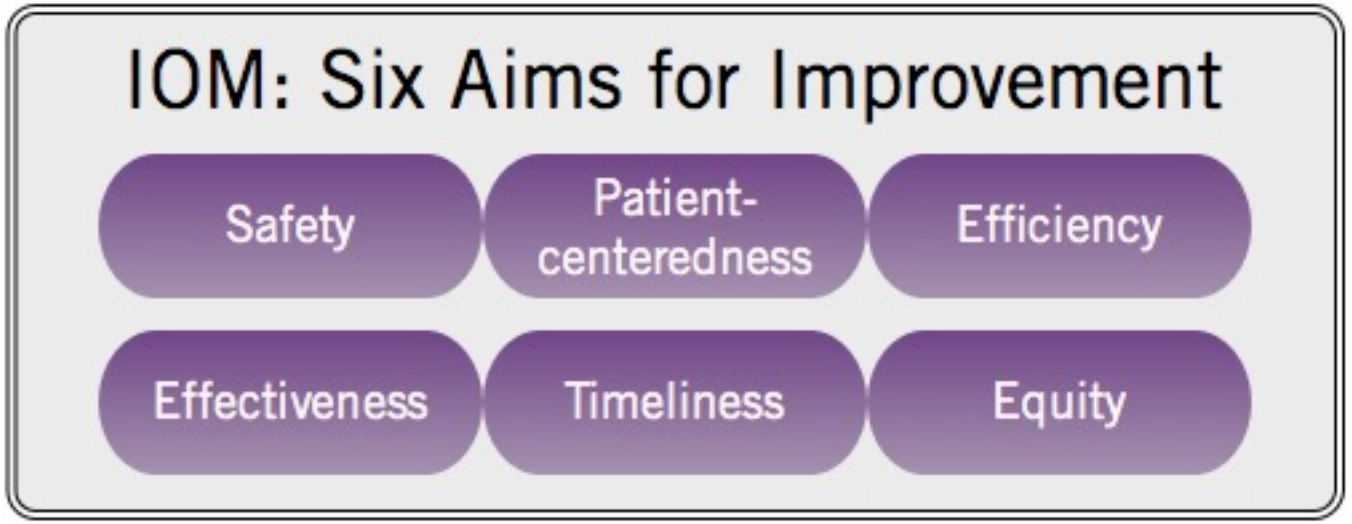


Figure 3: (Northwestern, n.d.)

- *Safe:* Avoiding injuries to patients
- *Effective:* Providing service based on scientific knowledge to those who could benefit
- *Efficient:* waste is avoided
- *Timely:* harmful delays are reduced for those who give and receive care
- *Patient centered:* Provider is respectful and responsive
- *Equitable:* high-quality care is provided to all

Literature Review

Ganz, O., Curry, L., Jones, P., Mead, K., & Turner, M. (2018). Barriers to mental health treatment utilization in wards 7 and 8 in Washington, DC: A qualitative pilot study. *Health Equity* (2), 216-222. 10.1089/heq.2017.0051.

Fear and Distrust of the Medical System	Lack of Support	Lack of Patient-Centered Care	Stigma

Sulaberidze, L., Green, S., Chikovani, I., Uchaneishvili, M., & Gotsadze, G. (2018). Barriers to delivering mental health services in Georgia with an economic and financial focus: informing policy and acting on evidence. *BMC health services research*, *18*(1), 108. doi:10.1186/s12913-018-2912-5

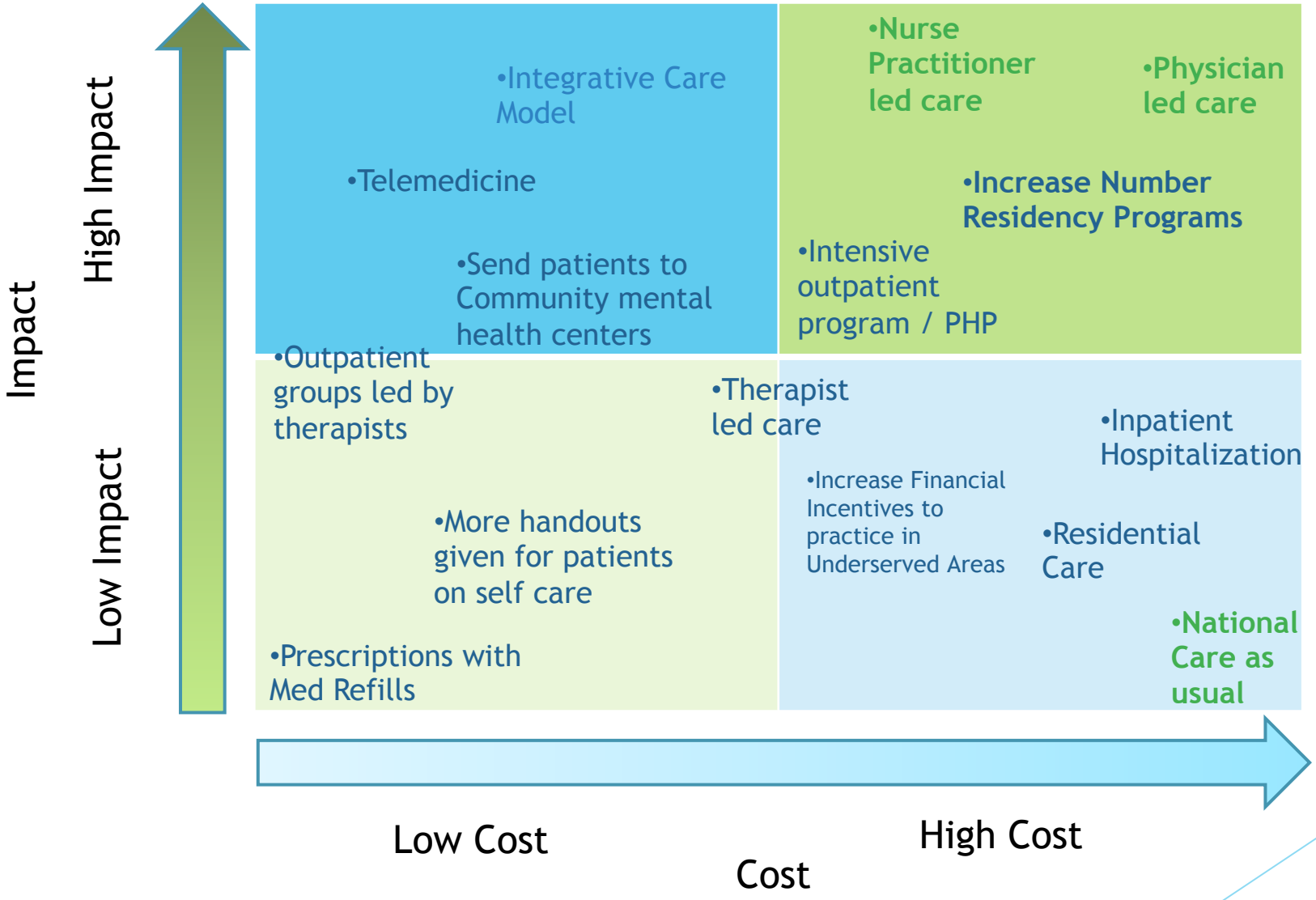
Difficulty with Transportation	Defining Quality	Low Diversity and Limited Services in Mental Health

Williams, M. O., Gilroy, J. R., Chang, T. Y., & Seymour, D. J. (2017). Challenges for Insured Patients in Accessing Behavioral Health Care. *Annals of family medicine*, *15*(4), 363–365. doi:10.1370/afm.2092

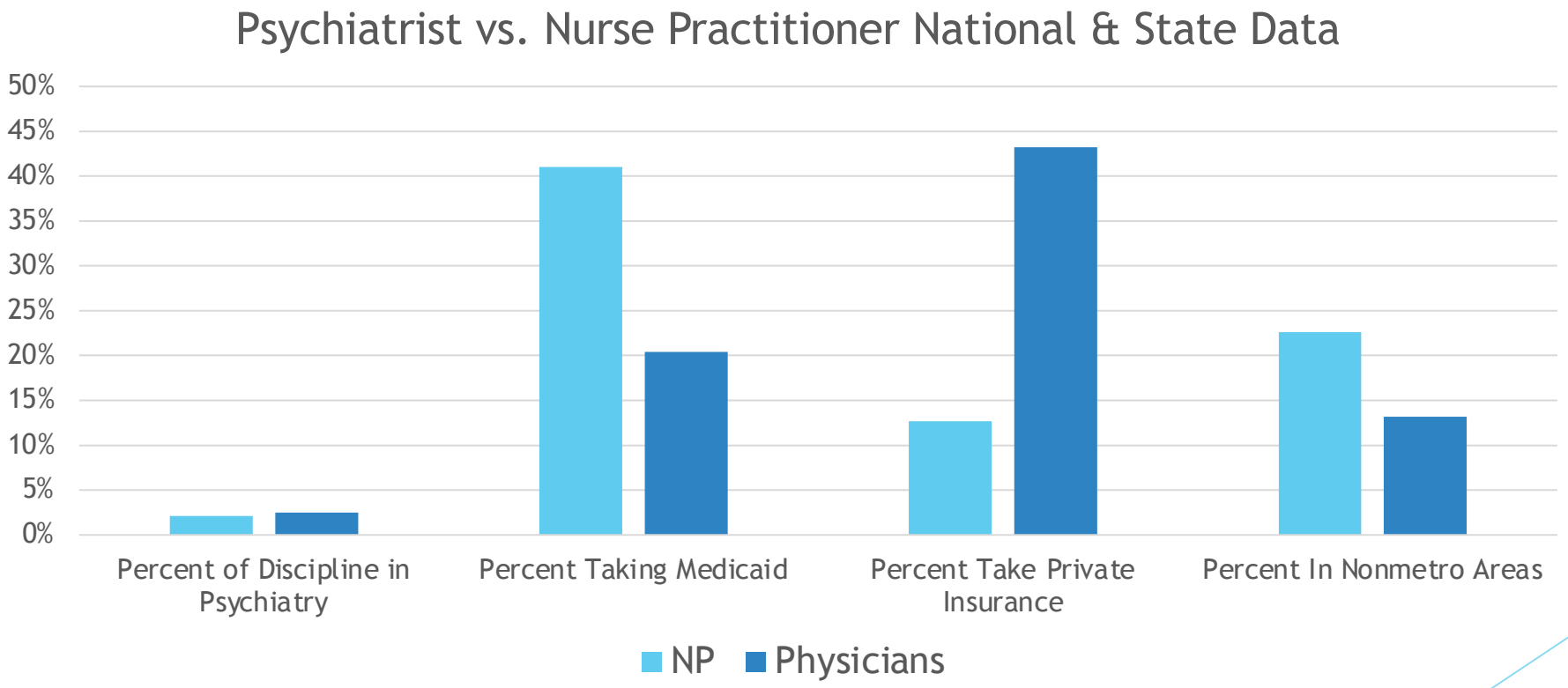
Less than 14% or psychiatrists taking new patients	Only 555 or psychiatrists accepted insurance

Improving Access to Psychiatric Care:

Cost – Impact Analysis Scattergram

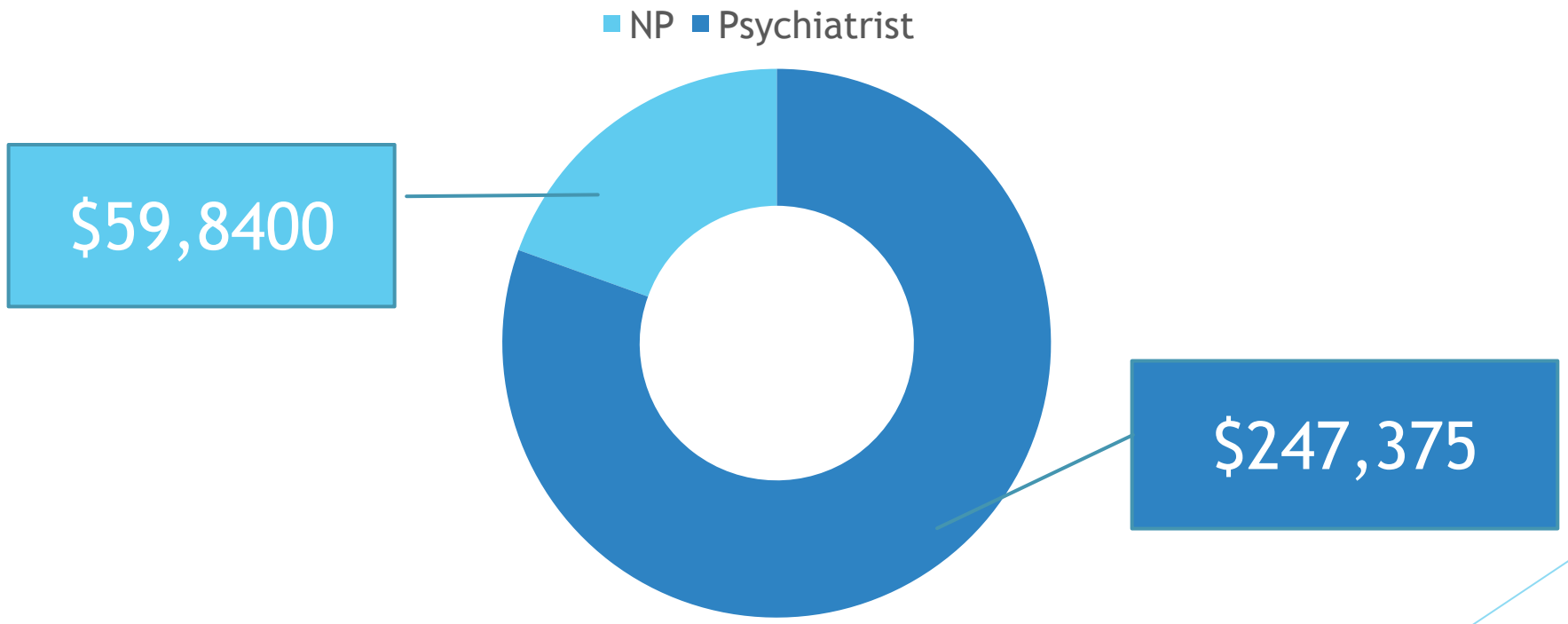


Psychiatrist vs. Nurse Practitioner National Data



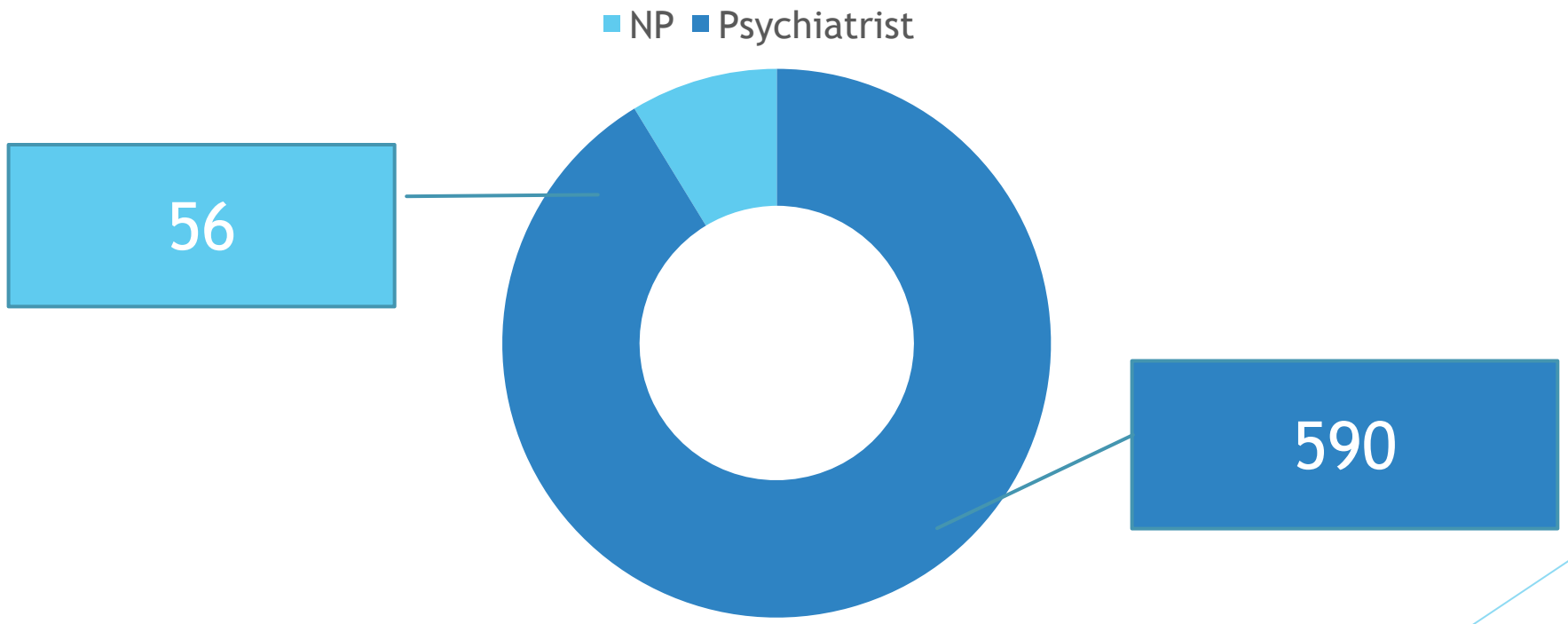
(Yang, Trinkoff, Zito, Burcu, Safer, Storr, Hohantgen, & Idzik, 2017)

Psychiatrist vs. Nurse Practitioner Salaries in Missouri



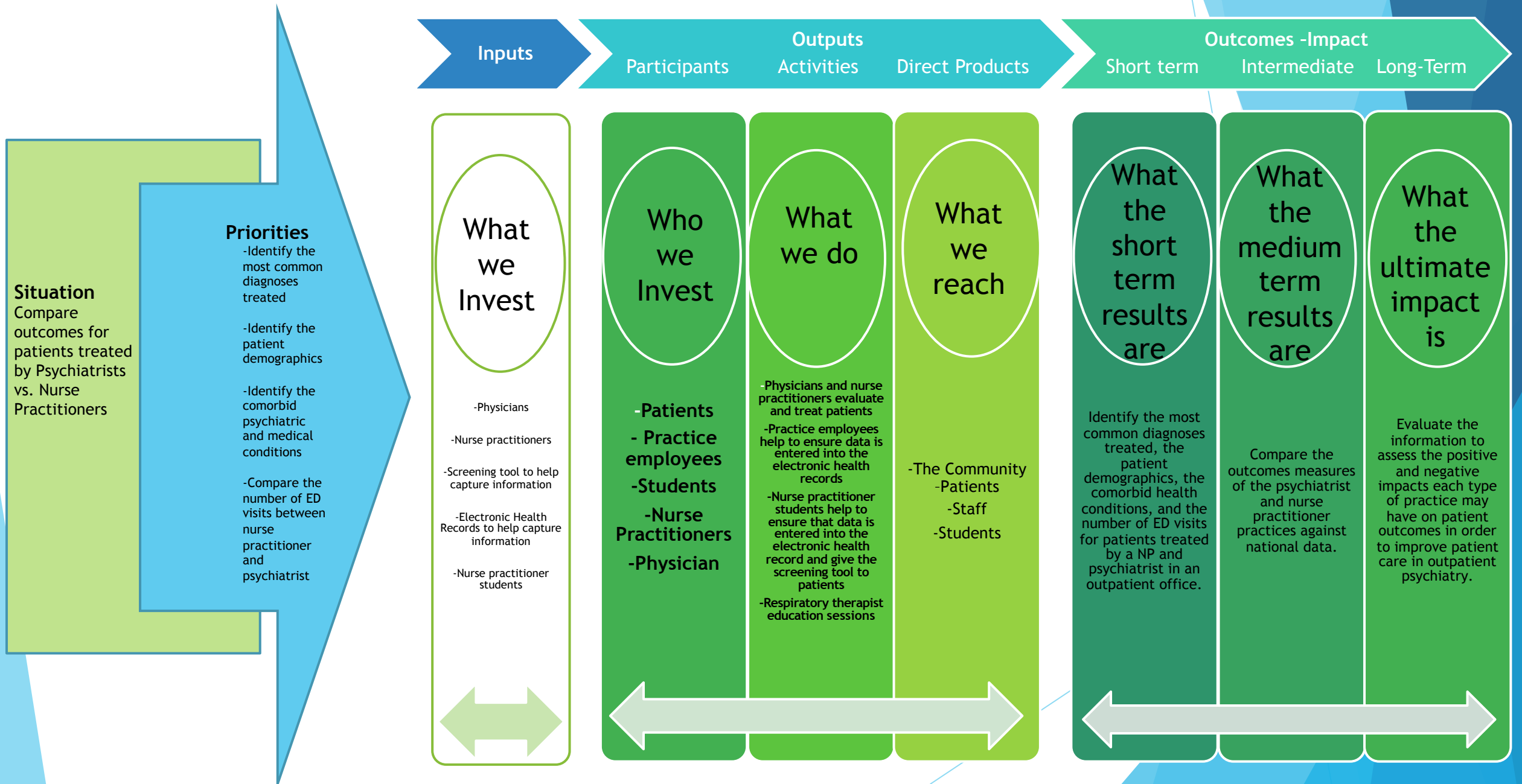
(Bureau of Labor Statistics, 2019)

Psychiatrist vs. Nurse Practitioner Salaries in Missouri



(Bureau of Labor Statistics, 2019)

LOGIC MODEL FOR PROJECT PLANNING



Outcome Measures

Outcomes to be Measured

Figure 4: (SMART, n.d.)

- 3 Most common diagnoses treated
- Percentage of racial/ethnic backgrounds treated
- Percentage of different payors for services
- Number of comorbid psychiatric conditions
- Number of comorbid medical conditions
- Number of ED visits over 6 months measured every 3 months

Process to Measure Outcomes

Intervention: Nurse Practitioner (NP) led care

- Hire a nurse practitioner to see patients in an outpatient psychiatric office
- Allow patients to choose physician or nurse practitioner led care
- Compare similar data between providers to establish similarities and differences
- Desired outcome will be demonstrating similar outcomes for NP led care as physician led care demonstrating NP led care is a solution for increased access to mental health care

Intervention: Nurse Practitioner led mental health care

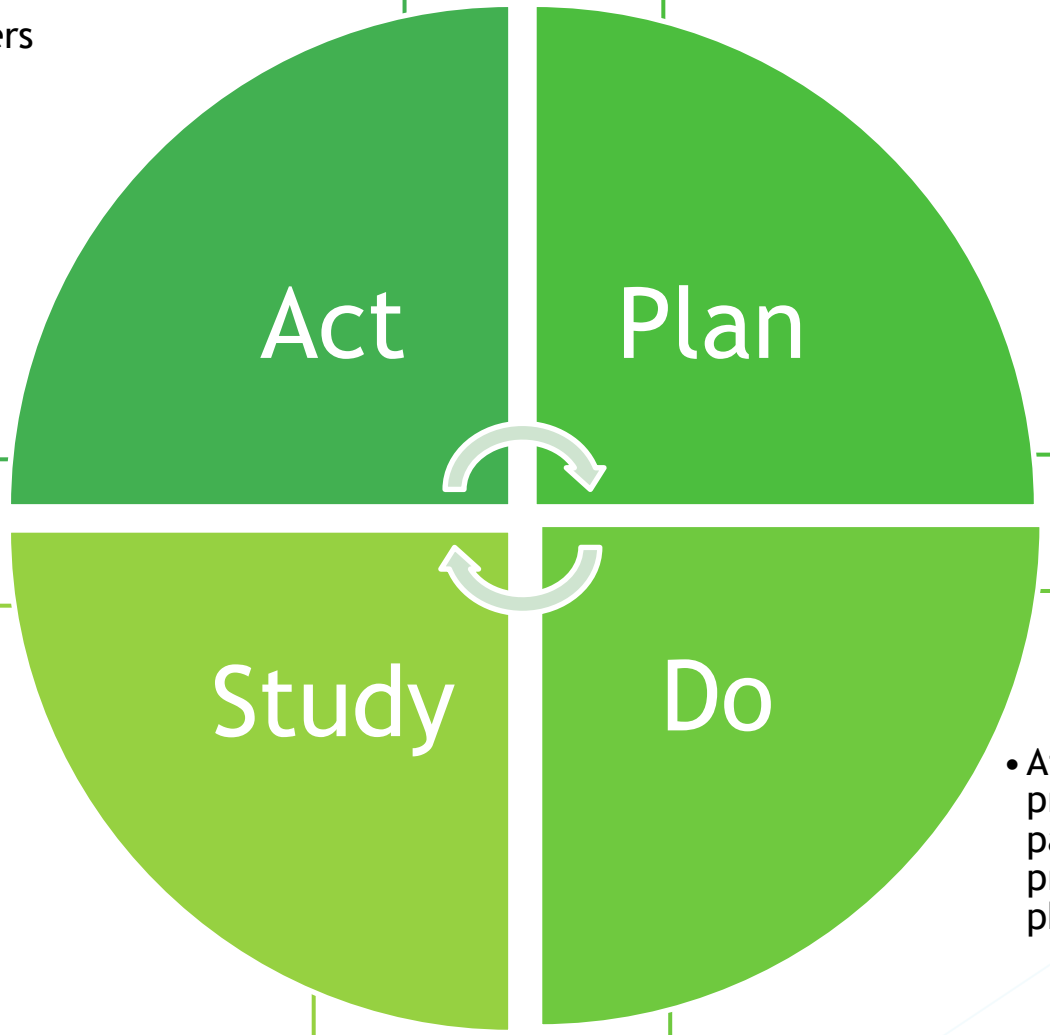
- Implementing a nurse practitioner led outpatient program to improve access to mental health care
- Patients are allowed to choose their own care as they would in the real world
- Physicians and nurse practitioners will offer care as usual
- Patients will have 24/7 hour access to their own provider via an exchange services
- Prescriptions with refillable medications
- All providers will be utilizing the same electronic health records system (Practice Fusion)

Test of Change

Plan, Do, Study, Act (PDSA) Worksheet
Test of Change

- We will implement more nurse practitioner led outpatient psychiatric programs.
- Patients will be able to choose providers of their choice and have the ability to access services quicker.

- Increased access to outpatient psychiatric mental health care



- Nurse practitioner led care seems to be comparable to physician led care in the outpatient psychiatric setting.
- Nurse practitioner led care has helped to increase access to psychiatric mental health services.

- After creation of the nurse practitioner outpatient program patients will be able to choose nurse practitioner led psychiatric care or physician led psychiatric care.

Barriers

- Little funding for support
- Non-compliance With Medications
- Non-Compliance with treatment plans
- State regulations placing barriers on NPs
- Lack of legislator education about NPs
- Low literacy level for patients
- Poor family support
- Poor insurance coverage
- Lack of transport for appointments

Inclusion and exclusion criteria

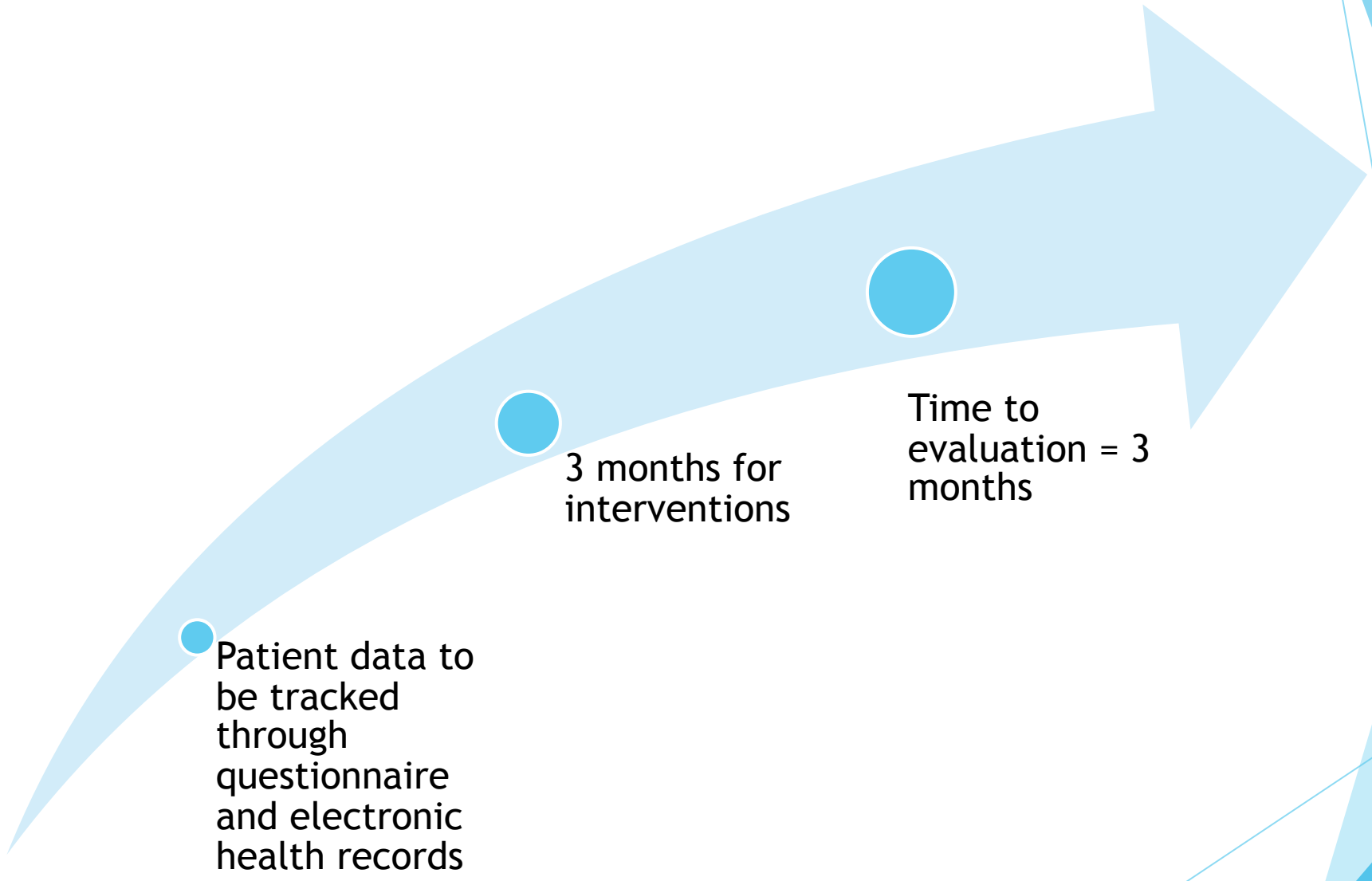
Inclusion Criteria

- Patients ages 18-60
- Has at least one psychiatric diagnosis
- Patient's interested in outpatient psychiatric mental health services

Exclusion Criteria

- Patients younger than 18 or older than 60
- Meets criteria for inpatient hospitalization
- Patients who do not have a psychiatric / mental health condition

Timeline for Interventions and Evaluation



Financial Analysis

Financial Analysis –

Average inpatient stay = $21,500

	Total # National Hospitalizations for mental illness	Total # Hospitalizations for Missouri for mental illness
	222,883	63,107
TOTAL COST:	4.8 TRILLION	1.4 BILLION

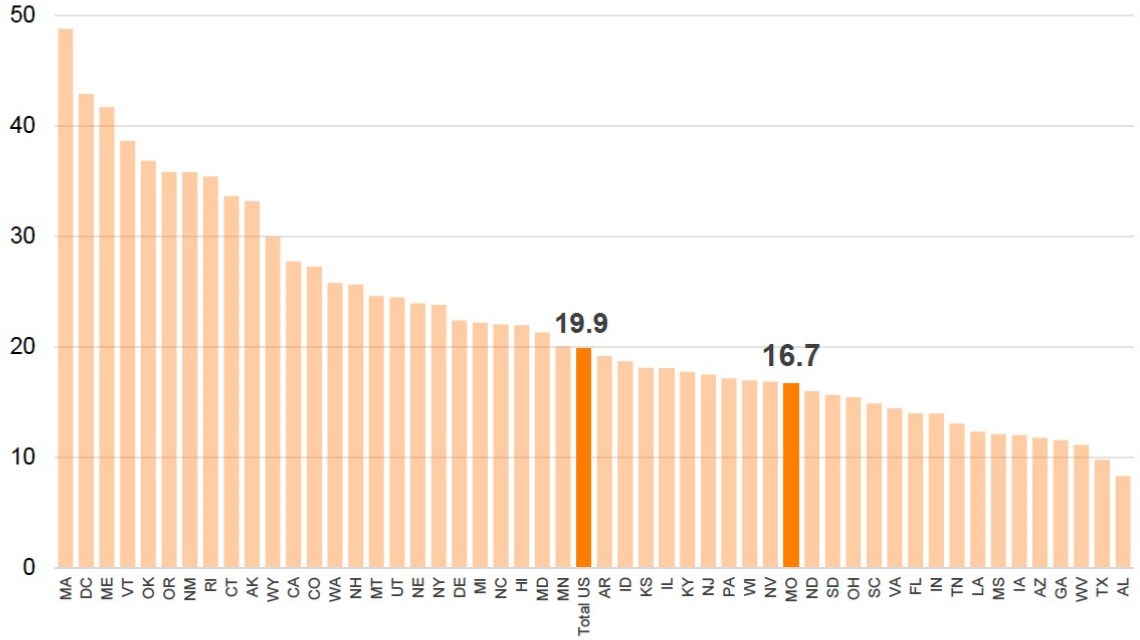
Maximum Loss related to Psychiatric INPATIENT STAYS in Missouri= $1.4 BILLION

(Heun-Johnson, Menchine, Goldman & Seabury, 2017)

Availability of mental health care providers

MISSOURI AND UNITED STATES 2016

Number of mental health providers
per 10,000 residents



There are approximately 17 mental health providers for every 10,000 residents in Missouri. This is lower than the national average, and not sufficient to serve the population in need of mental health treatment.

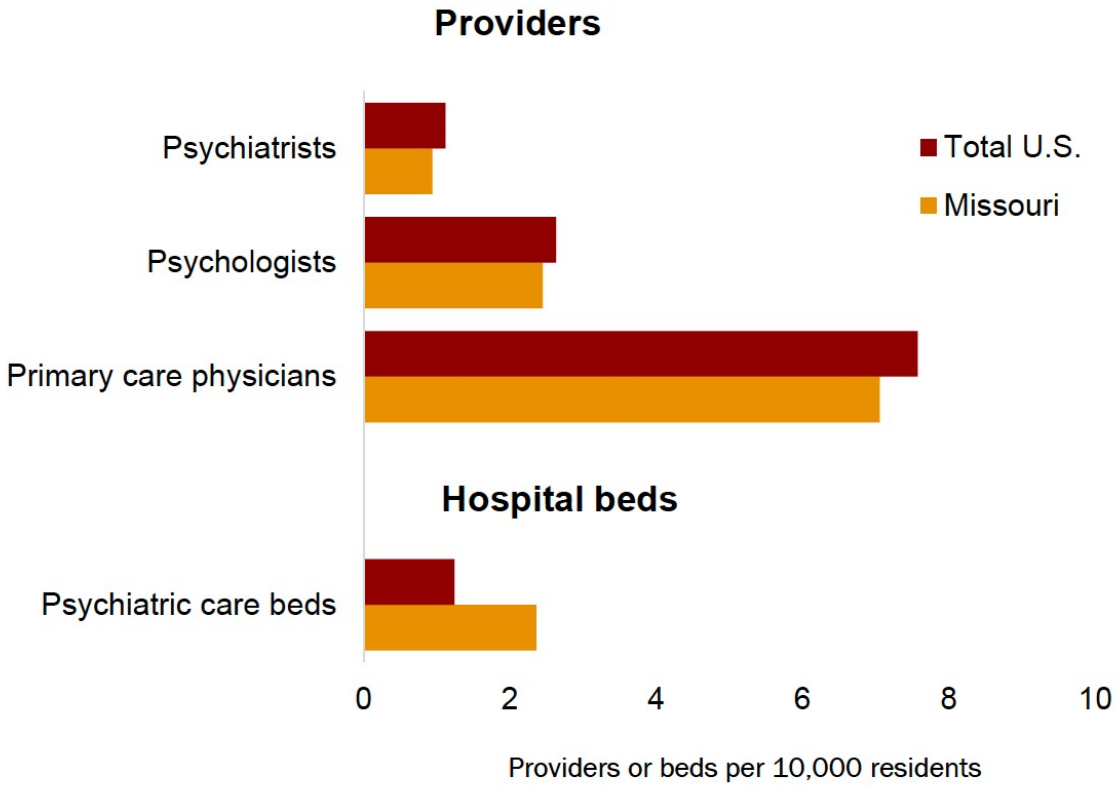
***Mental health providers include**: psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists, and advanced practice nurses specializing in mental health care*

Source: County Health Rankings & Roadmaps, by the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute.

(Heun-Johnson, Menchine, Goldman & Seabury, 2017)

Availability of mental health care providers and hospital beds

MISSOURI AND UNITED STATES 2013

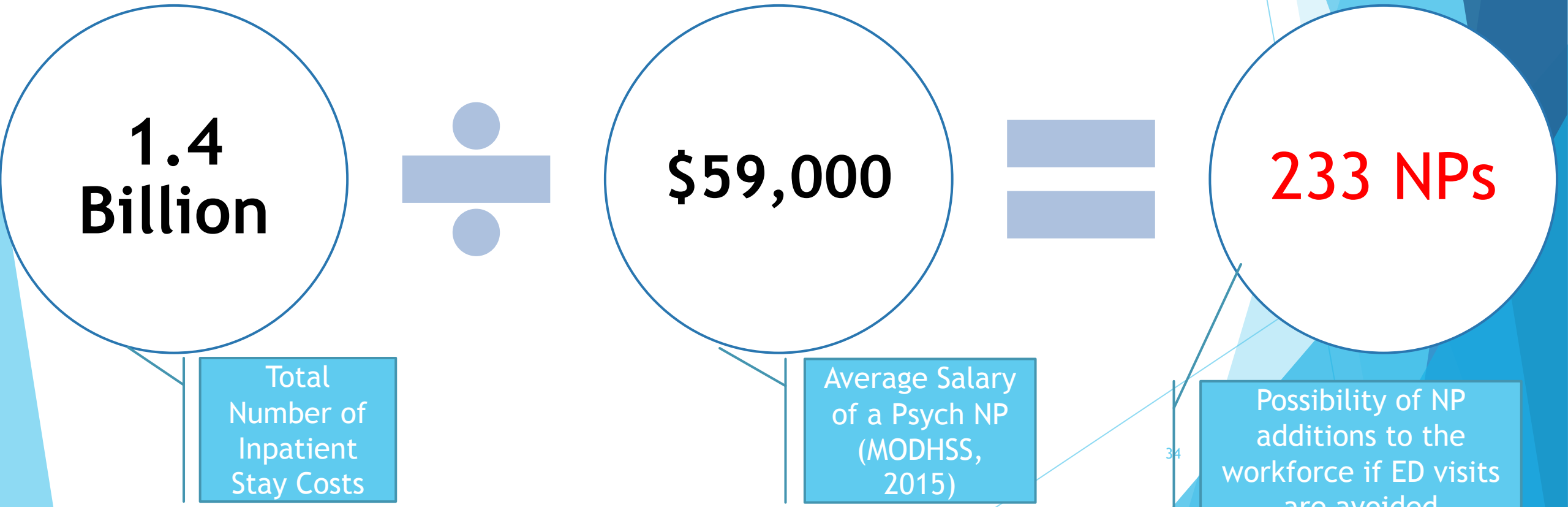


Per resident, Missouri has fewer psychiatrists and psychologists compared to the US average. However, Missouri has a higher number of primary care physicians and hospital beds dedicated to psychiatric care.

Source: Area Health Resource Files 2013 (psychiatrists, physicians and psychiatric care beds), and 2005-2013 Demographics of the U.S. Psychology Workforce, American Psychological Association (psychologists)

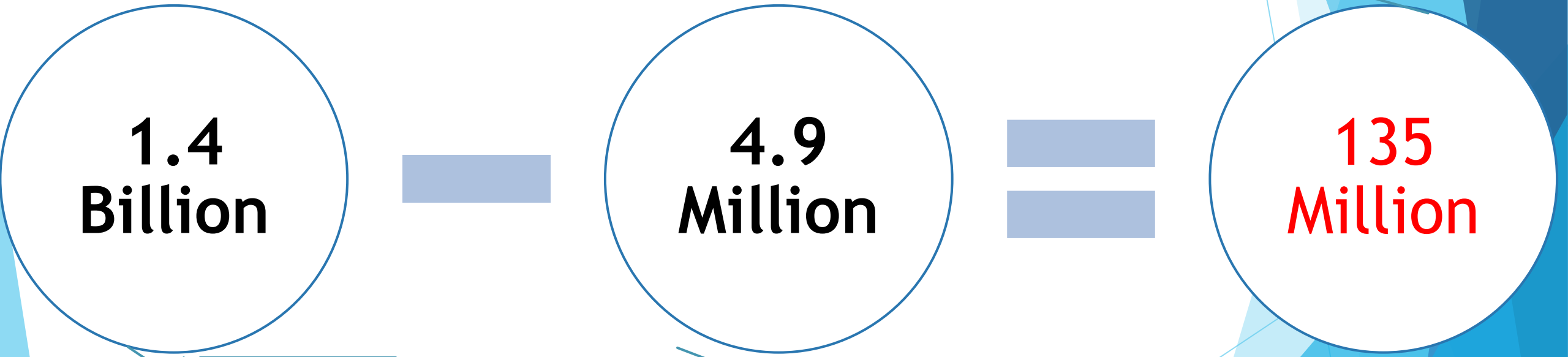
(Heun-Johnson, Menchine, Goldman & Seabury, 2017)

Financial Analysis – Potential Shift of Financial Burden



Financial Analysis – Potential Shift of Financial Burden

Amount of Money left from the 1.4 Billion potential Savings if ED visits are avoided through care access

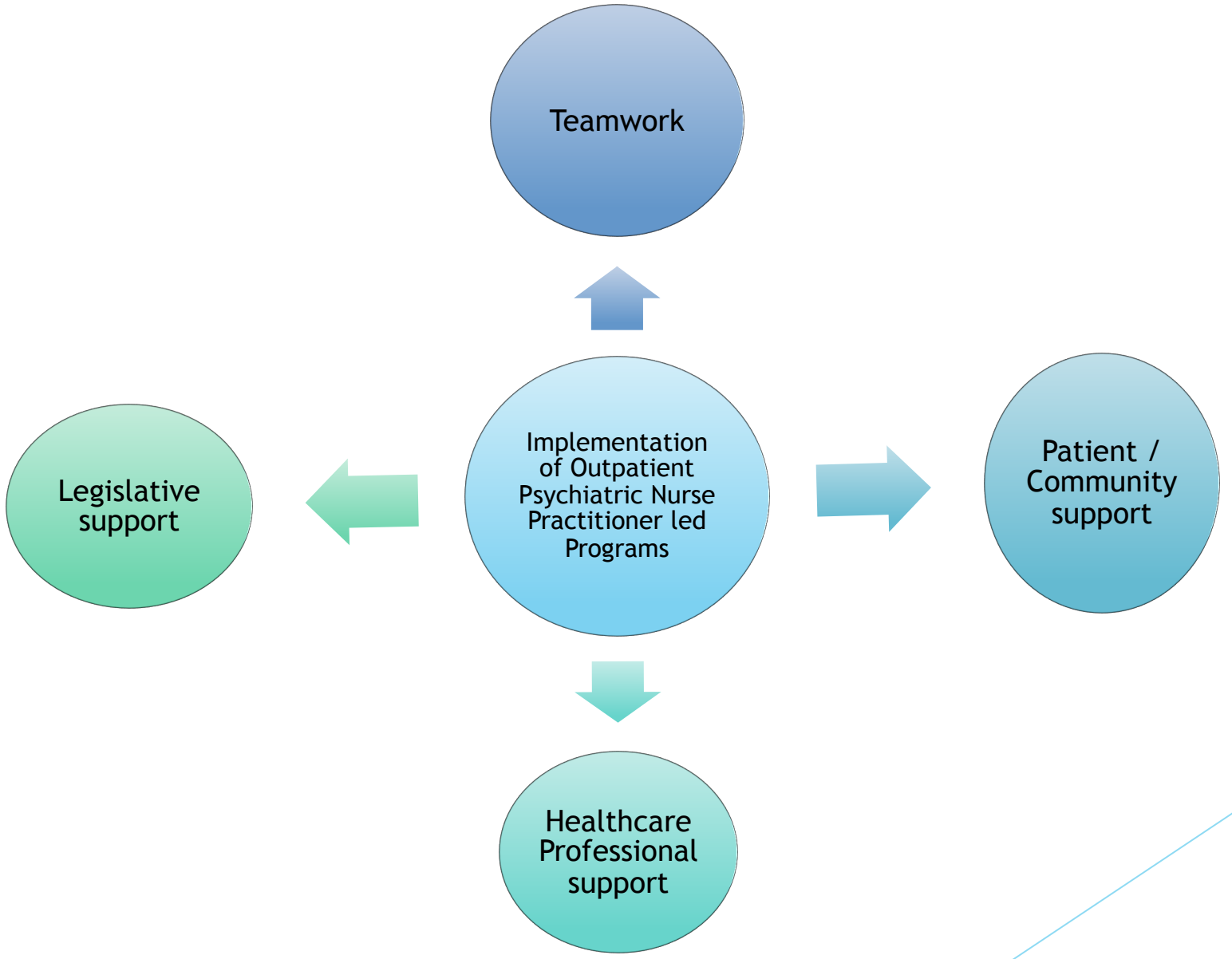


Cost for Total Number Possible NPs

Cost of 83 NPs (actual # needed in MO to remove HPSA), (Staff Care, 2015)

Implementation

How will the process be implemented on a broader scale?



Leading the Change

Describe how the change may be implemented in other departments/organizations/communities with similar issues

Communication that involves networking and information sharing

Legislative engagement with white paper and lobbyist support

Implementation in quarterly stages in multiple outpatient psychiatric settings

Job fairs to support the hiring of nurse practitioners into interested facilities

Contacting legislators to loosen scope of practice legislation restricting NPs the ability to practice

Mailings to organizations and communities advertising outpatient program availability

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