



# Quality Improvement Initiative to Strengthen Referral for Pediatric Cancer Patients Through Training, Mentorship and Establishment of WhatsApp Consultation Platform in Lilongwe, Malawi.

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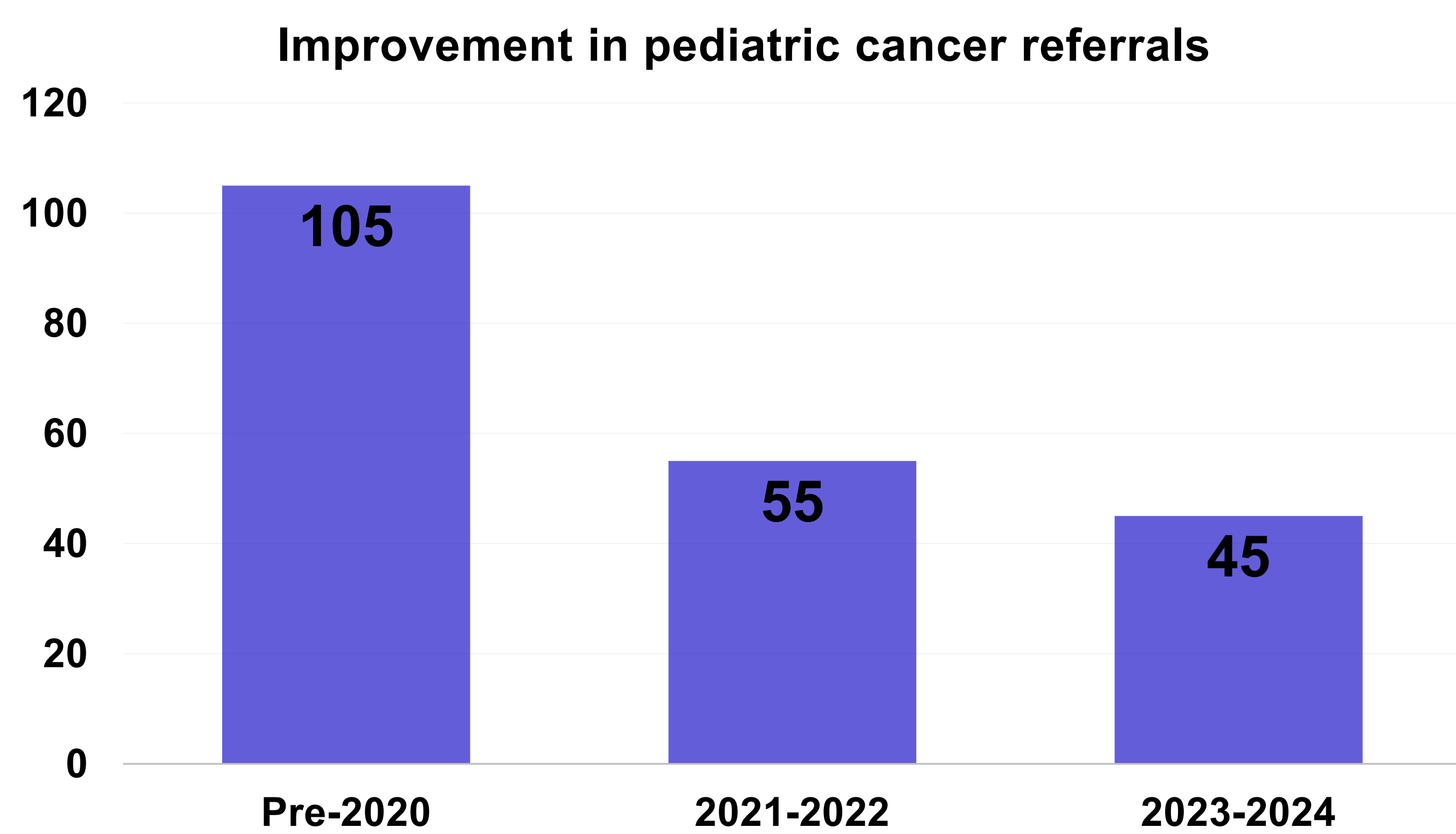
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## BACKGROUND AND OBJECTIVES

- In sub-Saharan Africa, late presentations contribute significantly to poor outcomes. This arises from delayed referrals, lack of awareness, fragmented referral networks, and transportation costs.
- This study aimed at improving early diagnosis through implementation of a training and mentorship program for community health workers, and establishment of WhatsApp-based consultation platform.

## METHODS

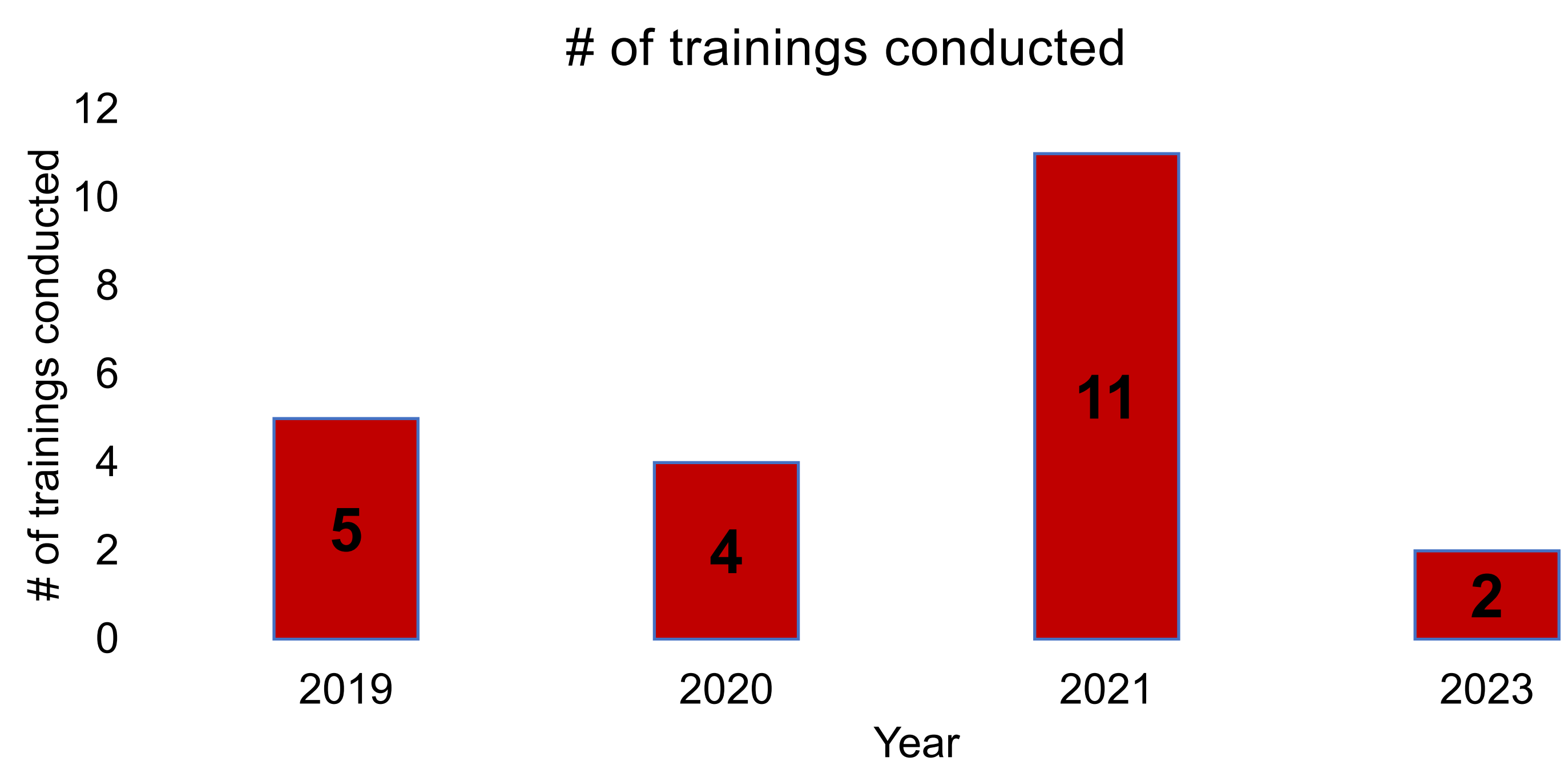
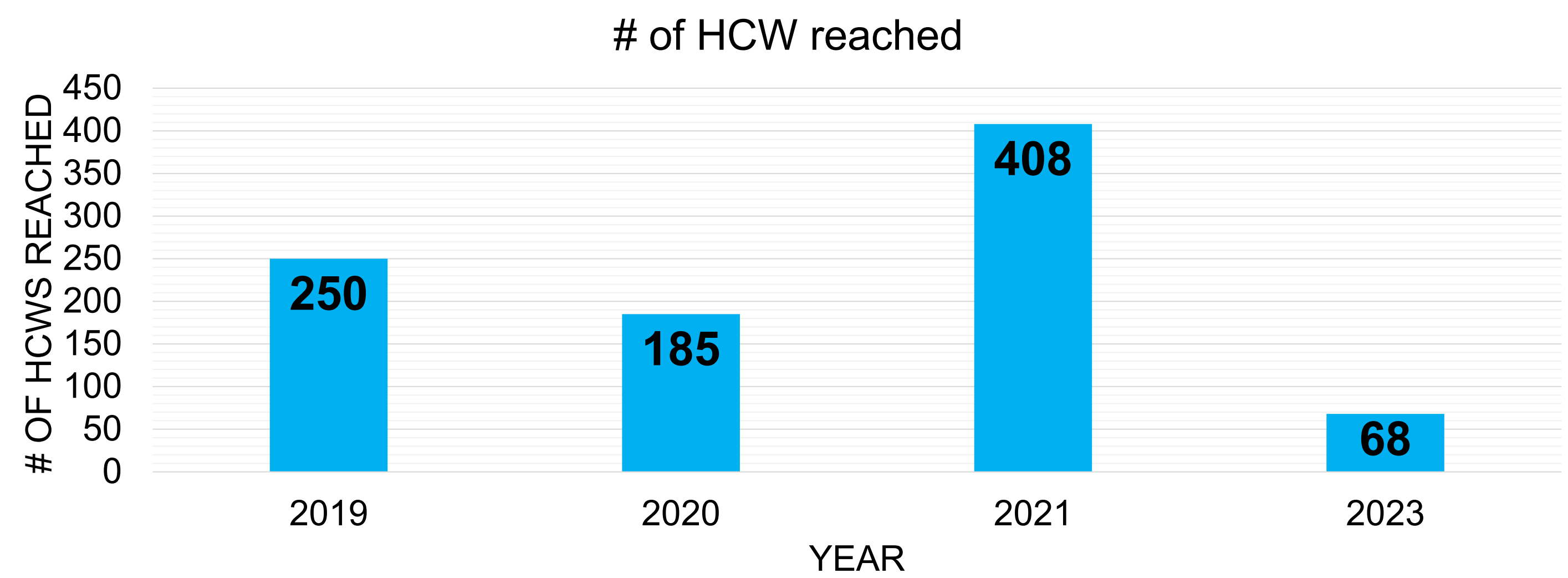
- This was a quality improvement (QI) project at Kamuzu Central Hospital (KCH), one of two pediatric cancer centers in Malawi.
- The multi-faceted intervention incorporated healthcare worker training on pediatric cancer symptoms and signs, a clinical mentorship program at KCH, and a WhatsApp-based consultation to improve referral efficiency.
- WhatsApp consultation allowed real-time case discussions with pediatric oncology clinic team.
- Pre- and post-training assessments were performed to evaluate knowledge on pediatric cancer symptoms and signs, and we measured the trend in the median referral times (time from first presentation at primary health centre to presentation at KCH).



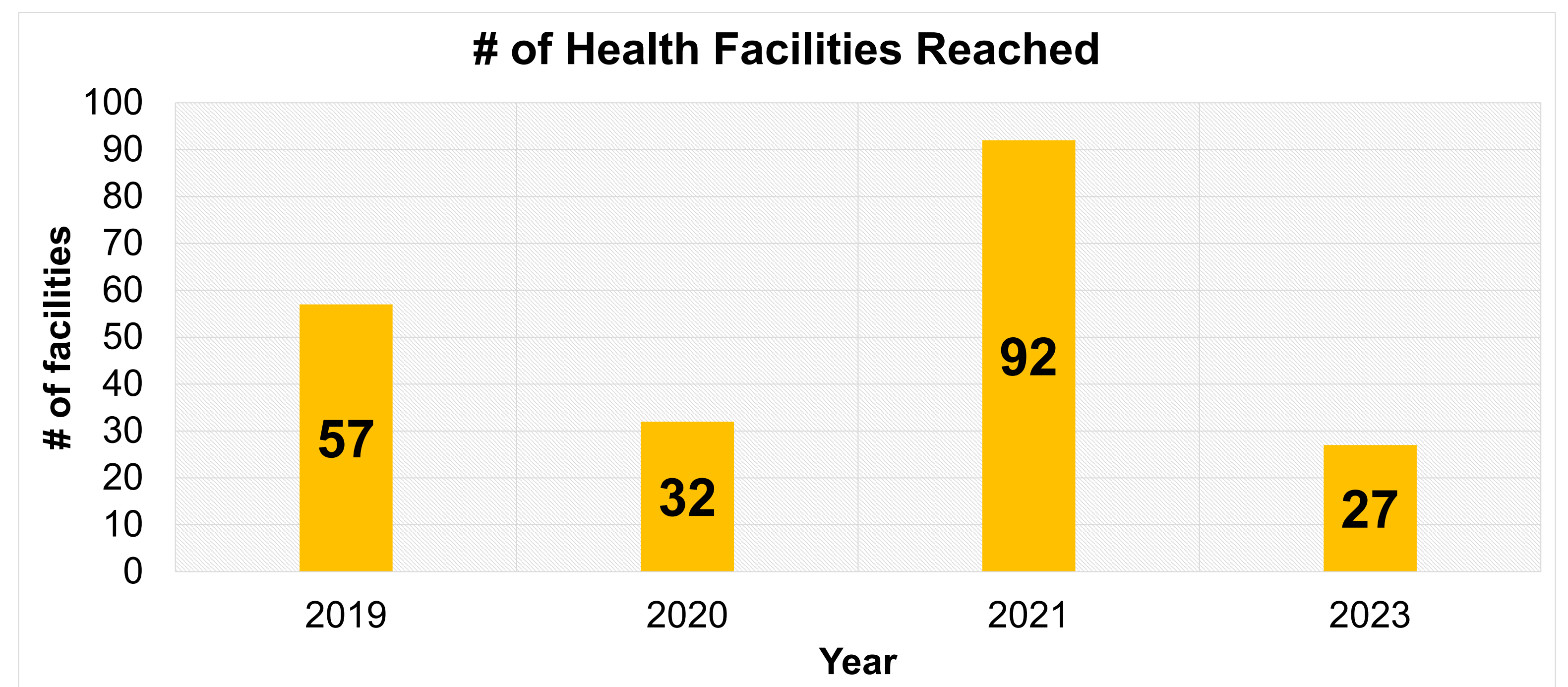
- Prior to 2020, median referral time was > 100 days. Between 2021-2022, this decreased to 55 days, dropping further to 45 days by 2023-2024.

## RESULTS

- Since the inception of this program in 2020, a total of 911 healthcare workers from 208 facilities were trained in early cancer identification and referral.



- Pre- and post-training assessments demonstrated 35% increase in knowledge on pediatric cancer warning signs. At the end of training 90% of participants reported confidence in identifying and referring suspected cancer cases.

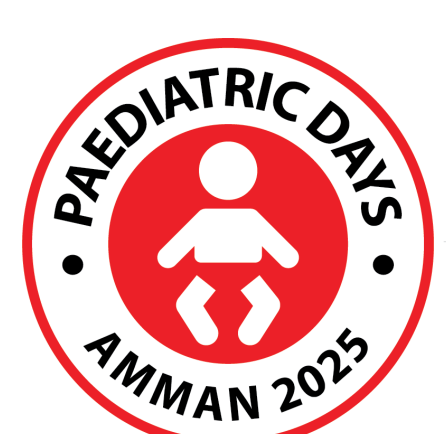


## LIMITATIONS

One of the major limitations of this study was availability of resources to train more HCWs especially through mentorship session.

## CONCLUSIONS

- Our comprehensive QI initiative of training, mentorship, and WhatsApp consultations resulted in a decrease in median referral times and an increase in provider knowledge of pediatric cancer symptoms.
- These low-cost, scalable interventions can be adapted to other low-resource settings.
- Major limitations included
- Further evaluation is needed to assess the long-term impacts on patient outcomes.



## ETHICS STATEMENT

This study fulfils the exemption criteria set by the MSF ERB and was approved for submission by the OCBA Medical Director.

