



The Effect of Screening and Preventative Care and Management in Early Detection of Disease

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PROJECT SCOPE

- *Conduct* literature review to assess international and local findings on community pharmacy screening services
- *Identify* benefits of pharmacy based screening and preventative care services
- *Address* factors influencing utilization of preventative care services offered at pharmacies (expanded scope of practice)
- *Analyse* the pharmacy screening trends amongst GEMS members from 2018 to 2023



OUTLINE



Literature Background



Thematic Analysis (coding)



Preventative Care Elements



Screening Services



Relevant Statistics



Recommendations



Conclusion

LITERATURE BACKGROUND

- Global literature
 - Focus on BRICS and African countries
- 2018 to 2023 publications
- Various review methodologies



Training – interactive workshops

Expanded scope of practice – to include their role in public health.
Supply of antimicrobials from community pharmacies during the pandemic.

Counselling skills – empowers patients to take ownership of their health

Technology – enables collaboration and efficiencies

Remuneration – a possible barrier to service provision

Scope of services offered at the pharmacy – influences utilization

Common themes between
Brazil, Russia, India, China
and South Africa

THEMATIC ANALYSIS (Global literature)

Themes	Colour Code
Accessibility	Blue
Pharmacy/ pharmacist role	Yellow
Benefits	Green
Challenges	Red
Framework	Grey
Patient reasons for visiting pharmacy	Purple
Sustainability	Cyan
Patient empowerment and patient health education	Black

Pharmacy/ pharmacist perceptions / attitude	Dark Green
Possible improvements	Magenta
Collaboration / multisectoral approach	Brown
Contributing factors (level of education, race, age, gender)	Dark Red
Communication	Light Green
Pharmacy services offered	Light Orange
Pharmacist Training	Orange
Interventions to improve management	Yellow



CODED THEMES: BRICS AND AFRICAN COUNTRIES

CODED THEMES

Themes	Colour Code	Brazil (Articles 30, 29, 28)	Russia (Article 41)	India (Articles 21, 22, 23, 24, 25)	China (Articles 10,14, 26, 27)	South Africa (Article 20, 30, 31)	Kenya (Article 32)	Nigeria and Ghana (Articles 19, 39)
Accessibility		X	X	X	X	X	X	
Pharmacy/ pharmacist role		X	X	X	X	X	X	X
Benefits		X		X	X	X	X	X
Challenges		X		X	X	X	X	X
Framework				X	X			
Patient reasons for visiting pharmacy						X	X	X
Sustainability		X		X		X		
Patient empowerment and patient health education		X		X	X	X	X	X
Pharmacy/ pharmacist perceptions / attitudes			X		X	X		
Possible improvements		X		X	X	X		X
Collaboration / multisectoral approach		X		X	X	X	X	
Contributing factors (level of education, race, age, gender)		X	X					X
Communication				X	X			
Pharmacy services offered		X	X	X	X	X	X	X
Pharmacist Training				X	X	X	X	X
Interventions to improve management		X					X	

PREVENTATIVE CARE ELEMENTS



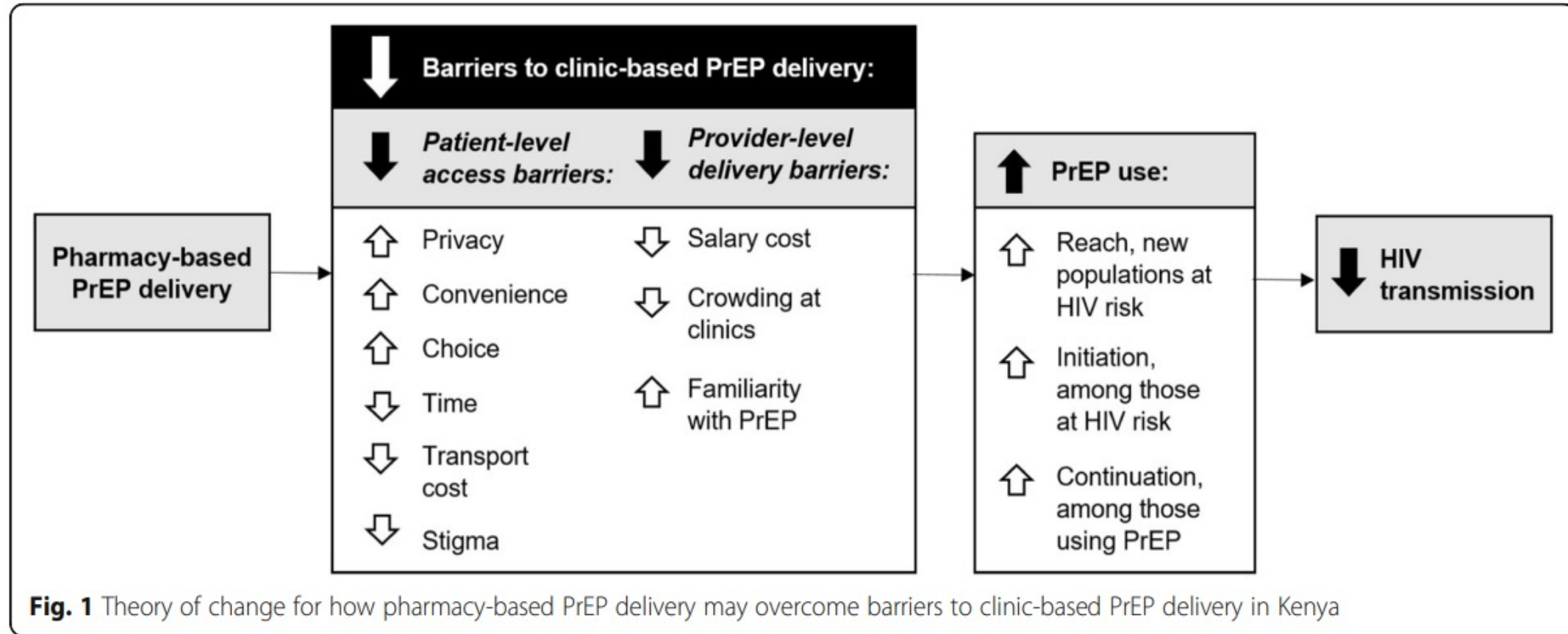
COUNTRY	TYPE OF PREVENTATIVE CARE	BENEFITS/WAYS OF IMPROVEMENT	CHALLENGES
Kenya (2020)	Care pathway for pharmacy-based Pre-Exposure Prophylaxis (PrEP) (counselling, HIV screening, prescribing, and dispensing)	- Standardise PrEP service offering and training - Improve quality of care and clinical outcomes	- Pharmacy provider competence - Regulatory hurdles to providing affordable HIV screening at pharmacies
Poland (2020) (comparison to other EU countries)	Flu vaccination	Improve flu-vaccination coverage rates and herd immunity	- Relatively low vaccination coverage - Limited access to vaccinations
USA (2019)	Interprofessional (IP) practice and education	- Care coordination - Holistic patient care - Improved clinical outcomes	- Mitigate the barriers to preventive services - Lack of interprofessional (IP) teams in the delivery of clinical and preventive services
Global (2021)	COVID-19 - Pharmacists providing drive-through services	Pharmacists play a vital role in the preparedness, prevention, protection, promoting access to medicines and to improve health outcomes during this crisis	- Pharmacists are more prone to errors (impacting patient safety) - Little interaction between pharmacist impacted on standardised health and medicines information to patients

PREVENTATIVE CARE ELEMENTS (CONT.)



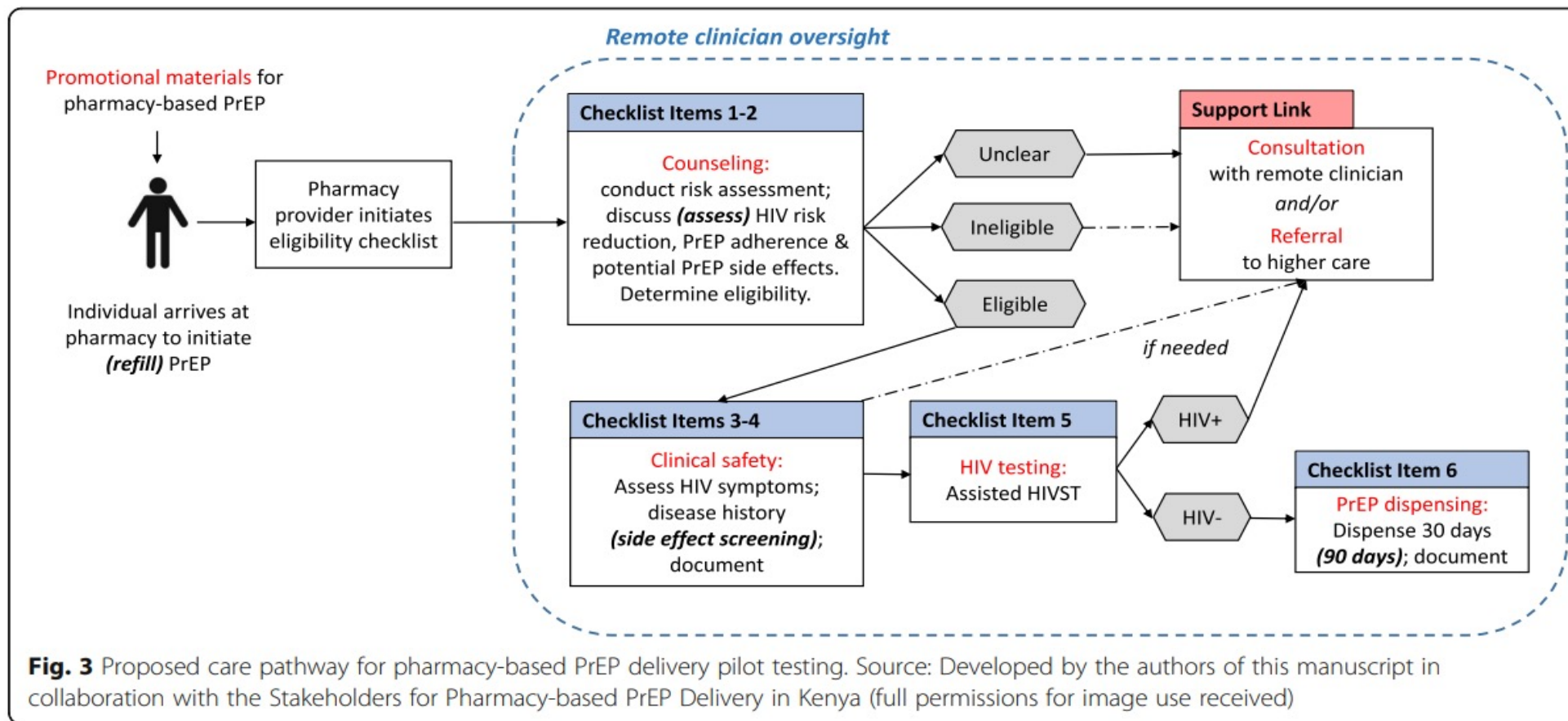
COUNTRY	TYPE OF PREVENTATIVE CARE	BENEFITS / WAYS OF IMPROVEMENT	CHALLENGES
Italy (2022)	Vaccination campaign	- Pharmacist engagement enhanced local health - The community pharmacists are trusted - Addressing misinformation and misunderstandings	Failure to achieve herd immunity
South Africa (2020)	PrEP (iPrevent program): pilot intervention in public health facilities in two Cape Town communities	- Pharmacies offered PrEP services - End-user input is vital for HIV prevention product success, uptake, and adherence - Longer operating hours (access) - Improved understanding of preferences amongst the youth i.e. preference for long-acting PrEP	- Out-of-pocket costs - Females preferred a local health clinic and disliked using a pharmacy (<i>trusted locations</i>)
South Africa (2020)	Pharmacist-based, pharmacist's assistant-based and nurse-based dispensing models within the PHC setting.	Opportunities exist, for the pharmacist's expanded role in enhancing patient-centred care	Limited patient-centred pharmaceutical care impacts service delivery
USA (2019)	Cardiovascular disease	- Improved medication adherence and clinical outcomes - Pharmacist-generated patient cost avoidance	Patients' unwillingness to accept pharmacist-generated interventions regarding cost savings

PHARMACY-BASED PrEP CARE PATHWAY IN KENYA



<https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-020-05898-9>

PHARMACY-BASED PrEP CARE PATHWAY IN KENYA



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*This project served as a pilot study for clinic-based PrEP delivery in Kenya. Can be contextualised to the South African setting to enhance accessibility to PrEP delivery and HIV screening services in South African pharmacies.

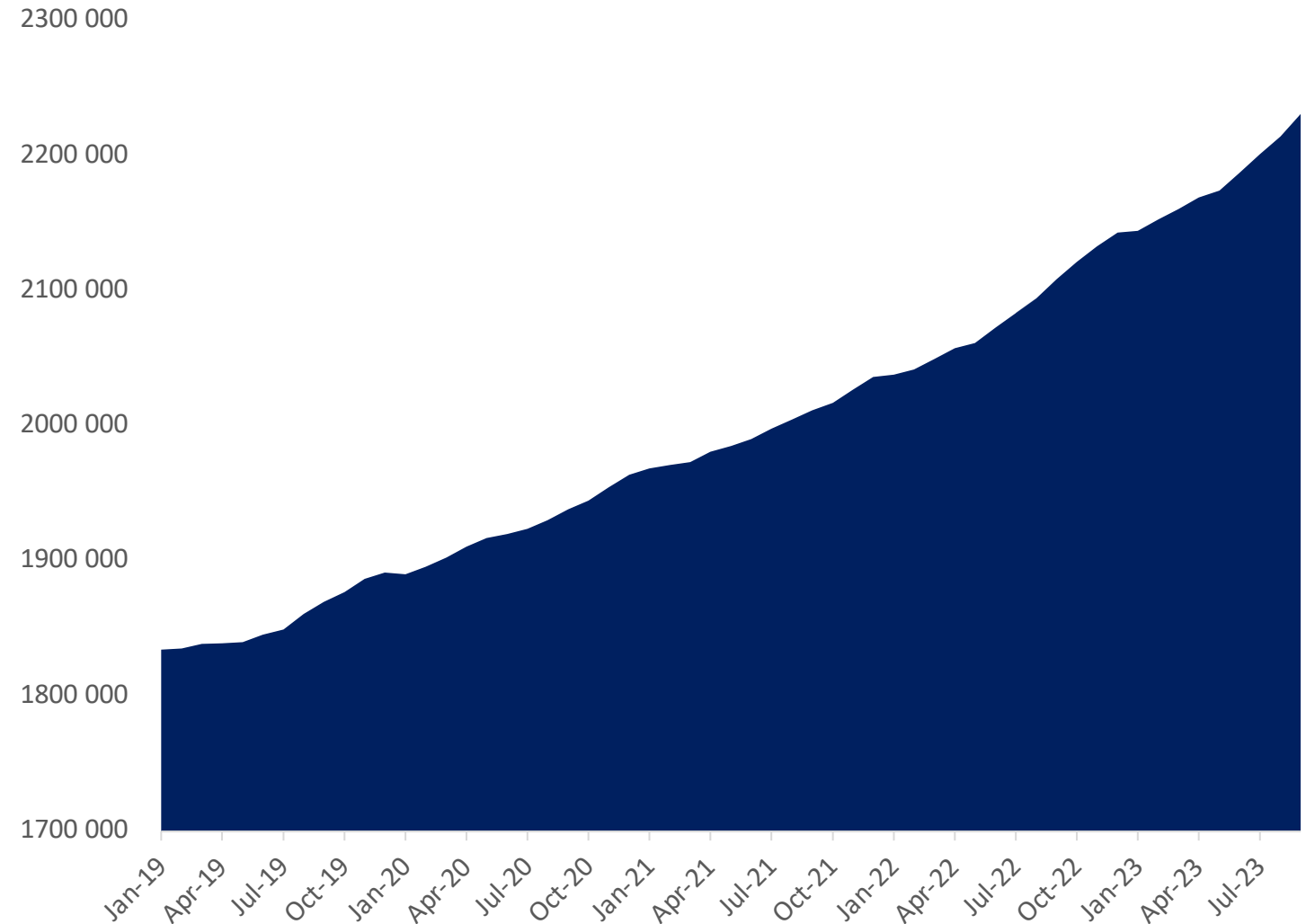
GEMS MEMBERSHIP



Despite challenging economic circumstances, GEMS has continued to grow at a rapid pace

Over the past year, GEMS has added more than 109,000 beneficiaries (5.2% growth)

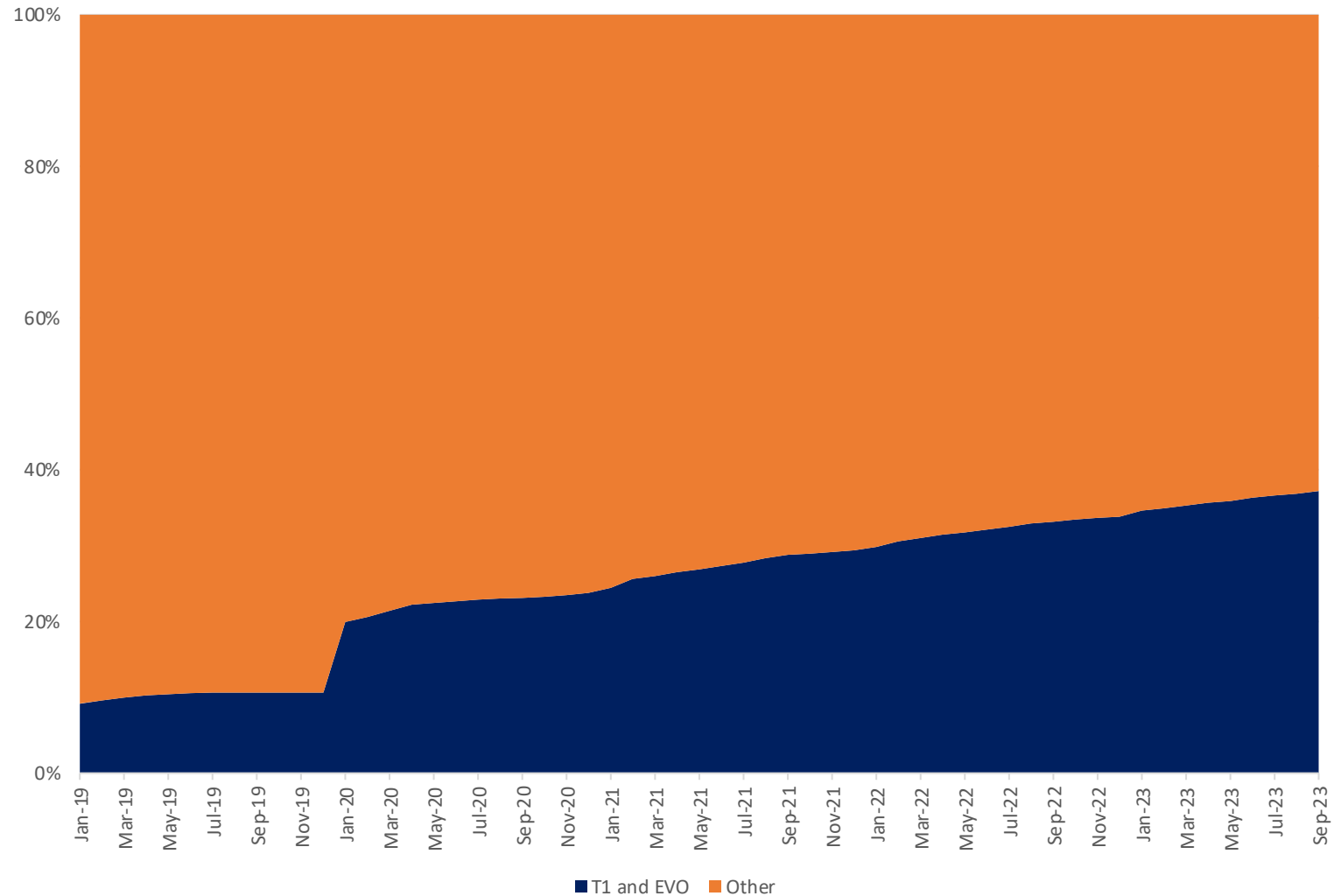
Over the past three years, GEMS has added more than 286,000 beneficiaries (14.7% growth)



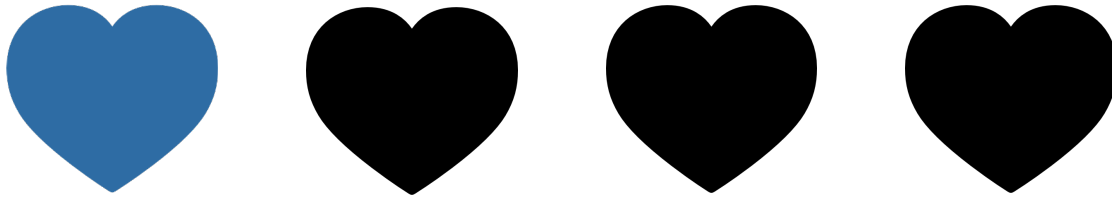
GEMS MEMBERSHIP



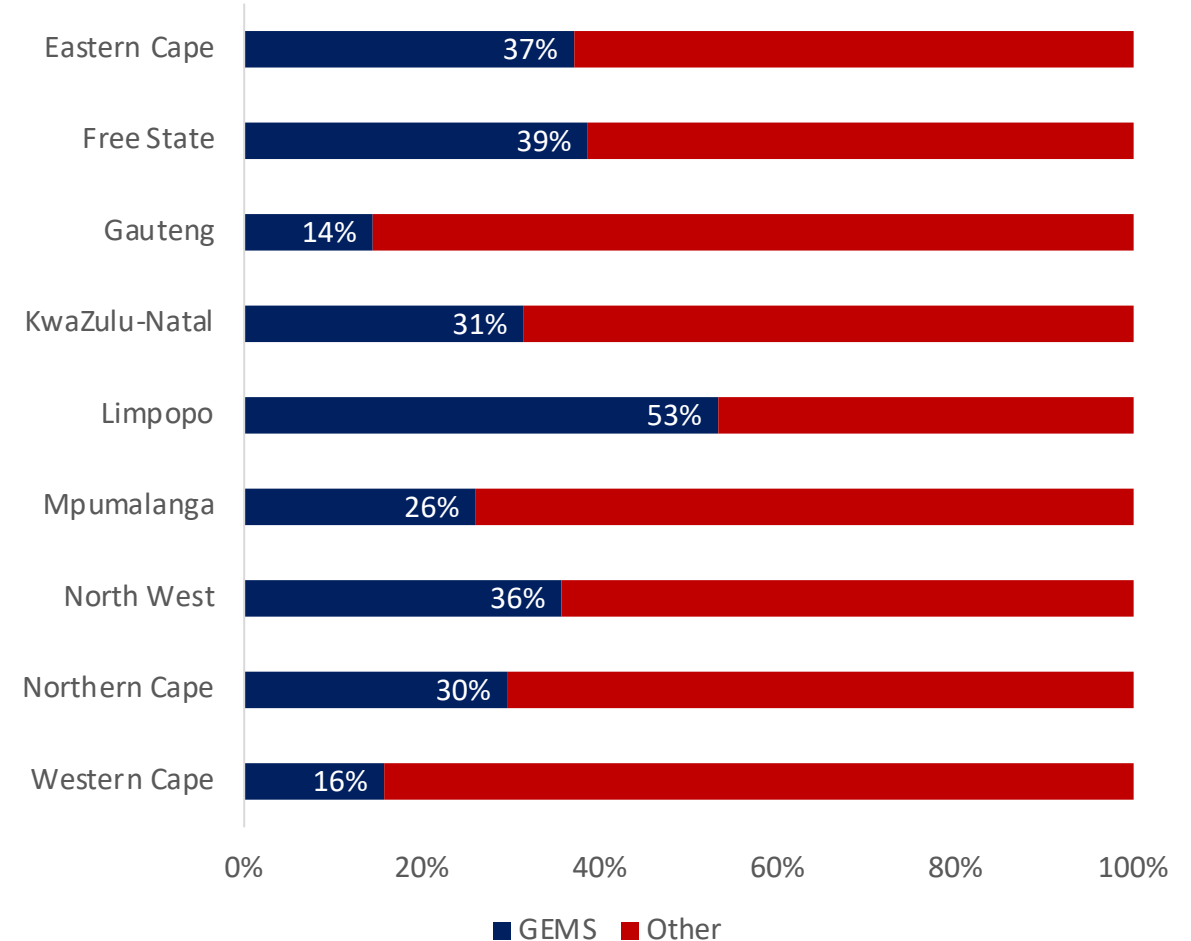
- More than 1 in 3 beneficiaries (36%) participate on the Tanzanite One and Emerald Value options.
- These options are underpinned by care coordination. This includes GP nominating, GP to specialist referrals and an efficient hospital network.
- In 2019, just 1 in 12 beneficiaries participated on such options.



GEMS MEMBERSHIP



- GEMS covers 1 in every 4 medical scheme beneficiaries.
- GEMS represents up to 53% of medical scheme beneficiaries in certain provinces.

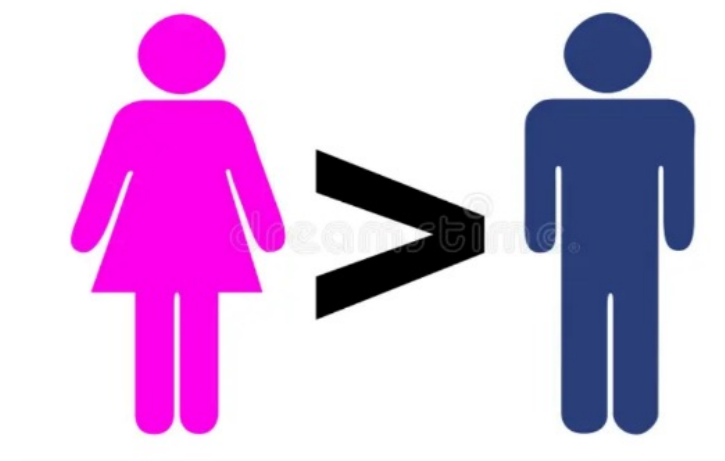
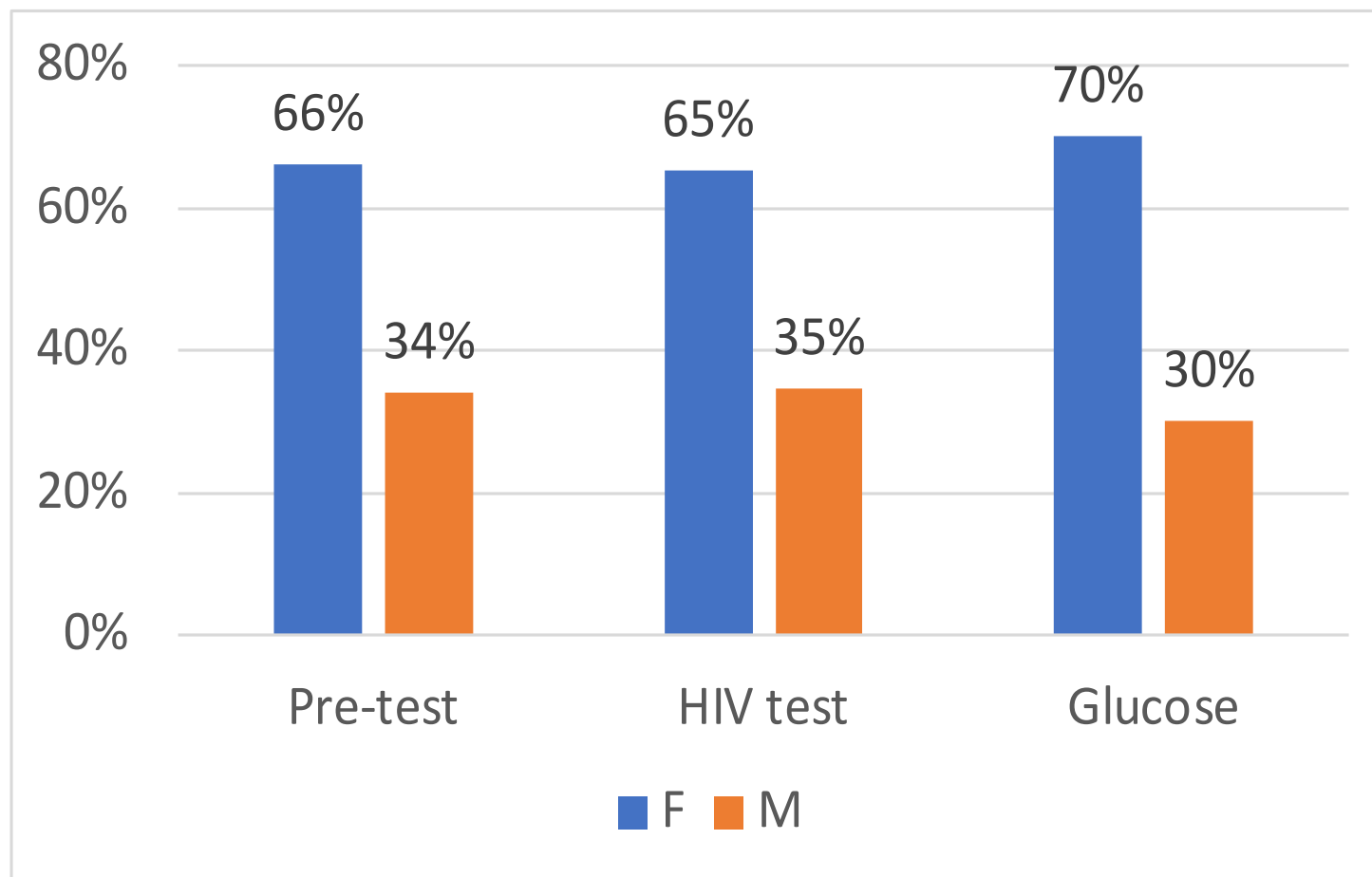


GROUPING OF SCREENING AND PREVENTATIVE CARE SERVICES

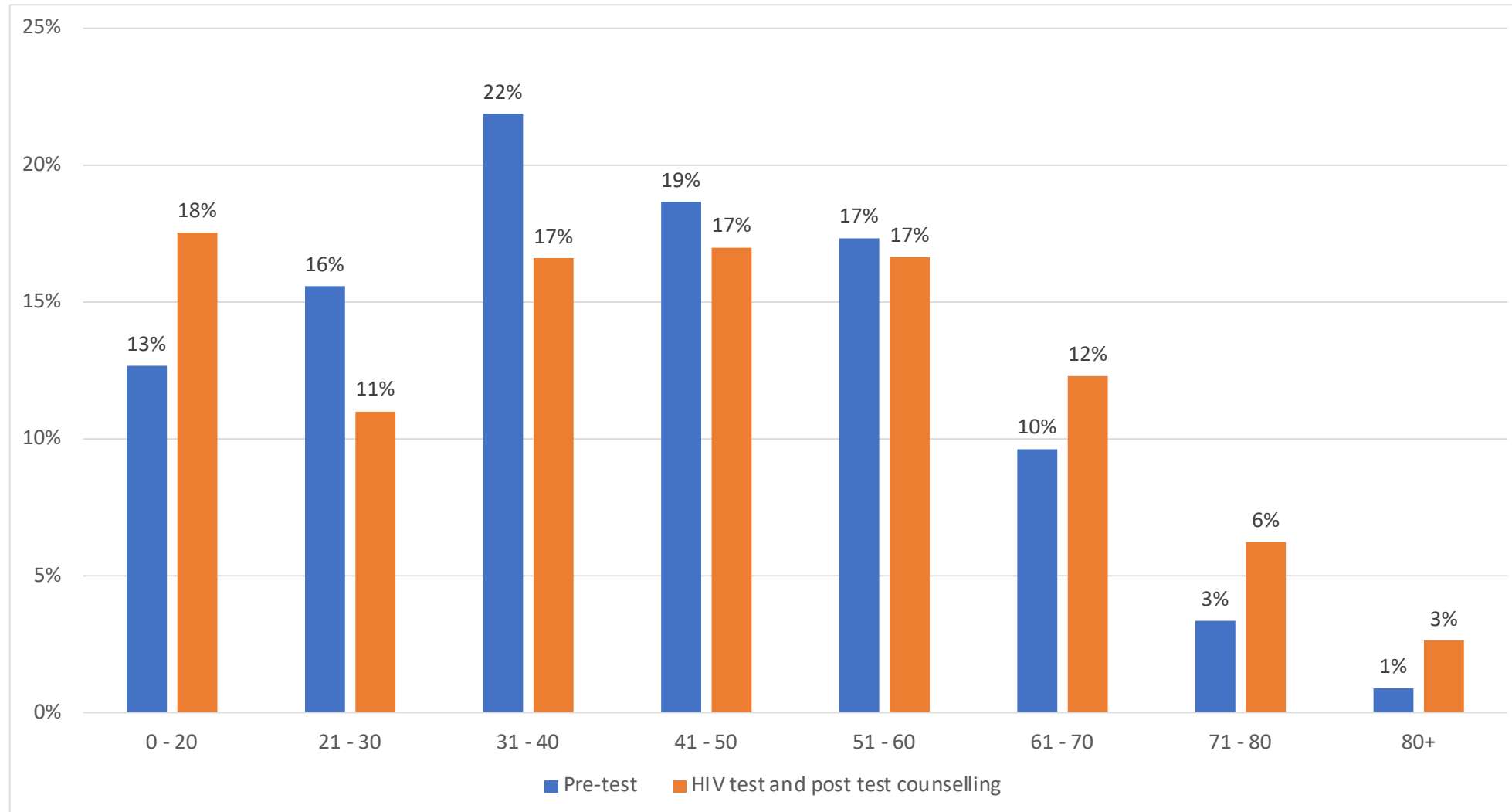


What GEMS covers/ funds	Opportunities to explore
HIV and AIDS Testing and Post Counselling	TB screening
Influenza vaccination	PrEP
Pneumococcal vaccination	Medication adherence
HPV Vaccination	Smoking cessation (move up)
Blood pressure monitoring	Weight management
Blood cholesterol test	Opioid related harms
Blood glucose test	
**Pregnancy Screening Test	
**Urine Analysis	*Chronic illnesses screening *Communicable diseases
Peak Flow Measurement	
Pre-Counselling (no test done)	

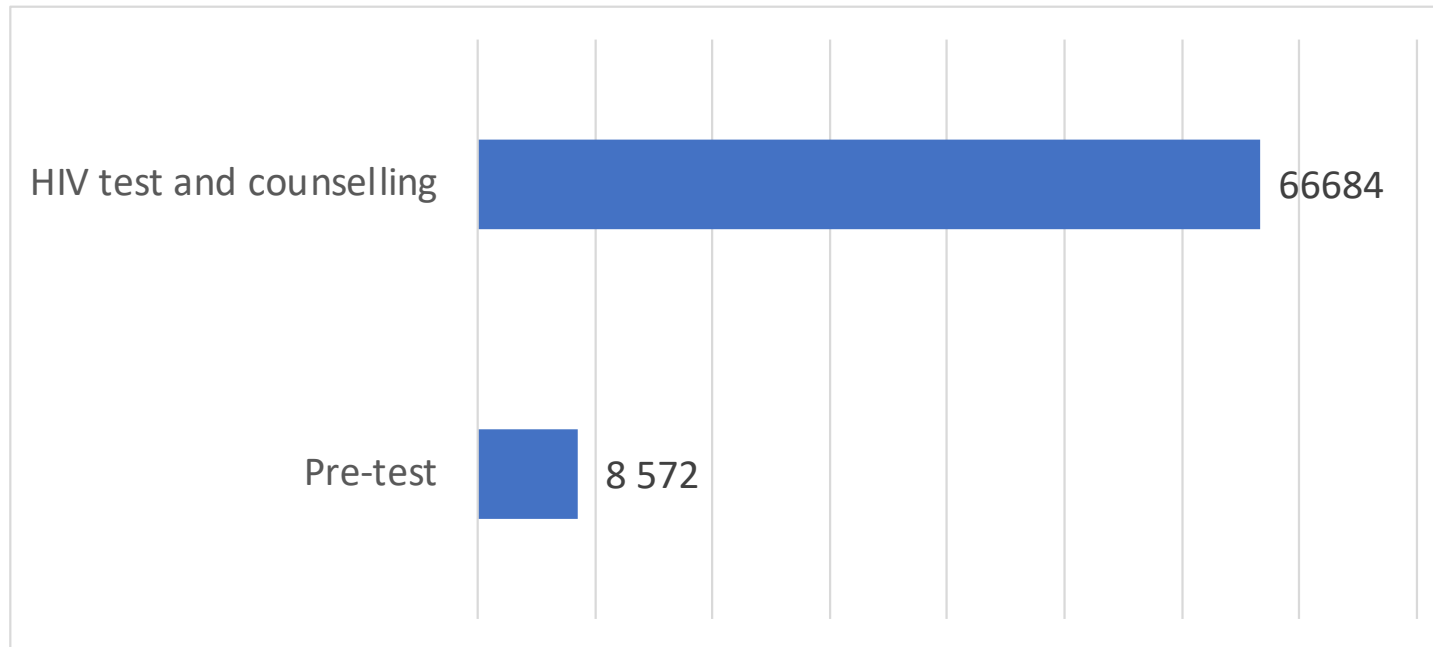
SCREENING UTILISATION BY GENDER



HIV PRE-TEST COUNSELLING VS. TESTING BY AGE BANDS

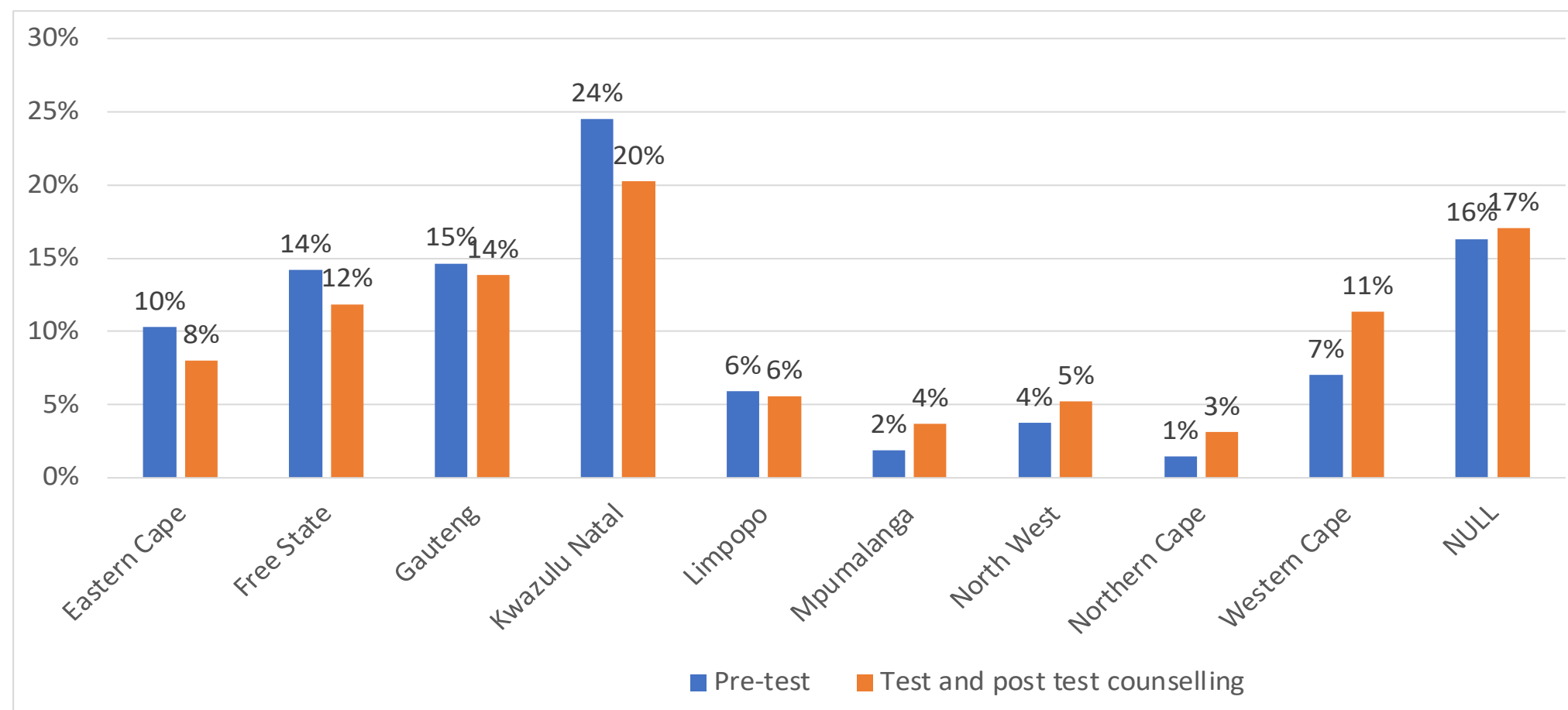


% OF MEMBERS TESTED FOR HIV WHO HAD PRE-TEST COUNSELLING

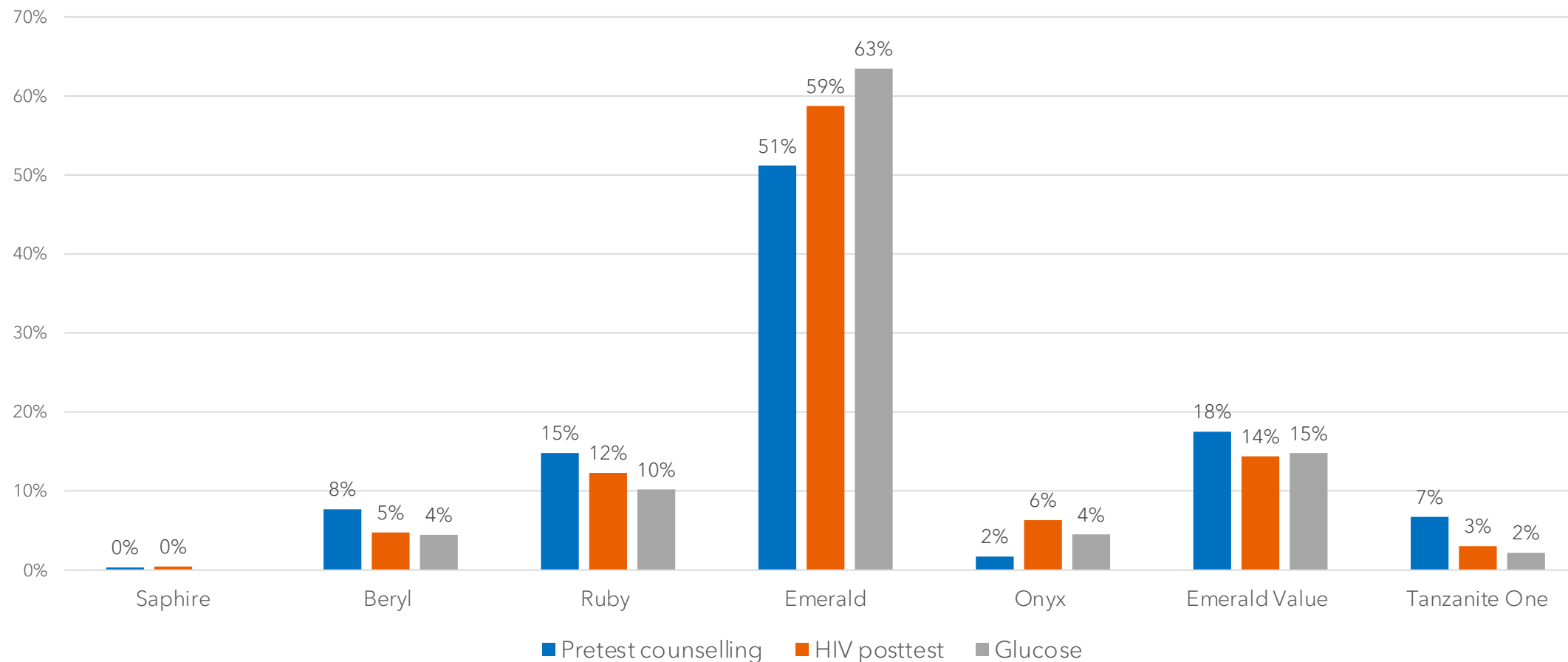


Only **12,85%** tested members had claims for pre-test counselling¹

MEMBERS WHO HAD PRE-TEST COUNSELLING COMPARED TO HIV TESTING AND POST-TEST COUNSELLING BY PROVINCE



SCREENING TRENDS PER SCHEME OPTION



REVIEW SUMMARY



Skills & Training

- Pharmacist-patient relationship
- Training and guidelines assist pharmacists in understanding their role in primary healthcare
- Pharmacists received training prior to offering screening services/tests
- Counselling services

Pharmacy Services

- Issue of accessibility is the key factor in driving patients to community pharmacies for their screening/tests/health checks/preventative care
- Utilisation of services depends on services the pharmacy/pharmacies rendered
- Renumeration influences screening and preventive care services
- Low capacity of clinical pharmacy services in South Africa

REVIEW SUMMARY CONT.



Patient-related	Collaboration
• Patient education influenced medication adherence and follow-up	• Using technology to enable collaboration among healthcare stakeholders and improve information sharing
• Community pharmacists- are first point of contact for patient chronic disease early detection (<i>Kenya, USA, China</i>)	• Communicating across the stakeholder spectrum (nurses/doctors/physicians/pharmacists)
• Women were more likely to visit the pharmacy compared to men	• Promoting a holistic, team-based approach in patient-centric care, by policymakers and funders
• The patient's age significantly influenced utilisation of services	• The reinforcement of physician-pharmacist collaboration to enhance clinical effectiveness
• Patient empowerment: enhance self-care, and healthcare-seeking behaviours	

SOME STATISTICS ON THE BENEFITS OF COMMUNITY PHARMACIST SCREENING



- In a 2020 Chinese study, [85.8%](#) of pharmacists were eager to enhance their pharmaceutical care skills, aiming to improve patient health outcomes.
- In Brazil's 2020 diabetes screening campaign, 17 580 people were tested, primarily in private pharmacies ([78.2%](#)). The study showed a 2.2% HbA1c decrease compared to 0.3% in the control group.
- In England, adults visit a pharmacy, on average, 16 times a year, and those with diabetes are known to visit their pharmacist [three to eight times](#) more frequently than those with no diabetes.
- Pharmacists work across a variety of settings, including hospitals, general practice, outpatients, industry, the military and prisons, but the majority ([70%](#)) is based in community pharmacies.
- Over [90%](#) of the US population resides within approximately 8 kilometres of a pharmacy.

BENEFITS OF SCREENING & PREVENTATIVE CARE



- Early disease detection and referral
- Improved quality of care and clinical outcomes
- Cost savings
- Improved patient engagement
- Potential reduction in hospitalization: 30% decrease in rehospitalization after interventions using nurse and pharmacist support
- Increased productivity
- Healthy aging

RECOMMENDATIONS



- **Shared common objective:** It is important that all stakeholders are made aware of the shared common objective.
- **Patient portals – mobile apps:** Easy patient access to health information, so they can take ownership of their health.
- **Innovative ways of communicating:** Effective communication with patients/Scheme members should be explored and implemented.
- **Awareness campaigns:** This, for both pharmacists and members.
- **Software system integration (*Interoperability*):** interprofessional communication and collaboration.

RECOMMENDATIONS (CONT.)



- **Feedback mechanism:** This can help identify areas for improvement, address concerns, and enhance overall patient satisfaction (i.e., surveys).
- **Policy advocacy:** Advocate for the integration of community pharmacy screening services; potential cost savings and improved health outcomes associated with early disease detection.
- **Continuous Professional Development:** Stakeholders to support CPD activities, screening technologies, guidelines, and patient communication techniques (*the role of universities in facilitating CPD & short courses*).
- **Elevate the status** of the Pharmacist as a Primary and a Community HCP.

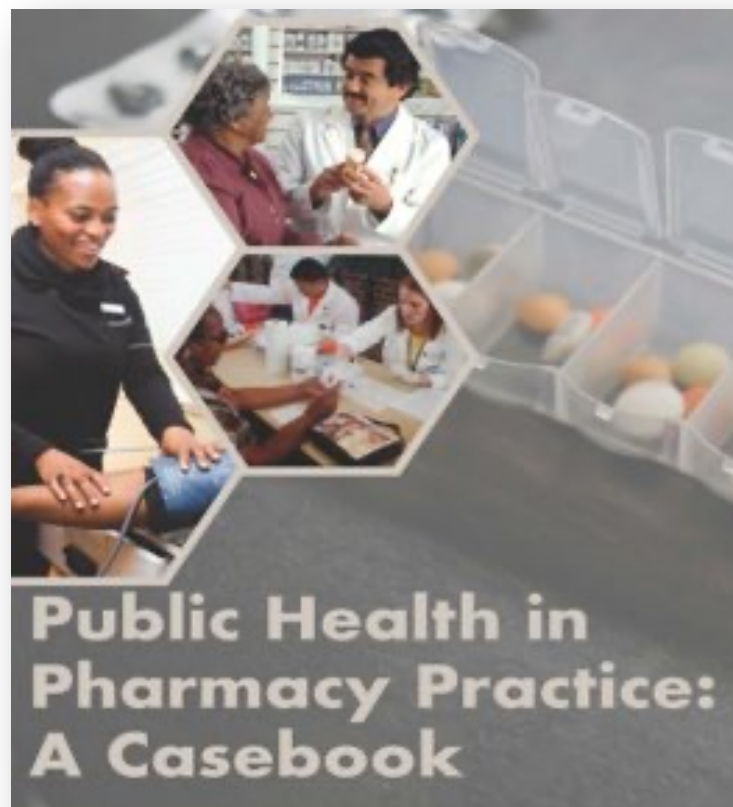
AREAS FOR FUTURE RESEARCH



- Assess the impact of community pharmacist-led interventions on clinical outcomes in the context of expanded scope of practice.
- Explore the expanded role of community pharmacists in the screening, prevention, and management of public health interventions in South Africa.
- Investigate factors influencing patients' utilization of pharmacy-led services.
- Explore the extent to which funders can facilitate a multidisciplinary approach to enhance the expanded role of pharmacists in early disease detection.

CONCLUSION

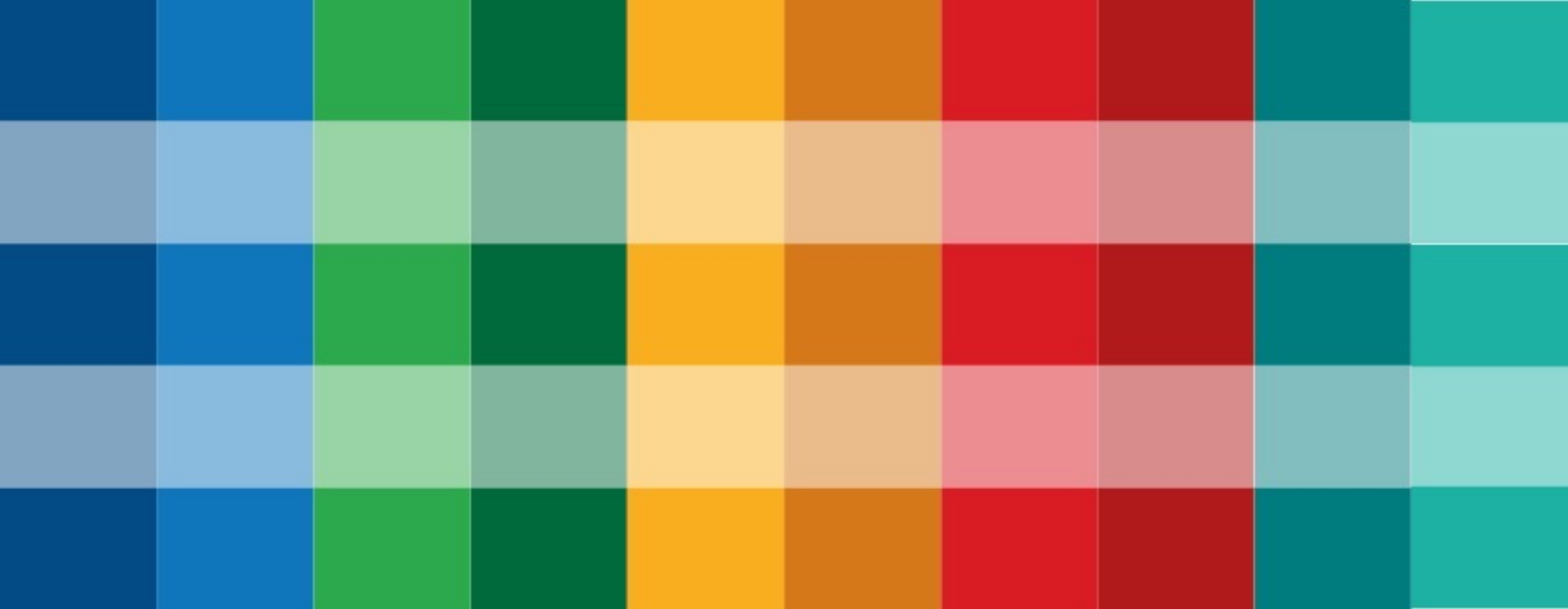
Various stakeholders have a significant role in enhancing the creation of awareness about pharmacists as PHC service providers, to extract more value from their expanded scope of practice.



*References provided upon request **

QUESTIONS





THANK YOU

