



HEARING AND VISION SERVICES FOR PRESCHOOL CHILDREN: A MHEALTH SUPPORTED COMMUNITY-BASED PROGRAMME

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466 000 000
people have permanent
disabling hearing loss

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INTRODUCTION

32 MILLION
CHILDREN



19 MILLION
CHILDREN

90% RESIDE IN LMIC



ACCESS TO SERVICES

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INNOVATIVE NEW MODEL

Accurate & reliable

Time efficient

Cost-effective

Quality control

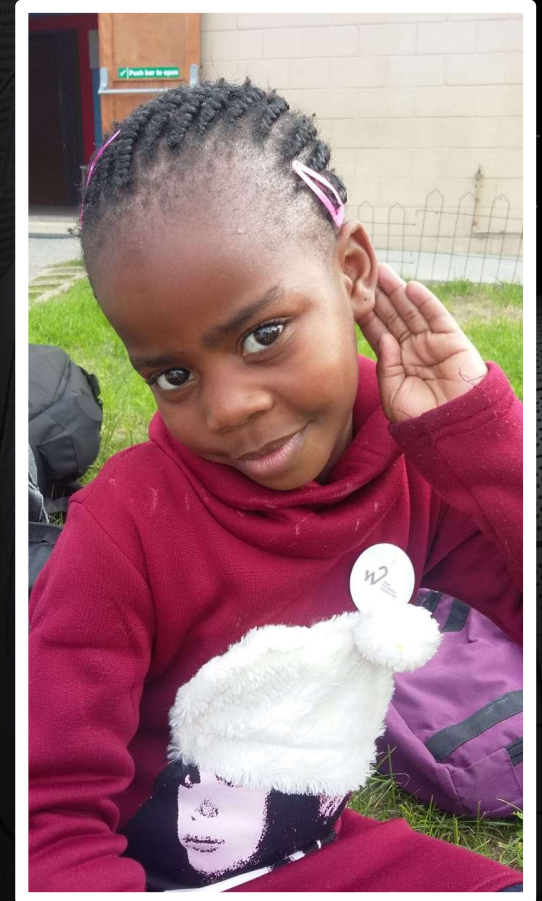
Trained laypersons



AIM

IMPLEMENTATION RESEARCH:

To describe and evaluate a joint sensory (hearing and vision) community-based screening programme for preschool children in underserved communities in the Western Cape using mHealth technology.



METHOD



Decentralized (ECD)

METHOD



Decentralized
(ECD)



mHealth solutions

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METHOD



Decentralized
(ECD)



mHealth
solution



Trained non-professionals

METHOD



Decentralized
(ECD)

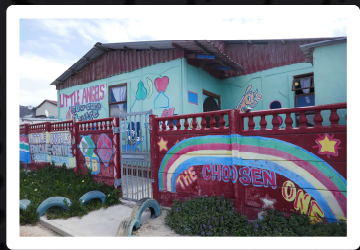


mHealth
solution



5-6 year olds

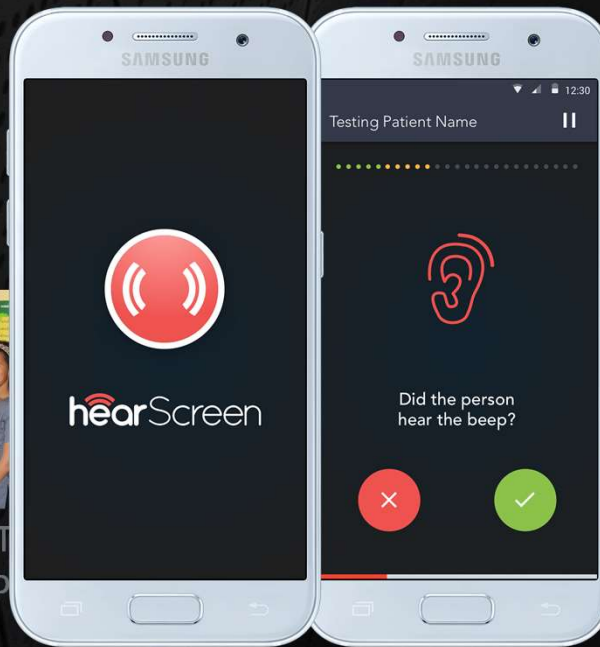
METHOD



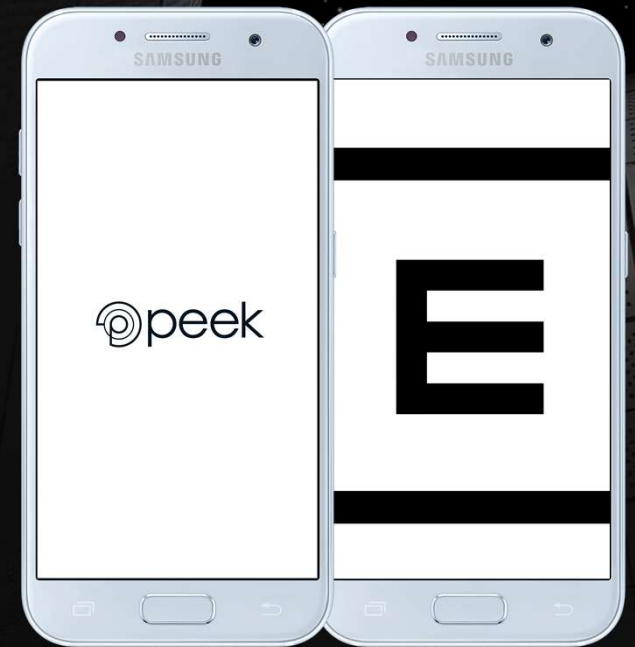
Decentralized (ECD)



mHealth solutions



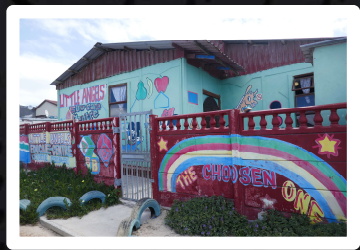
Hearing screening (hearScreen)



Vision screening (Peek Acuity)

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METHOD



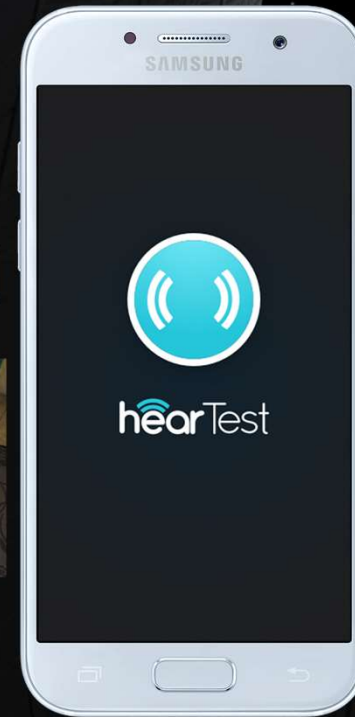
Decentralized (ECD)



mHealth solutions



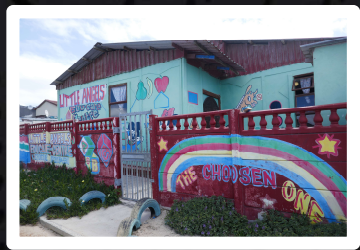
Trained non-professionals



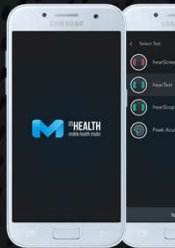
Stage 2: Hearing follow-up
(hearScope & hearTest)

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METHOD



Decentralized (ECD)



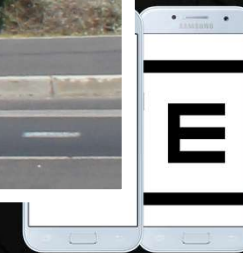
mHealth solution



Linked to public health diagnostic services



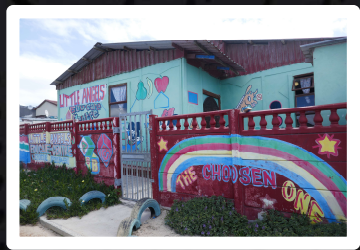
hearing screening (screen)



Vision screening (Peek Acuity)

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METHOD



Decentralized (ECD)



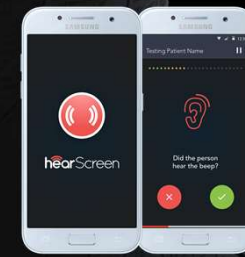
mHealth solutions



Trained non-professionals



5-6 year olds



Hearing screening (hearScreen)



Vision screening (Peek Acuity)



Linked to public health diagnostic services

RESULTS

- CHILDREN SCREENED = 8023, hearing & vision
- ECD centres = 271
- CONSENT RETURN RATE = 82% (8497/10362)
- SCREENING COVERAGE RATE = 94.4%



RESULTS | HEARING

	TOTAL
Hearing screenings	8023
Referral rate	5.4% (435/8023)
First line follow-up rate	89.4% (389/435)
Diagnostic referrals	31.9% (124/389)
Diagnostic follow-up rate	75.8% (94/124)
Confirmed diagnosis	0.6% (50/8023) *10 awaiting confirmation

RESULTS | VISION

	TOTAL
Vision screenings	8023
Referral rate	2.1% (170/8023)
First line follow-up rate	-
Diagnostic referrals	2.1% (170/8023)
Diagnostic follow-up rate	73.1% (n=109, 21 awaiting appointments)
Confirmed diagnosis	0.7% (55/8023) *8 awaiting confirmation & 21 awaiting appointments

DISCUSSION | FOLLOW-UP RATE



Community-based
89.4% follow-up rate
Cape Town, Western Cape

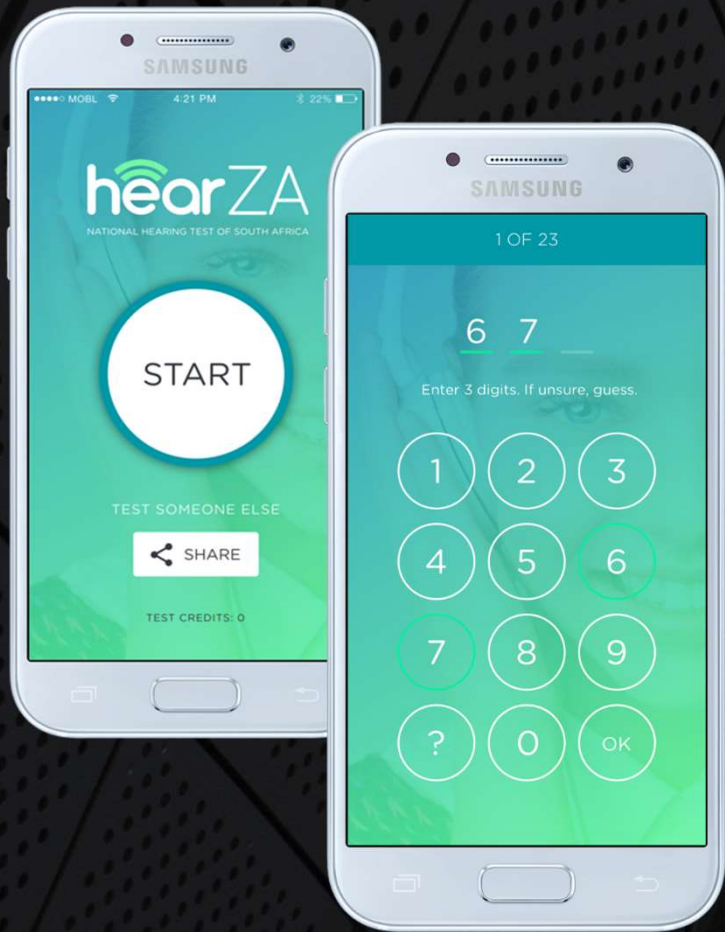


Facility-based (Clinics)
39.4% follow-up rate
Mamelodi, Gauteng

CONCLUSION

A joint sensory screening community-based programme enabled by mHealth supported systems and trained non-professionals:

- Increases access to services
- Reduces programme costs
- Improves programme outcomes
- Increases scalability
- Increases community awareness & staff knowledge
- Results in job creation



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5.P50.a



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The logo for hearX group features the word "hear" in white lowercase letters, followed by a large cyan "X" with three curved lines above it, and the word "group" in white lowercase letters. The background is a dark, textured surface with a grid pattern and a starry space scene on the right.

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