Government of Nepal

Ministry of Health and Food Safety

Mental Hospital

Presentation 2082/83

Dr. Suraj Tiwari

Chief Consultant Psychiatrists, 11th Level

Director

MENTAL HOSPITAL

Programs

S.N.	Program / Initiative	Key Objective & Scope	Target
1	**Suicide Helpline 1166**	24/7 Crisis hotline & psychological first aid	General Public in Distress
2	**Satellite OPD Clinic**	Community mental health outreach & consultations	Rural Patients
3	**Child & Adolescent Programme**	Pediatric mental health & developmental therapy	Children & Teenagers
4	**MD Psychiatry (NAMS)**	Postgraduate clinical specialization training	Doctors / Residents
5	**SSU & Health Insurance**	Financial assistance & social service subsidy	Underprivileged Patients
6	**OST Methadone**	Opioid substitution therapy & rehabilitation	Substance Dependence Cases
7	**Psychological Counseling**	Structured psychotherapy & mental wellness	Outpatients & Inpatients

SERVICE METRICS OVERVIEW

01 Key Health Indicators by Fiscal Year

Tracking core service delivery performance across seven consecutive fiscal years (2076/077 to 2082/083), encompassing outpatient, inpatient, emergency, and specialized mental health services.

Comprehensive view of service utilization, capacity, and efficiency metrics to inform strategic decisions and resource planning.

	Service / Indicator	2076/077	2077/078	2078/079	2079/080	2080/081	2081/082	2082/083
SERVICE VOLUME	OPD (Outpatient Dept)	35,801	28,202	31,233	34,691	40,923	44,124	**47,551**
	IPD (Inpatient Dept)	643	579	711	840	766	955	**1,094**
	ER (Emergency Services)	782	685	563	773	947	1,106	**1,205**
	EHS (Extended Health Services)	3,563	1,293	3,266	5,109	4,458	4,800	**4,533**
	Community Mental Health	144	156	396	450	500	550	**573**
	Psychology Services	1,152	578	424	500	550	600	**650**
CAPACITY & UTILIZATION	Bed Occupancy Rate (%)	99%	99%	98%	100%	98.5%	99%	**99%**
	Average Length of Stay (Days)	38.6	35.56	20.53	20.0	19.5	19.0	**18.5**
WORKFORCE RATIOS	Doctor Inpatient Ratio	63.4	72.87	65.54	40.0	36.5	45.5	**47.6**
	Doctor Outpatient Ratio	3,580.1	3,525.25	2,622.72	1,652.0	1,948.7	2,101.1	**2,285.7**
	Nurse Inpatient Ratio	83.0	41.64	45.06	42.0	38.3	47.8	**50.0**
	Doctor Nurse Ratio	1.05	1.05	1.05	1.05	1.05	1.05	**1.05**
EFFICIENCY	Bed Turnover Interval (Days)	1.73	1.59	1.62	0.15	0.50	0.30	**0.30**

KEY INSIGHTS (vs. 2076/077)

Service Demand Growth
OPD volume increased by 32.8%, ER visits by 54.1%, and IPD by 70.1%.
▲ STRONG GROWTH

Higher Utilization
Bed occupancy sustained at ~99% with improved efficiency.
▲ OPTIMAL UTILIZATION

Improved Efficiency
Average length of stay reduced by 52.1%.
▲ SIGNIFICANT IMPROVEMENT

Workforce Productivity
Doctor outpatient ratio improved by 36.1%; Nurse inpatient ratio improved by 39.8%.
▲ BETTER PRODUCTIVITY

Overall Trend (2076/077 → 2082/083)

Note: All figures are for reference and based on internal records.

SERVICE DEMAND GROWTH

AND CAPACITY UTILIZATION

Strong and Sustained Growth

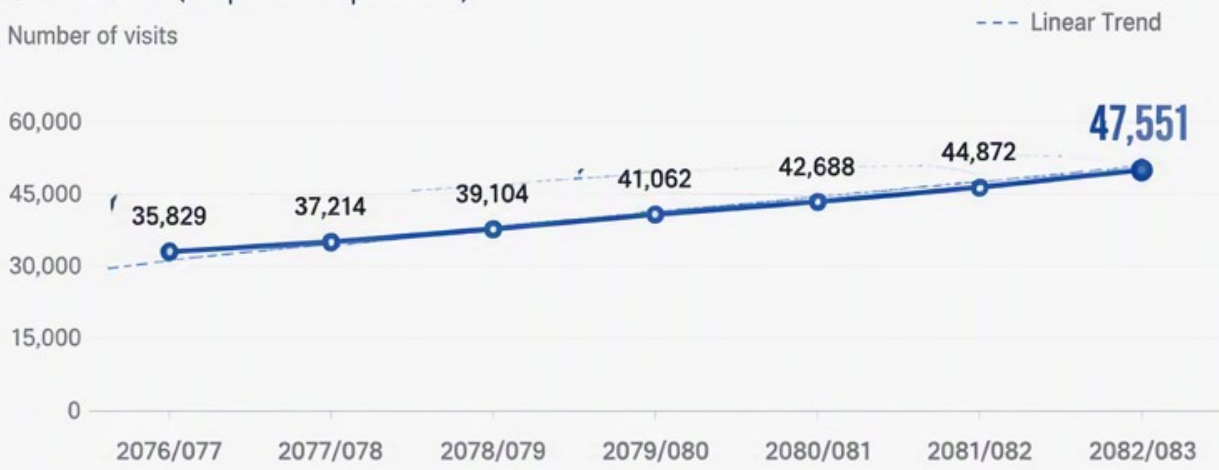
OPD visits increased **32.7%** from FY 2076/077 to 2082/083. ER cases grew **54.1%** over the same period, reflecting rising demand for both outpatient and acute care services.

Near-Maximum Capacity

Bed occupancy remains at **98% to 100%**, indicating extremely high utilization with minimal buffer for surge events.

Consistent growth in service demand combined with near-max capacity highlights the need for strategic capacity planning and resource expansion.

OPD VISITS (Outpatient Department)



Growth
2076/077 to 2082/083
+32.7%

ER CASES (Emergency Room)

Growth
2076/077 to 2082/083
+54.1%

BED OCCUPANCY RATE (Inpatient Psychiatric Care)

98% — 100%

Consistently near-maximum capacity

Minimal reserve capacity for surge events

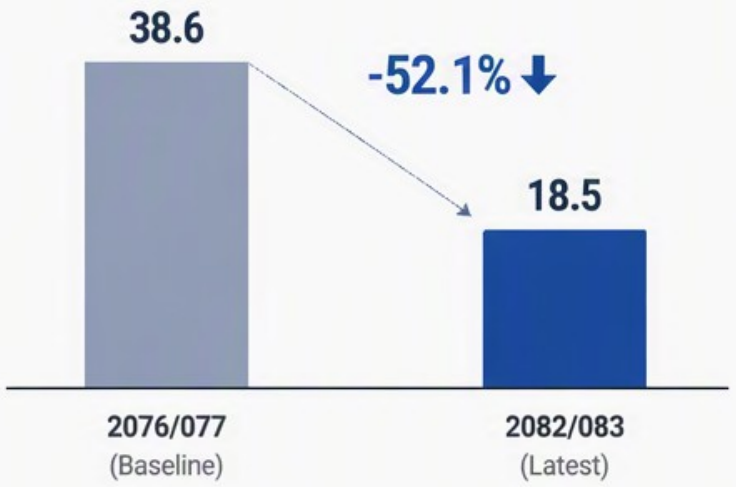
OPERATIONAL PERFORMANCE

Operational Efficiency Improvements

Significant reductions in patient stay duration and bed turnover interval drive higher capacity utilization and improved operational performance.

01 Average Length of Stay (ALOS)

Days



ALOS decreased from 38.6 days to 18.5 days, a **52.1% reduction** in patient duration, driven by enhanced care coordination, clinical pathway optimization, and earlier discharge planning.

02 Bed Turnover Interval

Days

Bed turnover interval improved from 1.73 days to 0.30 days, an **82.7% reduction**, enabling faster bed readiness, greater capacity, and more efficient resource utilization.

KEY TAKEAWAYS

52.1% **Reduction in ALOS**
from 38.6 days to 18.5 days

82.7% **Reduction in Bed Turnover Interval**
from 1.73 days to 0.30 days

Higher Capacity Utilization
More discharges and admissions with the same bed base

Improved Patient Flow
Smoother transitions and shorter waiting times

Operational Value
Better resource utilization and lower operational costs

HEALTHCARE OPERATIONS

Staffing Ratio Analysis and Workload Density

Workload per health worker continues to rise, though efficiency indicators show improvement.

Doctor Outpatient Ratio

Patients per Physician

3,580.1 (2076/077) → **2,285.7** (2082/083)

Improved by 36.1%
Fewer patients per physician

Nurse Inpatient Ratio

Admissions per Nurse

83.0 (2076/077) → **50.0** (2082/083)

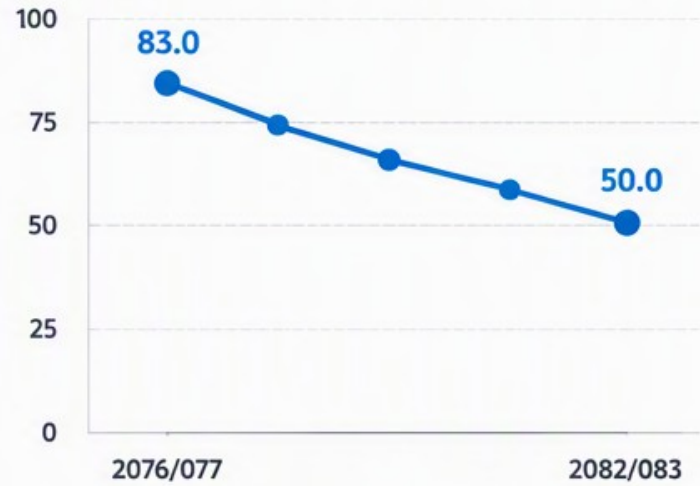
Improved by 39.8%
Fewer admissions per nurse

Doctor Outpatient Ratio

Patients per Physician

Nurse Inpatient Ratio

Admissions per Nurse



Key Takeaways

Workload density has increased
Rising patient volume continues to drive higher demand across both inpatient and outpatient services.

Positive efficiency signals
Improved ratios indicate either increased staffing or more effective patient flow and triage.

KEY MATHEMATICAL FORMULAS AND CALCULATION STANDARDS

The following standardized formulas ensure consistent measurement and benchmarking across reporting periods.

FOCUS
Standardized Measurement.
Consistent Benchmarking.

Bed Occupancy Rate (%)	$\frac{\text{Total Inpatient Days}}{\text{Total Beds} \times 365} \times 100$
Average Length of Stay (ALOS)	$\frac{\text{Total Inpatient Days}}{\text{Total IPD Admissions}}$
Doctor Inpatient Ratio	$\frac{\text{Total IPD Admissions}}{\text{Total Doctors}}$
Doctor Outpatient Ratio	$\frac{\text{Total OPD Patients}}{\text{Total Doctors}}$
Nurse Inpatient Ratio	$\frac{\text{Total IPD Admissions}}{\text{Total Nurses}}$
Doctor Nurse Ratio	Total Doctors / Total Nurses (21 / 20 = 1.05)
Bed Turnover Interval (Days)	$\frac{(\text{Total Beds} \times 365) - \text{Total Inpatient Days}}{\text{Total IPD Admissions}}$

Consistent metrics enable reliable trend analysis and performance benchmarking.

04

Disease Burden Analysis: Top Ten Diagnoses

Prevalent Mental Health Conditions and Diagnostic Distribution (FY 2082/083)

The following table presents the ten most frequently diagnosed conditions during fiscal year 2082/083, identified by ICD-11 classification and ranked by case frequency.

Rank	ICD-11 Code	Disease Description / Classification	Total Cases
1	6A60.1	Bipolar type I disorder, current episode manic without psychotic symptoms	236
2	6A20	Schizophrenia	110
3	6A22	Schizoaffective disorder	106
4	6A23	Acute and transient psychotic disorder	51
5	6C40.2	Alcohol-induced psychotic disorder / Dependence	48
6	6A60.0	Bipolar type I disorder (other episodes)	21
7	6A60	Bipolar or related disorders (unspecified)	14
8	6A00	Disorders of intellectual development	11
9	6B60	Dissociative disorders	8
10	6B43 / 6C41.6 / 6D10	Obsessive-compulsive disorder / Sedative dependence / Dementia (Tied)	8

MENTAL HEALTH SERVICE REPORT FY 2082/083

KEY INSIGHTS

Mood & psychotic disorders dominate

Top 3 diagnoses account for 452 cases (59% of total).

Broad spectrum of conditions

Diagnoses span mood, psychotic, substance-related, neurodevelopmental, and anxiety-related disorders.

Resource allocation focus

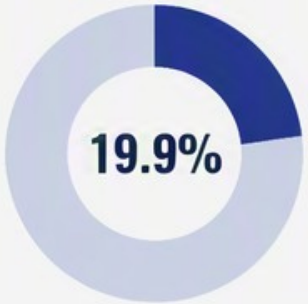
Prioritize capacity for bipolar and psychotic disorders while addressing substance-related and chronic conditions.

Note: Data reflects confirmed diagnoses for FY 2082/083.

5. Key Findings and Clinical Burden Conclusions

PRIMARY DIAGNOSTIC BURDEN

Strategic Priorities for Mental Health Service Delivery



Bipolar I disorder, manic state without psychotic features (6A60.1) accounts for **~19.9%** of the top ten diagnoses combined.

Source: Hospital Clinical Records | Period: FY 2082/083 | Top 10 Diagnoses Analysis

KEY FINDINGS & CLINICAL BURDEN CONCLUSIONS

01

Highest Disease Burden

Bipolar type I disorder in manic state without psychotic features (6A60.1) maintained the top position.

236 cases

~19.9%
of top ten diagnoses

02

Major Psychotic Spectrum Disorders

Schizophrenia (6A20) and schizoaffective disorder (6A22) ranked second and third.

110 cases
Schizophrenia (6A20)

106 cases
Schizoaffective disorder (6A22)

18.3%
of top ten diagnoses combined

03

Substance Use and Co-occurring Conditions

Alcohol-induced psychotic disorder and dependence (6C40.2) ranked fifth, highlighting the significant burden of co-occurring conditions.

48 cases

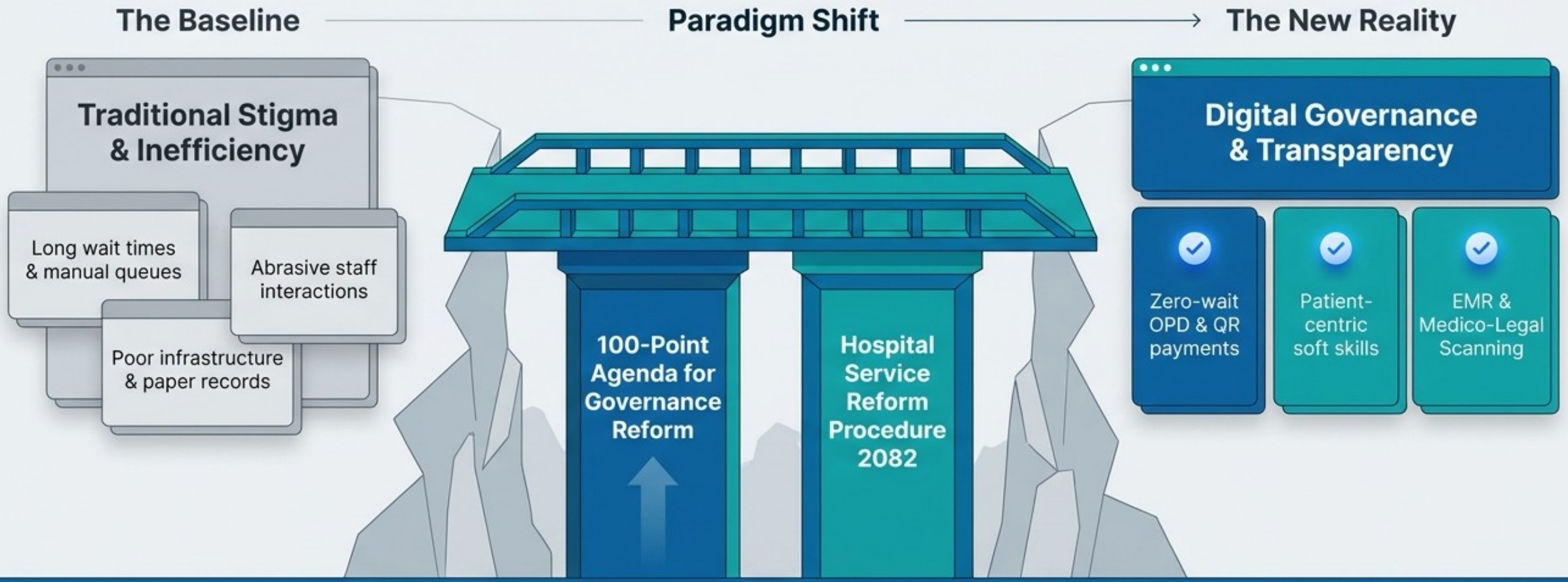
Need for integrated treatment protocols addressing both substance use and mental health.

STRATEGIC IMPLICATION

These findings indicate **priority areas** for resource allocation, specialized **capacity building, and integrated care approaches.**

Overcoming institutional stigma through targeted governance mandates

Institution Profile:
Lagankhel Mental Hospital
(Nepal's sole specialized facility)



Public sector healthcare facilities can achieve rapid modernization and transparency without massive budget increases through strict adherence to systemic policy mandates.

Gemini Notebook

A four-pillar operational blueprint for rapid hospital modernization

X-Axis

Y-Axis

	Systems & Tech	Human Capital & Environment
Internal Operations	**Digital Infrastructure** • Full Token System for queue management • QR Code payment gateways implemented • High-priority Digital Scanning of sensitive Medico-Legal records • Software integration for automated Discharge Summaries	**Human Capital & Conduct** • Targeted soft skills & communication training for all staff • Mandatory E-Attendance monitored daily by Hospital Director • Strict enforcement of uniforms, ID cards, and logbooks • Total ban on Medical Representatives during office hours
Patient Experience	**Operational Transparency** • Two-shift OPD services to eliminate wait times • Same-day reporting for Lab and Radiology • Visible Doctor Duty Display Boards • Wall-mounted Navigation Boards & Citizen Charters	**The Healing Environment** • Routine Cleanliness Audits and roster-based monitoring • National Sanitation Week integration and hazard clearing • Establishment of a robust Referral Network with major hospitals

Gemini Notebook

Sustaining accountability and scaling the digital governance model

Social Responsibility & Access

10%

- 10% of total capacity (5 beds) reserved free for indigent groups
- **Social Service Unit** (SSU) active for free treatment
- In-house pharmacy dispensing drugs below market rate

Real-Time Grievance Management

- **QR Code Scan Feedback System** with real-time resolution
- **Designated Nodal Officer** for national 'Hello Sarkar' portal
- Transparent public displays of Grievance Officer contacts

Transparency Systems

- Live digital displays in pharmacy for stock and pricing
- Upcoming real-time dashboard for free bed availability
- Live tracking of free medicine distribution

Next Phase Blueprint: High-speed servers for 100% full Electronic Medical Records (EMR) | Home-based online OPD booking | Extended Hospital Services (EHS) feasibility study.

A scalable case study for central government hospitals.

Gemini Notebook

Cleanliness and Maintenance (Cleanliness Audit)

1	**Regular Cleanliness Audits** Hospital premises, outpatient department, and wards undergo regular cleanliness audits with satisfactory current status.
2	**Supervision and Monitoring** Regular supervision with daily attendance and signature records of cleaning staff members has been established.
3	**Renovation and Management** Hospital building areas have been repainted as needed. Damaged equipment has been partially repaired, with non-repairable items planned for auction in the next fiscal year. Old items have been consolidated and stored in a designated location. Proper waste segregation and management has been implemented.

4. National Cleanliness Week Implementation Progress

Cleanliness Activities Conducted

OPD Block Cleaning

Unnecessary boards removed from the Outpatient Department block following deep cleaning.

Vegetation Management

Harmful plants and trees were cut down and removed from hospital premises.

Waste Removal

Scattered leaves and other plastic waste around the compound were removed.

Garden Maintenance

Flower gardens and landscaped areas were weeded and maintained.

Canteen Area

Areas around the hospital canteen were cleaned and feedback provided to canteen operators.

Regular Monitoring

Ward, emergency, and other areas received regular cleaning monitoring, evaluation, and feedback.

Material Removal

Soil, stones, and old materials from the back of the hospital building were collected and transported to the waste transfer center.

Staff Participation

Maximum participation of all staff members was ensured during the cleanliness week.

Patient Awareness

Patients and attendants were engaged in awareness discussions regarding waste management.

Equipment Organization

Old inventory items requiring auction were consolidated and stored appropriately.

Daily Review Meetings

Staff meetings were conducted daily after cleaning to review progress and plan for the next day.

Accountability Assignment

A cleanliness focal person was designated with a duty roster prepared for consistent oversight.

Supply Management

Necessary cleaning materials were appropriately managed through the store.

Public Documentation

Cleanliness week photographs were published on the hospital website for public transparency.

मानसिक अस्पताल, लगनखेल, ललितपुर

कर्मचारी विवरण तथा संगठनात्मक पद संरचना (२०८३)

क्र.सं.	पद / सेवा	तह	स्थायी संख्या	करार संख्या	कुल जम्मा
	नेतृत्व, कन्सल्टेन्ट तथा मेडिकल अधिकृत				
1	अस्पताल निर्देशक	११	1	0	1
2	प्रमुख कन्सल्टेन्ट साइक्याक्ट्रिस्ट	११	2	0	2
3	वरिष्ठ कन्सल्टेन्ट साइक्याक्ट्रिस्ट	९ / १०	6	8	14
4	मेडिकल अधिकृत	८	3	2	5
	नर्सिङ, प्यारामेडिकल तथा प्राविधिक सेवा				
1	वरिष्ठ नर्सिङ प्रशासक	९ / १०	1	0	1
2	वरिष्ठ नर्सिङ अधिकृत	७ / ८	1	0	1
3	वरिष्ठ मेडिकल रेकर्ड निरीक्षक	७	1	0	1
4	स्टाफ नर्स	५ / ६	14	13	27
5	वरिष्ठ अनमी / अनमी	५/ ६	6	0	6
6	फार्मेसी सहायक	५	2	0	2
7	ल्याब टेक्निसियन	६	2	0	2
8	रेडियोग्राफर	६	1	0	1
9	वरिष्ठ अ.हे.ब. / अ.हे.ब.	५ / ६	6	0	6
10	डार्क रुम असिस्टेण्ट	५	1	0	1
11	अन्य स्वास्थ्य प्राविधिक / विविध	४ - ८	0	8	8
	प्रशासन, लेखा तथा सहयोगी सेवा				
1	लेखा अधिकृत	रा.प.तृ.	1	0	1
2	नायब सुब्बा	रा.प.अनं.प्र.	1	0	1
3	खरिदार	रा.प.अनं.द्वि.	1	0	1

Thank You