DEDER GENERAL HOSPITAL

IPC Monitoring Report

Report period: 4th Quarter of 2017EFY

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June 2017E.C

Deder, Oromia

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1. Introduction

Infection Prevention and Control (IPC) ensures a safe and clean healthcare environment, minimizing the spread of healthcare-associated infections (HAIs). Deder General Hospital undertook a structured IPC monitoring assessment to identify areas of compliance and non-compliance, using a national standardized checklist.

2. Objective

To assess IPC compliance across systems, practices, and infrastructure; identify deficiencies; and develop actionable steps for improvement aligned with national and international IPC guidelines.

3. Methodology

3.1. Study Design

A facility-based, cross-sectional assessment was conducted using structured observation and checklist-guided interviews to evaluate Infection Prevention and Control (IPC) compliance across Deder General Hospital.

3.2. Assessment Tools

The assessment employed the **National IPC Monitoring Toolkit**, aligned with WHO and CDC standards, covering seven core components:

1. **IPC System/Capacity Assessment Tool** – to evaluate organizational readiness, policy availability, and training status.
2. **Facility IPC Practice Observation Checklist** – to observe compliance with core IPC behaviors.
3. **Hand Hygiene Compliance Audit Tool** – to measure adherence to WHO's "Five Moments for Hand Hygiene."

4. **PPE Use Monitoring Form** – to assess correct and consistent usage of gloves, masks, gowns, and eye protection.
5. **Biomedical Waste Segregation Monitoring Form** – to check segregation, labeling, and disposal of various waste streams.
6. **Transmission-Based Precautions & Isolation Monitoring Tool** – to evaluate implementation of contact, droplet, and airborne precautions.
7. **Environmental Cleaning Monitoring Tool** – to assess routine cleaning practices, agent use, and equipment maintenance.

3.3. Study Area

The assessment was carried out in **all service delivery areas** of Deder General Hospital, including outpatient departments (OPD), inpatient wards (pediatrics, medical, gynecology), emergency, maternity, minor procedure rooms, and waste handling units.

3.4. Data Collection Process

- **Date of Assessment:** ***June 25, 2017.C***
- **Observer:** Mr. Abrahim Tahir, IPC Focal Person
- **Method:** Direct observation of clinical practices, infrastructure review, and staff interviews using pre-designed forms.

3.5. Scoring Criteria

Each item was assessed and scored as:

- ✅ **Yes** – Compliant or present
- ❌ **No** – Non-compliant or absent
- **Not Applicable (NA)** – When an item did not apply to the area or service assessed

Results were quantified into total "Yes" and "No" counts per component and summarized as percentages to evaluate overall compliance.

3.6. Quality Assurance

- Data collection tools were standardized and pre-tested in similar health facility settings.
- The observer was trained on objective scoring and adherence to ethical assessment protocols.
- Findings were validated through cross-checking with available hospital records and direct staff verification where necessary.

3.7. Data Analysis

Data were compiled manually and summarized into:

- Component-wise performance
- Total compliance rates (Yes/No counts)
- Percentages for comparative performance analysis

  These were used to identify high- and low-performing areas and guide the recommendation and action plan.

4. RESULTS

The IPC monitoring assessment conducted in **June 2017 E.C**. at Deder General Hospital revealed an overall compliance rate of **88% (figure 1)**, demonstrating strong adherence to national IPC standards. The highest performing areas were *hand hygiene* and *environmental cleaning*, both achieving **100% compliance**. This reflects excellent awareness and implementation of core IPC practices among healthcare staff in these domains **(Table 1).**

Meanwhile, *transmission-based precautions* and *IPC system/capacity* scored **87.5%** and **91.7%** respectively, indicating generally good performance but with minor gaps such as incomplete implementation of isolation protocols and documentation. *IPC practice observation* scored **81.8%**, suggesting room for improvement in day-to-day clinical adherence to protocols. Areas such as *PPE usage* and *waste segregation* each recorded **75% compliance**, pointing to operational inconsistencies and a need for refresher training and supply reinforcement **(Table 1).**

In total, 57 items were assessed, of which 50 were marked compliant and 7 non-compliant. The assessment emphasized the need for continuous improvement, especially in equipment availability, safe patient transport during isolation, and waste management practices. The results serve as a foundational input for targeted corrective actions and the hospital's quality improvement roadmap **(Table 1).**

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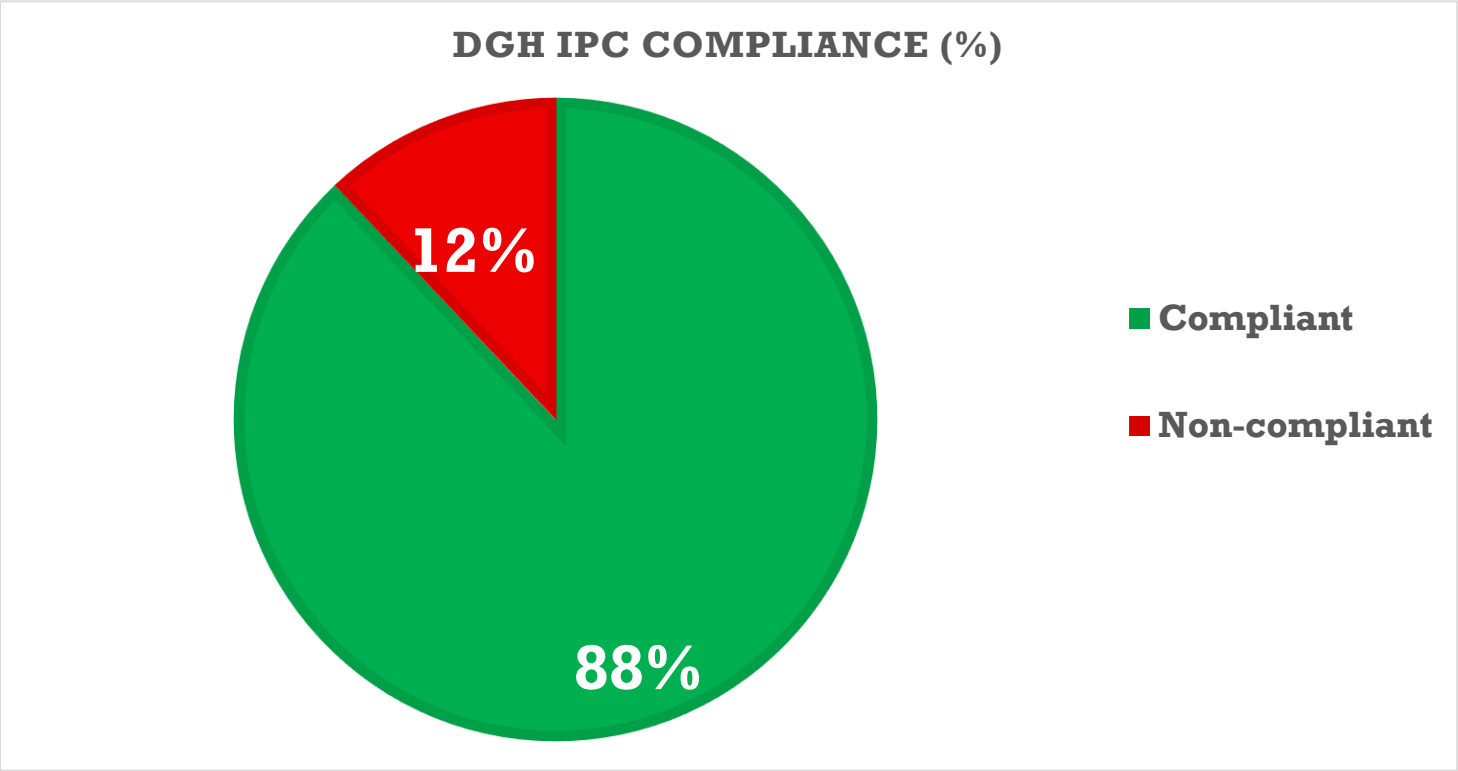

Figure 1: *Deder General Hospital Overall IPC compliance rate, June 2017E.C*

Table 1*: Deder General Hospital Overall IPC compliance rate, June 2017E.C*

Component	**Items**	✅ **Yes**	❌ **No**	**Yes**
1. IPC System/Capacity	12	11	1	91.7
2. IPC Practice Observation	11	9	2	81.8
3. Hand Hygiene Audit	5	5	0	100
4. PPE Use Monitoring	4	3	1	75
5. Waste Segregation	4	3	1	75
6. Transmission-Based Precautions	16	14	2	87.5
7. Environmental Cleaning	5	5	0	100
Total	**57**	**50**	**7**	**88**

5. Discussion

The overall IPC compliance rate of **88%** observed at Deder General Hospital in Q4 2017 E.C. aligns favorably with national and global standards, indicating a relatively strong IPC performance. When compared with similar studies conducted in Ethiopia and other low-resource settings, this result is commendable. For instance, a study by ***Debere et al. (2018)*** in Addis Ababa public health facilities reported varied compliance rates, with some facilities scoring below 70% in key areas such as waste management and PPE use, mainly due to lack of supplies and training gaps. In contrast, Deder Hospital's performance suggests better implementation and oversight, especially in critical areas such as hand hygiene and environmental cleaning, where it achieved **100% compliance** a benchmark few facilities in similar contexts reach.

Moreover, the **91.7% compliance in IPC system and capacity** at Deder reflects organizational readiness and effective leadership commitment, consistent with findings from the WHO's 2022 Global Report on Infection Prevention and Control, which emphasized that strong IPC governance is closely linked with higher facility-level compliance. However, despite this high rating, some gaps remain in practical implementation, as reflected in the **81.8% IPC practice observation score**. This discrepancy between system-level readiness and day-to-day practice echoes global findings by ***Pittet et al. (2022),*** who noted that institutional support must be matched by continuous behavior reinforcement to maintain high performance.

Challenges in PPE use (**75% compliance**) and waste segregation (**75% compliance**) mirror patterns reported by ***Chughtai et al. (2020)*** and ***Debere et al. (2018),*** where inconsistent PPE availability and poor waste bin maintenance were commonly cited as barriers. These findings suggest that while protocols are in place, logistical and supply issues still affect consistent practice. Additionally, the **87.5% score in transmission-based precautions** highlights a need to further sensitize staff on patient movement control and airborne precautions, supporting literature by ***Otter et al. (2020)*** and ***Weber et al. (2019),*** which emphasize environmental and staff behavior as major vectors in healthcare-associated infection transmission. Therefore, while Deder General Hospital shows encouraging compliance, sustaining and scaling these efforts will require focused training, timely procurement, and ongoing monitoring.

6. Recommendations

1. Provide **goggles/face shields** in EOPD procedure areas.
2. Repair and **functionalize biomedical waste bins**, particularly in OPD.
3. Ensure **availability of chemical waste bins** in all clinical units.
4. Improve **patient transport control** during droplet precautions.
5. Conduct regular **refresher training** on PPE use and waste management.
6. Maintain **routine environmental cleaning supervision**.

7. Action Plan

Gap Identified	Root Cause	Action to Be Taken	Responsible Body	Timeline
Lack of face shields in EOPD	Supply gap	Procure and distribute shields	Procurement Office	Within 2 weeks
Waste bin issues in OPD	Equipment damage	Repair or replace bins	Admin & Maintenance	Within 1 week
No chemical waste bins	Lack of supply	Procure and distribute bins	Procurement Office	Within 2 weeks
Droplet precaution patients transported freely	Staff not sensitized	Include restriction protocols in IPC training	IPC Committee	Week 2
Inconsistent injection safety in OPD	New staff untrained	Provide targeted training	Nursing Head & IPC Focal	Week 1

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