



Using implementation strategies to increase use of PPE among traditional healers

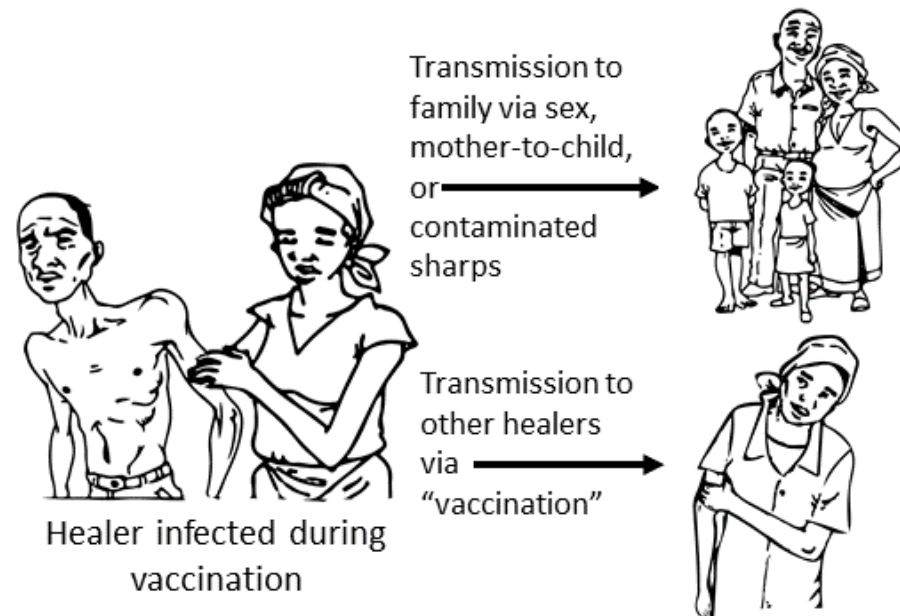
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Traditional healer health concerns

- Treating any disease with traditional ‘vaccination’ – exposure to HIV, HCV, and/or HBV – via patient blood



Multivariable model: Risk of HIV infection (n=162)

	Risk ratio	95% CI	p value
Exposure to blood while performing 'vaccinations'	2.35	1.55–3.56	<0.001*
No. of sex partners	1.04	0.93–1.16	0.500
Marital status			
Single	2.42	1.40–4.20	<0.002*
Married/living with partner	Reference		
Widowed	1.38	0.66–2.88	0.397
Divorced/separated	1.33	0.60–2.92	0.481
Practice as a traditional healer (years)	0.98	0.96–0.99	0.011*
Education (years)	0.91	0.85–0.98	0.011*
Sex (female)	1.00	0.53–1.91	0.995
No. of clients last week	1.07	1.03–1.11	<0.001*
Age (years)	0.99	0.97–1.01	0.995

CI, confidence interval

* Indicates statistical significance

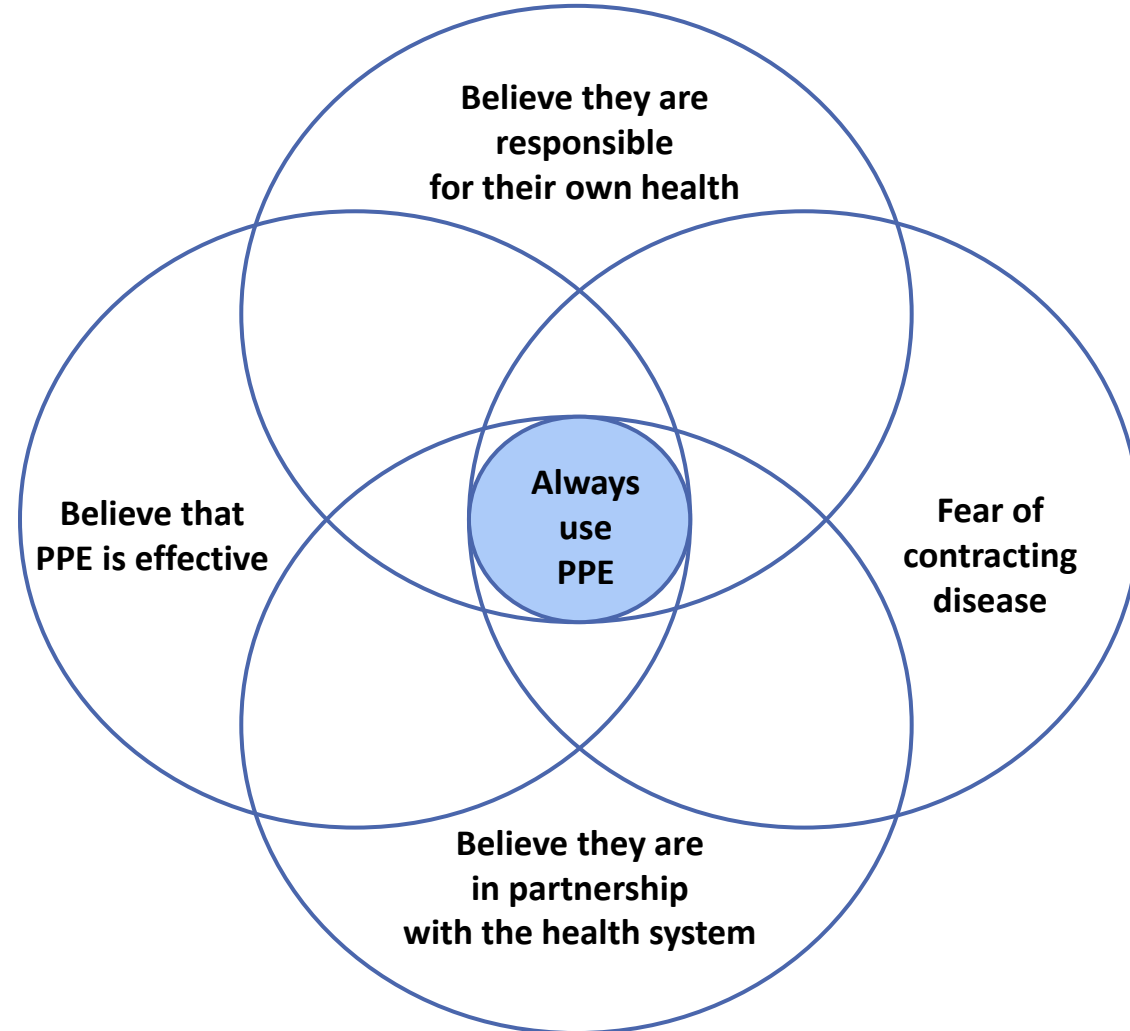
Increase use of PPE among healers



Who uses PPE regularly now?

“ *When a patient comes for vaccinations, I prepare the medicine first, wear the gloves, then open a razor blade and start with the vaccinations... When I don't have the hand gloves, I use the plastics [shopping bags]. I never vaccinate without wearing anything on my hands.* ”
(Female, 50–59)

“ *The government should give the healers the hand gloves because we are struggling, and we are at risk of contracting the diseases when we don't have the hand gloves. Traditional healing is another way of treating patients and we have some things in common with the medical doctors because we also inspect the wounds and treat them, and that requires the gloves.* ”
(Female, 70–79)



Can we use a healer-led strategy?

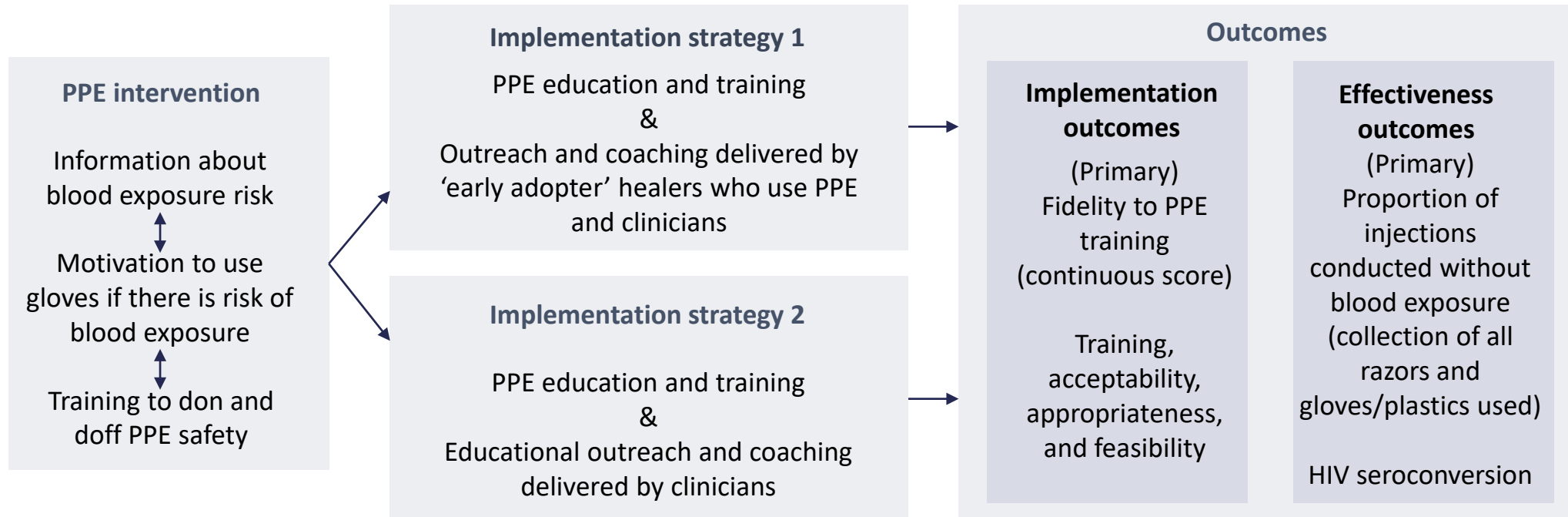
- We hypothesize that ‘early adopter’ healer messaging and delivery of evidence-based training programs will have greater impact on healer behavior:
 - given their trusted position within their own community
 - will be more easily scaled up nationwide given the large number of healers in SA
 - will be conducted more cost-efficiently given the lower hourly rate for healers (vs. HCWs)
- But we also need (1) access to PPE and (2) PPE and sharps disposal to ensure compliance

Aim 1: Adapt OSHA- and WHO-certified PPE training programs (the EBI) using the ADAPT-ITT model for use among traditional healers

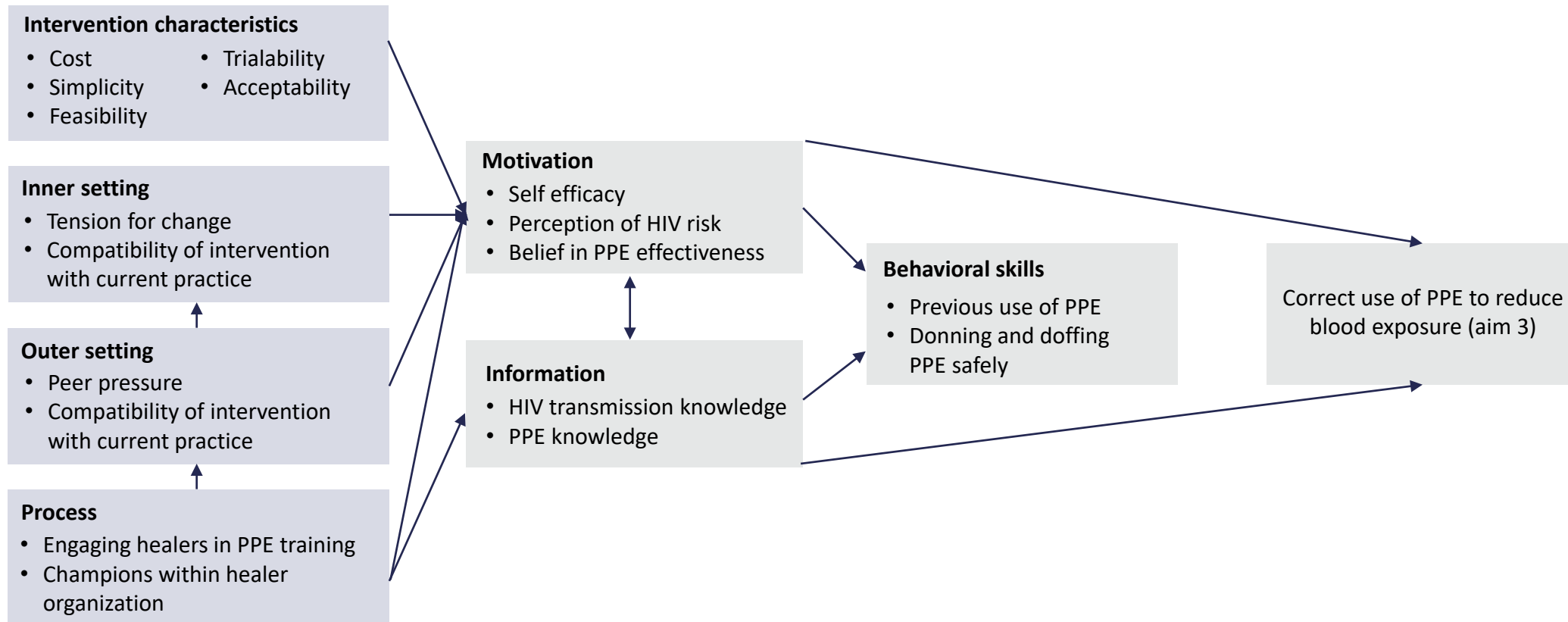
- Modification of the WHO PPE training program to be appropriate for healers with low levels of literacy and who work outside of the clinical setting will follow the ADAPT-ITT model


Examples of anticipated PPE training module adaptation	
PPE training	Potential adaptation
Gloves	We will need to simplify training and provide instructions for safe disposal at home
Sharps safety	With no infrastructure for disposal, we will develop a system for sharps containers and glove disposal
Masks	Use of surgical or cloth masks will be emphasized to prevent air-borne illness

The trial: RCT of two strategies



Why might this work?





Aim 2: Compare fidelity to delivery of PPE training between HCW-only and healer + HCW teams

- We will rate training fidelity via two constructs:
(1) content and (2) coverage during the week-long training session and community-based outreach sessions

Project implementation: Fidelity to training content

1. Delivered information about the definition of PPE.
Score _____
2. Provided information about when to use PPE.
Score _____
3. Provided information about what types of PPE to use in different circumstances.
Score _____
4. Provide information about the appropriate fit of PPE.
Score _____
5. Provide dos and don'ts of glove use.
Score _____
6. Provided information about don PPE.
Score _____
7. Provided information about how and where to remove PPE.
Score _____
8. Provided information about how to safely store used PPE.
Score _____
9. Provided information about hand hygiene.
Score _____
10. Provided instruction and feedback during PPE practice session.
Score _____

TOTAL SCORE FOR TRAINING SESSION _____ / 100

Fidelity to care delivery: Observation

User's PPE sequence↓	Task	Status	Notes
Hand hygiene #_____	Hand hygiene was performed		
	The choice of hand hygiene was appropriate		
Mask #_____	Chosen mask is appropriate face protection for the situation		
	Place mask over the nose and mouth		
	Mold metal strip to nose		
	Secure elastics or ties		
Gloves #_____	Remove inappropriate jewelry		
	Choose correct type of gloves (if available)		
	Choose well-fitting gloves		
	Put on gloves (if gown is worn, place gloves over gown cuffs)		

Aim 3: Compare the effects of the two implementation strategies on healer exposure to patient blood

1. **Collect used sharps and PPE.** Healers will be given containers to place all used gloves and razors/sharps to both ensure healer safety and allow us to count materials used (healers use gloves and a single razor once per patient and subsequently throw them into latrines or trash piles)

We will use the *number of glove pairs as the numerator* (number of times they used gloves during procedures) and the *number of razor blades as the denominator* (number of injections given)

2. **Self-report.** Healers will note every time they conduct a vaccination and the corresponding use (or not) of PPE
3. **HIV seroconversion among healers**



Fast-Track Cities

The importance of...

- 1. understanding the local epidemic**
- 2. tailoring evidence-based interventions and creating buy-in**
- 3. measuring implementation metrics, including acceptability and fidelity**
- 4. measuring clinical outcomes**



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Thank you!

Any questions?

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