

USE OF DATA TO STRENGTHEN INFECTION PREVENTION AND CONTROL OF COVID-19 IN HEALTH FACILITIES, ZIMBABWE (2020).

Vongai Mildred Pepukai, Chipo S Gwayagwaya Alethea Mushamba, Prof Valerie Robertson.

Monitoring IPC indicators capacitates Health Managers to target limited resources and develop appropriate interventions for primary care level. Self monitoring empowers HCWs when responding to a pandemic.

BACKGROUND & CHALLENGES TO IMPLEMENTATION

Zimbabwe reported its first case of COVID-19 in March 2020 and since then has been collecting data on the numerous COVID-19 related indicators from facility level through to national level. Collection of Infection Prevention and Control (IPC) related indicators were not prioritized unlike surveillance data in the initial stages of the pandemic in Zimbabwe. The lack of IPC data affected the implementation of the national response to the COVID-19 pandemic. This gap was noted and the Infection Control Association of Zimbabwe (ICAZ) identified key IPC indicators that were of interest to the Ministry of Health and Child Care (MoHCC), WHO, Resolve to Save Lives (RTSL) and other partners which they adopted and monitored as part of an IPC capacity strengthening project in 7 rural and 1 metropolitan Provinces of Zimbabwe.

The advent of the COVID-19 pandemic highlighted areas in need of strengthening within the national IPC program structures which were already in place. Of the WHO IPC core components adopted by Zimbabwe, monitoring and feedback still required strengthening.

METHODS / ACTIVITY

ICAZ with funding from Resolve to Save Lives supported the MoHCC by expanding training in IPC for COVID-19 response and preparedness over a period of 8 months (June 2020- January 2021) to health care workers working mainly at primary care level in the selected 4 districts per province and some district and mission hospitals where gaps were identified. ICAZ also developed and introduced a bi-weekly checklist that monitored IPC training, implementation (screening and triaging, hand hygiene and environmental cleaning) and availability of personal protective equipment (PPE) and other supplies critical for COVID-19 prevention. District IPC focal persons (DIPCFP) were trained on use of checklist and cascaded information. Facilities would then report indicators via whatsapp/sms based platforms to district level. DIPCFP was then responsible for compiling and entering data into the KOBACOLLECT application installed on tablets provided. All supported DIPCFPs and Provincial IPCFPs had KOBO accounts and used them to access their data. Data compiled was uploaded to project server. Monitoring and month by month trend analysis of IPC indicator scores was conducted from district through to national level. Sites with poor performing indicators were supported through site support and supervision visits conducted by teams comprising ICAZ project team members, PIPCFP and DIPCFP or DIPCFP and district managers. Data quality assessments were conducted by the ICAZ team using tools adapted from USAID DQA tools for HIV programming

RESULTS

3643 health care workers (clinical and ancillary) from 820 PHCs and 141 secondary level facilities in 28 rural districts and 2 cities were trained throughout the project period. Training was in-person during workshops and on the job through site support visits. Data was collected at 12 bi-weekly time points from an average of 106 facilities. Trend analysis of key IPC indicators as shown in figures 1, 2 and 3 revealed the following results:

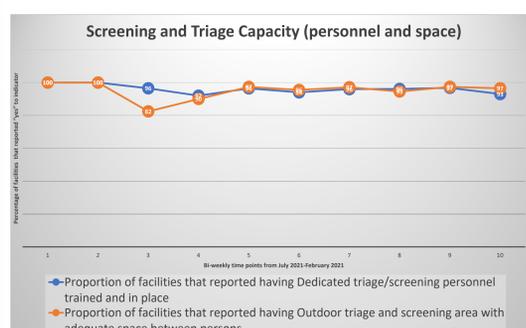


Fig1: Proportion of facilities with screening and triage capacity both personnel and dedicated space

On average 96% of targeted facility reported having dedicated screening and triage personnel that were trained in place bi-weekly. And an average of 95% had outdoor triage and screening areas with adequate space for physical distancing between patients and HCWs. Monitoring of this data coupled with surveillance of numbers screened at entrances vs number treated helped district managers to identify facilities in need of immediate support to strengthen screening and triaging efforts.

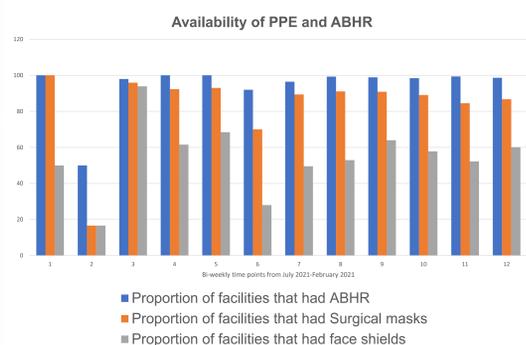


Fig2: Trend of availability of adequate stock of PPE and ABHR.

On average 94% of targeted facility reported having stocks of Alcohol based hand rub (ABRH) bi-weekly. And an average of 83% had adequate stocks of surgical masks and 55% had face shields/goggles. Monitoring stock levels empowered facilities to calculate restocking levels and helped district managers to identify instances when to advocate for timely supplies from the national supplier NATPHAM. Facilities experiencing severe stockouts of surgical masks were quickly assisted by district and provincial managers to get stocks.

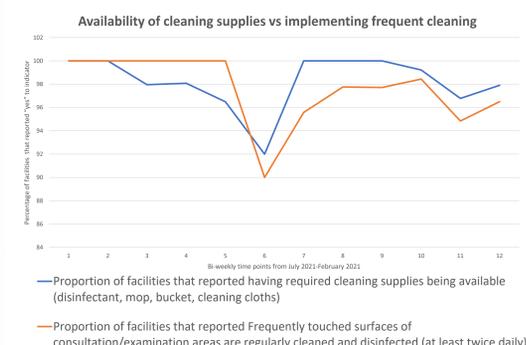


Fig3: Trend of availability of cleaning supplies vs regular cleaning of frequently touched surfaces

Data on environmental cleaning indicators was also monitored and the sharp drop in the proportion of facilities with required cleaning supplies in stock was closely associated with the drop in proportion of facilities that reported regular cleaning of frequently touched surfaces. The sharp drop also coincided with reports of HCWs relaxing on implementation of key IPC measures for the response and preparedness for COVID-19 due to exhaustion and attrition of trained personnel.

CONCLUSIONS

Monitoring IPC indicators equipped district and provincial teams with information that they could use for timely identification of gaps, structuring facility targeted interventions and efficiently allocating limited resources. This was evidenced by the sharp upward trend experienced after a sudden drop in proportion of facilities with stocks of cleaning supplies, surgical masks and alcohol based hand rub in bi-week 6. Indicator reports shared by DIPCFPs prompted for district teams to conduct site support and supervision at poor performing sites (included facilities with poor indicators and those failing to report at all) were on-site mentorship provided to have an impact on facility IPC program performance.

Capacity building on Self-monitoring of indicators motivated staff to implement correctional action and strengthen their IPC programs as well as reduce risk of COVID-19 infection among health care workers and patients. Self monitoring also empowered HCWs at primary level to highlight challenges that they were facing in implementing IPC for COVID-19 response and preparedness to their district managers. Indicator data monitoring assisted project staff, provincial and district teams to identify high performance sites where site support visits were conducted to re-enforce best practice and document facility tailored interventions that could be adopted they similarly structured facilities.

IPC data proved crucial in the impact assessment of the interventions introduced into the health system by MoHCC and emphasises areas that needed constant strengthening or re-strategizing. However, reports were not submitted consistently through out the project period thus the need for further engagement of national stakeholders for IPC indicators to be adopted into MoHCC reporting systems (DHIS2) in preparation for the next outbreak.

ACKNOWLEDGEMENTS

We would like to acknowledge the Ministry of Health and Child Care Zimbabwe through the Nursing Directorate for allowing us to provide support to their COVID-19 response and preparedness efforts and the provincial and district IPC teams and Health facility staff who worked hard to strengthen their IPC programmes. We would also like to acknowledge Resolve to Save Lives for funding ICAZ to implement the IPC strengthening for COVID-19 response and preparedness project and the Biomedical Research and Training Institute for managing the funds.



CONTACT

For more information contact **Mildred Pepukai** on:
Email: mildredpepukai@gmail.com
Tel: +263 773 978 663.



Presented at the
8th ICAN Congress

23 - 25 November 2021

sbs.co.za/ICAN2021

MOVING FORWARD WITH IPC
IN AFRICA FOR AFRICA

