



Session # H4a

Patient Outcomes Associated with Primary Care Behavioral Health : A Systematic Review

Kyle Possemato, PhD., Emily Johnson Ph.D.,
Gregory Beehler Ph.D., & Robyn Shepardson Ph.D.

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Faculty Disclosure

The presenters of this session have NOT had any relevant financial relationships during the past 12 months.

Conference Resources

Slides and handouts shared in advance by our Conference Presenters are available on the CFHA website at http://www.cfha.net/?page=Resources_2018



Slides and handouts are also available on the mobile app.



Learning Objectives

At the conclusion of this session, the participant will be able to:

- Describe the patient outcomes associated with primary care behavioral health services.
- Identify gaps in the current evidence-base.
- Discuss high priority areas for future research.



Bibliography / Reference

1. Possemato, K., Johnson, E.M., Beehler, G. P., Shepardson, R. L., King, P., Vair, C. L., Funderburk, J. S., Maisto, S. A., Wray, L. O. (2018). Patient Outcomes Associated with Primary Care Behavioral Health Services: A Systematic Review. *General Hospital Psychiatry, 53:1-11*. doi: [10.1016/j.genhosppsych.2018.04.002](https://doi.org/10.1016/j.genhosppsych.2018.04.002)
2. Funderburk, J.S., Shepardson, R.L., Wray, J., Acker, J., Beehler, G.P., Possemato, K., Wray, L.O., & Maisto, S.A. (2018). Behavioral medicine interventions for adult primary care settings: A review. *Families, Systems, and Health, 36 (3)*, 368-399. doi: [10.1037/fsh0000333](https://doi.org/10.1037/fsh0000333)
3. Beehler, G. P., Lilienthal, K. R., Possemato, K., Johnson, E. M., King, P. R., Shepardson, R. L., Vair, C. L., Reyner, J., Funderburk, J. S., Maisto, S. A., & Wray, L. O. (2017). Narrative review of provider behavior in Primary Care Behavioral Health: How process data can inform quality improvement. *Families, Systems, and Health, 35(3)*, 257-270. doi: [10.1037/fsh0000263](https://doi.org/10.1037/fsh0000263)



Learning Assessment

A learning assessment is required for CE credit.

A question and answer period will be conducted at the end of this presentation.

What is Primary Care Behavioral Health (PCBH)?

Platform of behavioral health care delivery in primary care

Key characteristics
Population-based
Collaborative
Open access
Time-limited intervention
Responsive to the needs of patient
Ideally...
Measurement-based
Evidence-based

PCBH is a unique model of care

- Briefer than traditional mental health treatment
 - 1-6 sessions, 30 minutes in length
- Beyond co-location
 - Behavioral health consultants are fully integrated to consult with team members and provide direct patient care services.
- Unique from Collaborative Care/ Care Management
 - Licensed independent mental health providers
 - Services for full spectrum of behavioral health concerns
 - Less- protocol driven

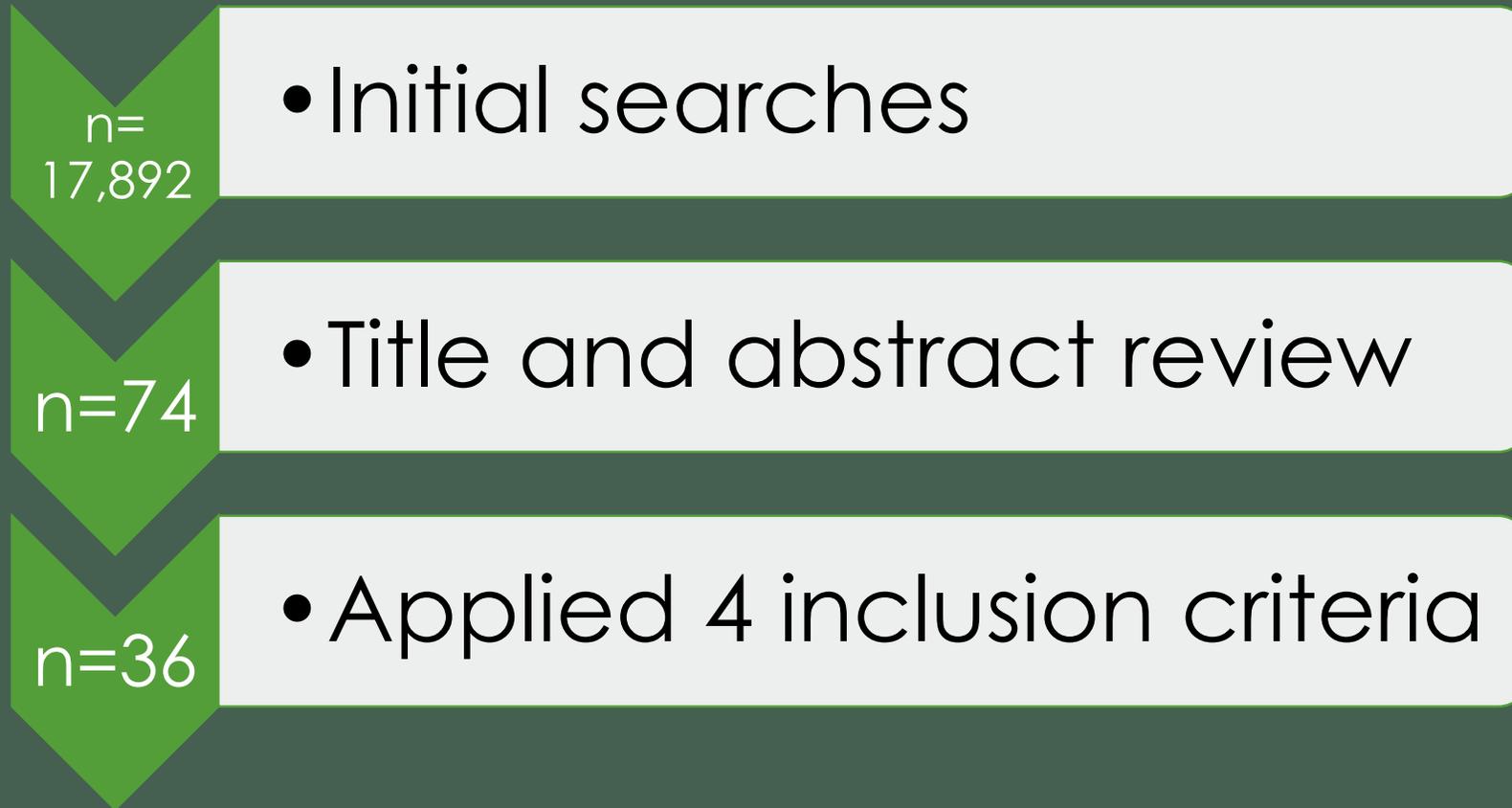
Outcome research on PCBH is sparse

- Despite wide-spread implementation little is know about how patients benefit
 - Patient access to and utilization of healthcare services
 - Patient health status as measured by changes in symptoms and functioning
 - Patient satisfaction with care
- Aims of the systematic review
 - Draw conclusions regarding the benefits patients experience from PCBH services.
 - Evaluate the quality of the research reviewed.
 - Identify under-researched areas.
 - Provide recommendations for future investigation.

Method

- A systematic review with protocol-based data extraction and synthesis consistent with PRISMA guidelines
- Inclusion Criteria
 1. Empirical, peer-reviewed publications focused on adult populations
 2. PCBH= services provided within primary care by licensed independent mental health providers with the goal of ongoing communication and collaboration
 3. Report on access, health status, or satisfaction
 4. Study of PCBH under normal clinical conditions

Method- article identification



Method- Data Extraction

Categories

Setting

Patient population

Study design

Results (odds ratio or Cohen's D)

Strengths and limitations (risk for bias)

Strategy

Two coders per article

First author confirmed all codes

Created standard list of strengths/ limitations

Another coder categorized these

PROSPERO, registration #CRD42016036989

Results- Access and Utilization n=23

Population

- Community clinics, safety net (n=11)
- VHA, DoD (n=12)

Sample Size

- 54- 92,190

Limitations

- No randomization (n= 20)
- Failure to measure/ control for co-variates (n=10)
- Limited generalizability (data from one clinic, n=9)

Strengths

- Comparison groups (n=19)
- Good External Validity (n=19)
- Sample size of ≥ 300 (n=17)

Results- Access and Utilization n=23

Outcome	N	Effect Size
Initiation rate of specialty mental health care	9	Small to large
Time to first health care visit	6	Small to medium
Number of PCBH visits	4	Small
Likelihood of attending at least 2 PCBH visits	4	Small
Number of medical appts following PCBH	3	Small to medium
Increases in psychiatric medical initiation	2	Small
% of patients who received 3 visits in 12 months	1	Small
Receipt of guideline-concordant depression care	1	Large

Results- Patient Health Status n=15

Population

- Community clinics, safety net (n=9)
- VHA, DoD (n=7)

Sample Size

- 19- 1,220

Limitations

- No randomization (n= 14)
- No comparison group (n=12)
- Response bias (outcomes from subset of pts, n=12)

Strengths

- Validated measures (n=15)
- Good external validity (n=14)

Results- Patient Health Status n=15

Outcome	N	Effect Size
General psychological distress/ functioning	11	Small- very large
Depression	6	Small- very large
Anxiety	2	Large
Alcohol/ drug use	1	Small
Suicidal ideation	1	--
PTSD	1	Large
Emotional lability	1	Small

Results- Patient Satisfaction n=8

All studies found patient satisfaction or therapeutic alliance was good to excellent.

Population

- Community clinics, safety net, university health (n=5)
- VHA, DoD (n=3)

Sample Size

- 52- 987

Limitations

- No randomization or comparison groups (n= 8)
- No validated measures (n=4)

Strengths

- Detailed description of PCBH services (n=8)
- Good external validity (n=7)

Discussion

- PCBH is associated with increased access to, and utilization of, behavioral health services in both primary care and specialty mental healthcare settings.
 - Uncontrolled studies demonstrate small to medium effect
 - 3 RCTs found shorter wait-times, and higher likelihood of engaging in care and attending a more PCBH visits compared to enhanced specialty referral.
- Patients health status and satisfaction studies demonstrate consistently positive results BUT..
 - Lack of comparison groups and small samples sizes decrease confidence
- Limited evidence stands in contrast to evidence of Collaborative Care, yet PCBH is implemented much more widely.

Gaps

- Is it reasonable to expect patient health status changes from a platform of care?
 - Should this outcome be limited to specific interventions?
- Randomized controlled trials are challenging now that PCBH is standard care
 - Alternative models of integrated care
 - Sites that have not yet implemented PCBH
 - Evaluate outcomes in your clinic- measurement based care
- Neglected outcomes
 - Functional outcomes
 - Health behavior change

Future Research

- Future Research
 - Investigate factors (e.g., provider preferences, system costs, ease of implementation) related to why PCBH is implemented more widely than Collaborative Care
 - Active ingredients of PCBH
 - What components drive outcomes for what patients?

Conclusions

- The implementation of PCBH services is ahead of the science supporting the usefulness of these services.
- The popularity and diverse dissemination of PCBH should serve as motivators to administrators, funding bodies, and researchers to conduct more rigorous investigations of patient outcomes associated with PCBH to allow for refinement and optimization of services.

Thank you for your interest!



Contents lists available at ScienceDirect

General Hospital Psychiatry

journal homepage: www.elsevier.com/locate/genhospsych



Review article

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Kyle Possemato^{a,b,*}, Emily M. Johnson^a, Gregory P. Beehler^{a,c}, Robyn L. Shepardson^{a,b}, Paul King^{a,d}, Christina L. Vair^e, Jennifer S. Funderburk^{a,b,f}, Stephen A. Maisto^{a,b}, Laura O. Wray^{a,g}

^a VA Center for Integrated Healthcare, New York/New Jersey VA Healthcare System, United States

^b Department of Psychology, Syracuse University, Syracuse, NY, United States

^c Community Health and Health Behavior, University at Buffalo, Buffalo, NY, United States

^d Department of Counseling, School, and Educational Psychology, University at Buffalo, Buffalo, NY, United States

^e Salisbury VA Health Care System, Salisbury, NC, United States

^f Department of Psychiatry, University of Rochester, Rochester, NY, United States

^g Division of Geriatrics/Palliative Care, Jacobs School of Medicine, University at Buffalo, Buffalo, NY, United States