

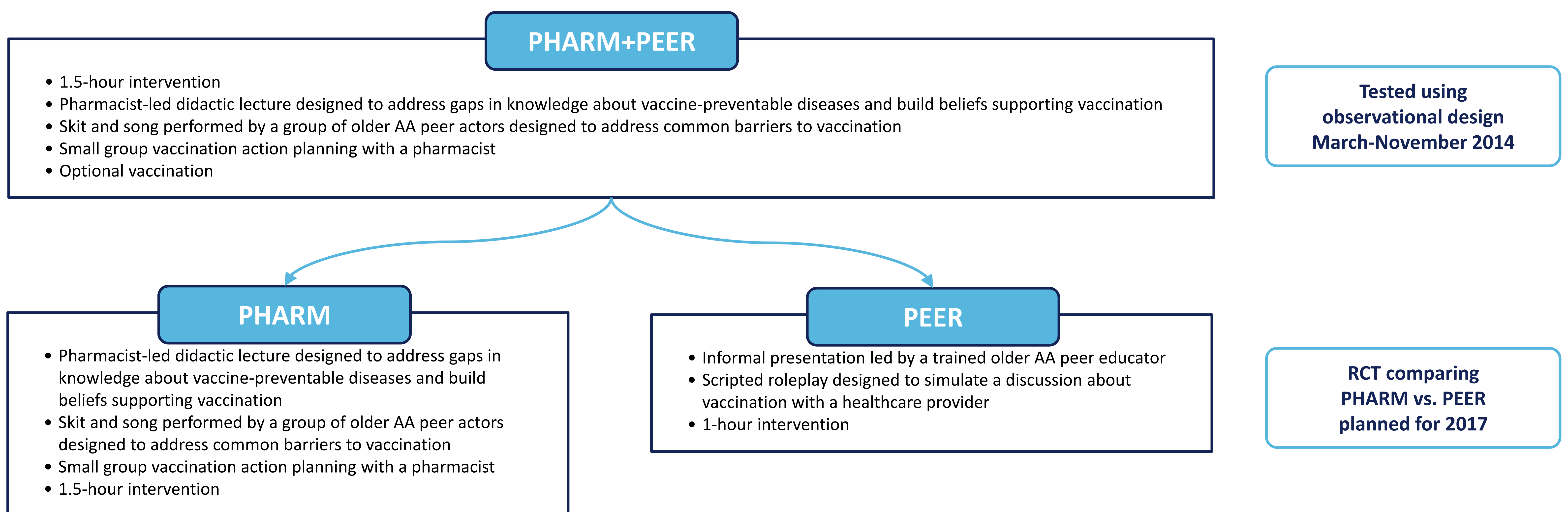
INTRODUCTION

- Vaccination for preventable diseases is a high-value healthcare intervention, yet rates remain below US Centers for Disease Control and Prevention (CDC) benchmarks, especially among minorities.^{1,2}
- The complex American healthcare system is difficult to navigate, contributing to underuse of vaccination.
- Decreased trust in the system resulting from a history of discrimination further exacerbates low vaccination rates (VR) among African Americans (AA) in particular.³⁻⁶
- Senior centers (SC) are an accessible, trusted venue for AA, presenting an opportunity to increase VR.

OBJECTIVE

To describe the evolution of three innovative vaccine education models developed in partnership with a nationally accredited Philadelphia SC.

Figure 1. Components of the Three Educational Models



RESULTS

- These models differ in complexity and resource requirements, but both target education to AA at risk for nonvaccination in a familiar, trusted, and accessible environment.
- Focus group input indicated that intervention quality and participants' receptivity is maximized by including components developed and/or delivered by AA peers.
 - Components included in each of the three models are illustrated in Figure 1.
- PHARM+PEER, a hybrid model built from elements of PHARM and PEER, was implemented in the Pharmacists' Pneumonia Prevention Program (PPPP), a prospective cohort pre/post study (n=203).
- PPPP was delivered in 4 urban locations in Philadelphia, PA, USA⁷
- Key success factors for PPPP included:
 - Participant focus:
 - Main advantage of this program was participant centricity
 - Speak with participants, not at them
 - In-person learning is preferred in this population
 - Live performance engages participants with messaging from their own population
 - Accept the fact that beliefs must be nurtured

LIMITATIONS

- These educational models were specifically designed to appeal to older AA; thus, they may be less effective in other populations.

CONCLUSIONS

- PHARM, PEER, and PHARM+PEER represent novel, culturally appropriate educational interventions that draw on SC strengths to reach an older AA population.
- Operationalizing vaccination education through SC is a novel approach which US healthcare policymakers should consider to increase VR.
- Future work will elucidate the comparative effectiveness of PHARM and PEER versus PHARM+PEER.

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METHODS

- Model development was guided by a focus group (8 older AA, 2 SC leaders, 3 pharmacists) that evaluated the literature and created 2 models, PHARM and PEER.
- Each model centered on vaccine-preventable diseases and vaccines (pneumonia, influenza, and zoster).
- Goals were improving participants' knowledge, building supportive beliefs, and activating participants to discuss or receive appropriate vaccines.
- Population of interest was older community-dwelling AA who regularly attend a senior center.
 - Inclusion criteria were age ≥50, English-speaking, able to read English at ≥4th-grade level, able to attend a 90-minute session, and cognitively intact.
- PHARM consisted of:
 - Traditional didactic lecture delivered by a pharmacist
 - AA peer video clips
- PEER consisted of:
 - Informal education delivered to small groups by trained older AA peer educators
 - Scripted skits wherein participants roleplay discussing vaccination with a provider

RESULTS (continued)

- Logistics:
 - Limit program duration to 1.5 hours
 - Provide refreshments and/or a modest giveaway
 - Call participants 1-2 days before the program to remind them
 - Pharmacy students can be leveraged to help staff program events
- Equal partnership between the community, SC, and pharmacists was a key success factor
- Though PPPP was successful in improving participants' knowledge and beliefs about pneumococcal disease, it was expensive to implement, in large part due to the cost of supplying and storing the vaccine.^{7,8}
- Planned testing using a randomized controlled trial (RCT) to compare the PHARM and PEER approaches is currently in development for a vaccination education program covering influenza, pneumonia, and zoster.
 - Intervention will be delivered to 316 older AA (158 in each arm) in 10 urban SC sites across the Delaware Valley (Pennsylvania, New Jersey, and Delaware).
 - Program focus will be education about vaccine-preventable diseases; thus, vaccination will not be offered, potentially reducing the cost of the program.
 - Outcomes will be assessed using a standardized knowledge instrument adapted from PPPP, which will allow comparison of PHARM and PEER results to the PHARM+PEER (PPPP) results.

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