

USAID MEDICINES, TECHNOLOGIES, AND
PHARMACEUTICAL SERVICES (MTaPS) PROGRAM

Improved Access. Improved Services. Better Health Outcomes.

**Strengthening infection
prevention and control
to reduce vulnerabilities
to infectious diseases:
The case of Ethiopia**

Tewodros Fantahun

Senior Technical Advisor



USAID
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Outline

- Introduction
- Methods
- Results
- Conclusion and discussion



Introduction

- Health care-associated infections (HAIs) vary between 5.7% and 19.1% in low- and middle-income countries.¹
- Effective infection prevention and control (IPC) measures can help prevent HAIs.
- IPC is one of the five strategic objectives of the WHO's Global Action Plan on antimicrobial resistance (AMR).
- The USAID MTaPS program supports Ethiopia's MOH in achieving the Global Health Security Agenda's (GHTSA) vision of attaining a world safe and secure from global health threats posed by infectious diseases.
- The GHTSA uses the WHO's Joint External Evaluation (JEE) framework to measure progress in a country's capacity to prevent, detect, and respond to public health emergencies.

¹World Health Organization 2011, Report on the burden of endemic health care-associated infection worldwide.

Ethiopia's IPC JEE 2016

**Score: 2/5
limited
capacity**

Capacities	Indicators	Score
National legislation, policy and financing	P.1.1 Legislation, laws, regulations, administrative requirements, policies or other government instruments in place are sufficient for implementation of IHR (2005)	4
	P.1.2 The State can demonstrate that it has adjusted and aligned its domestic legislation, policies and administrative arrangements to enable compliance with IHR (2005)	4
IHR coordination, communication and advocacy	P.2.1 A functional mechanism is established for the coordination and integration of relevant sectors in the implementation of IHR	3
Antimicrobial resistance	P.3.1 Antimicrobial resistance detection	3
	P.3.2 Surveillance of infections caused by antimicrobial-resistant pathogens	2
	P.3.3 Health care-associated infection (HCAI) prevention and control programmes	2
	P.3.4 Antimicrobial stewardship activities	2

Goal: Improve Ethiopia's JEE score on IPC to at least 3/5

National Level: Approach

GHSA-funded partnership with MOH to strengthen the national IPC program. Support included:

- Establishment of an IPC-TWG
- Engagement with the IPC-TWG to revise national IPC guidelines and training materials
- Assessment using WHO IPCAT2 to identify gaps
- Technical assistance provided to Clinical Service Directorate/MOH to develop national IPC action plan



Heads of the regional health bureaus during the national IPC reference manual launching, October 2019, Photo credit: Tewodros Fantahun (USAID MTaPS)

National Level: Results (I)

- Revitalization of IPC TWG
 - A national IPC TWG was created as a subcommittee of the NAMRAC TWG.
- IPC-TWG is providing guidance to MOH's Clinical Service and Pharmaceutical and Medical Equipment Directorates
- IPC TWG played a critical role in the country's response to the COVID-19 pandemic

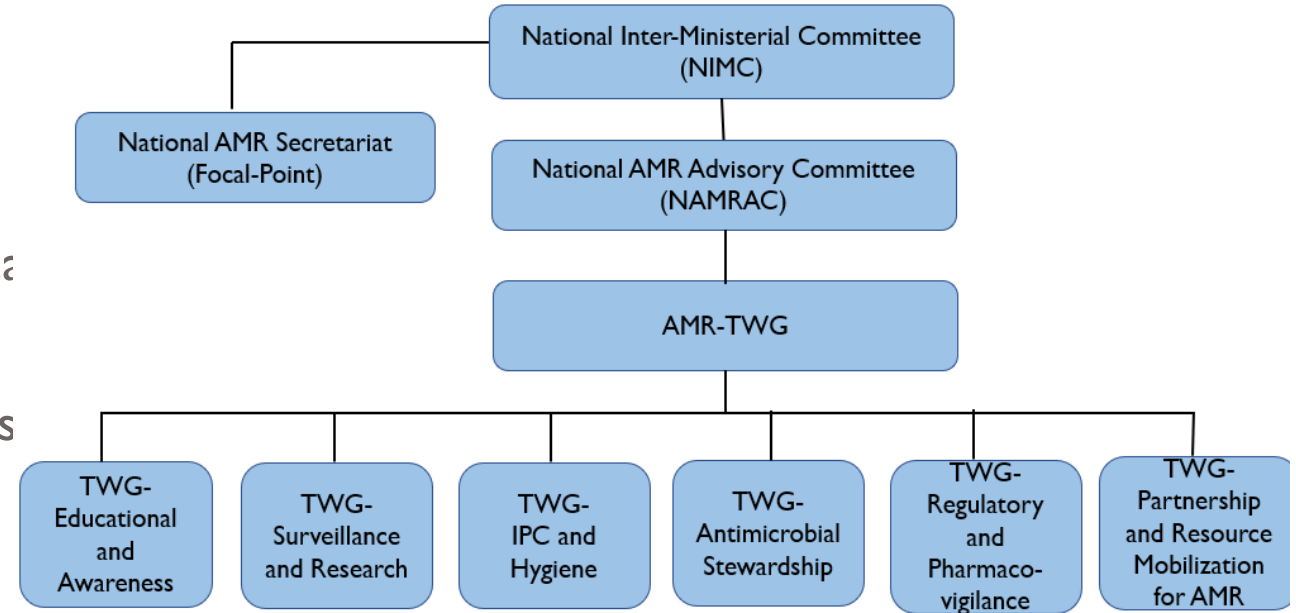


Figure: Ethiopia's 3-tiered multisectoral coordination structures on AMR

National Level: Results (2)

The revised IPC reference manual is guiding health care professionals' use of up-to-date IPC recommendations.

MOH, RHBs, and health care facilities (HCFs) are training health care workers (HCWs) by using the revised IPC training materials.

Printed and distributed copies of the reference manual helped 21 hospitals develop IPC SOPs.

IPC TOT trained professionals have cascaded IPC training to >2500 HCWs throughout the country.

Promotion of the revised IPC reference manual increased awareness of HCWs on updated IPC recommendations.



Ministry of Health, Ethiopia
October 30, 2019

ሀገር አቀፍ የኢንፎክሽን መከላከያ እና መቆጣጠር መመሪያ ተዘጋጀ

የጤና ሚኒስቴር የታካሚዎችን ደህንነት ለመጠበቅ የሚረዳ ሀገር አቀፍ የኢንፎክሽን መከላከያና መቆጣጠር መመሪያ ማዘጋጀቱን አስታወቀ።

በዛሬው እለት በኢትዮጵያ የህብረተሰብ ጤና እንስተቲቲዩት የከብሰበ አዳራሽ በተከናወነው ሀገር አቀፍ የኢንፎክሽን እና መቆጣጠር መመሪያ ሀገራዊ የትውውቅ ወርክሾች ላይ እንደተገለጸው መመሪያው የታካሚዎችን ደህንነት ለመጠበቅ ያለው አስተዋጽኦ ከፍተኛ እንደሆነ ተገልጿል።

በጤና ሚኒስቴር የሀክምና አገልግሎት ጄኔራል ዳይሬክተር ዶ/ር ያእቆብ ሰማን መመሪያው በይፋ በተዋወቀበት ፕሮግራም ላይ በደረጉት ንግግር የጤናው ዘርፍ ስራዎች ውጤታማ ይሆኑ ዘንድ የታካሚዎች ደህንነት መጠበቅ እንዲሁም የተዋህሰዎትን መድኃኒት መለመድን መከላከል መቻል ተገቢው ትኩረት ሊሰጠው የሚገባው ጉዳይ እንደሆነ በአጽንኦት አስረድተዋል።

አያይዘውም መመሪያው የአለም ጤና ድርጅት አለም አቀፋዊ መስፈርቶች እና የአሰራር መመሪያዎችን ግንዛቤ ውስጥ በማስገባት እንደተዘጋጀ ተናግረዋል።

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National Level: Results (3)

- The national IPC action plan was developed and informed by the findings of the assessment.
- Repeated assessment shows improvements in the national IPC program

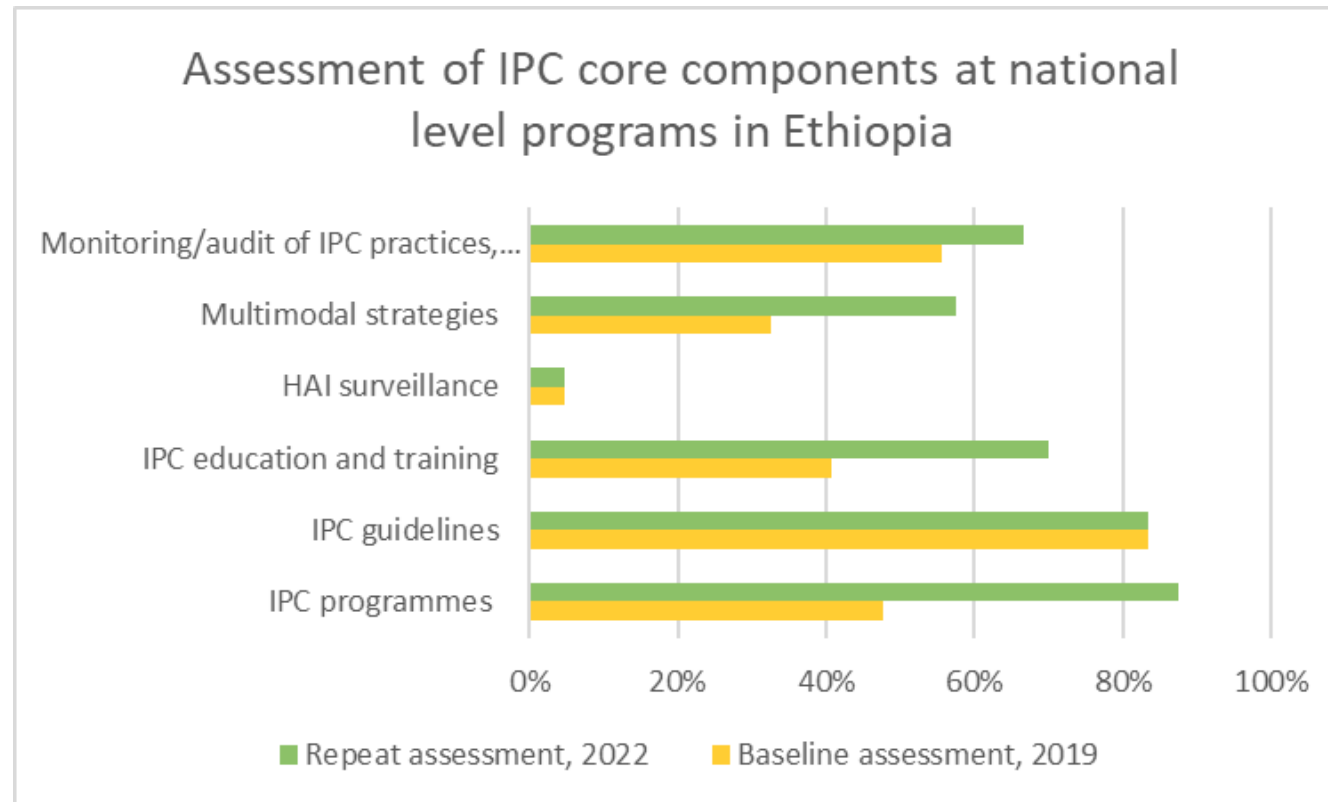


Figure: IPCAT-2 assessment results of the national IPC program, MOH.

Ethiopia's Progress to JEE Score of 3 (as of September 2022)

JEE level	Effective multisectoral coordination MSC on AMR	IPC	Optimize use of antimicrobial medicines in human and animal health and agriculture
No capacity – 01			
Limited capacity – 02	4/4 (100%)	4/5 (80%)	3/4 (75%)
Developed capacity – 03	3/4 (75%)	6/6 (100%)	4/6 (66.6%)
Demonstrated capacity -04	3/4 (75%)	4/5 (80%)	2/7 (28.6%)
Sustainable capacity - 05	0	0	1/7 (14.3%)

Facility Level: Approach (I)

USAID MTaPS:

- Identified 30 HCFs for targeted technical support on IPC
- Used WHO's IPCAF tools to conduct baseline assessment on IPC at 21 HCFs
- Provided technical assistance to develop an IPC action plan, informed by baseline assessment result
- Supported training of 92 IPC committee members on basic IPC
- Provided technical assistance to targeted HCFs throughout the IPC improvement process
- Conducted a repeat assessment at four randomly selected, targeted HCFs to evaluate improvements



IPCAF assessment validation meeting at Yekatit 12 Hospital, February 2020.
Photo credit: MTaPS Ethiopia

Facility Level: Approach (2)

- Supported MOH in customizing IPC assessment tool for HCFs (IPC-FLAT)²
- Provided technical assistance to MOH for developing an SOP for local ABHR production at HCFs
 - Also supported printing and distribution of 5,000 copies of the SOP for hospitals in all regions
- Created a social media platform to help hospitals exchange IPC practice experiences

² Infection Prevention and Control Facility-Level Assessment Tool.

Infection Prevention and Control Facility Level Assessment Tool (IPC-FLAT)

Introduction

The IPC assessment tool is designed for use in hospital settings to:

- Evaluate the system and capacity of IPC for safe healthcare services
- Evaluate the compliance of healthcare workers to IPC standards and practices
- Aid development of work plans for improvement
- Monitor the progress of IPC quality improvement activities over time

The tool has two sections that include:

- Section –I: Facility IPC Capacity and System:** This section addresses high-level IPC systems and capacities
- Section –II: IPC Practices and Compliances to IPC standards by healthcare workers.** This section includes routine IPC practices of healthcare workers considering the IPC standards and priorities. This assessment will be conducted by health facilities quarterly (every three months)

The tool is developed using the World Health Organization (WHO) IPC assessment framework and other regional IPC tools. Due to the technical nature of the questions, assessments must be carried out by IPC experts with relatively good experience and strong familiarity with IPC requirements and standards. The second section can be used more frequently as per the needs and available resources of the facility and assessment can be done using particular IPC domains (e.g. Hand Hygiene compliance) or combination of domains depending on the priority for monitoring compliance to IPC standards and practices.

Scoring Note :

General information

Name of facility	MCM (Korean hospital)			
Name and institution of supervisors		Name of supervisor	Qualification/position	Affiliated Institution
	1	Betlehem	IPC focal	MCM (Korean
	2	Ruth Boge	Quality office coordinator	MCM (Korean
	3	Tewodros Fantahun	STA-IPC	MSH/MTaPS
	4			
	5			
Total number of inpatient beds				
Total number staff	1. Total Number of Health Professionals _____			
	1.1. Dedicated IPC experts..... 1			
	1.2. Total physicians..... 66			
	1.3. Environmental Health __ 1			
	1.4. Total Nurses all types_ 244			
	1.5. Other Health Professionals _____			
	2. Total Number of Supportive staff _____			
	2.1. Cleaners/house keeping_ 53			
	2.2. Laundry staff_ 14			
	2.3. Kitchen workers_ 44			
2.4. CSSD staff _____				
2.4. Porters and runners_ 54				
2.5. Others __ 4 (Morgue, Gardner, Sewing, Educ)				
3. Total Number of Admin staff_ 101				
4. Other staff				
5. Total Number of staff_ (1+2+3 +4) 683				
Location	Region Addis Ababa City Addis Ababa			
Facility type	1st tier (Primary Hos <input type="checkbox"/> al)		2 nd tier (Gen <input type="checkbox"/> Hospital)	
	3rd tier (Specialized/referral <input type="checkbox"/> ching)		Pr <input type="checkbox"/> facility	
Date of Assessment	07/05/2022			
Date of Previous	N/A			

Facility Level: Approach (3)

- Each of the 21 hospitals have an IPC-trained focal person leading IPC improvement activities.
- All 21 hospitals have a functional IPC committees.
- Repeat assessment on four randomly selected hospitals showed improvement in IPCAF score, within a seven-month effort.

Table. IPCAF monitoring assessment results of 4 MTaPS supported hospitals

Hospital name	IPCAF score (out of 800) before technical support from <u>MTaPS</u> (baseline assessment done in December 2019)	Classification of IPC practice	IPCAF score (out of 800) after technical support from <u>MTaPS</u> (evaluation assessment done in August 2020)	Classification of IPC practice
<u>AaBET</u> Hospital	183.5	Inadequate	382.5	Basic
Hawassa University Hospital	452.5	Intermediate	565	Intermediate
<u>Felege</u> <u>Hiwot</u> Hospital	385	Basic	527.5	Intermediate
Debre <u>Berhan</u> Comprehensive Specialized Hospital	410	Intermediate	500	Intermediate

Facility Level: Results

- Following the collaborative intervention between MTaPS and MOH, 147 HCFs were able to produce and use ABHR during the active phase of the COVID-19 pandemic in 2020.
- Hospitals taught each other on the best IPC experiences by using an online platform.



Lessons Learned

- Strengthening the national IPC coordination body is critical to strengthen the IPC program in low- and middle-income countries, like Ethiopia.
- Establishing an effective national IPC-TWVG significantly helps MOH improve its IPC program through continuous support from IPC experts.
- Revising the IPC guideline has helped HCFs apply updated IPC guidance and made a crucial contribution to the country's COVID-19 prevention and response.
- Training HCWs on IPC and revitalizing IPCCs has helped HCFs effectively own and lead IPC improvement activities.



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MINISTRY OF HEALTH-ETHIOPIA

**NATIONAL INFECTION PREVENTION AND CONTROL
(IPC) REFERENCE MANUAL FOR HEALTH CARE
SERVICE PROVIDERS AND MANAGERS**

**VOLUME 2: ADVANCED AND SPECIAL SETTING INFECTION
PREVENTION AND CONTROL (IPC)**

**THIRD EDITION
OCTOBER 2019**



Lessons Learned

- Using the TOT approach to provide IPC compliance training was significant in rapidly cascading training to reach health professionals working in all parts of the country, especially during COVID-19.
- Using an innovative approach to produce ABHR at the health-facility level addressed the critical shortage of IPC supplies during the acute phase of the COVID-19 response.
- Use of standardized IPC self-assessment tools, such as WHO's IPCAF tool, is essential to identifying core IPC gaps, guide IPC improvement activities by developing targeted IPC action plans, and objectively monitoring IPC improvement by using a continuous quality improvement approach.
- The support on ABHR significantly contributed to the country's effort to respond to COVID-19 by relieving the critical shortage in IPC supplies (ABHR) at HCFs and in the community.



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MINISTRY OF HEALTH - ETHIOPIA



**HEALTH FACILITY ALCOHOL BASED HAND
RUB PREPARATION STANDARD
OPERATING PROCEDURE**

October 2019,
Addis Ababa, Ethiopia

Conclusions

- Collaborative effort enhanced IPC improvement practice
- Strengthening the governance of the IPC program at the national level helped spearhead IPC improvement.
- Using standardized IPC tools (WHO's IPCAF and IPCAT-2) guided application of an evidence-based practice to improve IPC.
- The revised IPC reference manual was one of the significant measures that the collaborative effort yielded.
- Training health professionals on the revised IPC guidelines helped hospitals implement the updated IPC recommendations.



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