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Assessment of licensing status, compliance with the basic licensing requirements, and MNH care readiness of the private inpatient healthcare facilities of Bangladesh

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Executive Summary

Background: Bangladesh has a pluralistic health system where health care services are provided by multiple stakeholders, including government, non-government, and private organizations. Since the 1980s private sector has become the predominant source of healthcare services including maternal and newborn health (MNH) care. Private sector health facilities account for four-fifth of ~3500 hospitals which need to be brought under equitable, affordable, and standardized service delivery systems. However, quality of care in maternal and neonatal health is a concern in general and the condition in private sector facilities is grossly unexplored. The Medical Practice and Private Clinics and Laboratories (Regulation) Ordinance of 1982 provides the legal framework for the operation of private health care facilities in Bangladesh. The ordinance provides overarching guidance on seven criteria that every private facility should fulfill to receive a license. However, both the 1982 ordinance for private clinics and the latest draft guideline prepared by DGHS to support the implementation of the ordinance lack a set of objectively measurable standards and criteria that could be considered as the reference to assess the performance of private sector facilities to provide quality care.

There is hardly any information on compliance practices of private health facilities on regulatory and quality assurance mechanisms. There is also a scarcity of systematic reviews of private health facilities' readiness to provide quality maternal and newborn care services. The study in broad explores the licensing practices and the service readiness of private health facilities to assess the maternal and newborn health care services of Bangladesh.

Objectives: The specific objectives of the study were: i) to explore the licensing practice of and compliance with the licensing requirements/conditions by private health facilities, ii) to document the barriers faced by private health facilities and the GOB to implement the current regulations and conditions on licensing; ii) to explore the service readiness of the private health facilities to provide MNH services.

Methods: We followed a cross-sectional, mixed-method study design and deployed both quantitative and qualitative data collection techniques to achieve the three study objectives. To examine the licensing status a listing of all for-profit private facilities in 29 Upazila municipalities and 12 city corporations was conducted. Compliance with the licensing criteria and readiness to provide MNH services were assessed using a structured heath facility assessment questionnaire in a subset of 349 private clinics with inpatient MNH care services, selected by stratified random sampling by size (bed numbers) of the facilities. The licensing process and the private facility owners' practices, experiences, and challenges to comply with licensing requirements were explored through a document review and further checked with qualitative interviews.

Results: We identified a total of 1119 private clinics with inpatient facilities from the census listing of all private facilities in the selected geographic locations. Eighty-six percent of the private facilities had obtained a license from the Directorate of Hospitals and Clinics, while 10% applied for a license but started operating before license was approved and 4% never

applied for a license . Overall, only 6% had a valid license on the day of the facility visit by the surveyors. Two-fifths (59%) of the facilities had applied for a new (11%) or a renewed (48%) license. A vast majority (80%) of the facilities with an expired license applied for license renewal after 12 months of the expiration of the license validity period. About one-third of the private facility managers were not aware of any of the reasons that can cause the cancellation of the license. There was no difference in the submission of license applications between the large (>20 beds) and small facilities (≤ 20 beds), 61% vs. 63%, respectively. In compliance status, private facilities located in municipal areas were more compliant to submit licensing applications than the facilities in city corporations, 76% vs. 54%, respectively.

The Medical Practice and Private Clinics and Laboratories (Regulation) Ordinance includes seven mandatory conditions that every private clinic has to fulfill to obtain the license to operate. The conditions are proper accommodation with a hygienic environment, adequate space per patient, air-conditioned OT, availability of essential equipment and medicine, fulltime registered medical staff, and availability of specialists. Of the total 349 facilities assessed for compliance with licensing criteria, almost all (98%) had air-conditioned OT and at least one specialist available, while 87% had the required standard floor area ratio per patient. However, only 41% of the facilities had the recommended staffing ratio. Although over half (52%) of the facilities had all the essential equipment, only 7% had the essential medicine. Infection prevention measures were very poor, 3% of the facilities had maintained all 9 standard precautions for infection prevention. A majority (75%) of the facilities did not have a narcotic license, while one-third of the facilities did not have an environmental clearance certificate. Compliance with licensing conditions was better among facilities in municipalities than those in CCs. However, bigger facilities with 21+ beds had better compliance compared with smaller facilities with 20 or fewer beds. The only observable exceptions were in terms of the full-time staff availability – larger facilities had lower availability.

Qualitative interviews explored several barriers and challenges in the licensing application process. Although many private clinic owners reported that the online licensing process has eased the previous complex and lengthy application process, it contains certain difficulties. Delay in obtaining clearances from multiple departments was cited as one of the major challenges in the application process. The government officials highlighted the one-year validity of the license as another challenge for managing a large number of applications. Lack of functional linkage between departments leads to frequent visits to government offices and limits the private clinic owner's compliance with timely licensing application submission requirements. Although 63% of private clinics had a computer with the internet, they relied on the internet café for submitting a licensing application which resulted in the poor follow-up of the application. Revised license fees have become a burden for private clinic owners. The high licensing fees often demotivate particularly small private clinics for compliance to license renewal.

Almost all (98%) of the private health facilities provided caesarean delivery service. While 95% of the facilities offered normal delivery service, less than half (47%) of these facilities had a separate labour room. Antenatal care services were available only in two out of five

private health facilities. Only 1% of the facilities had all 6 items of readiness to provide ANC service and none of the facilities had all 13 tracer readiness items to provide NVD service. Readiness to provide MNH care was better in the larger facilities (>20 beds) compared to the smaller facilities (\leq 20 beds). Most of the private facilities provided 50 or fewer NVD services and 100 or above caesarean section services in the last six months (67% and 56%, respectively). Among the larger facilities (>20 beds), 29% provided 100 or more NVD services in the last six months compared to that 10% of smaller facilities (\leq 20 beds). About 43% of facilities located in municipality areas provided 50 or more NVD services per month compared to only 28% of facilities in CCs.

Recommendations: Based on the findings of the assessment, several systems-level changes are recommended which are as follows:

- Development of detailed rules and procedures to support the implementation of the 1982 private facility ordinance is essential.
- Increasing license validity from 1 year to 2 years would address the challenges the health system and facility owners face in the yearly renewal.
- Deployment of adequate human resources at the central level and capacity building of sub-national level health officers on the private facility licensing procedure is needed to ensure timely monitoring and minimize the compliance gaps. The utilization of the electronic license portal should be extended to test alternative built-in modalities of monitoring and compliance tracking.
- A coordination link between multiple government departments involved in issuing approvals/certifications required for the licensing application is important to ease the process for private facility owners.
- Knowledge and competency gaps among the private facility owners are high, and the private clinic owners' association could be considered an important leveraging platform to increase coordination between private health facilities and government regulatory authority.

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1. Introduction

1.1 Background

Bangladesh has a pluralistic health system where healthcare services are provided by multiple stakeholders, including government, non-government, and private organizations (1). Since the 1980s, the for-profit private sector has become the predominant source of healthcare services, including maternal and newborn healthcare (MNH), in Bangladesh(2–5). There are more than 3,500 hospitals in the country, and private sector facilities account for four-fifths of the health facilities (6).

However, pluralism in health systems involves the risk of poor health governance and regulation (7). In Bangladesh, the suboptimal quality of maternal and neonatal health services is a major concern. There is substantial evidence of the poor quality of care in public hospitals, including poor physical environments, shortages of medicine, equipment, supplies, and providers, scarcity of water and electricity, incompetent providers, poor patient-provider communication, long waiting times and short consultation times, informal payments, poor follow-up services, and irregularities in the management system (8–10). However, the service readiness and the quality of care provided by for-profit private sector facilities remain largely unexplored. The 2014 and 2017 Bangladesh health facility surveys provided information on service availability and readiness of large private health facilities (\geq 20 beds). But the survey sample did not include small private health facilities that represent a notable share of the healthcare market (11).

The private sector appears to be operating in an unregulated fashion. Formal accountability mechanisms for private sector facilities are nearly non-existent in practice (12). As a result, the perceived "better "services availed from these facilities are often of suboptimal quality with high out-of-pocket expenditure(13). The rapid growth of the private sector needs to be brought under a regulatory and accountability mechanism to ensure equitable, affordable, and standardized service delivery(12)(14). The current sector program, i.e., the 4th Health Nutrition and Population Sector Program (HNPSP), strongly emphasizes improving the quality of care as the second pillar of achieving universal health coverage. With the growing contribution of the for-profit private sector to healthcare utilization, the program realizes the critical importance of ensuring appropriate-quality MNH services in the private sector and plans to establish hospital accreditation systems in the future (15).

The Medical Practice and Private Clinics and Laboratories (Regulation) Ordinance of 1982 provides the legal framework for the operation of private health care facilities in Bangladesh(16). According to the ordinance, each private clinic requires a license from the director general (DG) of the Ministry of Health and Family Welfare (MOH&FW) through the divisional director's office to run its operations and services. The ordinance provides overarching guidance on seven criteria that every private facility should fulfil to receive a license. The ordinance also suggests that upon inspection of a private clinic by the DG or

authorized personnel, any deviation from the ordinance and non-compliance with licensing criteria can result in the private clinic's operation is stopped. The process for obtaining and renewing a license for private facilities provides a leveraging gateway for improving public-private sector coordination and establishing a quality assurance mechanism for health care in the private sector via the government's stewardship.

1.2 Study Objectives

This study was conducted to explore the licensing practices, structural readiness, and service utilization of private health facilities in Bangladesh. This research is the first step toward addressing the existing evidence gap in the implementation of and compliance with regulatory and quality assurance mechanisms in private sector health care delivery. The findings from the readiness assessment identified critical areas for intervention to ensure the appropriate quality of the maternal, newborn, and child health services provided at private health facilities. The objectives of the study included the following:

- To assess licensing practices of private health facilities and compliance with licensing requirements.
- To explore and document the constraints of the public health system to enforce licensing regulations.
- To document implementation-related barriers faced by the private facilities in license application and its renewal process.
- To examine the readiness of private health facilities to provide Maternal Newborn and Child Health (MNCH) services.

2 Methods

2.1 Study design

We followed a cross-sectional, mixed-method study design and deployed both quantitative and qualitative data collection techniques to achieve the study objectives. The assessment of the licensing status of private health facilities was explored via a census listing of all for-profit private facilities in selected geographic areas. Compliance with the licensing criteria and readiness to provide MNH services were assessed using a structured heath facility assessment in selected facilities providing inpatient MNH care. The processes of license provision and renewal and the institutional capacity of the public health system to enforce the licensing ordinances were explored through a document review and qualitative data collection techniques. The details of the methods are provided in the following sections. Table 1presents the objectives, relevant indicators/areas explored, and data collection methods.

Objectives	Indicators/assessment domains	Data collection methods
Objective 1: Licensing practice and compliance with the licensing conditions	 % of private facilities with a valid license % of private facilities submitting a licensing application The time lag between license expiry and renewal application submission 	 Listing and assessment of all private facilities' licensing status
	 % of facilities that complied with the seven licensing conditions % of facilities with supportive documents for obtaining licensing 	• Structured health facility assessment on compliance with licensing conditions
Objective 2: Constraints of the public health system to enforce licensing regulations, and Objective 3: Implementation- related barriers faced by the	The historical trajectory of private facility licensing and regulation in Bangladesh	 Document review Key informant interviews with national-level program managers and policymakers as well as government directors and program managers at the central and district levels
private facilities in license application and its renewal process	Processes of licensing provision and inspections/audits/compliance monitoring visits by government systems Institutional strength and capacity of the government systems to enforce the licensing practices Limitations of current regulations	 In-depth interviews with private health facility managers/owners and national- and district-level program managers

 Table 1: Objectives, indicators/assessment domains, and relevant data collection methods

	Implementation barriers regarding current regulations Supervision and monitoring strategies	
<i>Objective 3:</i> <i>Readiness and</i> <i>utilization of</i>	Structural readiness (service-specific*) Training of health care providers	Health facility assessment Interviews with health care providers
MNCH services provided at private health facilities	Utilization of normal vaginal delivery and caesarean section services in the last six months	Review of facility records

2.2 Study area

We conducted the study in all 12 (old and new) city corporations and 29 sub-districts of the 10 selected districts. We randomly selected five old (out of 19 from the post-liberation period) and five new districts. The old districts included Jessore, Dinajpur, Tangail, Noakhali, and Patuakhali, and the new districts were Brahmanbaria, Kishoreganj, Nawabganj, Meherpur, and Moulvibazar. We included all wards of the city corporation areas in the assessment, except for the two city corporations in Dhaka. In addition, we selected two administrative zones from each of the Dhaka North and South City Corporations (CC) for the assessment. The city corporation zones were selected considering their higher availability of private health facilities with inpatient services. In each of the selected districts, we selected the Sadar Municipality and two other sub-district municipalities that had at least four private health facilities with inpatient services, as confirmed by key informants. In the Kishoreganj district, the Sadar Municipality and one other sub-district were selected, as no other sub-districts had at least four private health facilities. We selected these geographic clusters based on their high concentration of private facilities with inpatient services (Figure 1). One sub-district municipality other than the district Sadar Municipality had at least four private health facilities in 10districts. We conducted the study in two sub-districts instead of one district. In the study, we covered 41 geographic clusters in total.

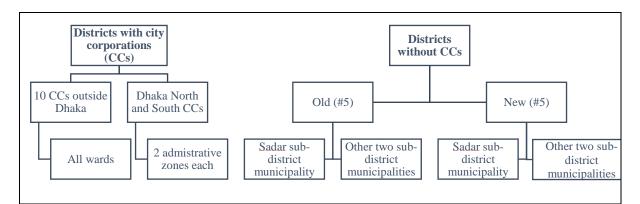


Figure 1: Selection of geographic clusters (administrative zones/wards) according to their higher concentrations of private facilities

2.3 Data collection methods

Desk review and stakeholder consultations:

We conducted a detailed desk review of previously published and unpublished literature to understand and document the historical trajectory of the introduction and implementation of private facility licensing and regulation in Bangladesh. We reviewed the 1982 private clinic licensing ordinance, the licensing criteria, and the definitions of the conditions. Some of the licensing conditions were not clarified in detail in the 1982 ordinance, so we explored the relevant definitions used in the Bangladesh Health Facility Assessment and other guidance documents, including the essential drug list and draft guidelines for private facility establishment and regulation, to construct an operational definition of those criteria. We conducted three consultations with stakeholders, including program managers and directors of relevant departments in the Directorate General of Health Services (DGHS) and Program Management and Monitoring Unit of the Ministry of Health and Family Welfare (MOH&FW), development partners, and representatives from the private clinic owners' association. The consultations aimed to review and finalize the data collection methods and identify the key informants and information sources for both the quantitative and qualitative data collection methods adopted for the study. We also consulted with the stakeholders on the study area selection and sampling strategies to ensure appropriate representation of the for-profit private health facilities in the assessment.

Listing and licensing status assessment of private facilities:

Using a three-step process, we compiled a list of all private health facilities with inpatient services in the 29 Upazilas and 12 city corporations in the selected geographic clusters (Figure 2). In step one, a team of trained data collectors with a paramedical degree prepared an initial list of the facilities by collecting the names and addresses of facilities from the DGHS and civil surgeon (CS) office records and consulting with the local private clinic owners' association. In step two, the data collectors updated the list upon discussions with local key informants, including health care providers, pharmacy/drug shop owners, and medical representatives. In step three, the data collectors conducted physical verification of each ward of the selected city corporations and municipalities and prepared an exhaustive list of all private health facilities with available inpatient services. A field supervisor visited all selected geographic clusters and randomly visited several wards to determine whether any private facilities were missed during the listing. After the final list of existing private facilities was prepared, the data collectors assessed whether the listed facilities had received and/or renewed a license from the DGHS by the day of the visit. A facility listing and licensing status tool was prepared to list the private facilities located in the selected geographic areas and included information on each facility's name, address, year of establishment, availability of inpatient services, availability of inpatient MNH care, number of existing beds, number of beds mentioned in the first and latest license renewals, current licensing status, current license validity, and latest license's expiry and renewal date. Health facility managers were requested to show the latest license and documentation of the latest license or renewal application submission. Listing of private facilities and assessment of licensing status was conducted between April and May 2019.

Step 1

 List from DGHS/CS office
 List of registered health facilities (BPCDOA)
 website

Step 2

Cross-checking and updating the list from key informants, e.g., health care providers, pharmacy owner/drug sellers, and medical reps Step 3 Physical verification by the assessors

Figure 2: Steps of listing private facilities for the census

Health facility assessment on compliance with licensing conditions and MNH care readiness:

The health facility assessment was conducted in a selected subset of private facilities. The assessment's focus was on collecting information on the seven specified conditions mentioned in the ordinance for obtaining the license as well as the MNCH service readiness of the facilities. A structured *health facility assessment* tool was developed, adapting the Service Preparedness Assessment (SPA) tools used by the Bangladesh Health Facility Assessment (BHFS). The facility assessment tool included separate sections for collecting information on each facility's physical infrastructure, available Human Resources (HR), Standard Operative Procedure (SOPs) and guidelines, logistics, job aids, drugs and supplies required for each of the specific services, and utilization of different services within the six months preceding the survey. A section of the tool explored the availability of necessary certifications and approvals required to obtain a license. Questions relevant to the seven criteria for obtaining a license according to the 1982 ordinance were included, following the World Health Organization (WHO's) service availability and readiness assessment tool and the nationally adapted emergency obstetric and neonatal care (EmONC) needs assessment tool if not already included in the SPA tool. Either the health facility owner or the manager of the respective service area was interviewed to collect the information; this was followed by direct observations and document reviews where indicated. The key areas explored in the assessment included the following:

- Physical environment and infrastructure of the facility in both the inpatient and outpatient units, observation of the operation theater, diagnostic services and laboratories, pharmacies, and other relevant service delivery points
- Availability and readiness of specific services, including antenatal care (ANC), delivery, and newborn care services
- Assigned health care providers on full-time service registered as either on-site or oncall
- Quality assurance and client feedback mechanism
- Human resources and their extent of involvement in the daily clinical care and supervision of patients
- Infection prevention and hygiene practices including disinfection and infection control
- Storage/supply and functionality of essential medicines, logistics, and equipment

- Inspections, audits, or compliance monitoring visits
- Health care managers' knowledge and perceptions of licensing

Interviews with the healthcare providers: At the selected private facilities, we interviewed the healthcare providers involved in MNCH care provision who were present on the day of the interviewer's/data collector's visit. The information collected during the structured interviews related to their professional qualifications, roles and responsibilities, in-service training, and workplace supervision.

<u>Record review</u>: We reviewed relevant register books and facilities' own Management Information System (MIS) systems to collect the number of maternal care service utilization within the six months preceding the assessment. For all facilities, we also explored the gaps in the regulatory actions of the ordinance and reviewed every record concerning visits, visitor logbooks, visitors' observations, and penalties placed on hospital authorities.

The facility assessment was performed concurrently by five teams, each consisting of one physician and two paramedics. The assessment of each facility generally took a day to complete. In the case of incomplete assessment, the team revisited the facility to complete the assessment on the following working day. Before starting the facility assessment in a municipality or city corporation, the team organized meetings with the Civil Surgeon (CS) to obtain their consent. The assessment was conducted between August and December 2019.

<u>Key informant interviews (KIIs)</u>: A team of qualitative interviewers conducted in-depth interviews with four Civil Surgeons (CSs) (from four districts), two divisional directors (from two divisions), 18 private facility owners, and two representatives of the private facility owners' association. At the national/central level, Director, Hospitals and Clinics from DGHS, two relevant program managers, one representative from the National Accreditation Board, and one representative (president) from the Bangladesh Private Clinic Diagnostic Owners Association (BPCDOA) were interviewed.

We adopted separate strategies to collect qualitative data through the KIIs from the supply side (national and sub-national government managers) and demand-side (private health facility owners). We covered a range of key informants from the DGHS at the central and local levels and clinic owners from both city corporation and municipality areas. We purposely selected the key informants from private clinics and hospitals. We checked the licensing status of the facilities, such as facilities with a valid license, facilities with an expired license, and facilities never licensed during selecting facilities for KII with the managers. Additionally, we selected the facilities by bed number to cover small and medium private health facilities as well as large We also interviewed hospitals. representative members of the private clinic owners' association at both the regional and central levels. We used separate guidelines for the government officials and clinic owners as study objectives and suitability. We asked them about licensing practices the and compliance, adequacy and the current limitations of licensing

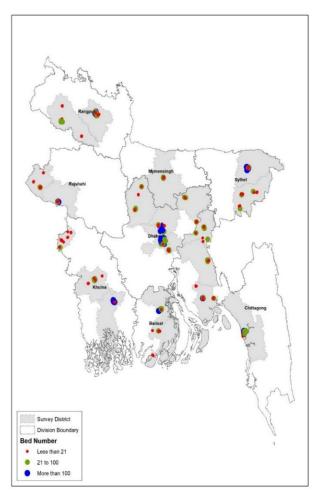


Figure 3: Locations of private facilities by bed number

regulations, the implementation-related barriers of the current regulations and their related monitoring and supervision, gaps in the coordination between the government and private sector in implementing private health facility licensing, and regulatory issues.

2.4 Sampling and sample size

We prepared a census list of all private facilities in the selected geographic clusters of city corporations and municipalities (*Figure 3*) and assessed the facilities' licensing status. This list also provided a sampling frame for selecting a subset of facilities for detailed exploration of their compliance with licensing conditions and readiness to provide MNH care.

A total of 1,189 private facilities were listed in the selected geographic clusters, and the data collectors were allowed to access 1,149 of them for information collection. Inpatient care was provided in 1,119 of the facilities where the licensing status assessment was conducted. Among them, 1,035 provided inpatient MNH care. With the stratified random sampling by bed number, a subsample of 363 facilities were approached to assess their MNH care readiness and licensing condition compliance. Of these, 12 were shut down in the six months between the licensing

status assessment (conducted from April to May 2019) and subsample facility assessment (conducted from August 2019 to January 2020). Upon receiving consent from the private facility managers, the assessment was completed in 349 facilities (*Table 2*). Among the facilities assessed, 72% had \leq 20 beds and two-thirds (64%) were located in city corporations (*Table 3*). We also conducted in-depth qualitative interviews with 31 national- and district-level key informants (*Table 2*).

Data collection methods	Sample size
Private facility listing and licensing status assessment using a structured checklist	All private facilities in selected geographic clusters
Structured assessment of compliance with licensing conditions	349
Health facility assessment of MNH care readiness	349
Health care provider interview	349
KII	31

Table 3: Distribution of available	and sampled facilit	ies by bed c	ategory and	location
	Facilities a	Samples selected		
Facility type	Ν	N %		%
Bed category				
≤20 beds	839	75.1	251	71.9
>21 beds	278	24.9	98	28.1
Location				
City Corporation	709	63.6	222	63.6
Municipality	408	36.4	127	36.4
Total	1117	100.0	349	100

2.5 Data analysis

Quantitative:

We conducted a descriptive analysis to identify the proportion of private facilities with a license that complied with the seven licensing conditions. The health facilities 'readiness for different service-specific indicators was presented in proportions. In a few cases, we generated estimates for composite indicators of readiness, similar to those of the BHFS. We also presented a stratified analysis by facility location and type.

Qualitative:

All qualitative interviews were audio-recorded after obtaining the participants' consent and then transcribed in the local language. The research team reviewed the transcripts to develop a code list for the topics related to the research questions. The "framework approach" was applied to analyze the qualitative data, which provided us with a systematic structure to manage, analyze, and identify themes and sub-themes to adequately interpret the findings.

3. Results

3.1 Historical trajectory of the regulatory framework

The Medical Practice and Private Clinics and Laboratories (Regulation) Ordinance was introduced in 1982, and some minor amendments were made in 1984. However, there was no progress in the development of "rules" or guidelines to support the ordinance's implementation between 1982 and 2016. In 2008, a circular specifying the license fee was issued by the DGHS. Currently, the hospital service management operational plan of the DGHS coordinates this function. An attempt to update the ordinance was initiated in 2016, and a draft was prepared for review by the hospital service management operation plan. The proposed amendment is still under review (personal communication). However, in Bangladesh, health care services in the private sector remain mostly unregulated. In 2017, an online portal was created for private health facilities to submit applications for new licenses or license renewals. A circular was also issued on the amendment of license fees on September 4, 2018.

The online application portal was launched in 2018 and is currently in operation (Figure 4).

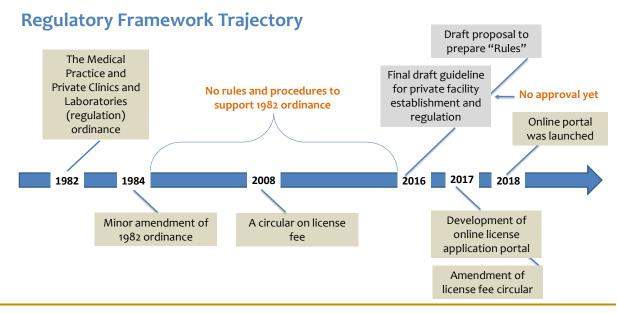


Figure 4: The trajectory of the regulatory framework

Before the licensing application, an applicant has to collect all required documents for their facility and clearance certificates from five different government offices. The necessary certificates area Taxpayer's Identification Number (TIN)/income tax certificate, value-added tax (VAT) registration number, and environment, fire, and narcotic clearance certificates. Once an application is submitted through the online application portal with all necessary documents uploaded, the licensing/renewal process starts. An application submission receipt is issued as proof upon successful submission of the application via the portal. The hospital management services of the DGHS central office then issue an official request letter to the divisional director's (DD) office for private health facilities located in city corporations (CCs) or to the CS for facilities in municipalities outside CCs for verification of the respective applicant's

facilities. The DD and CS form a team involving managers and medical officers from local offices to conduct a physical visit to the applicant's clinic. The team verifies and assesses the facility following the licensing conditions mentioned in the 1982 ordinance and submits their reports to the DGHS office. The hospital management services of the DGHS review the reports, decide whether the applicant's facility is eligible for a license, and provide license approval once all licensing conditions and relevant documentations are satisfied.

3.2 Licensing status

Key findings

- Only 6% of the 1117 private facilities with inpatient services had a valid license on the day of the surveyors' visit to the facilities. Three-fifths of the facilities had applied for a license or renewal of the license. Over one-third of the facilities had never applied for a license or the renewal of the expired license.
- Among those who applied for license renewal, 80% applied at least 12 months after the expiration of the license validity period.
- There was no difference in the likelihood of applying for or renewing the license between the larger and smaller facilities.
- Licensing compliance was better among facilities in municipalities than those in City Corporations.

We assessed the licensing status of private health facilities with inpatient services. We listed all facilities in 41 geographic clusters, including 12 CCs and 29 sub-district headquarters from 10 districts. From the census list, we identified a total of 1,119 private facilities providing inpatient care. Overall, 86% of the private facilities had obtained a license since their establishment, while 10% applied for license but were operating without receiving the approval and 4% had not even applied for a license. Out of the 1,117 private health facilities that provided us with information on their licensing status, only 6% had a valid license on the day of assessment. Among those who had a license, 92% (886/956) were operating with an expired license. Among all facilities, about 59% of the facilities had applied for either a new license (11%) or the renewal of their expired license (48%), while 35% had not applied for either a

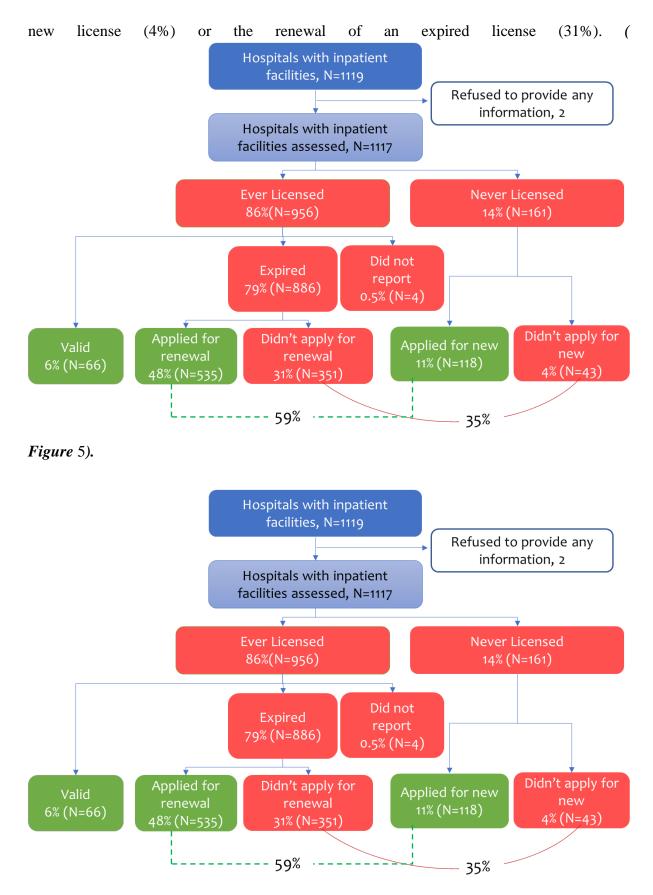


Figure 5: Licensing status of private health facilities

Among 1051 facilities that did not have a valid license on the visit day, 653 (62%) applied for a license. Bed wise distribution showed that 150 (61%) out of 247 large facilities (>20 beds) and 503 (63%) out of 804 small facilities (\leq 20 beds) that did not have a valid license had applied for a new license or license renewal (*Figure 6*). However, all private facilities with 100+ beds had submitted a licensing application (data not shown in the figure). Private facilities located in municipal areas were more compliant with the submission of licensing applications than those located in CCs (76% vs. 54%, respectively).

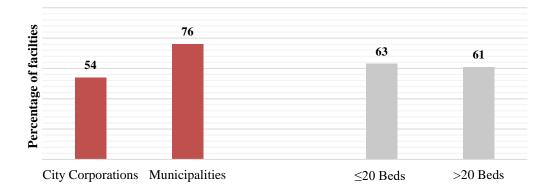


Figure 6: Submission of application for license renewal or a new license by the facilities who did not have a valid license on the days visit (N=1,051) by facility size and location

Sixty percent of the facilities with an expired license (535 out of 886 facilities) had submitted the application for license renewal at the time of the survey. But the majority of these facilities (80%) submitted their application at least a year after the expiry of the validation period of their license. The time lag between the license expiry date and renewal application submission differed by facility size and location (*Figure 7*). Eighty-two percent of the small facilities (less or equal to 20 beds) submitted the renewal application 12 months after the license expiry date compared to 73% of the large facilities (>20beds). In municipalities, 71% of facilities applied 12 months after the expiry date compared to 89% in municipality areas. Out of the 653 private facilities that applied for either a new license or a license renewal, almost half (46%) submitted the application of the online application portal and orders issued by the DGHS on private facility licensing between June 2017 and July 2018 (data not shown in the figure).



Figure 7: Time lag of 12 months or over between license expiry and renewal application submission by facility size and location (N=535)

3.3 Compliance with licensing conditions

Key findings

- Compliance with three licensing conditions i.e., adequate floor space per bed, available air-conditioned operating theater (OT), and at least one specialist was good. Among all facilities, 87% had 80 square feet of floor space per bed, and 98% had an air-conditioned OT and at least one specialist available.
- Conditions regarding infection prevention, essential equipment, and essential medicine were significantly poor. None of the facilities had the 36 types of equipment recommended by the 1982 private clinic licensing ordinance.
- The availability of full-time doctors at the recommended bed doctor-to-bed ratio was low (26%).
- Compliance with licensing conditions was better among facilities in municipalities than those in CCs. However, bigger facilities with 21+ beds had better compliance compared with smaller facilities with 20 or fewer beds. The only observable exceptions were in terms of the full-time staff availability – bigger facilities had lower availability.

The Medical Practice and Private Clinics and Laboratories (Regulation) Ordinance includes seven mandatory conditions that every private clinic has to fulfill to obtain the license to operate. One of the components of the ordinance's regulatory functions is to provide licenses to private facilities and renew the licenses through proper monitoring of the required conditions. According to the newly amended ordinance proposed by the Ministry of Health for licensing, the DGHS is the highest authority for license provision and can also issue administrative action against a private facility if it fails to comply with these seven conditions (*Box 1*).

Box 1: Conditions to obtain license

 Proper accommodation with a hygienic environment for patients
 80 square feet of space for each patient
 Air-conditioned OT
 Essential equipment present

5. Adequate supply of life-saving and essential medicine6. Full-time registered medical

practitioners, nurses, and other staff

7. Specialists for operation, treatment,

and supervision of patients

Licensing conditions

Condition 1: Proper accommodation with a hygienic environment: This objective definition of Condition 1isnot well clarified in the 1982 private clinic licensing ordinance. In practice, the condition is primarily subjectively assessed by the CS/medical officer/DGHS representative who conducts the inspection. We used the BHFS's standard precaution for infection prevention and control as a proxy indicator of a hygienic environment. We assessed the compliance with the nine standard infection prevention control precautions: availability of sterilization equipment, safe final sharps disposal, sharps storage, disinfectant, syringes and needles, soap

and running water or alcohol, latex gloves, medical masks, and standard precaution guidelines. We ignored the "proper accommodation" part of Condition 1, as this is also included in Condition 2. Among all 349 private facilities assessed, only 3% had taken all nine standard precautions, while about half had fulfilled at least seven of the precautions. Facilities with 21+ beds had better compliance (62%) with at least seven infection prevention and control standards than those with 20 or fewer beds (47%). Similarly, facilities in municipalities were more compliant with at least seven standard precautions (61%) compared to those in CCs (46%) (Table C-1). Having standard precaution guidelines was the precaution least complied with(8%), followed by availability of appropriate storage for sharps waste (38%) and availability of medical masks (48%).

Table C-1: Standard precautions for infection prevention and control												
Background characteristics	Sterilization equipment 1	Safe final disposal of sharps waste ²	Storage of sharps waste ³	Disinfectant ⁴	Syringes and needles ⁵	Soap and running water or alcohol-based hand disinfectant	Latex gloves ⁶	Medical masks	Guidelines for std precautions ⁷	At least 7 std precautions	All 9 standard precautions	Number of facilities
Bed category												
20 or fewer	82.5	96.4	35.9	82.9	72.1	88.5	86.1	43.4	5.6	47.0	2.0	251
21 or more	86.7	96.9	45.9	89.8	80.6	92.9	95.9	61.2	15.3	62.2	7.1	98
Location												
CC	85.1	96.8	28.8	78.8	68.0	84.7	86.9	45.9	5.9	45.5	3.2	222
Municipality	81.1	96.1	55.9	95.3	85.8	98.4	92.1	52.8	12.6	61.4	3.9	127
Overall	83.2	96.4	37.9	84.2	73.7	89.2	88.3	47.6	7.8	50.3	2.8	349

Table C-1: Standard precautions for infection prevention and control

Note: The indicators presented in this table comprise the standard precautions domain for assessing general service readiness within the health facility assessment methodology proposed by the WHO and United States Agency for International Development (USAID) (WHO 2012). ¹ Facility reports that some instruments are processed in the facility and that the facility has a functioning electric dry heat sterilizer, a functioning electric autoclave, or a non-electric autoclave with a functioning heat source available somewhere in the facility.

² The process of sharps waste disposal is incineration, and the facility had a functioning incinerator with fuel on the day of survey or disposes of sharps waste via open burning in a protected area, dumping without burning in a protected area, or removal offsite with storage in a protected area prior to the removal.

³ Sharps containers were observed in the general outpatient service area.

⁴ Chlorin-based or other country-specific disinfectants used for environmental disinfection are available in the general outpatient area.

⁵ Single-use standard disposable syringes with needles or auto-disable syringes with needles are available in the general outpatient area.

⁶Non-latex equivalent gloves are acceptable.

⁷ Any guidelines for infection control in health facilities are available in the general outpatient area.

Condition 2: 80square feet of space for each patient: The second licensing condition overlaps with the "proper accommodation" requirement of the first. However, the definition of proper accommodation is also subjectively mentioned in the ordinance. In contrast, the second condition specifies 80 square feet of space for each patient. Nonetheless, clarification on whether to count the total floor space of the hospital or only that of the inpatient ward and single or shared cabins was not provided. According to the current practice of the DGHS, we considered inpatient ward and cabin space and calculated the space-to-bed ratio. Among all facilities, 87% had 80 square feet of floor area per bed. Compliance with Condition 2 was better among smaller facilities with 20 or fewer beds (89%) compared to bigger facilities with 21+ beds (80%) on appropriately maintaining the ratio of floor space per bed (**Table C-2**).

Condition 3: Availability of air-conditioned OT: The ordinance stipulates that all private healthcare facilities with inpatient service should have an OT with temperature regulations facility (air-conditioned). Nearly all facilities had an air-conditioned OT, with no difference based on bed number or location (Table C-2).

Background characteristics	80 sq. ft. of floor space per bed ¹	Air-conditioned OT	At least 1 specialist available ²	Number of facilities
Bed category				
20 or fewer	89	98	98	251
21 or more	80	96	99	98
Location				
CC	86	98	98	222
Municipality	88	98	98	127
Overall	87	98	98	349

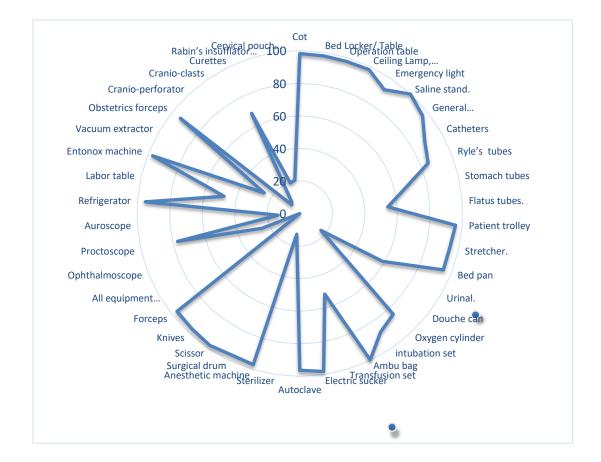
Table C-2: Availability of adequate space per patient, air-conditioned OT, and specialist

¹ The combined space of the indoor and cabin areas was considered to calculate the space per bed.

² Registered specialists regardless of discipline or full-time/part-time/on-call status.

Condition 4: Essential equipment present: The 1982 private clinic ordinance lists 36 pieces of equipment that every private facility should maintain on-site. However, some equipment in the list is of limited use in current times, as better or more integrated equipment are now available. None of the private health facilities had all 36 pieces of equipment on the day of the assessment (

Figure 8). Some pieces of critical equipment, including the labor table, transfusion set, vacuum extractor, and ophthalmoscope, were missing, especially in smaller facilities. The BHFS lists six basic pieces of equipment, including an adult scale, child scale, thermometer, stethoscope, Blood Pressure (BP) apparatus, and light source, that should be available in every health facility. About half of the facilities had all six of these (Table G-1, MNH readiness section).



Condition 5: Adequate supply of life-saving and essential medicines: There is a lack of clarity in the definition of the essential medicines list. The 1982 private clinic ordinance neither specifies the medicines nor refers to any approved list that should be followed by the DGHS representatives conducting the licensing inspections. The current practice is a subjective checking of drugs by physicians from the DGHS or CS offices based on their knowledge of 'essential' medicines. During the inspection, the availability of some common drugs used in surgery and anesthesia is often checked. Occasionally, the essential service package (ESP) medicine list is considered. However, the ESP medicine list comprises over 100 drugs, and a different set of drugs is recommended for different tiers of public health facilities depending

on the services offered. We used the 14 BHFS-recommended essential medicines as a reference to assess this licensing condition (*Table C-3*). Only 7% of the facilities had all 14 essential drugs on the BHFS list. Larger facilities had higher availability of essential medicines compared to smaller facilities. In facilities with 20 or fewer beds, 6% had all 14 medicines compared to 13% of facilities with 21+ beds. The availability of medicines such as cotrimoxazole, amoxicillin, atorvastatin, and salbutamol inhalers was lower in most of the small facilities (<=20 beds), whereas the availability of higher generation antibiotics such as ceftriaxone and ciprofloxacin was higher. Facilities in municipalities (12%) had better availability of all 14 medicines than those located in CCs (6%).

Table C-5. Availability of essential medicines							
	Bed ca	ategory	Lo	ocation			
Essential medicines	20 or fewer	21 or more	СС	Municipality	Overall		
Amitriptyline tablets/capsules ¹	35.4	73.5	42.3	52.8	44.1		
Amoxicillin tablets/capsules ²	33.9	70.4	40.1	51.2	41.8		
Atenolol tablets/capsules ³	49.8	80.6	51.4	70.9	56.8		
Captopril tablets/capsules ⁴	28.3	49.0	32.0	37.8	32.4		
Ceftriaxone injectable ⁵	93.2	96.9	95.0	92.9	94.1		
Ciprofloxacin tablets/capsules ⁶	79.3	90.9	80.6	85.8	81.8		
Cotrimoxazole oral suspension ⁷	10.8	29.6	13.1	21.3	14.6		
Diazepam tablets/capsules ⁸	72.5	89.8	75.7	80.3	76.4		
Diclofenac tablets/capsules9	74.5	90.9	77.5	81.9	78.2		
Glibenclamide tablets/capsules ¹⁰	22.3	59.2	32.0	33.9	30.9		
Omeprazole/cimetidine tablets/capsules ¹¹	88.4	94.9	88.3	93.7	89.9		
Paracetamol oral suspension ¹²	51.0	82.7	55.0	68.5	58.5		
Salbutamol inhaler ¹³	45.0	78.5	54.5	54.3	52.5		
Simvastatin/atorvastatin tablets/ capsules ¹⁴	26.3	51.0	26.6	44.9	32.3		
All 14 types of medicine	6.0	13.0	5.9	11.8	7.0		
Number of facilities	251	98	222	127	349		

Table C-3: Availability of essential medicines

Note: The indicators presented in this table comprise the essential medicines domain for assessing general service readiness within the health facility assessment methodology proposed by the WHO and USAID (WHO 2012).

¹ For the management of depression in adults.

² First-line antibiotics for adults.

³ Beta-blocker for management of angina/hypertension.

⁴Vasodilator for management of hypertension.

⁵ Second-line injectable antibiotic.

- ⁶ Second-line oral antibiotic.
- ⁷Oral antibiotic for children.

⁸ Muscle relaxant for management of anxiety/ seizures.

9Oral analgesic.

¹⁰ For management of type 2 diabetes.

¹¹ Proton-pump inhibitors for the treatment of peptic ulcer disease, dyspepsia, and gastro-esophageal reflux disease.

¹² Fever reductor and analgesic for children.

¹³ For the management and relief of bronchospasm in conditions such as asthma and chronic obstructive pulmonary disease.

¹⁴ For the control of elevated cholesterol.

Condition 6: Availability of full-time registered medical practitioners, nurses, and other staff: The licensing condition stipulates that all private facilities should have at least three doctors, six nurses, and three support staff members for every 10 beds. Only general

practitioners are considered medical practitioners/doctors in this condition's definition to reflect round-the-clock availability. Overall, only 18% of the facilities had all three types of staff available in the recommended ratio. In contrast to the other criteria, the availability of all three types of staff members was considerably higher in the smaller facilities with 20 or fewer beds (21%) than in the larger facilities with 21+ beds (9%). Larger facilities had a much lower number of medical officers or general practitioners available. The availability of full-time staff in the facilities located in municipalities (22%) was higher than that of the facilities in CCs (16%) (*Table C-4*).

Table C-4: Availability of full-time staff						
	Adequate number of doctors ¹	Adequate number of nurses ²	Adequate number of other staff members ³	Staff at standard ratio⁴	Number of facilities	
Bed category						
20 or fewer	30.0	67.1	71.5	21.1	251	
21 or more	12.7	45.1	49.4	8.6	98	
Location						
CC	24.3	56.0	62.8	16.3	222	
Municipality	29.8	73.1	73.9	21.7	127	
Overall	26.4	62.6	67.1	18.4	349	

¹ Three full-time doctors in facilities with 10 beds is considered standard.
²Sixnurses per 10 beds is considered standard.

³ Three support staff (cleaners) in facilities with 10 beds is considered standard.

⁴Doctors, nurses, and other staff members present at a 3:6:3 ratio per 10 beds is considered standard.

Condition 7: Specialists for operation, treatment, and supervision of patients: This condition is generic and does not specify the type of specialist required or whether they need to be available full-time at the facility. In accordance with the current practice of the DGHS, in the analysis, we assessed the availability of any specialist with a postgraduate degree and Bangladesh Medical and Dental Council (BMDC) registration working on either a full-time or on-call basis. Almost all facilities had at least one specialist providing services (*Table C-2*). Field notes taken by the data collectors suggested that most of the specialists were working on an on-call basis. Hospital managers often reported that a specialist worked for several health facilities in the area on an on-call basis. Most of the specialists were available on a pay-perconsultancy basis unless they owned the private facility.

3.4 The mandatory supporting documents for obtaining a license

Key findings

- On the day of the visit, in all 349 private health facilities assessed, the availability of the supporting documents was as follows: TIN/income tax certificate (86%), VAT registration (58%), environmental clearance certificate (32%), and narcotic license (25%).
- The availability of the VAT registration and environmental clearance certificate was higher in the facilities in municipalities compared to those in CCs.
- Only 4% of the private facility managers knew that changing the location/name/address of a private facility may result in license suspension or cancellation.
- About one-third of the private facility managers did not have the knowledge of any of the reasons that can cause license cancellation.

Since July 2018, to obtain a new license or renew an expired license, all private health facilities are required to submit four mandatory clearances and certificates through the online licensing application portal, i.e., the TIN/income tax certificate, VAT registration number, environmental clearance certificate, and narcotic license. Overall, more than half of the facilities had a VAT registration number (58%); of these, more facilities in municipalities (74%) than those in CCs (51%) had the number. Among all private facilities,86% had the TIN/income tax certificate, comprising 89% of the facilities located in municipalities and 84% of those in CCs. The narcotic license was not available in most (75%) of the facilities. Similarly, nearly one in three facilities did not have an environmental clearance certificate (32%) (*Table D-1*). Although the availability of the income tax certificate was similar among small (<=20 beds) and large (20+ beds) facilities, a substantially smaller proportion of small facilities had a VAT registration number (55%), environmental clearance certificate (26%), and narcotic license (19%).

Background characteristics	TIN/income tax	VAT registration number	Environmental clearance certificate	Narcotic license	Number of facilities	
Bed category						
20 or fewer	84.5	55.4	27.5	18.7	251	
21 or more	88.8	68.4	44.9	46.9	98	
Location						
CC	83.8	50.5	27.9	23.4	222	
Municipality	89.0	74.0	40.2	32.3	127	
Overall	85.5	58.3	31.6	25.0	349	

 Table D-1: Percentage of all private health facilities with available supporting documents for licensing

We explored the knowledge of private health facility managers and owners on the mandatory certifications for obtaining a license. Most facility managers knew that a TIN certificate (87%) and environmental clearance certificate (86%) are required for obtaining a license (*Table D*-

2). However, only about a quarter of the managers knew that a VAT registration number and narcotic license are mandatory as well. Knowledge regarding the mandatory certifications for licensing was better among the managers from large facilities (21+ beds) and those located in municipality areas.

Background characteristics	TIN/income tax	VAT registration number	Environmental clearance certificate	Narcotic license	Number of facilities
Bed category					
20 or fewer	86.1	69.8	84.8	74.5	251
21 or more	87.8	79.6	86.8	82.7	98
Location					
CC	82.9	66.7	82.0	72.1	222
Municipality	92.9	82.7	91.3	85.0	127
Overall	86.6	72.6	85.5	76.9	349

Table D-2: Percentage of private health facility managers/owners with knowledge of themandatory certifications for licensing by bed distribution

We also explored the managers' knowledge of the reasons for license cancellation or suspension. Only a quarter (26%) of the managers knew that violation of the BMDC act is a reason for license cancellation (*Table D-3*). Very few reported that they knew a name and address change (3%), license transfer (3%), and failure to renew the license on time (4%) are reasons a license can be canceled or suspended. About one-third of the respondents did not know any of the reasons for license cancellation.

Table D-3: Percentage of private health facility managers knowing reasons for cancellation/suspension /revocation of a license

Background characteristics	Violation of BMDC act	Name and address change	License transfer	Failure to renew license	Don't know	Number of facilities
Bed category						
20 and below	24.7	4.0	3.2	3.6	34.7	251
21 and above	30.7	1.0	5.1	5.1	35.7	98
Location						
CC	27.0	4.5	5.4	5.0	34.2	222
Municipality	25.2	0.8	0.8	2.4	36.2	127
Overall	26.1	3.1	3.4	3.6	35.2	349

3.5 Implementation-related barriers to the current regulations on licensing private facilities and related monitoring and supervision

Key findings

System-level challenges

- The 2016 draft guidelines for licensing of private hospitals and clinics specify the duration for which the license is valid, the deadline for the license application, and the financial penalty for delayed submission. However, the draft guidelines have yet to receive approval from the DGHS and MOHFW.
- The one-year license validity is too short and makes managing a large number of applications a challenge
- The DGHS lacks adequate human resources and technical competence regarding human resources at the sub-national level to inspect all private facilities before issuing license approvals every year.
- The Lack of a functional linkage between multiple government departments leads to frequent visits to government offices and limits private clinic owners' compliance with licensing application submission requirements.
- Inspections are made only in facilities that submit licensing applications.

Challenges faced by facility owners

- Private clinic owners lack knowledge of and technical competence regarding online licensing applications. They rely on internet cafés for submitting the applications which results in poor application follow-up.
- The shortage of skilled health care providers such as nurses in the health workforce makes it difficult for private clinics to meet licensing requirements.
- *Revised license fees have become a burden for private clinic owners. The high fees often demotivate small private clinics in particular to comply with license renewal.*

Information on the implementation-related barriers of the current regulations on private facilities licensing and related monitoring and supervision was gathered through qualitative methods. The findings are presented in the following sub-sections.

3.5.1 The licensing processes

The previous manual licensing process

According to the Medical Practice and Private Clinics and Laboratories (Regulation) Ordinance of 1982, private health facilities/hospitals and diagnostic centers have separate licensing provisions. The DGHS is the authorized body that issues a license to a private clinic when the conditions specified in the ordinance are fulfilled. Previously, the licensing approval process followed a manual system of physical inspection and verification of private facilities by the DGHS and civil surgeon's office. The process for submitting the application, providing necessary clarifications and documents, and obtaining the license issued by the DGHS required several in-person visits to Dhaka. A clinic owner expressed his experience with the manual licensing application submission,

We had to face a lot of difficulties when things were done manually. We had to compile all the required papers in two separate files. For collecting one individual paper we needed to visit the office (DGHS at Dhaka) repeatedly. We had to move back and forth to different offices. Sometimes, we lost some files while running from one department to another. (ID-13)

Online application for private facility registration

In 2018, the DGHS launched an online registration system for the licensing process. All private health facilities must apply for the license and its renewal through the licensing application portal. The license validity period is one year, after which the facilities must submit the license renewal application. The DGHS has formed inspection teams for physical verification of the applicant facilities at the division and district levels. The civil surgeon leads the physical inspection team at the district level while the divisional director (health) leads this committee at the division level. After receiving a licensing application submitted by a private facility through the online portal, the DGHS central office sends an online request letter to the respective divisional director's or civil surgeon's office for a physical inspection of the facility. Upon receiving a satisfactory report from the inspection team, the DGHS issues the license. A clinic owner shared his experience with the DGHS's visit:

The inspection team comes from DG Health just before issuing approval. When they inspect the facility, they take a look at our papers and documents. They observe whether our health facility is clean or not and whether the proper waste management plan is in place. Overall, they take a look at everything with a holistic approach. (ID-5)

The burden on the owners and managers of private health facilities in terms of the licensing application submission has been greatly reduced with the introduction of the online application portal. The new application system has contributed positively to the licensing processes which include applying for, sorting, archiving and retrieving the license. In the current online portal, an application submission is considered successful after all required documents have been uploaded and the fees have been fully paid. An automated acknowledgment letter from the DGHS is generated immediately after successful submission. The portal notifies applicants of pending requirements and submission errors and also eliminates the requirement of repeatedly submitting the same documents for renewal applications. A private facility owner stated the advantages of the online system over the previous paper-based in-person system:

When I applied through the online system, I was amazed at how easily the system works. The main advantage of the online system is that we can complete the application in a short time. It takes 30 minutes to an hour. There is no fear of losing any documents. Application updates can also be viewed through the online portal. This system is very simple. (ID-3) Another clinic owner reported,

In the online system, we need to upload the documents only and these documents will be kept by [the] DGHS. For license renewal, we will not have to do anything extra. We will just need to provide some updates on the previously submitted documents including dates, number of employees, their educational background, joining dates and staff turnover. (ID-8)

A DGHS official reported the advantages of the new online licensing system from their perspective,

When the manual system existed, we could not figure out the total number of new private clinics and their license status. Also, they were out of our monitoring reach. That's why we were not able to know whether any private clinic [was] providing service[s] with a license that [had] expired the validity period. (ID-5)

Several knowledge gaps of the private clinic owners regarding the online application portal were also identified. Although most private clinics (60%) have IT infrastructure, they lack technical expertise in online applications, the application formats and the approval status tracking process. Most clinic owners seek help from an internet shop technician for submitting the online application. The owners are unaware of the approval status tracking process and often do not respond to queries from the DGHS on their submitted applications. Before the launch of the online licensing application portal, no formal orientation was provided to the private clinic owners on technical skills regarding the online application system. This has emerged as a significant hurdle in implementing the system. A clinic manager stated that the procedure is difficult:

The licensing procedure is hard, it became difficult with the arrival of the online system. I provided all documents to one of my familiar internet shops for application. He applied and informed me that my application was submitted. However, he did not respond to the queries of [the] DGHS which was noticed a few days back. Now, this is a problem for me to understand, was this a query or any update for my license? (ID-16)

3.5.2 Legislative and system-level barriers

Administrative challenge: the requirement of multiple clearances to obtain a license

The cumbersome process of obtaining multiple license-related documents was mentioned as one of the key challenges at the system level. The licensing process includes clearances from several autonomous departments including the Bangladesh Atomic Energy Commission, Directorate General of Drug Administration, Environment, Narcotics, National Board of Revenue (NBR) for VAT and Taxes, Bangladesh Fire Service and Civil Defence, Waste Management and Ministry of Labour and Employment departments. These departments are not functionally linked to each other for the licensing process which results in significant delays in obtaining all of these approvals considering the short license validity period of one year. For example, the Narcotics Department will only approve a license applicant based on the submission of valid VAT and tax exemption documents from the NBR. This lengthy and cumbersome process of obtaining multiple approvals often demotivates private clinic owners from timely submitting the application. A clinic owner described how the clearance-seeking process has become a barrier to applying:

We need nine clearances including a trade license [and], VAT-tax, fire, atomic energy, waste management, environment, and Ministry of Labour [clearances]. When you visit a department, you will see that they have many more files pending. You can't predict when your time will come. Thus, we move across different government offices including DG Health for months. The lengthy waiting period on receiving the clearance is a point where I lose my interest in license application and even for renewal. (ID-7)

Another clinic owner said the following about the barrier in arranging documents for the application,

We were afraid of arranging all the required documents. I was not aware of all the processes of the new application system. I had to depend on the officials of each department for preparing and submitting relevant documents. The clinic owners who are not acquainted with the system are afraid of the process of obtaining narcotics, environment, fire, and trade certificates. They thought it would take a long time to arrange all these documents and require a huge amount of money. So, no need to go for a license. (ID-1)

A participant from the DGHS described the licensing application process,

[The] DGHS only accepts an application that has all the clearances from other mandatory departments. We do not issue a license unless they meet the basic prerequisites. The basic requirement for issuing a license is clearance from the Environment [Department]. For this, they need clearance from the Fire Department. If they do not have this clearance, we do not issue the license. And if they do not have a trade license, they will not be able to continue the business. With this, if they have a good waste management system in place, they can apply for clearance from [the] Environment Department. (ID-5)

Challenges in obtaining prerequisite clearances

There is no one-stop place to obtain all of the necessary documents for licensing. The qualitative interviews revealed structural factors that affect compliance with the prerequisite clearances. Several compliance issues, such as ensuring the provision of fire safety structures and waste management systems, delay the acquisition of clearances from these departments. The clinic owners reported that the fire safety provision was the most difficult element to arrange and required a high establishment cost. A clinic manager described the difficulties of negotiating compliance issues:

According to government policy, if we want to build a hospital, we have to design a fire safety plan. If we want to build a good fire safety plan, it will take a large amount of money. (ID-9)

Several facility owners raised concerns that the Environment Department's requirements were difficult to comply with. In addition, many of these health facilities, especially small facilities,

operate their business in rented buildings, making it challenging to build an effluent treatment plant (ETP) for waste management. In most cases, the building owners do not allow the clinics to make any structural changes to their buildings. A clinic owner explained the complexity of implementing an ETP,

If any team from the Environment [Department] comes, they first ask why [we don't] have ETP, but they do not fine [us]. They also do not give us the environment clearance unless we meet their requirements. Moreover, we cannot commit to them as the building owner does not allow us to install the ETP. As a result, the environmental clearance remains pending. (ID 10)

The short license validity period

The current validity period of the private license is one year. Although the digitalized system has made the licensing application process faster, complying with the mandatory clearances from various departments still makes the process lengthy. As a result, a few months after obtaining the license, clinic owners find it has already expired. Both clinic owners and DGHS officials from the central and regional levels mentioned the challenges of the one-year license validity period. The qualitative interviews with clinic owners also found that there is no specific processing time for license approval after the licensing application is submitted. A DGHS official explained that national and sub-national level delays in the inspection visit and processing often result in a long waiting time between receiving the application and issuing the license. An official said,

The license validity period is only one year. It is another problem. With very little manpower, it is extremely difficult to issue a new license every year with a physical inspection. Within this, we have to work for the renewal of licenses also. In this short period, it's getting unmanageable for us to clear all the license applications and renewals. (ID-8)

A clinic owner expressed his grievances about the license validation period,

We would have benefited if the license had been valid for three years. [We are] getting it for a year now. When we apply for a license, the process of obtaining all clearances takes at least six months to complete the application. Then, I am getting the license after two months of application submission. Then I have only four months of validity left. After four months, the renewal process has to start again. So, you have to continuously run after the license throughout the year. This is a big problem for us. (ID-7)

For the license renewal application, clearance documents have to be submitted from all of the aforementioned departments. According to the license policy, owners have to apply one month before the expiration date of their current license. The clinic owners demonstrated their frustration that they have to apply for renewal one month before the validity expires since collecting all of the clearances takes so long. In the meantime, the license expires. A clinic owner remarked,

When we want to renew the license, we need to get all those approvals like..... but we have limited time to collect these documents. During this process, it is already delayed for renewal. In my opinion, as they have already seen all these documents before, then

only the changes that have been made in the last year should be reviewed during renewal to avoid delay. (ID-9)

Lack of HR in the DGHS for monitoring and inspection visits

A monitoring system for the private facility licensing process is in place at both the central (DGHS) and sub-national levels. At the Upazila level, there is a committee headed by the Upazila Health and Family Planning Officer for monitoring the private health facilities within each Upazila. At the district level, the committee is under the leadership of the civil surgeon (CS), while for divisional cities, the committee is headed by the divisional director (DD). However, the system lacks adequate competent and skilled HR personnel at all levels to conduct regular monitoring to identify new private facilities in the area and timely inspect all (old and newly established) private facilities for licensing compliance. Nonetheless, the quality of inspection was also a notable concern. The CS's office said,

One of the purposes of the inspection team is to conduct physical verification at the facilities to check the documents and facility readiness. But this requires adequate human resources. Since [the] DGHS does not have sufficient manpower to visit, we (CS office) at the regional level do it on behalf of DG Health but the full authority goes to DG Health we just do the inspection. (ID-11)

A clinic owner said,

An inspection team comes from DG Health, they take a look at our papers and documents. They observe whether our health facility is clean or not and whether the proper waste management plan is in place or not. (ID-7)

Very few clinic owners reported that the local inspection team visits the clinics regularly. The inspection team comes from different departments (e.g, the Fire, Narcotics and Environmental Departments and the CS and DGHS offices). Some owners reported that the visits take place once a year. Usually, the DGHS inspection team conducts the visit just before the approval is issued.

In general, inspections are conducted only at facilities that have applied for a new license or a renewal. Thus, facilities that operate without a license or have an expired license could remain unnoticed. Bottom-up listing of all private facilities across geographic areas and inspection of their licensing status is not possible due to the lack of manpower. Additionally, in most cases, the monitoring visits are complaint-based. During visits, if officials find anything that does not align with the existing policy, they notify the clinic and provide sufficient time to fill in those gaps. A DGHS official stated the inspections carried out are incident-based:

Still, monitoring of licensing is incident-based. When someone places a complaint against any clinic then we go for an inspection with the law enforcement team. (ID-5)

Restriction of the DGHS's authority to enforce licensing compliance

The current ordinance does not empower the DGHS to take any disciplinary measures for licensing non-compliance. If an irregular or fraudulent case occurs, DGHS officials have no authority to cancel a facility's license; rather, they must undertake an inspection visit and ask the facility to improve. The officials cannot take legal action against the clinic owners under the current policy. A DGHS official mentioned this limitation of authority:

We do not have the authority to cancel a license. The ordinance specifies DG Health as the license-providing authority. However, regarding the cancelation of a license, it is said that the government is the authority. It is not clarified who in the government (ministry or DG Health) has the authority [to cancel the license]. DG Health does not have the magistracy power. Since we do not have the magistracy power, we do not get help from any [law enforcement] force. (ID-04)

Lack of functionality and coordination of the Private Clinic Owners' Association

According to the clinic owners, there is limited communication between the DGHS and the Private Clinic Owners' Association of Bangladesh. This coordination gap limits the opportunities to utilize the association for disseminating new information and guidance from the DGHS to clinic owners. The association also lacks a platform to express concerns and challenges regarding licensing process. A member of the association said,

[The] clinic owners' association has limited opportunity to meet with policymakers. As a representative of the owner's association, we had a meeting with [the] CS at the district level. His responsibility is to share our demands and challenges regarding licensing with policymakers. But how do we know if our concerns were shared with the licensing authority? There is no visible change in the licensing process. We doubt that our feedback was shared with the authority. (ID-6)

Representatives from the association said that many private facilities do not have a license and, thus, cannot be members of the association. The association cannot reach out to these clinics. Clinic owners expressed their dissatisfaction with the association's functionality and role. They opined that it does not have a substantial role in any changes, appeals, or decisions regarding the licensing and compliance processes. One clinic owner said,

There is no platform where we can share our concerns and grievances; nobody listens to us. (ID-9)

3.5.3 Challenges from private clinic owners' perspectives:

Lack of familiarity with the online application system:

Some clinic owners faced difficulties with properly performing the licensing application process. Although all the instructions for application are written in Bengali on the online application portal, the applicants often cannot complete it properly. Due to a lack of computer skills, the clinic owners often faced technical difficulties when submitting their applications.

Several owners mentioned that they needed to learn how to use the online system before applying for the license. One clinic owner said,

We got scared when the online system was introduced. I could not understand what to do. Then I talked to IT personnel about it, and then he did it. It took time, but now it is easy. (ID-1)

A lack of initiative from the licensing authority was evident regarding the arrangement of formal training on technical know-how and improving awareness for private clinic owners before introducing the online portal. Some private clinic owners believed that the DGHS often fails to give the private sector sufficient importance in terms of making the licensing and regulatory processes user-friendly. One owner said,

I think we (the private sector) provide 60% of all the services. But the government does not monitor, control, or provide support for the 60% of services that we provide. (ID-8)

Shortage of skilled healthcare providers

According to the 1982 ordinance, a 10-bed hospital needs three full-time doctors and six nurses. The online licensing application portal restricts the registration of a physician or nurse at one private clinic only. However, in practice, doctors and nurses provide care in multiple private facilities. Hiring the required number of skilled nurses against the bed number is difficult for private health facilities, as there is a shortage of nurses in the existing health workforce in Bangladesh. In addition, the most qualified and experienced nurses are appointed to government hospitals. In response to a question on complying with HR requirements, one clinic owner said,

For a 20-bed hospital, we need 12 diploma nurses and at least six medical doctors. But arranging 12 nurses is very difficult. No clinic will be able to arrange 12 nurses because there are a lot of private clinics across the country and not enough nurses. The government itself is struggling to ensure adequate nurses in the public systems. (ID-7)

The majority of the private clinics had an HR shortage, making it difficult to comply with the licensing requirements. A clinic owner said,

In the past, a doctor could work part-time in more than one clinic, but now they cannot. If his/her name is registered in one clinic through the online system, their name cannot be included in another clinic although they are eligible for a part-time job in multiple private clinics. (ID-7)

Frequent attrition of trained health care providers is common at private facilities. Even if facility owners manage to recruit qualified health care providers, the providers quit upon receiving a higher offer elsewhere. A hospital manager said,

Most of the nurses working here have diploma degrees; we do not usually recruit nondiploma nurses unless there is a severe shortage. Since they are diploma nurses, they get better jobs and then leave us. (ID-3)

Perceived financial burden of obtaining the license

With the introduction of the online portal application system in 2018, the annual licensing fees were revised and increased to a minimum of 50,000 BDT and a maximum of 250,000 BDT. The revised fees were reported as high by most of the clinic owners, especially those who owned small clinics. Some of the DGHS officials also agreed that the revised fees were a burden to small private clinic owners. Several clinic owners thought that the previous license fees were more reasonable. One owner said,

For hospitals, the fee was 6,000 BDT; now, it has been increased to 50,000 BDT. Along with this, we have to give 15% VAT. Every year we have to deposit this amount (ID-1).

A government health manager said,

I think the license fees should have been more reasonable; these fees are being deposited into government funds, and [they are] being treated as [a] government tax. All investors here are not as big as Apollo and United Hospital. There are many middle-class investors [that] are involved in this business. Considering this, the fees could be more reasonable. (ID-11)

3.5.4 Suggestions from GOB authorities and private clinic managers on improving the licensing process

Suggestions made by central-level DGHS staff

- The increased licensing fee is a burden for small private health facilities and should be reduced to motivate facility owners to apply for licensing.
- The license validity is one year, which is very short. An extension of the validity period to 2–3 years should be considered.
- Alternative ways to address HR issues (e.g., a shortage of nurses) could be considered. For instance, other auxiliary health care providers, e.g., medical technologists, paramedics, and sub assistant community medical officers, could fill in the gap left by the nurse shortage.
- Increasing or appointing separate HR groups to implement and monitor licensing compliance should be considered. Appointing two medical officers to each division for a total of 16 officers should be sufficient to make the licensing process smoother and faster under the current circumstances. Budgetary allocation for the inspection visits is also critical. In this regard, international organizations, including the United Nations, should come forward to work with the DGHS to help solve the HR shortage.
- Authorities could consider relaxing some of the mandatory requirements, especially the approval from the Environment and Narcotic Departments, which delays the process substantially.
- A technical team could be developed to provide capacity-building training for clinic owners and managers.

- Separate policies should be included in the ordinance for specialized hospitals (ophthalmological, dental, dermatology etc.).
- Regular submission of service utilization data from private health facilities and hospitals could be linked to license renewals to ensure accountability.
- The online application portal should be a user-friendly platform.
- There is a need for smooth coordination among different ministries to make the licensing process easier. Additionally, regular communication between the DGHS and Private Clinic Owners' Association is necessary.

Suggestions made by local-level DGHS authorities

- An established, well-planned, and systematic coordination and communication system is needed to hold health facilities, healthcare providers, and clinic owners/managers accountable. To achieve this, the government monitoring system, including the magistracy power of the higher DGHS officials, needs to be strengthened.
- At the district level, the CS office needs to have a dedicated team and adequate resources (concerning the budget, logistics, etc.) for the monitoring and supervision of private health facilities.
- The license validation period could be extended by up to three years to reduce the burden on the applicants, and a decentralized process could make the approval and renewal processes faster.
- Licensing fees should be reconsidered to keep them reasonable for small health facilities.
- The DGHS could regularly organize educational training programs for private clinic owners on ethical issues and motivational training to ensure the provision of quality and equitable services.

Suggestions made by clinic owners

- The authorities should realistically consider policies and conditions and reduce the number of prerequisite approvals to two or three to make the licensing and renewal processes smoother and faster.
- The authorities could increase the licensing fee in stages to avoid placing a sudden burden on clinic owners; the fees need to be revised based on the clinic size.
- The authorities should consider increasing the license validity to at least three years to reduce the inconvenience for clinic owners.
- The authorities could form a dedicated team at both the central and local levels for application and document verifications, inspection visits, and routine monitoring visits.
- The authorities could fix the service charges based on the nature of the health facilities and services. Instead of permitting many small health facilities to work in the same area, the authorities could convert them into specialized hospitals or limit the number of private health facilities that can receive approval in a certain geographic location.
- Private clinic owners expect the BPCDOA to have a proactive and functional role. The authorities could include a BPCDOA member or representative in their inspection team to smooth the process.

3.6 Readiness of private facilities to provide MNH services

3.6.1 Availability of health services, basic amenities, essential equipment, laboratory services, and waste management

Key findings

- Only 4% of all private facilities with inpatient services offered all the basic client services, namely outpatient curative care for sick children, child growth monitoring, facility-based child vaccination, modern methods of family planning, antenatal care and normal delivery.
- Most private facilities with inpatient care provided normal delivery services (95%) and modern methods of family planning (88%). Outpatient curative care for sick children was available in 78% of the private facilities.
- Overall, 78% of all private health facilities had all six basic amenities (electricity, improved water source, visual and auditory privacy, client latrine, communication equipment and computer and internet) for client services available on the day of the survey.
- All basic amenities were almost universally available among all private health facilities (~95%), except for computers with internet connectivity (60%).
- On the day of the assessment, 52% of private health facilities had all six basic equipment required to provide quality client services available in the general outpatient service area.
- Adult stethoscopes (99%), blood pressure apparatus (99%), thermometers (95%), and adult weighing scales (89%) were the most common equipment available in private facilities.
- Overall, 43% of all the private health facilities had the readiness to conduct all five basic diagnostic tests (hemoglobin, blood glucose, urine protein, urine pregnancy test).
- The blood glucose test was the most widely available basic test (72%).
- Ceftriaxone injections (94%) and omeprazole or cimetidine tablets or capsules (90%) were the most commonly available essential medicines in private health facilities.

We adopted a range of indicators recommended by the WHO to assess the readiness of the private healthcare facilities to provide MNH services. We assessed the availability and readiness of six services (**Error! Reference source not found.**): The lowest proportion of facilities providing all services comprised those with 20 or fewer beds (1%) compared to those with 21+ beds (20%). The CC facilities (9%) were three times more likely to provide all services compared to the municipality facilities (3%).

- Outpatient curative care for sick children
- Child growth monitoring services
- Facility-based child vaccination services
- Provision of modern methods of family planning
- ANC
- Normal delivery

			Table G-2: A	vailability of ba	sic client servi	ces			
Background Characteristics	Child curative care	Child growth monitoring services	Child vaccination services	Any modern methods of family planning	Antenatal care services	Normal delivery	All basic client services with normal delivery ¹	All basic client services without normal delivery	Number of facilities
Bed category									
20 or fewer	73.3	25.9	7.6	86.9	36.3	95.3	1.2	1.2	251
21 or more	93.9	57.1	36.7	89.8	64.3	95.9	20.4	20.4	98
Location									
CC	77.9	27.9	18.9	86.9	35.1	94.6	8.6	8.6	222
Municipality	81.1	46.5	10.2	89.0	59.8	96.9	3.1	3.1	127
Overall	78.2	33.0	12.5	87.5	42.2	95.3	4.4	4.4	349

¹ Basic client services include outpatient curative care for sick children, child growth monitoring, facility-based child vaccination services, any modern methods of family planning, ANC, and normal delivery.

3.6.2 General service readiness

The survey collected information to assess the general preparedness of the health facilities. According to the WHO (2013), quality services require the following six general service readiness factors:

- Basic amenities for client services
- Basic equipment to support quality health services
- Standard precautions for infection control in service delivery areas
- Capacity for adherence to standards for quality sterilization
- Diagnostic capacity
- Availability of essential medicine

All basic amenities were available in most (~95%) of the private health facilities, except for emergency transport (32%), computers with internet connectivity (60%), and separate latrines for female clients (51%). More larger facilities with 21+ beds had all basic amenities compared to smaller facilities with 20 or fewer beds (85% and 50%, respectively). More facilities located in municipality areas had all six basic amenities compared to those located in CC areas (68% and 55%, respectively) (Error! Reference source not found.).

			· J	J	
	Bed ca	tegory	Lo	cation	
Basic amenities	20 or fewer	21 or more	СС	Municipality	Overall
National electricity	00 C	100.0	99.5	100.0	99.7
grid Regular electricity ¹	99.6 100.0	100.0 100.0	100.0	100.0	100.0
Improved water source ²	100.0	100.0	100.0	100.0	100.0
Visual and auditory privacy ³	96.8	94.9	94.6	99.2	96.2
Client latrine ⁴	90.8 98.8	100.0	98.6	100.0	99.1
Communication equipment ⁵	99.2	100.0	99.1	100.0	94.4
Computer with Internet ⁶	51.0	87.8	57.2	68.5	59.6
Emergency transport ⁷	22.3	67.3	36.5	32.3	32.2
Separate latrine for female clients	43.8	74.5	49.5	57.5	50.7
All 6 basic amenities ⁸	49.8	84.7	55.0	67.7	57.9
Number of facilities	251	98	222	127	349

Note: The indicators presented in this table comprise the basic amenities domain for assessing general service readiness within the health facility assessment methodology proposed by the WHO and USAID (WHO 2012).

¹ Facility is connected to a central power grid and has not had an interruption in power supply lasting more than two hours during normal working hours in the seven days before the survey, had a functioning generator with fuel available on the day of the survey, or has solar power back-up.

² Water is piped into the facility or onto facility grounds or is from a public tap or standpipe, a tube well or borehole, a protected dug well, a protected spring, rainwater, or bottled water and the outlet from this source is within 500 meters of the facility.

³ A private room or screened-off space available in the general outpatient service area that is a sufficient distance from other clients so that a normal conversation can be held without the clients being seen or heard by others.

⁴ The facility has a functioning flush or pour-flush toilet, a ventilated improved pit latrine, or a composting toilet.

⁵ The facility has a functioning land-line telephone, a functioning facility-owned cellular phone, or a private cellular phone that is supported by the facility.

⁶ The facility has a functioning computer with access to the internet that is not interrupted for more than two hours at a time during normal working hours or has access to the internet via a cellular phone inside the facility.

⁷ The facility has a functioning ambulance or other vehicle for emergency transport that is stationed at the facility and had fuel available on the day of the survey or has access to an ambulance or other vehicle for emergency transport that is stationed at or operates from another facility.

⁸ All six basic amenities include electricity, improved water source, visual and auditory privacy, client latrine, communication equipment and computer and internet

Among all equipment, child or infant scales were the least available (65%). All six basic pieces of equipment were available in 78% of the private health facilities located in municipalities compared to 38% of the facilities located in CCs. However, smaller facilities (<=20 beds) had substantially lower availability of all six pieces of equipment (49%) than larger facilities (61%) (Error! Reference source not found.).

		1	Table G-4: Ava	ilability of ba	sic equipme	nt		
Background characteristic s	Adul t scale	Child scale 1 or infan t scale 2	Thermomete r	Stethoscop e	Blood pressure apparatus ³	Light source 4	All 6 types of equipmen t available	Number of facilitie s
Bed								
category								
20 or fewer	87.6	62.5	94.0	98.8	98.4	74.5	49.0	251
21 or more	94.9	74.5	96.9	100.0	99.0	76.5	61.2	98
Location								
CC	84.7	54.5	92.8	98.6	97.7	66.2	37.8	222
Municipality	98.4	85.8	98.4	100.0	100.0	90.6	78.0	127
Overall	89.2	65.3	94.6	99.1	98.5	75.0	51.8	349

Note: The indicators presented in this table comprise the basic equipment domain for assessing general service readiness within the health facility assessment methodology proposed by the WHO and USAID (WHO 2012).

¹ A scale with gradation of 250 grams or a digital standing scale with gradation of 250 grams or lower where an adult can hold a child to be weighed available somewhere in the general outpatient area

weighed available somewhere in the general outpatient area ² A scale with gradation of 100 grams or a digital standing scale with gradation of 100 grams where an adult can hold an infant to be weighed available somewhere in the general outpatient area

³ A digital blood pressure machine or a manual sphygmomanometer with a stethoscope available somewhere in the general outpatient area.

⁴ A spotlight source that can be used for client examination or a functioning flashlight available somewhere in the general outpatient area.

The provision of diagnostic services, comprising laboratory tests and diagnostic imaging, is essential for clinical decision-making and enhancing the delivery of quality health care (**Error! Reference source not found.**). Five tests are considered basic tests according to the WHO Service Availability and Readiness Assessment (SARA), i.e., hemoglobin, blood glucose, urine protein, urine glucose, and urine pregnancy tests. The blood glucose test was the most widely available basic test (72%) at the facilities. Among other noteworthy tests, Tuberculosis (TB) microscopy was the least available (4%) at the private facilities. Less than half of the facilities in municipal (49%) and CC (42%) areas could conduct all five basic diagnostic tests; facilities with 20 or fewer beds (36%) had lower availability compared to those with 21+ beds (65%).

	Bed c	ategory	Lo	cation								
Laboratory tests	20 or fewer	21 or more	СС	Municipality	Overall							
Basic tests												
Hemoglobin	55.4	87.8	55.0	81.1	62.8							
Blood glucose	68.1	84.7	72.1	74.0	71.8							
Urine protein	55.8	79.6	57.2	71.7	61.4							
Urine glucose	57.4	79.6	58.6	72.4	62.6							
Urine pregnancy test	57.8	77.5	56.3	75.6	62.5							
All 5 basic tests available ¹	36.3	65.3	41.9	48.8	43.1							
Noteworthy miscellaneous tests												
TB microscopy	1.6	11.2	3.6	5.5	3.9							
Syphilis rapid diagnostic test	36.2	68.4	45.9	44.1	43.4							
General microscopy	54.6	87.8	57.7	74.8	62.3							
Liver or renal function test (ALT or creatinine)*	54.2	86.7	57.7	73.2	61.8							
Advanced level diagnostic tests												
Serum electrolytes	54.2	86.7	57.7	73.2	61.8							
Full blood count with differentials	45.4	83.7	47.7	70.9	54.3							
Blood typing and cross matching	3.6	22.4	10.4	6.3	7.3							
Syphilis serology	49.0	84.7	53.2	69.3	57.3							
Gram stain	12.0	60.2	28.8	19.7	23.1							
Stool microscopy	41.5	81.6	48.6	59.8	50.5							
CSF/body fluid counts*	35.8	76.5	38.7	62.2	45.2							
TB culture	0.0	5.1	1.4	1.6	1.0							
TB rapid diagnostic test	4.4	12.2	5.9	7.9	6.6							
Equipment for diagnostic imaging												
X-ray machine	44.3	86.8	50.9	65.4	54.2							
Ultra-sonogram	59.0	88.8	58.6	82.7	65.9							
CT scan*	2.0	40.9	14.4	10.2	10.1							
Number of facilities	251	98	222	127	349							

Table G-5: Laboratory diagnostic capacity

Note: The basic test indicators presented in this table comprise the diagnostic capacity domain for assessing general service readiness within the health facility assessment methodology proposed by the WHO and USAID (WHO 2012). 1Hemoglobin, blood glucose, urine protein, urine glucose, and urine pregnancy tests.

*CT Scan-computerized tomography scan, CS fluid- Cerebrospinal fluid (CSF), ALT- alanine aminotransferase

Uninterrupted availability of essential medicines is important for the delivery of quality health services. The study assessed the presence of 14 essential medicines in concurrence with the service readiness indicators (**Error! Reference source not found.**) proposed by the WHO and USAID (WHO 2012). Ceftriaxone injections (94%) and omeprazole or cimetidine tablets or capsules (90%) were the most widely available essential medicines in private health facilities. The least available drug in all private facilities was cotrimoxazole oral suspension (15%). Omeprazole or cimetidine (~90%) and ciprofloxacin (~81.8%) were the most commonly available drug sat facilities of all sizes. The availability of other common drugs, including paracetamol oral suspension (51% vs. 83%), diclofenac (75% vs. 91%), diazepam (73% vs.90%), and ciprofloxacin (79% vs. 91%), was lower in smaller facilities (\leq 20 beds) compared to larger facilities (\geq 21 beds), respectively. Among facilities in both CCs and municipalities, the most commonly available drugs were ceftriaxone (95% vs.93%, respectively), ciprofloxacin (81% vs.86%, respectively), and omeprazole or cimetidine (88% vs.94%,

respectively). Cotrimoxazole was the least commonly available drug among facilities in both CCs (13%) and municipalities (21%).

7	Table G-6: Av	ailability of es	sential medi	cines	
-	Bed ca	tegory	I	Location	0
Essential medicines	20 or fewer	21 or more	СС	Municipality	Overall
Amitriptyline tablets/capsules ¹	35.4	73.5	42.3	52.8	44.1
Amoxicillin tablets/capsules ²	33.9	70.4	40.1	51.2	41.8
Atenolol tablets/capsules ³	49.8	80.6	51.4	70.9	56.8
Captopril tablets/capsules ⁴	28.3	49.0	32.0	37.8	32.4
Ceftriaxone injections ⁵	93.2	96.9	95.0	92.9	94.1
Ciprofloxacin tablets/capsules ⁶	79.3	90.9	80.6	85.8	81.8
Cotrimoxazole oral suspension ⁷	10.8	29.6	13.1	21.3	14.6
Diazepam tablets/capsules ⁸	72.5	89.8	75.7	80.3	76.4
Diclofenac tablets/capsules9	74.5	90.9	77.5	81.9	78.2
Glibenclamide tablets/capsules ¹⁰	22.3	59.2	32.0	33.9	30.9
Omeprazole/Cimetidine tablets/capsules ¹¹	88.4	94.9	88.3	93.7	89.9
Paracetamol oral suspension ¹²	51.0	82.7	55.0	68.5	58.5
Salbutamol inhaler ¹³	45.0	78.5	54.5	54.3	52.5
Simvastatin/atorvastatin tablets/capsules ¹⁴	26.3	51.0	26.6	44.9	32.3
Number of facilities	251	98	222	127	349

Note: The indicators presented in this table comprise the essential medicines domain for assessing general service readiness within the health facility assessment methodology proposed by the WHO and USAID (WHO 2012).

¹ For the management of depression in adults.

² First-line antibiotics for adults.

³ Beta-blocker for management of angina/hypertension.

⁴Vasodilator for management of hypertension.

⁵ Second-line injectable antibiotic.

⁶ Second-line oral antibiotic.

⁷Oral antibiotic for children.

⁸ Muscle relaxant for management of anxiety/seizures.

9Oral analgesic.

¹⁰ For management of type 2 diabetes.

¹¹ Proton-pump inhibitor for the treatment of peptic ulcer disease, dyspepsia, and gastro-esophageal reflux disease.

¹² Fever reductor and analgesic for children.

¹³ For the management and relief of bronchospasm in conditions such as asthma and chronic obstructive pulmonary disease.

¹⁴ For the control of elevated cholesterol.

3.6.3 Service readiness for ANC

Key findings

- Only 1% of all the private health facilities offering ANC services had all six items including availability of a trained staff, any guideline for ANC, blood pressure measurement apparatus, hemoglobin and urine testing facility and iron and folic acid supplement required to provide quality ANC services available.
- The most widely available item was the blood pressure apparatus (98%).

This section describes the results of the health facility readiness assessment survey. Appendices 10 to 13 show the availability of ANC services at the health facilities, including the availability of basic amenities and equipment, diagnostic capacity, essential medicines, and infection control processes. Table A1 shows the facilities' readiness to provide quality ANC services. The WHO has identified a set of items/tracer indicators that a facility needs to offer quality ANC services [WHO 2013, SARA]. Data from the health facility readiness assessment survey could be used to construct a slightly less restrictive and Bangladesh-context-appropriate version of the WHO-recommended service readiness measures for ANC. These measures require all of the following six items/tracer indicators to be available for a health facility to be considered ready to offer quality ANC services:

- Trained staff: at least one ANC provider that has ever received in-service ANC training
- Guidelines: national or other ANC guidelines at the facility
- Equipment: Blood pressure apparatus
- Hemoglobin test
- Urine protein test
- *Medicines: iron or folic acid tablets*

Error! Reference source not found. shows the percentages of private health facilities offering ANC services as well as the facilities that had the items considered important for the provision of quality ANC services by facility size and location. Guidelines for ANC were the least (3%) available item in facilities providing ANC services. Regarding the availability of all six items, none of the facilities with 20 or fewer beds had all six, while only 3% of facilities with 21+ beds had all six. Only 3% of facilities in CCs had all six items available, while none of the facilities in municipality areas did.

Background characteristics	Guidelines on ANC ¹	Staff trained for ANC at any time ²	Blood pressure apparatus ³	Hemoglobin testing capacity	Urine protein testing capacity	Iron or folic acid tables	All six items	Ultrasonography	Number of facilities offering ANC	
Bed category										
20 or fewer	1.1	14.3	97.8	83.5	86.8	71.4	0.0	89.0	91	
21 or more	9.5	23.8	98.4	95.2	88.9	92.1	3.2	96.8	63	
Location										
CC	9.0	20.5	96.2	84.6	88.5	83.3	2.6	88.5	78	
Municipality	0.0	15.8	100.0	92.1	86.8	76.3	0.0	96.1	76	
Overall	2.8	16.7	98.2	87.2	87.6	77.9	0.7	91.4	154	

Table A-1: Readiness of health facilities to provide ANC services

Note: The guidelines for ANC and staff trained in ANC comprise the training domain and the blood pressure apparatus indicator comprises the equipment domain for assessing readiness to provide ANC services within the health facility assessment methodology proposed by the WHO and USAID (2012).

¹ National ANC guidelines or other guidelines relevant to ANC.

² Facility has at least one interviewed staff member providing ANC services who reported receiving in-service training in some aspect of ANC. The training must have involved structured sessions; this does not include individual instruction that a provider might have received during routine supervision.

³ Functioning digital blood pressure apparatus or a functioning manual sphygmomanometer and a stethoscope.

3.6.4 Service readiness for delivery and newborn care

Key findings

- In total, 43% of all the private health facilities offered all three maternal health care services, namely ANC, normal delivery services, and caesarean delivery.
- Overall, 95% of all private facilities provided normal delivery services. Facilities in municipality areas were more likely (97%) to provide normal delivery services than those in CC areas (95%).
- In total, 82% of all private health facilities offering normal delivery services had all six essential medicines required to provide quality normal delivery care services available.
- Only 6% of all the private health facilities offering normal delivery services practiced all seven signal functions for basic EmONC (BEmONC). All nine signal functions of comprehensive EmONC (CEmONC) were practiced in only 5% of these facilities. The CEmONC signal functions include all seven BEmONC signal functions along with blood transfusions and caesarean sections.
- Less than1% of all the private health facilities offering normal delivery services had all 13 readiness items available on the day of the survey.
- Among the newborn care practices, drying and wrapping newborns to keep them warm (99%) was the most common practice in facilities providing normal delivery care services.
- Among the essential medicines for newborn care, injectable ceftriaxone was the most commonly available drug (97.6%) among the facilities providing normal delivery care.

This section explores the following key issues related to the provision of quality delivery and newborn care services at private health facilities:

- Availability of maternal health services, including delivery services
- Essential components of quality provision of delivery services, such as availability of service guidelines, staff with up-to-date training, and basic items for and information on infection control
- Level of performance of signal functions for emergency obstetric and newborn care
- *Readiness of health facilities to provide normal delivery care as defined by the WHO criteria*
- Newborn care practices in terms of availability of routine newborn care practices in health facilities and essential medicines and equipment for newborns

Error! Reference source not found. shows the percentages of private health facilities offering maternity services. The availability of normal delivery services was almost equal among facilities in municipalities (97%) and CCs (95%). Overall, 98% of all private health facilities provided caesarean sections. However, only 42% provided ANC services, and this percentage was substantially lower for smaller facilities with 20 or fewer beds (36%) compared to bigger facilities with 21+ beds (64%). The availability of all three services (antenatal care -ANC, normal vaginal delivery- NVD, and caesarean) was higher in the facilities with 21+ beds (64%)

		Table	DL-1: A	vailabili	ty of mat	ernal he	alth sei	rvices		
		Per	centage o		e of facilities of livery services have:					
Background characteristic s	ANC	DVD	CS	ANC and NVD	ANC, NVD and CS	All 3 services	Number of facilities	Provider of delivery care available on-site or on-call 24 hours/day, with observed duty schedule	Provider of delivery care available on-site or on-call 24 hours/day, with or without observed duty schedule	Number of facilities offering NVD
Bed category										
20 or fewer 21 or more	36.3 64.3	95.3 95.9	98.8 95.9	35.5 64.3	35.5 64.3	35.5 64.3	251 98	65.7 93.6	86.2 96.8	239 94
Location	01.5	55.5	53.9	0-1.5	0-1.5	0115	50	55.0	55.0	51
CC	35.1	94.6	98.2	35.1	35.1	35.1	222	70.0	87.6	210
Municipality	59.8	96.9	97.6	58.3	58.3	58.3	127	79.7	91.9	123
Overall	42.2	95.3	98.0	43.8	43.8	43.8	349	73.7	89.2	333

than in those with 20 or fewer beds (36%). In addition, the percentages of facilities in CCs (98%) and municipalities (98%) offering caesarean section services were almost equal.

Error! Reference source not found.shows the percentages of private health facilities offering normal delivery services with essential medicines and commodities for delivery care and priority medicines for mothers, as defined by the WHO. Facilities with 20 or fewer beds (78%) had lower availability of all six essential medicines compared to the facilities with 21+ beds (90%). Nearly 80% of the facilities in municipal areas and 83% of those in CCs had all six essential medicines available on the day of the survey.

<i>Ta</i>	able DL-2: M	ledicines and c	ommodities	for delivery	
Medicines and	Bed ca	ntegory	Lo	ocation	Overall
commodities	20 or fewer	21 or more	сс	Municipality	Overall
Essential medicines for de	livery ¹				
Injectable utero tonic (oxytocin) ²	96.6	98.9	97.6	96.7	97.3
Injectable antibiotics ³	97.1	98.9	98.1	96.7	97.6
Injectable magnesium sulfate ²	86.2	97.9	87.1	93.5	89.5
Injectable diazepam	97.1	100.0	97.6	98.4	97.9
Skin disinfectant	91.6	93.6	94.3	88.6	92.1
Intravenous fluids with infusion set ⁴	97.5	100.0	98.1	98.4	98.2

All 6 essential medicines available for delivery ¹	78.2	90.4	82.9	79.7	81.7
Priority medicines for mo	thers⁵				
Injectable calcium gluconate	64.4	85.1	67.1	75.6	70.4
Ampicillin powder for injection	18.8	44.6	26.2	26.0	26.1
Injectable metronidazole	92.0	95.7	93.3	92.7	93.1
Azithromycin capsules or tablets or oral liquid	65.3	93.6	71.4	76.4	73.3
Misoprostol capsules or tablets	84.6	89.4	85.7	86.2	85.9
Cefixime capsules or tablets	73.7	93.6	79.0	79.7	79.3
Benzathine benzyl penicillin powder for injection	7.1	14.9	8.6	10.6	9.3
Injectable betamethasone/ dexamethasone	90.8	98.9	91.0	96.7	93.1
Nifedipine capsules or tablets	37.2	74.5	50.0	43.9	47.7
Number of facilities offering normal delivery services	239	94	210	123	333

Note: The essential medicines presented in this table comprise the medicines domain for assessing readiness to provide basic obstetric care within the health facility assessment methodology proposed by the WHO and USAID (2012).

¹ All essential medicines for delivery were assessed and had to be available at the service delivery site.

² Injectable uterotonic (e.g., oxytocin) and injectable magnesium sulfate are classified as priority medicines for mothers.

³ Injectable penicillin, injectable gentamycin, injectable ampicillin, or injectable ceftriaxone.

⁴ Normal saline solution, lactated Ringer's solution, or 5% dextrose solution.

⁵ The priority medicines for mothers have been defined by the WHO; the list is published at

http://www.who.int/medicines/publications/A4prioritymedicines.pdf.

During the process of labor and normal delivery, complications may arise at any stage. Thus, facilities are required to have the equipment to provide EmONC, which includes nine signal functions segregated into three levels: obstetric first aid, BEmONC, and CEmONC. Each of the facilities that provided normal delivery care was asked whether they had performed any of the nine signal functions at least once during the three months preceding the survey.

Signal functions performed to provide EmONC include the following:

- BEmONC (seven signal functions):
 - 1. Application of parenteral antibiotics
 - 2. Application of parenteral uterotonic (oxytocin)
 - 3. Application of parenteral anticonvulsant
 - 4. Performance of assisted vaginal delivery
 - 5. Performance of manual removal of placenta
 - 6. Performance of removal of retained products of conception (manual vacuum aspiration [MVA])
 - 7. Performance of neonatal resuscitation
- CEmONC (nine signal functions):
 - 1. All seven BEmONC functions
 - 2. Performance of blood transfusion

3. Performance of caesarean section

Error! Reference source not found. shows the percentages of private health facilities offering normal delivery services as well as those reporting that they performed the signal functions for emergency obstetric care at least once within the three months preceding the survey. Among the signal functions, the application of parenteral antibiotics (97%), administration of parenteral uterotonics (oxytocin) (95%), blood transfusion (95%), and caesarean section (95%) were most common. Assisted vaginal delivery (10%) was the least practiced signal function in the facilities providing normal delivery services. More facilities with 21+ beds performed all BEmONC and CEmONC signal functions (9%) compared to facilities with 20 or fewer beds (4%). More facilities in municipality areas performed all BEmONC (7%) and CEmONC (7%) signal functions compared to those in CC areas (5%).

	Percentage	e of facilities t parenteral:	hat applied		Percentage of facilities that carried out									
Background Characteristi c	Antibioti cs	Oxytocin	Anticonv ulsant	Assist ed vagina I delive ry	Manu al remov al of placen ta	Remova I of retaine d product s of concept ion (MVA)	Neonatal resuscita tion	Blood transfus ion	Cesarea n delivery	Three signal functions	Seven signal functio ns ²	All nine signal functions 3	Numb er of faciliti es offeri ng NVD	
Bed category														
20 or fewer	97.5	95.0	53.2	7.9	51.5	47.7	79.9	94.2	93.7	52.8	5.0	4.2	239	
21 or more	95.7	95.7	73.4	13.8	64.9	67.0	80.9	95.7	96.8	72.3	8.5	8.5	94	
Location														
CC	98.6	96.7	57.1	8.6	54.3	50.0	78.1	93.8	94.8	57.1	5.2	4.8	210	
Municipality	94.3	92.7	61.8	11.4	56.9	58.5	83.7	95.9	94.3	60.2	7.3	6.5	123	
Overall	97.0	95.2	58.9	9.6	55.3	53.2	80.2	94.6	94.6	58.3	6.0	5.4	333	

Table DL-3: Signal functions for emergency obstetric care

¹ Antibiotics, oxytocin, and anticonvulsant.
 ² Antibiotics, oxytocin, anticonvulsant, assisted vaginal delivery, manual removal of placenta, removal of retained product of conception, and neonatal resuscitation.
 ³ Antibiotics, oxytocin, anticonvulsant, assisted vaginal delivery, manual removal of placenta, removal of retained product of conception, neonatal resuscitation, blood transfusion, and caesarean delivery.

Readiness to provide normal delivery services includes the following 13 items/tracer indicators:

- Trained staff: at least one provider that has ever received in-service training in delivery care
- Guidelines: national or other BEmONC or CEmONC guidelines available at the facility
 - Equipment:
 - Examination light
 - Delivery pack
 - Suction apparatus
 - Neonatal bag and mask
 - Partograph
 - Gloves

- Medicines and commodities:
 - Injectable oxytocin
 - Injectable antibiotics
 - Magnesium sulfate
 - Skin disinfectant
 - Intravenous solution with infusion sets

The WHO emphasizes the availability of specific items/tracer indicators in health facilities in the definition of service readiness for normal delivery. In this section, data from the study are used to create a slightly less restrictive and Bangladesh-context-appropriate version of the WHO measures. **Error! Reference source not found.** shows the availability of each item/tracer indicator for assessing a health facility's readiness for normal delivery. Among the items, a suction apparatus (100%) was available in all facilities, followed by gloves (100%), a neonatal bag and mask (99%), intravenous fluid with an infusion set (98%), injectable antibiotics (98%), injectable uterotonic oxytocin (97%), and delivery packs (97%). Guidelines on BEmONC or CEmONC were the least available items (1%). The municipality areas had no facilities that provided normal delivery care or had all 13 tracer items, while only 0.5% of facilities in CCs had all items on the day of the survey. None of the facilities with 20 or fewer beds and 1% of the facilities with 21+ beds had all items present on the day of the survey.

Error! Reference source not found. presents information from the health facility survey on various practices of routine newborn care at the facilities that offered normal delivery services. Kangaroo mother care was the least practiced (18%). In municipality areas, drying and wrapping newborns to keep them warm (99%) was the most common practice. A full bath immediately after birth, which is highly discouraged in current recommendations on newborn care, was reported in more than10% of the facilities with 20 or fewer beds and was more common in municipality areas (14%) compared to CCs (7%). The availability of other newborn services, e.g., skin-to-skin care, initiation of breastfeeding within one hour of birth, routine newborn examination, and measuring newborns' birthweight, was high (>95%).

Error! Reference source not found. shows the percentages of private health facilities offering normal delivery services that had essential medicines for newborns available on the day of the survey. Among the essential medicines, antibiotic eye ointment for newborns (20%) was the least available. Overall, 8% of the facilities had all six essential medicines available. Fewer facilities in CCs had all medicines (6.2%) compared to facilities in Municipalities (11.4%). Only 4% of the facilities with 20 or fewer beds had all the essential medicines, while 19% of the facilities with 21+ beds had all six medicines.

			Tal	ole DL-4:	Readiness	of health f	acilities to	o provide n	ormal del	ivery serv	rices				
Background characteristics	Guidelines on BEmOO ¹ or CEmOC ¹	Staff trained in delivery care at any time ²	Examination light ³	Delivery pack ⁴	Suction apparatus (mucus extractor)	Neonatal bag and mask	Partograph ⁵	Gloves ⁶	Injectable uterotonic oxytocin	Injectable antibiotic	Magnesium sulfate	Skin disinfectant	Intravenous fluids with infusion set	Percentage having 13 items ⁷	Number of facilities offering normal delivery services
Bed category															
20 or fewer	0.4	9.6	84.9	96.6	100.0	99.2	12.5	100.0	96.6	97.1	86.2	91.6	97.5	0.0	239
21 or more	2.1	13.8	93.6	96.8	100.0	100.0	20.2	98.9	98.9	98.9	97.9	93.6	100.0	1.1	94
Location															
CC	1.0	10.0	92.4	96.7	100.0	99.0	15.2	99.5	97.6	98.1	87.1	94.3	98.1	0.5	210
Municipality	0.8	12.2	78.9	96.7	100.0	100.0	13.8	100.0	96.7	96.7	93.5	88.6	98.4	0.0	123
Overall	0.9	10.8	87.3	96.7	100.0	99.4	14.7	99.7	97.3	97.6	89.5	92.1	98.2	0.3	333

¹BEmOCor CEmOC guidelines.

² Facility has at least one interviewed staff member providing the service who reported receiving in-service training in IMPAC. The training must have involved structured sessions; this does not include individual instruction that a provider might have received during routine supervision. Considered training: IMPAC and "Training on Delivery and Newborn Care." ³ A functioning flashlight is acceptable.

⁴ Either the facility has a sterile delivery pack available at the delivery site or all of the following pieces of individual equipment must be present: cord clamp, episiotomy scissors, scissors (or blade) to cut the cord, suture material with a needle, and needle holder.

⁵ A blank partograph at the service site.

⁶ Disposable latex gloves or equivalent are available at the service site.

				Table N-1: Newbo	rn care practices				
Background characteristics	Delivery to the abdomen (skin-to- skin)	Drying and wrapping the newborn to keep them warm	Kangaroo mother care	Initiation of breastfeeding within the first hour	Routine complete (head-to- toe) examination of newborns before discharge	Suctioning the newborn with suction bulb	Weighing the newborn immediately upon delivery	Giving the newborn a full bath shortly after birth ¹	Number of facilities offering NVD
Bed category									
20 or fewer	95.8	98.3	13.4	96.2	96.6	97.1	97.1	10.0	239
21 or more	96.8	98.9	29.8	95.7	97.9	97.9	97.9	8.5	94
Location									
CC	94.8	98.1	18.6	95.7	98.1	96.7	98.6	7.1	210
Municipality	98.4	99.2	17.1	96.7	95.1	98.4	95.1	13.8	123
Overall	96.1	98.5	18.0	96.1	97.0	97.3	97.3	9.7	333

¹ Immersing newborn in water within minutes/hours after birth.

			Table N-2: Ess	ential medicines for new	wborn care			
Background characteristics	Antibiotic eye ointment for newborns	Injectable gentamicin	Injectable ceftriaxone	Amoxicillin syrup/suspension	Ampicillin injection	7.1% chlorhexidine solution	All 6 essential medicines for newborn care	Number of facilities offering NVD
Bed category								
20 or fewer	14.2	82.8	97.1	21.3	18.8	83.7	3.8	239
21 or more	34.0	94.7	98.9	57.4	44.6	98.9	19.1	94
Location								
CC	16.7	88.6	98.1	29.0	26.2	83.8	6.2	210
Municipality	25.2	82.1	96.7	35.8	26.0	95.1	11.4	123
Overall	19.9	86.1	97.6	31.6	26.1	88.1	8.2	333

¹ Note: The essential medicines and antibiotic eye ointment for children presented in this table comprise the medicines domain for assessing readiness to provide basic obstetric care within the health facility assessment methodology proposed by the WHO and USAID (2012).

3.6.5 Utilization of normal vaginal delivery and caesarean section services

We collected information on the number of normal vaginal delivery and caesarean section services provided by the facilities in the last six months before data collection. **Table U 1** shows the percentage of facilities providing normal delivery and caesarean section services by the number of services provided in the last six months. Overall, two-thirds of the facilities provided 50 or fewer NVD services in the last six months. However, 29% of larger facilities (\geq 21 beds) and 10% of smaller facilities (\leq 20 beds) conducted 100 or more NVD. A higher percentage of facilities located in municipality areas had higher utilization of normal delivery compared to facilities located in CCs. About 43% of facilities located in municipality areas provided 50 or more NVD services per month compared to 28% of facilities in CCs. In contrast to NVD service, more than half (55%) of all facilities provided caesarean section service to 100 or more women in the last six months. Two-thirds (67%) of the large facilities (\geq 21 beds) conducted 100 or more caesarean section delivery in the last six months compared to half of the small facilities (\leq 20 beds) providing the same number of caesarean section services. Similarly, about two-thirds (65%) of facilities located in municipalities conducted 100 or more caesarean section delivery in the last six months compared to 50% of facilities in city corporations.

Table U 2: Utilization of normal vag last six mo	ginal delivery an nths by bed cate		•	rvices in the
Background characteristics	50 or fewer	51 to 99	100 or above	Ν
Normal vaginal delivery (NVD)				
Bed category				
20 or fewer	71.7	18.7	9.6	251
21 or more	55.1	16.3	28.6	98
Location				
CC	72.5	14.4	13.1	222
Municipality	57.5	24.4	18.1	127
Overall	67.0	18.1	14.9	349
Caesarean section delivery				
Bed category				
20 or fewer	23.5	25.5	51.0	251
21 or more	23.5	9.2	67.3	98
Location				
CC	27.0	23.0	50.0	222
Municipality	17.3	17.3	65.4	127
Overall	23.5	20.9	55.6	349

4. Study Recommendations

Based on the findings of the study, the following recommendations are suggested:

- The 1982 private facility licensing ordinance and regulation needs 'rules and procedures' to support its effective implementation. The MOH&FW should initiate this process. The final draft of the 2016 guidelines proposed a two-year license validity, clarified the application timing, fixed the financial penalty for delayed submission, and added the inspection process; however, the guidelines require approval for implementation. The proposed two-year license validity would address the challenges the health system and facility owners face in the yearly renewal.
- The 2016 draft guidelines for licensing of private hospitals and clinics also need to clarify the approval processing time and licensing conditions. Regular reporting on the seven licensing conditions should be made mandatory. Regarding the compliance with licensing conditions, considerable differences were found based on facility size and location. The private facilities in municipalities were somewhat more compliant with the criteria compared to those in CCs. However, facilities with 20 or fewer beds at any location were less compliant than larger facilities with 21+ beds. Targeted monitoring is required to improve licensing compliance.
- A needs assessment exercise on adequate human resources is necessary to implement inspections of all private facilities during the proposed two-year license validity period.
- Alternative modalities of compliance tracking, e.g., sample auditing, could be explored. The online portal could be improved for electronic monitoring of registered facilities for timely application submission and improved compliance. Renewal reminders sent to private facility owners in advance with clear guidance could improve the timely submission of the renewal application.
- The DGHS should coordinate and organize dialogues with different government departments to mitigate the obstacles and delay times in obtaining necessary prior approvals. The introduction of a one-stop service concept could be considered and tested.
- Health service utilization data reporting by the private facilities are poor and should be added as a prerequisite for license renewal.
- The knowledge gap among facility owners requires attention. Strengthened engagement of the private clinic owners' association could help organize educative training sessions as well as clarify the online license application process, mandatory certifications, and reasons for license cancellation.
- The MNH readiness was poor overall and worse in smaller facilities. Nearly all existing private clinics provide MNH care. The licensing conditions could include the availability of staff trained in MNH care as a criterion.
- Gaps in MNH service readiness were prevalent in private health facilities located in CCs and smaller private facilities. The hospital services management of the DGHS should collaborate with the program managers of relevant operation plans for periodic assessment and compliance tracking of MNH care readiness.

• The private clinic owners' association could be considered an important leveraging platform to increase coordination with private health facilities and improve their awareness of and compliance with licensing practices.

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Appendix

Appendix -1: Licensing status of the private health facilities by area and bed distribution based on the census(N=1,117)

Background characteristics	Ever license	ed	Valid lie (Observ		Expired (Observ reported	ed or	Unknov (Repor		Never	I	Number of facilities
Bed category	Ν	%	Ň	%	N	%	N	%	N	%	N
≤20 beds	702	83.7	35	4.2	665	79.3	2	0.2	137	16.3	839
>21 beds	254	91.4	31	11.2	221	79.5	2	0.7	24	8.6	278
Location											
CC	630	88.9	63	8.9	563	79.4	4	0.6	79	11.1	709
Municipality	326	79.9	3	0.7	323	79.2	0	0.0	82	20.1	408
Total number of private facilities	956	85.6	66	5.9	886	79.3	4	0.4	161	14.4	1117

Licensing status of the private health facilities by area and bed distribution based on the census

1 "Ever licensed" means facilities with valid or expired license issued by the DGHS.

2 "Never licensed" means facilities with no license.

3Existing valid license for licensed facilities means a license that had not expired by the day of the visit.

4 Expired license for licensed facilities means a license that had already expired by the day of the visit.

Appendix -2: Percentage of private health facilities by expiry date (year) of latest license (N=890)

Background characteristics		uly2014 ed or reported)	July2014 to June2 (Observe		After Jul (Observe	y2017 ed or reported)	Unknow (Report		Number of facilities
Bed category	Ň	%	Ň	%	Ň	%	Ň	%	Ν
≤20 beds	20	3.0	81	12.1	558	83.7	8	1.2	667
>21 beds	9	4.0	32	14.3	179	80.3	3	1.3	223
Location									
CC	18	3.2	88	15.5	452	79.7	9	1.6	567
Municipality	11	3.4	25	7.7	285	88.2	2	0.6	323
Total number of private facilities	29	3.3	113	12.7	737	82.8	11	1.2	890

Appendix - 3: Percentage of private health facilities without a valid license that applied for a new license or renewal of an expired license (N=1,051)

Background characteristics	Had applied for renewal (Observed/reported)		Had not applic for renewal (Observed/re		Number of facilities
Bed category	Ν	%	Ν	%	Ν
≤20 beds	503	63	301	37.4	804
>21 beds	150	61	97	39.3	247
Location					
CC	347	53.7	299	46.3	646
Municipality	306	75.6	99	24.4	405
Total number of private facilities	653	62	398	38	1051

Percentage of private health facilities that applied for a new license or license renewal

Background characteristics		17 ber 2017 ved/reported)	January to June201 (Observe		July2018 to Decembe (Observe		January 2 to June2019 (Observe		Number of facilities
Bed category	Ň	%	Ň	%	Ň	%	Ň	%	Ν
≤20 beds	35	7.0	39	7.8	147	29.2	282	56.1	503
>21 beds	4	2.7	11	7.3	62	41.3	73	48.7	150
Location									
CC	17	4.9	24	6.9	84	24.2	222	64.0	347
Municipality	22	7.2	26	8.5	125	40.8	133	43.5	306
Total number of private facilities	39	6.0	50	7.7	209	32.0	355	54.4	653

Appendix - 4: Percentage of private health facilities that submitted a new license/renewal application by the time of application (N=653)

Appendix - 5: Percentage of private health facilities by lag time between license expiry and renewal application submission (N=535)

Background characteristics	<12 months		≥24 moi	nths	Number of facilities
Bed category	Ν	%	Ν	%	Ν
≤20 beds	71	17.6	333	82.4	404
>21 beds	36	8.9	95	72.5	131
Location					
CC	34	11.9	251	88.1	285
Municipality	73	29.2	177	70.8	250
Total number of private facilities	107	20.0	428	80.0	535

Appendix - 6: Percentage of private facilities by first licensing year (N=956)

Background characteristics	July	efore /2014	t June	2014 o 2017	July2 te June	o 2018	July	fter / <u>2018</u>		known	Number of facilities
Bed category	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν
≤20 beds	461	65.7	170	24.2	38	5.4	21	3.0	12	1.7	702
>21 beds	169	66.5	59	23.2	13	5.1	9	3.5	4	1.6	254
Location											
CC	411	65.2	149	23.7	35	5.6	22	3.5	13	2.1	630
Municipality	219	67.2	80	24.5	16	4.9	8	2.5	3	0.9	326
Total number of private facilities	630	65.9	229	24.0	51	5.3	30	3.1	16	1.7	956

Appendix - 7: Percentage of private facilities by time lag between the year of establishment and first licensing year (N=940)

Background characteristics	At establi	shment	1–5 ye	ars after	6–10 y after	/ears	11–15 after	years	>15 y	ears after	Number of facilities
Bed category	Ν	%	N	%	Ν	%	Ν	%	Ν	%	N
≤20 beds	371	53.8	255	37.0	32	4.6	19	2.8	13	1.9	690
>21 beds	122	48.8	70	28.0	22	8.8	13	5.2	23	9.2	250
Location											
СС	330	53.5	204	33.1	37	6.0	22	3.6	24	3.9	617
Municipality	163	50.5	121	37.5	17	5.3	10	3.1	12	3.7	323
Total number of private facilities	493	52.4	325	34.6	54	5.7	32	3.4	36	3.8	940

Time lag between the year of establishment and first licensing year (N=940)

Background characteristics		сс	М	unicipalities	Number of facilities
Bed category	Ν	%	Ν	%	
<7	16	2.3	8	2.0	24
8–10	311	43.9	238	58.3	549
11–20	166	23.4	100	24.5	266
21–50	135	19.0	53	13.0	188
51-100	38	5.4	6	1.5	44
101–250	21	3.0	2	0.5	23
251-800	22	3.1	1	0.2	23
Total number of private facilities	709	100	408	100	1117

Appendix - 8: Bed distribution of the private health facilities

Appendix - 9: Standard precautions for infection control

Thoma	Bed ca	itegory	Lo	cation	Overall
Items	20 or fewer	21 or more	CC	Municipality	Overall
Sterilization equipment ¹	82.5	86.7	85.1	81.1	83.2
Equipment for high-level disinfection ²	73.3	80.6	79.3	68.5	75.2
Safe final disposal of sharps waste ³	96.4	96.9	96.8	96.1	96.4
Safe final disposal of infectious waste ⁴	80.1	83.7	76.6	89.0	81.1
Appropriate storage of sharps waste ⁵	35.9	45.9	28.8	55.9	37.9
Appropriate storage of infectious waste ⁶	94.4	97.9	92.8	100.0	95.2
Disinfectant ⁷	82.9	89.8	78.8	95.3	84.2
Syringes and needles ⁸	72.1	80.6	68.0	85.8	73.7
Soap	82.1	83.7	75.2	95.3	82.0
Running water ⁹	82.1	88.8	77.5	95.3	83.2
Soap and running water	80.1	82.6	73.0	94.5	80.2

Alcohol-based hand disinfectant	83.3	92.9	79.3	97.6	85.3
Soap and running water or alcohol-based hand disinfectant	88.5	92.9	84.7	98.4	89.2
Latex gloves ¹⁰	86.1	95.9	86.9	92.1	88.3
Medical masks	43.4	61.2	45.9	52.8	47.6
Gowns	37.1	54.0	35.6	52.8	41.2
Eye protection	5.2	12.2	5.4	10.2	6.9
Guidelines for standard precautions ¹¹	5.6	15.3	5.9	12.6	7.8
Number of facilities	251	98	222	127	349

Note: The indicators presented in this table comprise the standard precautions domain for assessing general service readiness within the health facility assessment methodology proposed by the WHO and USAID (WHO 2012). ¹ Facility reports that some instruments are processed in the facility and that the facility has a functioning electric dry heat sterilizer, a functioning electric autoclave, or a non-electric autoclave with a functioning heat source available somewhere in the facility.

² Facility reports that some instruments are processed in the facility and that the facility has an electric pot or other pot with a heat source for high-level disinfection by boiling or steaming or chlorine, formaldehyde, CIDEX, or glutaraldehyde for chemical high-level disinfection available somewhere in the facility on the day of the survey.

³ The process of sharps waste disposal is incineration and the facility had a functioning incinerator with fuel on the day of the survey or disposes of sharps waste via open burning in a protected area, dumping without burning in a protected area, dumping without burning in a protected area, or removal offsite, with storage in a protected area prior to the removal.

⁴ The process of infectious waste disposal is incineration, and the facility had a functioning incinerator with fuel on the day of the survey or disposes of infectious waste via open burning in a protected area, dumping without burning in a protected area, or removal offsite, with storage in a protected area prior to the removal.

⁵ Sharps container observed in the general outpatient service area.

⁶ Waste receptacles observed in the general outpatient service area.

⁷ Chlorine-based or other country-specific disinfectants used for environmental disinfection available in the general outpatient area.

⁸ Single-use standard disposable syringes with needles or auto-disable syringes with needles available in the general outpatient area.

⁹ Piped water, water in a bucket with a specially fitted tap, or water in a pour pitcher available in the general outpatient area.

¹⁰ Non-latex equivalent gloves are acceptable.

¹¹ Any guidelines for infection control in health facilities are available in the general outpatient area.

		e of facilit IC that ha				Equipm				
Background Characteristics	Guidelines on ANC ¹	Staff trained for ANC within the past 24	Staff trained for ANC at anytime ²	Blood pressure apparatus ³	Stethoscope	Adult weighing scale	Fetal stethoscope	Measuring tape ⁴	Examination bed or couch	Number of facilities offering ANC
Bed category										
20 or fewer	1.1	5.5	14.3	97.8	98.9	96.7	64.8	80.2	97.8	91
21 or more	9.5	3.2	23.8	98.4	98.4	100.0	60.3	92.1	100.0	63
Location										
CC	9.0	5.1	20.5	96.2	97.4	98.7	47.4	84.6	97.4	78
Municipality	0.0	3.9	15.8	100.0	100.0	97.4	78.9	85.5	100.0	76
Overall	2.8	4.3	16.7	98.2	99.0	97.8	64.2	84.4	98.6	154

Appendix - 10: Guidelines, trained staff, and basic equipment for ANC services

Note: The guidelines for ANC and staff trained in ANC comprise the training domain and the blood pressure apparatus indicator comprises the equipment domain for assessing readiness to provide ANC services within the health facility assessment methodology proposed by the WHO and USAID (2012).

 ¹ National ANC guidelines/protocol/manual or other guidelines/protocol/manual relevant to ANC.
 ² Facility has at least one interviewed staff member providing ANC services who reported receiving in-service training in some aspect of ANC. The training in under a training in the design of the des training must have involved structured sessions; this does not include individual instruction that a provider might have received during routine

supervision. ³ Functioning digital blood pressure apparatus or a functioning manual sphygmomanometer and a stethoscope.

⁴ For measuring fundal height.

Percentage of facilities offering ANC that have the indicated tests												
				Blood			Number					
				grouping			of					
Background		11.2	11.2.4	and		All 5	facilities					
characteristics		Urine	Urine	Rhesus		diagnostic	offering					
	Hemoglobin ¹	protein ²	glucose ³	factor ⁴	Syphilis ⁵	tests	ANC					
Bed category												
20 or fewer	83.5	86.8	86.8	5.5	85.7	5.5	91					
21 or more	95.2	88.9	88.9	30.2	95.2	30.2	63					
Location												
CC	84.6	88.5	88.5	23.1	89.7	23.1	78					
Municipality	92.1	86.8	86.8	7.9	89.5	7.9	76					
Overall	87.2	87.6	87.6	13.4	88.6	13.4	154					

Appendix - 11: Diagnostic capacity

Note: The hemoglobin and urine protein measures presented in the table comprise the diagnostics domain for assessing readiness to provide ANC services within the health facility assessment methodology proposed by the WHO and USAID (2012).

¹ Capacity to conduct any hemoglobin test in the facility.

² Dipsticks for urine protein.

³ Dipsticks for urine glucose.

⁴ Anti-A, anti-B, and anti-D reagents, an incubator, Coombs reagent, and glass slides all present.

⁵ Rapid test for syphilis or Venereal Disease Research Laboratory test or polymerase chain reaction or rapid plasma regain.

Per	Percentage of facilities offering ANC that have the indicated medicines												
Background characteristics	Iron tablets	Folic acid tablets	Combined iron and folic acid tablets	Iron or folic acid tablets	Number of facilities offering ANC								
Bed category													
20 or fewer	49.4	62.7	64.8	71.4	91								
21 or more	69.9	92.1	90.5	92.1	63								
Location													
CC	53.8	75.6	76.9	83.3	78								
Municipality	61.8	73.7	73.7	76.3	76								
Overall	57.0	72.2	72.9	77.9	154								

Appendix - 12: Availability of medicines for routine ANC

Note: The medicines and vaccine presented in the table comprise the medicines and commodities domain for assessing readiness to provide ANC services within the health facility assessment methodology proposed by the WHO and USAID (2012).

Appendix -	13:	Items	for	infection	control	during	provision	of ANC
rr · ·							F	

¹ Piped water, water in a bucket with a specially fitted tap, or water in a pour pitcher.

² Nonlatex equivalent gloves are acceptable.

³ Waste receptacle with plastic bin liner.

* The facility has the following six infection control items: soap, running water, alcohol-based hand disinfectant, latex gloves, sharps container, and waste receptacle.

Appendix - 14: Guidelines, trained staff, and equipment for delivery services

	offering	tage of faci normal de ces that hav	livery	Equipment											
Background Characteristics	Guidelines on BEmOC ¹ or CEmOC ¹	Staff trained in delivery care within the past 24 months ²	Staff trained in delivery care at any time ²	Emergency transport ³	Examination light ⁴	Delivery pack ⁵	Suction apparatus (mucus extractor)	Manual vacuum extractor	Vacuum aspirator or D&C kit ⁶	Neonatal bag and mask	Partograph ⁷	Gloves ⁸	Delivery bed	Sterilization equipment ⁹	Number of facilities offering normal delivery services
Bed category															
20 or fewer	0.4	2.1	9.6	23.4	84.9	96.6	100.0	21.4	69.0	99.2	12.5	100.0	45.2	82.9	239
21 or more	2.1	3.2	13.8	69.1	93.6	96.8	100.0	43.6	79.8	100.0	20.2	98.9	68.0	89.3	94
Location															
CC	1.0	1.9	10.0	38.1	92.4	96.7	100.0	25.7	74.8	99.0	15.2	99.5	57.1	86.2	210
Municipality	0.8	3.3	12.2	33.3	78.9	96.7	100.0	30.9	67.5	100.0	13.8	100.0	42.3	82.1	123
Overall	0.9	2.4	10.8	36.3	87.3	96.7	100.0	27.7	72.0	99.4	14.7	99.7	51.5	84.6	333

Note: The indicators presented in this table comprise the staff training and equipment domains for assessing readiness to provide delivery care within the health facility assessment methodology proposed by the WHO and USAID (2012).

¹BEmOC or CEmOC guidelines.

² Facility has at least one interviewed staff member providing the service who reported receiving in-service training in delivering care. The training must have involved structured sessions and does not include individual instruction that a provider might have received during routine supervision. ³ Facility has a functioning ambulance or other vehicle for emergency transport stationed at the facility and had fuel available on the day of the survey or has access to an ambulance or other vehicle for emergency transport that is stationed at or operates from another facility.

⁴ A functioning flashlight is acceptable.

⁵The facility has a sterile delivery pack available at the delivery site. If not, all of the following equipment must be present: cord clamp, episiotomy scissors, scissors (or blade) to cut cord, suture material with needle, and needle holder.

⁶ Facility has a functioning vacuum aspirator or a dilatation and curettage (D&C) kit available.

⁷ A blank partograph is present at the service site.

⁸ Disposable latex gloves or an equivalent are available at the service site.

⁹ Facility reports that some instruments are processed in the facility, and the facility has a functioning electric dry heat sterilizer, a functioning electric autoclave, or a non-electric autoclave with a functioning heat source available.

Appendix -	15:	Items	for	infection	control	during	provision of	delivery care
FF · · ·							F	

Background characteristics	Soap	Running water ¹	Soap and running water	Alcohol-based hand disinfectant	Soap and running water or alcohol-based hand disinfectant	Latex gloves ²	Sharps container	Waste receptacle ³	All 6 items available*	At least 4 items available	Number of facilities offering normal
Bed category											
20 or fewer	93.3	94.1	93.3	97.5	99.2	98.7	51.0	76.6	44.4	92.5	239
21 or more	98.9	98.9	98.9	96.8	98.9	97.9	61.7	85.1	58.5	97.9	94
Location											
CC	92.4	93.3	92.4	96.7	99.0	98.6	46.2	72.9	38.6	91.4	210
Municipality	99.2	99.2	99.2	98.4	99.2	98.4	67.5	89.4	65.0	98.4	123
Overall	95.0	95.6	95.0	97.3	99.1	98.5	54.3	79.1	48.6	94.1	333

¹ Piped water, water in a bucket with a specially fitted tap, or water in a pour pitcher.

² Nonlatex equivalent gloves are acceptable.

³ Waste receptacle with plastic bin liner.

* The facility has the following six infection control items: soap, running water, alcohol-based hand disinfectant, latex gloves, sharps container, and waste receptacle.

Appendix - 16: Availability of equipment for newborn care services

Background characteristics	Incubator ¹	Suction apparatus with catheter	Suction bulb with penguin sucker	Newborn bag and mask	Timer	Infant scale	Fetal stethoscope	Thermometer	Thermometer for low body temperature	All 9 pieces of equipment for	Number of facilities offering normal deliverv services
Bed											
category											
20 or fewer	24.7	99.2	82.5	99.2	68.2	77.8	35.6	98.7	4.6	1.6	239
21 or more	70.2	100.0	86.2	100.0	88.3	88.3	63.9	100.0	12.7	9.6	94
Location											
CC	34.8	99.0	83.3	99.0	71.9	83.8	35.7	98.6	7.6	4.3	210
Municipality	42.3	100.0	83.7	100.0	77.2	75.6	56.9	100.0	5.7	3.3	123
Total											
private facilities	37.6	99.4	83.5	99.4	73.9	80.7	43.7	99.1	6.9	3.9	333

¹ Incubator, open care system (radiant warmer, fixed height, trolley, drawers, oxygen bottles), or other external heat source.

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