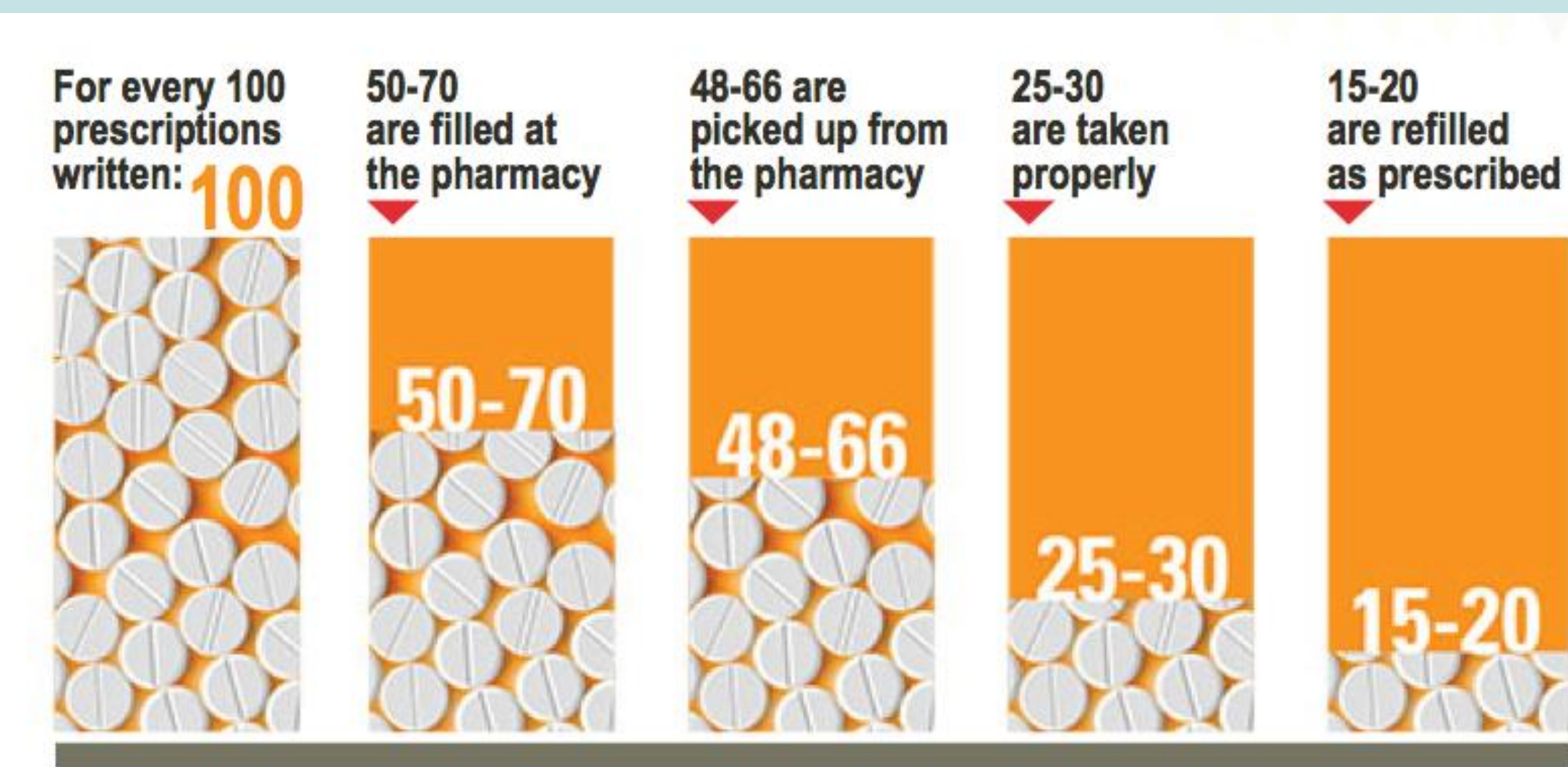


Clinical Problem and Objective

Medication nonadherence is a persistent problem leading to adverse outcomes and reduction in treatment efficacy

- Prevalence**
 - 50% rate of medication adherence
 - Up to 80% for certain medications
 - Higher among minority, low income, urban communities
- Effects**
 - ~ 125,000 U.S. deaths annually
 - 10% of hospitalizations
 - Costs US healthcare system nearly \$300 billion annually
- Objective**
 - To train primary care staff to identify and address medication nonadherence

(Brown et al., 2016; Gerber et al., 2010; Oates et al., 2020; Patel et al., 2016; Viswanathan et al., 2012; WHO, 2003)



National Association of Chain Drug Stores Pharmacies: Improving Health, Reducing Costs. July 2010. Based in IMS Health Data

Synthesis of Supporting Literature

Nurses are key players in addressing the problem

- 8 RCTs of nurse-led interventions significantly improved medication adherence

- Minimal training results in practice change

- Another study demonstrated a single educational workshop can result in nurse-led practice change

Evidence-based Interventions to promote adherence:

- combo pills
- 1 x/day dosing
- text messaging
- Insulin pens

Focus given to high-risk populations:

- African Americans, low-income, and urban communities

(Munoz et al., 2019; Revello & Fields, 2015; Slabaugh et al., 2015; Thakkar et al., 2016; Weeda et al., 2016; Verloo et al., 2017).

Project Implementation

Population, Setting, & Stakeholders

- 91% black, 42% patients below the poverty line
- Urban Federally Qualified Health Center (FQHC)
- Clinic staff, patients, QI committee, Mile Square system

Design & Theoretical Framework

- Quasi-experimental, mixed methods pre-post-design
- New World Kirkpatrick Model

Progression of Intervention

Pre-Intervention

- Presentation to the Mile Square QI Committee
- Site visit for participant recruitment (n=8) (See Figures 1 and 2)
- Pre-Survey

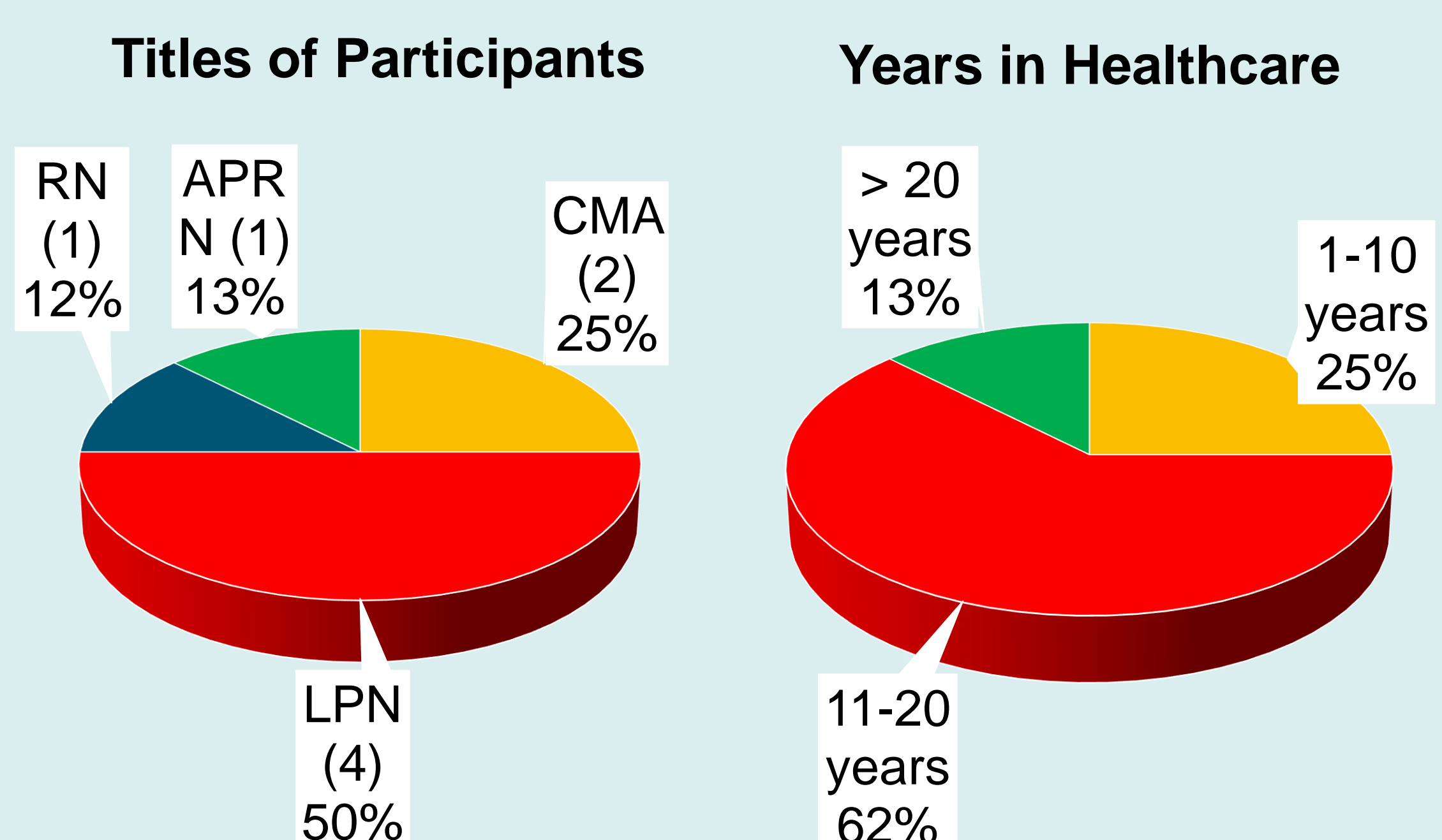
Intervention

- Single 30-minute slideshow presentation
- Virtual webinar (n = 6), Recorded webinar (n = 2)
- TOOLS for staff:
 - Modified Medication Adherence Rating Scale (MARS)
 - Barriers and Interventions Checklist (BIC)
 - Motivational Interviewing

Post-Intervention

- Immediate and 4 weeks post-workshop surveys
- Weekly email reminders

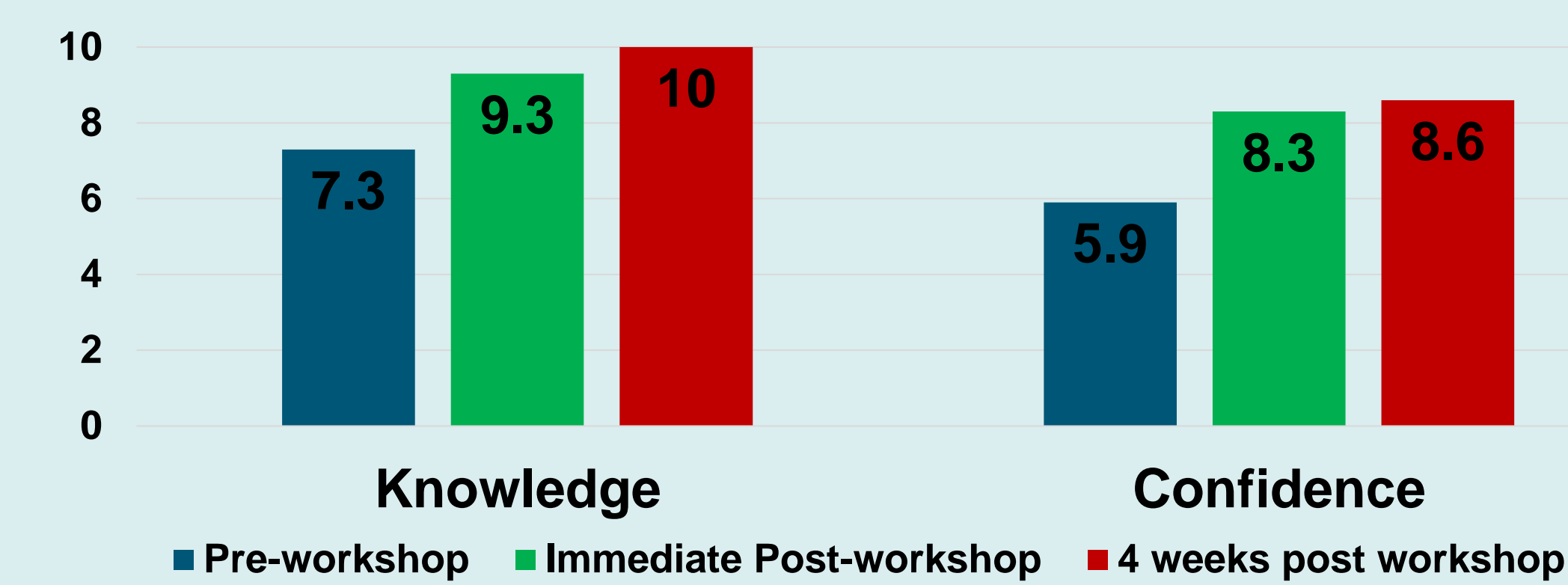
(Oyekan, 2009; Thompson et al., 2000).



Outcomes

Project Objectives Met

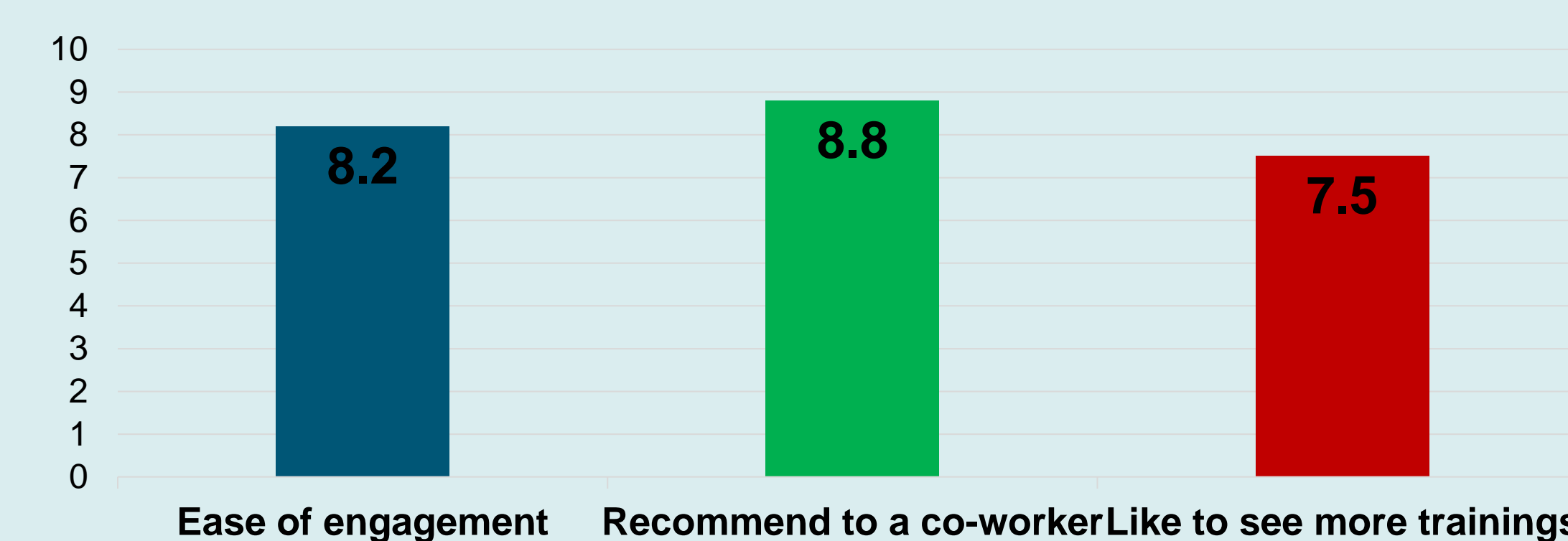
- 29% increase in staff knowledge
- 44% increase in staff confidence in initiating conversations
- 77% increase in patient adherence discussions



Practice Change Contributors/ Recognition of Relevance



Program Evaluation



Staff Reasons for Successful or Unsuccessful Program Adoption

Reasons for Successful Program Adoption	Reasons for Unsuccessful Program Adoption
Utilizing practical course materials/tools (25%)	Too many other things to do (37%)
My own effort and discipline (25%)	No incentive to apply change (13%)
My experience (25%)	Difficult to apply (13%)
The workshop itself (17%)	Told not to use it (13%)
A good system of accountability (8%)	Do not remember what I learned (12%)
	Not encouraged to use it (12%)

Implications for Practice and Recommendations

Conclusion

- Medication nonadherence exists among the patient population
- A single session nurse-led clinic staff education program resulted in an increase in knowledge, self-confidence and self-reported practice behavior change

Clinical Implications for Practice

- Evidence of prevalence and need for practice change

Recommendations and Next Steps

- Continue at current Mile Square Englewood clinic
- Expand to other Mile Square sites
- Add modified MARS and BIC to intake workflow (EHR)
- Delegate process steps by staff position
- Establish standard method of staff communication
- Complete adequate patient follow-up



Acknowledgements

- Dr. Ashish Ansal, MD, Sr. Director of Quality and Analytics at Mile Square Health Care Center
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- Afra Vincent, LPN II at Mile Square Englewood

References

Available upon request or at the following Google document:

https://docs.google.com/document/d/1Hjp3XUIhEiAu_4M-IXc6hT8Xp_JsvWkZuRhBiL_lw/edit?usp=sharing