



INDIANA UNIVERSITY

The DNP and Quality Improvement

Decreasing No-Show Appointments at a Regional Mental Health Organization

Dr. Rosalind Williams, DNP, APRN, PMHNP-BC, *Presenter*

Dr. Kathleen Hubner, DNP, APRN, ACNS-BC, ANVP, CNRN

Background Significance

No-Show or Missed Appointments:

- Cost the US healthcare system \$150 billion per year
- Twice as high in psychiatric clinics
- Negatively affect patients' treatment and health outcomes
- Incomplete preventive care
- Threat to patients and the future doors at a Regional Mental Health Organization (RMHO).
- Organization's current standard of care
- Evidence-based practice and quality improvement interventions

(Drewek, Mirea, & Adelson, 2017; Jain, 2020; Long et al., 2016)



Purpose and Literature Summary

Aim/Question?

- Whether personal telephone reminder (PTR) calls, in addition to automated text-messaging (ATM) reminders, have an impact on reducing the number of no-show appointments at a RMHO?

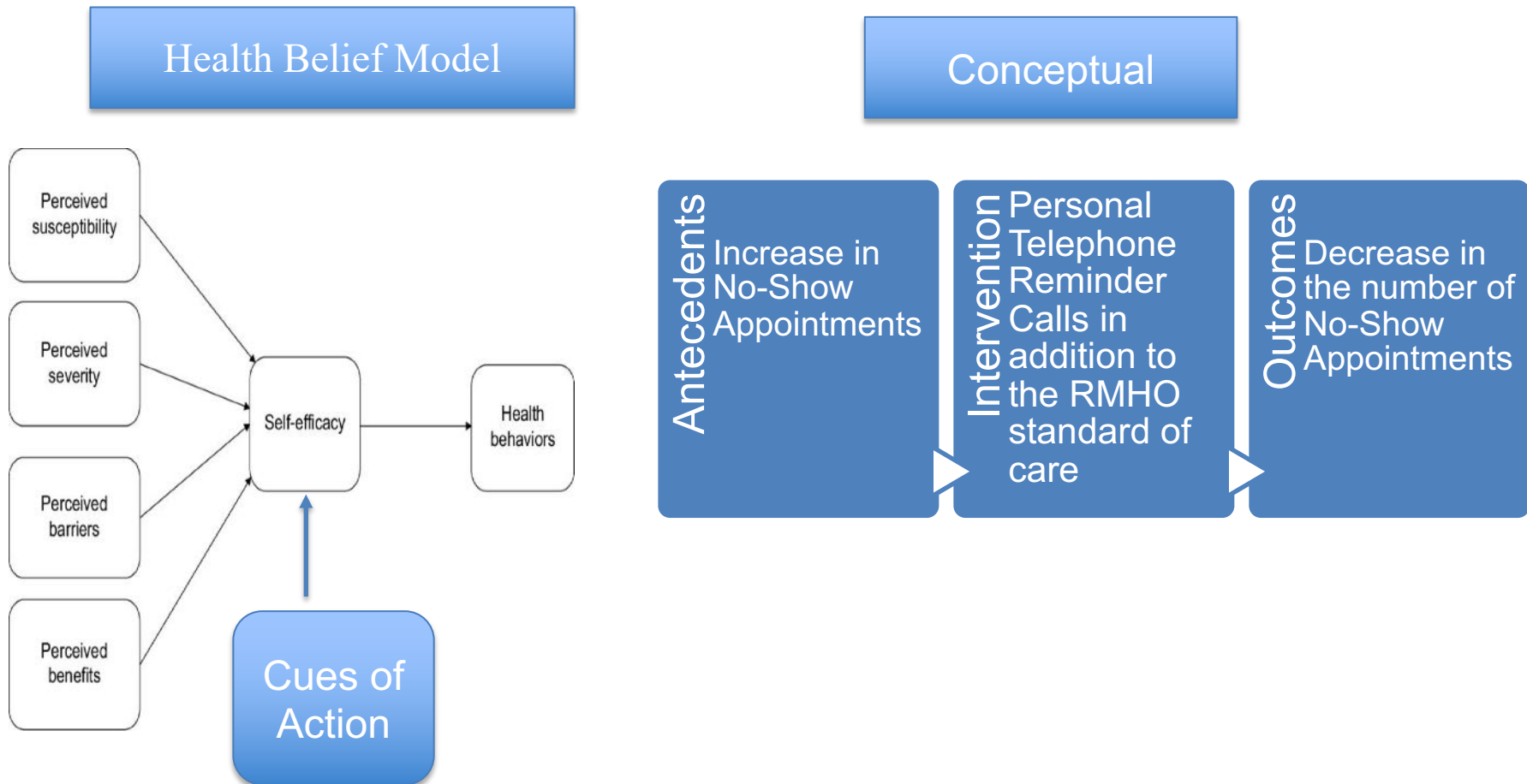
Summary of Literature

- Appointment reminders impact on missed appointments
- ATM and PTR most relevant and effective
- Lead times
- Common reasons for missed appointments
- Demographics

(McLean et al., 2016; Perron et al., 2013; Car et al., 2013; Shah et al., 2016; Miller & Ambrose, 2019; Salameh, Olsen, & Howard, 2012; Teo et al., 2017; Mayer & Fontelo, 2017; Drewek et al., 2017; Childers et al., 2016)



Theoretical Framework



(Jones & Llewellyn, 2014)

Methods

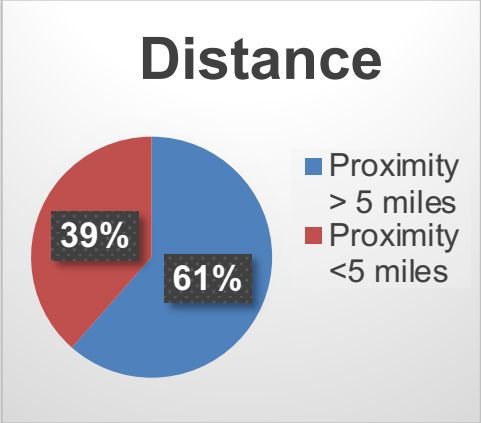
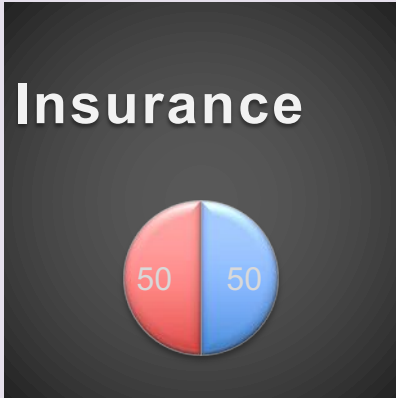
- IRB approval
- Setting at a Mental Health Organization
- (N=26) met inclusion criteria and provided informed consent
- Confidentiality
- Instrument measurement tools
- Demographic data
- Surveys
- Data Analysis
 - Baseline and post-intervention data
 - Excel and SPSS Version 27
 - Descriptive statistical method



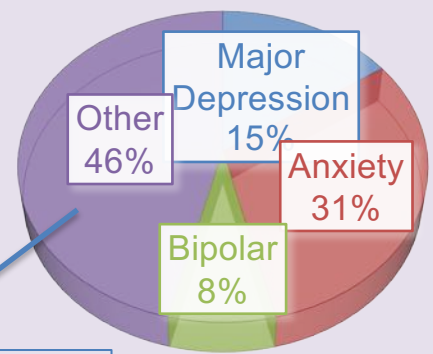
Project Findings

N=26

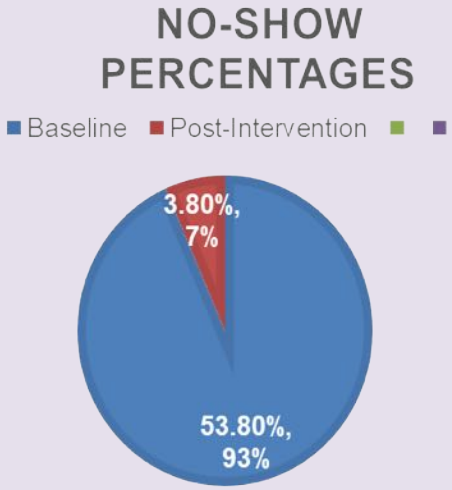
Mean Age
36.4



DIAGNOSES



Adjustment Disorder
Alcohol Dependence
Opioid Disorder



Key Members
N=8
87.5%
Overall Satisfied

Limitations and Implications for Practice

Limitations

- COVID-19 Pandemic
- Organization's population
- Data of reasons for missed appointments
- Flaws in the standard of care –ATM reminders

Implications for Practice

- Project's importance to the RMHO
- Benefits for the RMHO
- What worked well and lessons learned
- A call for change for change in legislation



Recommendations and Conclusion

- Future Opportunities and Next Steps
 - Dissemination
 - Conduct a SWOT Analysis
 - Continue the 24- hour reminder PTR call
 - Assess barriers through follow-up
 - Keep shorter lead times
- The literature support of ATMs and PTR calls in reduction of no-show appointments
- Continual care and improved patient outcomes



References

- Car J, Gurol-Urganci I, de Jongh T, Vodopivec-Jamsek V, & Atun R. (2013). Mobile phone-messaging reminders for attendance at healthcare appointments. *Cochrane Database of Systematic Reviews*, 12.
- Childers R. E, Laird A, Newman L, Keyashian K. (2016). The role of a nurse telephone call to prevent no-shows in endoscopy. *Gastrointest Endosc.*, 84(6):1010-1017.e1. doi: 10.1016/j.gie.2016.05.052.
- Drewek, R., Mirea, L., & Adelson, P. D. (2017). Lead-time to appointment and no-show rates for new and follow-up patients in ambulatory clinic. *Health Care Manager*, 36(1), 4–9. <https://doi-org.proxyse.uits.iu.edu/10.1097/HCM.0000000000000148>
- Jain, S. H. (2020). Missed appointments, missed opportunities: Tackling the patient no-show problem. (2020). *Journal of Medical Practice Management*, 35(6), 115.
- Jones, C. J., Smith, H., Llewellyn, C. (2014). Evaluating the effectiveness of health belief model interventions in improving adherence: A systematic review, *Health Psychology Review*, 8(3), 253-269. <http://doi:10.1080/17437199.2013.802623>
- Long, J., Sakauye1, K., Chisty, K., Upton, J. (2016). The empty chair appointment. *Sage*, 1-5. doi: 10.1177/2158244015625094
- Mayer, J. E., & Fontelo, P. (2017). Meta-analysis on the effect of text message reminders for HIV-related compliance. *AIDS care*, 29(4), 409–417. <https://doi-org.proxyse.uits.iu.edu/10.1080/09540121.2016.1214674>



References

- Mclean, S., Booth, A., Gee, M., Bhanbhro, S., Salway, S., Cobb, M., & Nancarrow, S. (2016). Appointment reminder systems are effective but not optimal: Results of a systematic review and evidence synthesis employing realist principles. *Manual Therapy*, 25, e125. <https://doi-org.proxyse.uits.iu.edu/10.1016/j.math.2016.05.23>
- Miller M.J, Ambrose, D.M. (2019). The problem of missed mental healthcare appointments. *Clinical Schizophrenia Related Psychoses*. 12(4), 177-184. doi:10.3371/CSRP.MIAM.112316
- Perron, N., Dao, M. D., Righini, N. C., Humair, J. P., Broers, B., Narring, F., Haller, D. M., & Gaspoz, J. M. (2013). Text-messaging versus telephone reminders to reduce missed appointments in an academic primary care clinic: A randomized controlled trial. *BMC health services research*, 13(125). <https://doi.org/10.1186/1472-6963-13-125>
- Salameh, E., Olsen, S., & Howard, D. (2012). Nonattendance with clinic follow-up appointments. Diabetes as exemplar. *Journal for Nurse Practitioners*, 8(10), 797–803. <https://doi-org.proxyse.uits.iu.edu/10.1016/j.nurpra.2012.09.017>
- Shah, S., Cronin, P., Hong, C., Hwang, A., Ashburner, J., Bearnot, B., Richardson, C., Fosburgh, B., Kimball, A., Shah, S. J., Hong, C. S., Hwang, A. S., Ashburner, J. M., Bearnot, B. I., Richardson, C. A., Fosburgh, B. W., & Kimball, A. B. (2016). Targeted reminder phone calls to patients at high risk of no-show for primary care appointment: A randomized trial. *JGIM: Journal of General Internal Medicine*, 31(12), 1460–1466. <https://doi-org.proxyse.uits.iu.edu/10.1007/s11606-016-3813-0>
- Teo, A. R., Forsberg, C. W., Marsh, H. E., Saha, S., & Dobscha, S. K. (2017). No-show rates when phone appointment reminders are not directly delivered. *Psychiatric Services*, 68(11), 1098–1100. <https://doi-org.proxyse.uits.iu.edu/10.1176/appi.ps.201700128>

