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Titled

**MANAGING AND SUSTAINING ACCREDITATION FOR
TRANSFORMING HEALTH CARE IN PUBLIC SETTINGS:
EVIDENCE FROM TAMIL NADU**

Submitted by

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**Managing and sustaining accreditation for transforming health
care in public settings: Evidence from Tamil Nadu**

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ABSTRACT

This research report examines the management and sustainability of the National Quality Assurance Standards (NQAS) program in public facilities of Tamil Nadu, focusing on patient experience. A mixed-methods study from March 2023 to December 2023 was conducted across 40 public facilities, collecting data from patient experience surveys (N=1756), facility observations, and interviews of healthcare administrators and personnel. The report provides an overview of the execution of NQAS standards in public hospitals of Tamil Nadu, highlights areas of concern, and offers recommendations for improvement in current practices.

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ABBREVIATIONS

ANC	Antenatal care
ANM	Auxiliary Nurse and Midwife
BMW	Bio-Medical Waste
BMWM	Bio-Medical Waste Management
CBWTF	Common Bio-medical Waste Treatment Facility
CCTV	Closed Circuit Television
CHC	Community Health Centres
CMHIS	Chief Minister Health Insurance Scheme
CMO	Chief Medical Officer
DDHS	Deputy Director of Health Services
DH/DHQH	District Hospital/District HeadQuarter Hospital
GH	Government Hospital
IEC	Information, Education & Communication
IPD	In-Patient Department
JDHS	Joint Director of Health Services
JSK	Jansankhya Sthirata Kosh
JSY	Janani Suraksha Yojana
LaQshya	Labour Room Quality Improvement Initiative
LMIC	Low and Middle-income countries
MO	Medical Officer
MRD	Medical Records Department
NABH	National Accreditation Board of Hospitals and Healthcare Providers
NHM	National Health Mission
NHSRC	National Health Systems Resource Centre
NQAS	National Quality Assurance Standards
OPD	Outpatient Department
OT	Operation Theatre
PG	Post Graduate Medical Students
PHC	Primary Health Centre
PN	Post Natal
PWD	Public Works Department
QOC	Quality of Care
RBSK	Rashtriya Bal Swasthya Karyakram
SDH	Sub-District Hospital
SNA	Single Nodal Account
SOP	Standard Operating Procedure
SQAC	State Quality Assurance Committee
TNHSRP	Tamil Nadu Health System Reforms Program
UPHC	Urban Primary Health Centre

EXECUTIVE SUMMARY

The Tamil Nadu Health System Reforms Program (TNHSRP), funded by the World Bank, aims to improve Quality of Care through accreditation, biomedical waste management, and strengthening health management information systems. The TNHSRP has supported NQAS accreditation for 370 facilities across Tamil Nadu so far.

The two-fold objectives of the study were

1. To examine the differences in service quality experienced by patients visiting accredited public facilities and those in non-accredited ones
2. To identify challenges faced by public hospitals in maintaining NQAS accreditation standards, and suggest potential solutions to sustain these standards Study Design

The study adopted a mixed methods design to collect primary data in quantitative as well as qualitative form. Data was collected from 40 facilities including DHQs, GHs, CHCs, and PHCs across 22 districts of Tamil Nadu. Survey respondents were 1756 (Outpatients: 912, Inpatients: 844). In-depth interviews and focus group discussions with 102 healthcare personnel and administrators from various facilities.

Results

The survey findings showed that patients' experiences of service quality were better in accredited facilities compared to those in non-accredited ones. Yet there were issues related to patient amenities such as lack of cleanliness in wards and toilets, drinking water, mosquitoes, no proper waiting area for attendants, privacy concerns, etc. Few patients in the survey reported out-of-pocket expenses on drugs and diagnostics.

Facility-level observations and interviews with healthcare providers across facilities revealed the following concerns:

- Inadequate NQAS Gap funds; irregular NHM funds flow and utilization; 10 to 20% of CMHIS claims rejected.
- Shortages of manpower at all levels; Deputation and reliance on PG Bond students affecting quality standards
- Inadequate physical infrastructure for expanded services; some CHCs functioning from condemned-certified buildings

- PWD non-compliant with NQAS standards
- Clutter of regulatory and directional signages and IEC in public facilities
- Documentation burden compromising patient care; incomplete case sheets
- Knowing-doing gap in infection control practices, PPE use, housekeeping practices, and biomedical waste management

Recommendations

- ✓ Ensure adequate allocation of funds for NQAS gaps and Review manpower adequacy and regular recruitment.
- ✓ Rationalization of registers; periodic audit of registers, prescriptions, case sheets, etc.
- ✓ Mandate consultation/approval with the hospital superintendent or MO in charge of PWD works in the facility
- ✓ Enhance supervision and accountability for biomedical waste management and disposal and housekeeping practices
- ✓ Develop leadership attributes, especially among regular senior staff nurses
- ✓ Tackle the “Knowing –doing” gap through the “Kaizen” principle of making incremental quality improvements in daily operations.
- ✓ Encourage a "Quality Culture" in public facilities with peer review assessments and inculcate a sense of collective responsibility.

I. Quality Accreditation for public facilities in India and Tamil Nadu

1.1 Background

Accreditation is gaining wider acceptance as a mechanism to set minimum standards for healthcare in low-resource settings. Accreditation for health facilities is essentially a two-step process, where the first step concerns with design of standards and the second step is actual measurement relative to the same standards (Dybkaer, 1994). These pre-established standards are a specific set of management practices and processes related to patient safety, patient rights, infection control, clinical organization, medical equipment and facilities, and staff training and environmental safety. An independent third-party (external / peer reviewers) assessor or a healthcare accreditation body evaluates a healthcare organization's compliance and level of performance in relation its pre-established performance standards (Shaw, 2004). Accreditation typically entails changes in four main elements: organizational structure, implementation, incentives, and monitoring. It helps to standardize the processes in healthcare organizations to promote safety and quality of care which in turn leads to patient satisfaction, public accountability, and staff development.

In low-resource settings, the purpose of accreditation is to ensure better and equal access to healthcare services by establishing basic health facilities with adequate staffing and equipment (Shaw, 2003, 2004). The acceleration of Universal Health Coverage through insurance and initiatives such as the Joint Learning Network led to the expansion of accreditation programs across low and middle - income countries (LMICs), including India (Smits et al, 2014). Supported by a variety of international organizations and donor agencies, several LMICs adopted hospital accreditation models to improve healthcare quality and patient safety, enhance public accountability of healthcare organizations, and promote medical tourism destinations. Some of them have established national hospital accreditation programs and adapted them to fit their national contexts, despite limited time, resources, and information (Mansour et al, 2020).

Hospital Accreditation in India

In the Indian context, both state and non-state actors have recommended accreditation for healthcare facilities as a regulatory mechanism to ensure quality of care and patient safety (Nandaraj and Khot, 2003; Chakravarthi & Hunter, 2019). Sustained collaborative efforts by industry, not-for-profit actors, and the government led to the launch of the country-wide National Accreditation Board of Hospitals and Healthcare Providers (NABH) in 2006 under the management of the quasi-governmental Quality Council of India (Hunter et al, 2022). In 2013, the Ministry of Health and Family Welfare launched the National Quality Assurance Standards (NQAS) program.

The National Health Systems Resource Centre has developed quality assurance standards that are broadly arranged under eight “Areas of Concern” - Service Provision, Patient Rights, Inputs, Support Services, Clinical Care, Infection Control, Quality Management, and Outcome. These standards aim to improve the quality of healthcare services by promoting up-to-date, evidence-based, effective, and consistent practices. To implement NQAS systematically, an institutional mechanism involving a Central Quality Supervisory Committee, State and District Quality Assurance Committees, and Facility Level Committees was set up (Figure 1.1).



Figure 1.1: Institutional Mechanism for NQAS implementation

Source: NHSRC website¹

Currently, the NQAS is available in about 1200 public facilities comprising district hospitals, community health centres (CHCs), primary health centres (PHCs), and Urban PHCs across India (NHSRC India Website). The journey of the NQAS program is depicted in figure 1.2. The operational guidelines of quality assurance for district hospitals (DH) was released in 2013 and for community health centres (CHC) and primary health centres (PHC) in 2014. Subsequently, multiple initiatives such as Kayakalp Award, LaQshya, Patient Safety, and MusQan for quality improvement in the public health system have been introduced.

¹ <https://qps.nhsrindia.org/training-and-capacity-building/quality-Training-Presentation>

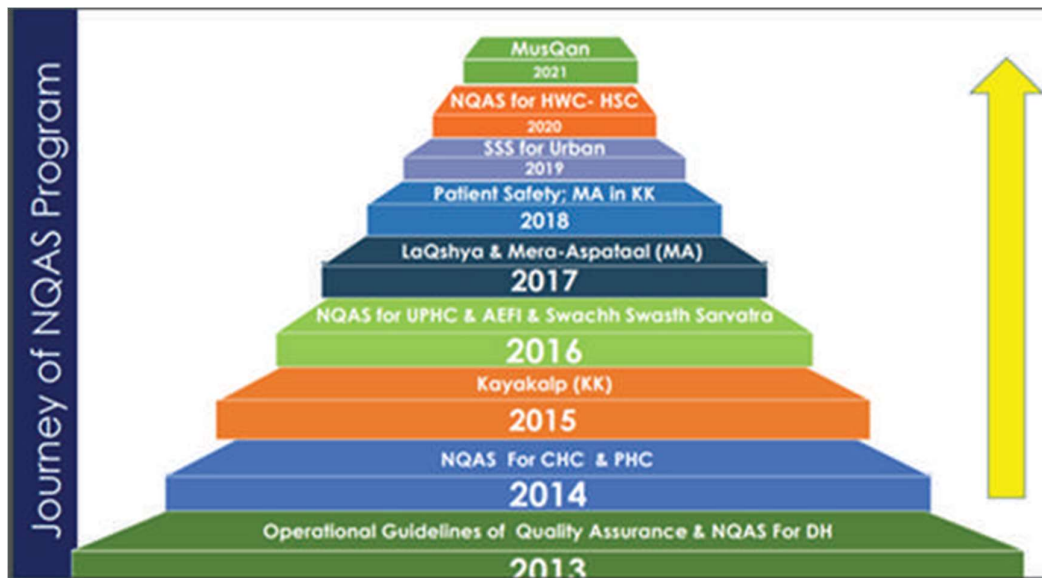


Figure 1.2: An Overview of NQAS Program

Source: NHSRC website

Tamil Nadu context

The state of Tamil Nadu has been a pioneer in pursuing quality accreditation for public facilities. As early as 2009, several public hospitals started preparation for the National Accreditation Board of Hospitals (NABH) certification. By 2016, five government hospitals from Tamil Nadu managed to get NABH certification competing with private hospitals, namely, Nammakal, Sholingur, Padmanabapuram, Hosur, and Tambaram. The Tamil Nadu Health System Reforms Program (TNHSRP) funded by the World Bank, since 2005 has aimed to improve Quality of Care (QoC) through financial and technical inputs to public facilities through accreditation, biomedical waste management, and strengthening of health management information systems, electronic medical records, laboratory services and citizenship engagement. The TNHSRP has adopted a three-pronged approach towards improvement of QoC: (a) govern for quality, (b) transform the health workforce through competency-based clinical education, and (c) ignite the demand for quality in the population and improve accountability (as shown in figure 1.3). It has supported NQAS accreditation for 370 primary and secondary facilities together across Tamil Nadu.

²<https://qps.nhsrccindia.org/training-and-capacity-building/quality-Training-Presentation>

³<https://www.deccanchronicle.com/nation/current-affairs/170416/five-government-hospitals-enter-nabh-list.html>

⁴<https://tnhsp.org/tnhsrp/objectives.php>

⁵<https://tnhsp.org/tnhsrp/result-areas.php>



Figure 1.3: TNHSRP Approach to Improving QoC

Source: TNHSRP website⁶

Limited evidence exists on the challenges and issues in managing and sustaining NQAS accreditations in public facilities of India. The study aims to investigate patient experience as well as the challenges faced by healthcare providers in delivering quality services in public health settings. The context is the state of Tamil Nadu.

1.2 Objective of the Study

The two-fold objectives of our study are, as follows:

1. To examine the difference between patient experiences visiting accredited public facilities in comparison to those visiting non-accredited ones.
2. To identify major challenges faced by public facilities in managing and sustaining quality standards recommended by NQAS accreditation agencies.

1.3 Methodology

Study design:

We conducted a multi - phased study following a mixed-methodology approach to collect primary data in quantitative as well as qualitative form.

⁶<https://tnhsp.org/tnhsrp/objectives.php>

Study settings:

A total of 40 facilities (20 accredited and 20 non-accredited) across different districts of Tamil Nadu were included in the study. The study adopted stratified random sampling; samples would be drawn from four strata of public facilities - District Hospitals (DH), Sub - District Hospitals (SDH), Community Health Centres (CHC), and Primary Health Centres (PHC). However, during the study, some facilities got certifications and some were upgraded from sub-district hospitals to district hospitals. The list of 40 facilities included in the study is shown in Table 1.1.

Table 1.1: Facilities selected for the study (N=40)

Category	Accredited (N1=24)	Non Accredited (N2=16)
District Hospital	DH Mettur Dam (Salem) DHQH Kumbakonam (Thanjavur) DH Cheyyar (Tiruvanamalai) GHQH Wallajapet (Ranipet) DH Tenkasi (Tenkasi)	DH Thirukovilur (Villupuram) DH Gudiyattam (Vellore) DH Uthamapalayam (Theni) DH Ponneri (Thiruvallur) DH Kangeyam (Tiruppur)
Sub-District Hospital	GH Harur (Dharmapuri) GH Thiruchendur (Tuticorin) GH Denkanikottai (Krishnagiri) *DH Hosur (Krishnagiri) *DH Aruppukottai (Virudhunagar) *DH Rasipuram (Namakkal)	GH Thiruvotriyur (Thiruvallur) GH Avinshi (Tiruppur) GH Srivaikundam (Tuticorin) GH Ettayapuram (Tirunelveli) GH Koodankulam (Tirunelveli)
Community Health Centre	CHC Kunnur (Virudhunagar) #CHC Mailam (Villupuram) CHC Mugaiyur (Cuddalore) CHC Sayalkudi (Ramanathapuram) CHC Kadugur (Ariyalur) CHC Perungattur (Tiruvannamalai) #CHC Zamin Kollankondan (Virudhunagar)	CHC Devipattinam (Ramanathapuram) CHC Anakkavur (Tiruvannamalai) CHC Andimadam (Ariyalur)

Primary Health Centre	UPHC Therespuram (Tuticorin) PHC Belrampatti (Dharmapuri) PHC Avatti (Cuddalore) #PHC Thiruvallampozhil (Tanjavur) PHC Agasthiarpatti (Tirunelveli) #PHC Swamimalai (Tanjavur)	UPHC Pammal (Chengalpattu) UPHC Fathima Nagar (Tuticorin) PHC Sirumangalam (Cuddalore)
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*Facilities are upgraded, but operating in old infrastructure

Facilities were awarded NQAS accreditation during this project.

Designing the Survey:

We designed two separate questionnaires for the patient experience survey based on a Likert scale - one for inpatient and the other for the outpatient department, based on the NQAS framework. These tools aim to capture patient experience with public facilities with items related to quality care aspects such as waiting times, availability of services, drugs, privacy, confidentiality, communication, and so on. Scale items will be further refined before conducting a field study. (Inserted in the APPENDIX). Note that the Likert scale is a type of psychometric response scale in which responders specify their level of agreement to a statement typically in five points: (1) Strongly disagree; (2) Disagree; (3) Neither agree nor disagree; (4) Agree; (5) Strongly agree. The study's target population is both in-patients admitted to medical wards and outpatients visiting accredited and non-accredited public facilities in Tamil Nadu. To address variability due to a large number of different diagnoses and procedures, the survey was taken amongst patients across different departments.

Empirical Data Collection:

Sample Size: For data collection two sets of questionnaires were developed to assess both IPD and OPD. Question set of 60 for IPD and 30 for OPD was developed. We have analysed the empirical data collected from patient experience survey following Structural Equation Modelling, where ideal sample size is determined by Holter's critical N statistic. We collected data from 1756 respondents, i.e., N=843 from inpatient and N=913 outpatients.

Study subjects: All patient age groups were recruited to participate in the survey. The outpatients will be recruited from special clinics or outpatient departments of the selected health facilities. For inpatients, eligible patients would be identified with the help of hospital admission and discharge staff. Patients were excluded if they were in poor physical status. For the data analysis we opted for quantitative software like SMART-PLS and SPSS. SMART PLS-SEM tool was adopted for the detailed analysis of our results datasets, allowing us to assess construct validity, reliability, and discriminant validity. This analysis eliminates internal similarities between constructs that impact the robustness of our results.

Qualitative Research:

In-depth interviews guided by the NQAS framework and supplemented by follow-up questions, probes, and comments, were used to collect open-ended data from providers and explore participant thoughts, feelings, and beliefs about accreditation in public facilities. A purposive sampling was used to select participants who were knowledgeable and willing to share details about NQAS accreditation were included in the study. Provider: A total of around 102 providers/staff across the selected accredited facilities in the study. In-depth interviews with each participant, with follow-up discussions (over the telephone) and focus group discussions with select key participants, to get more insights on the provider's perspective on Accreditation (shown in Table 1.2).

Table 1.2: Key informants to the study (N=102)

Respondents	Numbers
JDHS	2
DDHS	2
Hospital Superintendent	3

Regional Medical Officer	2
Chief Medical Officer	5
Block Medical Officer	8
Medical Officer	4
In-charge Medical Officer	9
NQAS Nodal officer	7
District Quality Medical Officer	3
Nursing Superintendent	8
NQAS in charge Staff Nurse	24
Mentor Staff Nurse	5
Pharmacist	5
Contractual Staff Nurse	15
Total	102

Triangulation:

Triangulation of our qualitative findings has been done with secondary data such as official documents including hospital-level accounts data, government orders, medical records, minutes of meetings, etc of selected facilities in the study were also examined for triangulation to verify and validate field observations. This was complemented with primary data from the facility observation checklist that we developed from our field visit, (Inserted in the APPENDIX). Further, we conducted FGD among healthcare practitioners and experts in QA before reporting our findings.

II. Differences in patient experiences in accredited and non-accredited facilities

2.1 Respondents to Patient Experience Survey

Table 2.1. Demographic details of the respondents (Total N = 1756)

FACILITY-->	IPD-ACCREDITED N= 528		IPD NON-ACCREDITED N=315		OPD ACCREDITED N=535		OPD NON-ACCREDITED N=378	
GENDER								
Male	181	(34%)	84	(27%)	232	(43%)	172	(46%)
Female	348	(66%)	231	(73%)	303	(57%)	205	(54%)
AGE								
Less than 1 year	3	(0%)	0	(0%)	0	(0%)	0	(0%)
1-10YEARS	36	(7%)	21	(7%)	36	(7%)	25	(7%)
11-20 YEARS	62	(12%)	47	(15%)	35	(7%)	20	(5%)
21-30 YEARS	186	(35%)	113	(36%)	91	(17%)	60	(16%)
31-40 YEARS	62	(12%)	37	(12%)	69	(13%)	58	(15%)
41-50 Years	55	(10%)	27	(9%)	97	(18%)	62	(16%)
51-60 Years	47	(9%)	34	(11%)	101	(19%)	77	(20%)
60 Years and above	79	(15%)	36	(8%)	107	(15%)	75	(14%)
FORMAL EDUCATION								
Illiterate	90	(17%)	52	(17%)	106	(20%)	64	(17%)
Primary	98	(19%)	56	(18%)	134	(25%)	114	(30%)
Secondary	155	(29%)	109	(35%)	176	(33%)	123	(33%)
Higher Secondary	86	(16%)	55	(17%)	45	(8%)	25	(7%)
Postgraduate	14	(3%)	9	(3%)	10	(2%)	13	(3%)
Undergraduate or equivalent	86	(16%)	34	(11%)	64	(12%)	38	(10%)
INCOME (INR per month)								
BELOW 5000	88	(17%)	56	(18%)	116	(22%)	80	(21%)
5000-10000	160	(30%)	100	(32%)	223	(42%)	157	(42%)
10001-15000	174	(33%)	105	(33%)	123	(23%)	96	(25%)
15001-20000	59	(11%)	33	(10%)	39	(7%)	31	(8%)
ABOVE 20001	48	(9%)	21	(7%)	34	(6%)	13	(3%)
No. of days Hospitalized								
=< 5 days	312	(59%)	258	(82%)	NA	NA	NA	NA
> 5 days	217	(41%)	48	(15%)	NA	NA	NA	NA

Table 2.2. Facility-wise division of respondents

FACILITY	IPD ACCREDITED		IPD NON-ACCREDITED		OPD ACCREDITED		OPD NON-ACCREDITED	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)
DH	313	(59%)	226	(72%)	105	(20%)	105	(28%)
DHQ	0	(0%)	0	(0%)	25	(5%)	0	(0%)
SDH	175	(33%)	87	(28%)	151	(28%)	156	(41%)
CHC	36	(7%)	2	(1%)	158	(30%)	68	(18%)
PHC	3	(1%)	0	(0%)	64	(12%)	16	(4%)
UPHC	1	(0%)	0	(0%)	32	(6%)	33	(9%)
TOTAL	528		315		535		378	

2.2 Antecedents of Patients Experience

All statistical analyses have been performed with a 95% confidence interval, following the practice in health service research. Thus, the null hypothesis is rejected for a p-value less than 0.05.

Table 2.3: Antecedents of patient experience in IPD at Accredited facilities

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
OUTPUT	533	2395	4.49	0.18
PATEINTS RIGHT	533	2300	4.32	0.09
CLINICAL SERVICES	533	2317	4.35	0.22
SUPPORT SERVICE	533	2397	4.50	0.16
INFECTION CONTROL	533	2089	3.92	0.43
INPUTS	533	2269	4.26	0.26
QUALITY MANAGEMENT	533	2468	4.63	0.47
SERVICE PROVISION	533	2294	4.30	0.80
PATEINTS EXPERIENCE	533	2447	4.59	0.25

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	P values
Clinical Services -> Patients Experience	0.155	0.151	0.055	0.005
Infection Control -> Patients Experience	0.033	0.035	0.042	0.436
Inputs -> Patients Experience	0.044	0.047	0.041	0.287
Outcome -> Patients Experience	-0.012	-0.001	0.034	0.717
Patient Rights -> Patients Experience	0.229	0.230	0.068	0.001
Quality Management -> Patient Experience	0.126	0.122	0.039	0.001
Service Provision -> Patients Experience	0.337	0.325	0.059	0.000
Support Service -> Patients Experience	0.070	0.083	0.039	0.075

Interpretation: Statistically significant associations indicate that Clinical Services ($p=0.005$), Patient Rights ($p=0.001$), Quality Management ($p=0.001$), and Service Provision ($p=0.000$) play a significant role in influencing Patients' Experience. Conversely, no statistically significant associations were observed between Patients' Experience and Infection Control, Inputs, Outcome, and Support Service.

Table 2.4: Antecedents of patient experience in IPD at Non-Accredited facilities

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
OUTCOME	315	1344.75	4.269048	0.266754
PATIENTS RIGHT	315	1310.643	4.160771	0.136994
CLINICAL SERVICE	315	1321.875	4.196429	0.253043
SUPPORT SERVICE	315	1354.25	4.299206	0.245227
INFECTION CONTROL	315	1165.5	3.7	0.459574
INPUTS	315	1265	4.015873	0.342502
QUALITY MANAGEMENT	315	1431	4.542857	0.682075
SUPPORT SERVICE	315	1392.333	4.420106	0.331442
PATEINTS EXPERINCE	315	1436.5	4.560317	0.247146

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	P values
Clinical Services -> Patient Experience	0.117	0.103	0.066	0.074
Infection Control -> Patient Experience	0.139	0.150	0.054	0.010
Inputs -> Patient Experience	0.130	0.129	0.048	0.007
Outcomes -> Patient Experience	0.063	0.067	0.052	0.225
Patients Right -> Patient Experience	0.183	0.209	0.066	0.006
Quality Management -> Patient Experience	0.012	-0.021	0.078	0.882
Service Provision -> Patient Experience	0.284	0.264	0.062	0.000
Support Service -> Patient Experience	0.018	0.050	0.063	0.776

Interpretation: Statistically significant associations are observed between Infection Control (p=0.010), Inputs (p=0.007), Patient Rights (p=0.006), and Service Provision (p=0.000) with Patients' Experience. Conversely, Clinical Services, Outcomes, Quality Management, and Support Services do not exhibit a statistically significant role in influencing Patients' Experience.

Table 2.5: Antecedents of patient experience in OPD at Accredited facilities

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
OUTCOME	535	2375.5	4.440187	0.299552
PATEINTS RIGHT	535	2242	4.190654	0.087588
CLINICAL SERVICE	535	2460	4.598131	0.577899
SUPPORT SERVICE	535	2324.5	4.34486	0.366336
INFECTION CONTROL	535	1827	3.414953	1.212323
INPUTS	535	2243.5	4.193458	0.348506
SERVICE PROVISION	535	2392.667	4.472274	0.365803
QMI	535	2456	4.590654	0.388302
PATEINTS EXPERINCE	535	2469.75	4.616355	0.29086

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	P values
Clinical services -> Patients Experience	0.120	0.119	0.050	0.017
Infection control -> Patients Experience	0.012	0.003	0.035	0.726
Inputs -> Patients Experience	0.028	0.038	0.044	0.534
Outcome -> Patients Experience	0.076	0.077	0.052	0.142
Patient right -> Patients Experience	0.206	0.211	0.052	0.000
Quality Management -> Patients Experience	-0.017	-0.015	0.037	0.650
Service provision -> Patients Experience	0.480	0.471	0.062	0.000
Support service -> Patients Experience	0.059	0.057	0.039	0.136

Interpretation: We observe a statistically significant impact of Clinical Services ($p=0.017$), Patient Rights ($p=0.000$), and Service Provision ($p=0.000$) on Patients' Experience. Additionally, Infection Control, Inputs, Outcome, Quality Management, and Support Service exhibit a statistically significant influence on Patients' Experience.

Table 2.6: Antecedents of patient experience in OPD at Non-Accredited facilities

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
OUTPUT	377	1607.25	4.263263	0.338919
PATEINT RIGHT	377	1508.125	4.000332	0.152468
CLINICAL SERVICES	377	1650.5	4.377984	0.776296
SUPPORT SERVICE	377	1537.5	4.078249	0.498515
INFECTIION CONTROL	377	1273.5	3.377984	1.108743
INPUTS	377	1420	3.766578	0.494719
QUALITY CONTROL	377	1720	4.562334	0.406343
SERVICE PORVISION	377	1609.667	4.269673	0.458112
PATEINT EXPERINCE	377	1658	4.397878	0.398453

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	P Values
Clinical Services -> Patient Experience	0.130	0.127	0.050	0.009
Infection Control -> Patient Experience	0.120	0.118	0.040	0.003
Inputs -> Patient Experience	-0.082	-0.056	0.050	0.105
Outcome -> Patient Experience	0.148	0.152	0.059	0.012
Patients Right -> Patient Experience	0.112	0.129	0.055	0.042
Quality Management -> Patient Experience	-0.065	-0.065	0.044	0.137
Service Provision -> Patient Experience	0.479	0.460	0.069	0.000
Support Service -> Patient Experience	0.041	0.041	0.054	0.445

Interpretation: We observe a statistically significant impact of Clinical Services ($p=0.009$), Infection Control ($p=0.003$), Outcome ($p=0.012$), Patient Rights ($p=0.042$), and Service Provision ($p=0.000$) on Patients' Experience. Additionally, Inputs, Quality Management, and Support Service do not play a statistically significant role in shaping patients' experience.

2.3 Mapping of the Patient Experience Survey to Areas of Concern in NQAS

Table 2.7: Statistically significant scale items identified from IPD of all facilities

INPATIENT EXPERIENCE SURVEY		
S.No.	Scale item	Constructs
1	During this hospital stay, the nurses often treated me with respect and dignity.	Patients Right
2	During this hospital stay, the nurses often gave most information about my test results.	Patients Right
3	During this hospital stay, the nurses often maintained confidentiality about my clinical records	Patients Right
4	During this hospital stay, the nurses often maintained my physical privacy(eg, putting curtains/ asking people to move out, etc.,)	Patients Right
5	During this hospital stay, the nurses often listened carefully about my health needs.	Patients Right
6	During this hospital stay, the nurses often explained things in a way that was easy for me to understand.	Patients Right
7	During this hospital stay, the doctor often maintained confidentiality about my clinical records	Patients Right
8	During this hospital stay, the doctor often maintained my physical privacy (while administering injection / examine private parts)	Patients Right

9	During this hospital stay, my consent was sought by providers (Doctors/Nurses/Other staffs) for all treatments and procedures done to me.	Patients Right
10	My consent (written), wherever required, for medical procedures was taken by providers (Doctors/Nurses/Other staffs)	Patients Right
11	Providers (Doctors/Nurses/Other staffs) give equal treatment to all	Patients Right
12	The gates of the facility is locked during night	Quality Control
13	There is no fear of theft of personal belongings in the facility	Quality Control
14	The facility allows only one attender with the patient	Service Provision
15	Providers (Doctors/Nurses/Other staffs) have a caring attitude towards patients in general	Service Provision
16	Providers (Doctors/Nurses/Other staffs) ensure clinically appropriate treatments for patients in general	Service Provision
17	The facility is free of foul smell	Infection Control
18	The facility is free of insects/flies/mosquitoes/bugs/rodents	Infection Control
19	The facility is free of stray dogs/cats	Infection Control
20	Cleanliness and hygiene of wards in the facility is acceptable to me	Infection Control
21	Cleanliness and hygiene of toilets in the facility is acceptable to me	Infection Control
22	Cleanliness and hygiene of bed and linen in the facility is acceptable to me	Infection Control
23	Cleanliness and hygiene of waiting hall in the facility is acceptable to me	Infection Control
24	Providers (Doctors/Nurses/Other staffs) used hand sanitizers/gloves while examining me	Infection Control
25	At least one infectious waste container (not the usual dust bin) is available in the ward	Infection Control
26	The facility has reasonable hygiene and infection control measures (hand wash, use of gloves & masks, respiratory hygiene / cough etiquette etc)	Infection Control

Table 2.8: Statistically significant scale items identified from OPD of all facilities

OUT PATIENT EXPERINCE SURVEY		
S.No	Description	Constructs
01	Waiting time for clinic registration was acceptable to me	Outcome
02	Waiting time between clinic registration and doctor consultation was acceptable to me.	Outcome
03	Waiting time for counselling / sample collection / Blood Bank / X-ray / diagnostic centre was acceptable to me.	Outcome
21	The clinical examination by providers (Doctors/Nurse/ Others Staffs) was acceptable to me.	Outcome
07	I was kept informed often by providers (Doctors / Nurses / Other staffs) about all the medical procedureds being done to me.	Patients Right
04	During this visit, the healthcare providers allowed me to speak and explain my health condition	Patients Right
09	The healthcare provider-maintained confidentiality about my clinical records.	Patients Right
10	The healthcare provider maintained my physical privacy (e.g. While administering injection or examining private parts) during the consultation.	Patients Right
11	I could get all dugs and consumables required by me free of cost within the facility.	Patients Right
17	Providers (Doctors / Nurses / Other staffs) give equal treatment to all.	Patients Right
18	The healthcare provider often treated me with respect and dignity.	Patients Right
08	I was asked to list or review all of the prescription drugs I was taking before the consultation.	Clinical Services
05	The consultation time with the doctor was adequate.	Clinical Services
19	Providers (Doctors/Nurses/Other Staffs) have a caring attitude towards patients in general.	Service Provision
23	The available health services in the facility are appropriate to my needs.	Service Provision
24	The available health services in the facility are sufficient to my needs.	Service Provision
26	The facility has reasonable hygiene and infection control measures (hand wash, use of gloves & masks, respiratory hygiene / cough etiquette etc)	Infection control
13	Providers (Doctors/Nurses/Other staffs) used hand sanitizers / gloves while examining me.	Infection control

Broad Interpretation:

- The IPD patient experience survey revealed a statistically significant influence of Clinical Services, Patient Rights, Quality Management, and Service Provision on the patient experience.
- In the OPD patient experience survey, key factors such as Clinical Services, Infection Control, Patients' Rights, and Service Provision emerged as contributors to positive outpatient experiences.
- The statistical significance of these findings corroborates our on-site observations regarding the role of clinical care quality, infection control measures, adherence to patients' rights, and effective service provision in outpatient settings, irrespective of accreditation status.
- Both IPD and OPD satisfaction survey results add quantitative rigor to the qualitative insights obtained during extensive facility visits.
- It's noteworthy that the prevailing facility satisfaction forms widely used in healthcare facilities may have limitations in fully capturing and measuring patient satisfaction and experiences.
- By utilizing scales that categorize responses broadly into poor, fair, good, and excellent, these forms may oversimplify the nuanced feedback and varied experiences reported by patients.
- For instance, the assessment of waiting time at the registration counter, graded on a scale of poor, fair, good, very good, and excellent, might lack granularity, potentially overlooking subtle variations in patient perceptions of waiting times.
- Recognizing the multifaceted and subjective nature of patients' experiences, a more detailed and nuanced measurement scale is necessary to provide a more accurate reflection of their sentiments.

2.4 Group Wise Comparative Analysis

Table 2.9: ANOVA results comparing IPD patient experience from two groups - accredited vs non-accredited

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	198.4531	8	24.80664	78.06654	0.00	1.940339
Within Groups	1521.448	4788	0.317763			
Total	1719.901	4796				

Interpretation: The statistical analysis of data from IPD reveals significant differences in patient experience between accredited and non-accredited facilities.

Table 2.10: ANOVA results comparing OPD patient experience from two groups - accredited vs non-accredited

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	183.0526	8	22.88157	69.46073	0.00	1.941677
Within Groups	930.9335	2826	0.329417			
Total	1113.986	2834				

Interpretation: The statistical analysis of data from OPD reveals significant differences in patient experience between accredited and non-accredited facilities.

Table 2.11: ANOVA results comparing overall patient experience (IPD & OPD) from two groups - accredited vs non-accredited

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Sample	669.2	175	3.8	11.57	0.00	1.183
Columns	1190.7	8	148.8	450.33	0.00	1.939
Interaction	1252.8	1400	0.9	2.71	0.00	1.066
Within	4711.6	14256	0.3			
Total	7824.3	15839				

Interpretation: The analysis of the full dataset (data from both IPD and OPD) reveals statistically significant differences in patient experience between accredited and non-accredited facilities. On average, patient experience at accredited facilities has been 4.4, with a variance of 0.3, whereas patient experience at non-accredited facilities has been 4.18, with a variance of 0.12. In other words, the data from our study reports that the patient experience at accredited facilities is likely to be better than that at non-accredited facilities.

2.5 Facility Wise Comparative Analysis

Table 2.12: ANOVA results comparing various facility wise scenerios

Scenarios	Facility levels	Group1	Group 2	<i>P-value</i>	Significant?
1	DH-IPD	Accredited	Non-Accredited	0.00	YES
2	DH-OPD	Accredited	Non-Accredited	0.00	YES
3	SDH-IPD	Accredited	Non-Accredited	0.00	YES
4	SDH-OPD	Accredited	Non-Accredited	0.00	YES
5	CHC-IPD	Accredited	Non-Accredited	0.00	YES
6	CHC-OPD	Accredited	Non-Accredited	0.00	YES
7	PHC-IPD	Accredited	Non-Accredited	0.00	YES
8	PHC-OPD	Accredited	Non-Accredited	0.00	YES

Interpretation: The statistical analysis comparing accredited and non-accredited healthcare facilities across different levels (DH / SDH / CHC / PHC) indicates significant differences in both IPD and OPD patient experiences in all scenarios.

2.6 Out-of-pocket expenses on drugs and diagnostic tests

In accredited public facilities, few patients reported out-of-pocket expenses on certain drugs and diagnostics from private pharmacies and diagnostic centers.

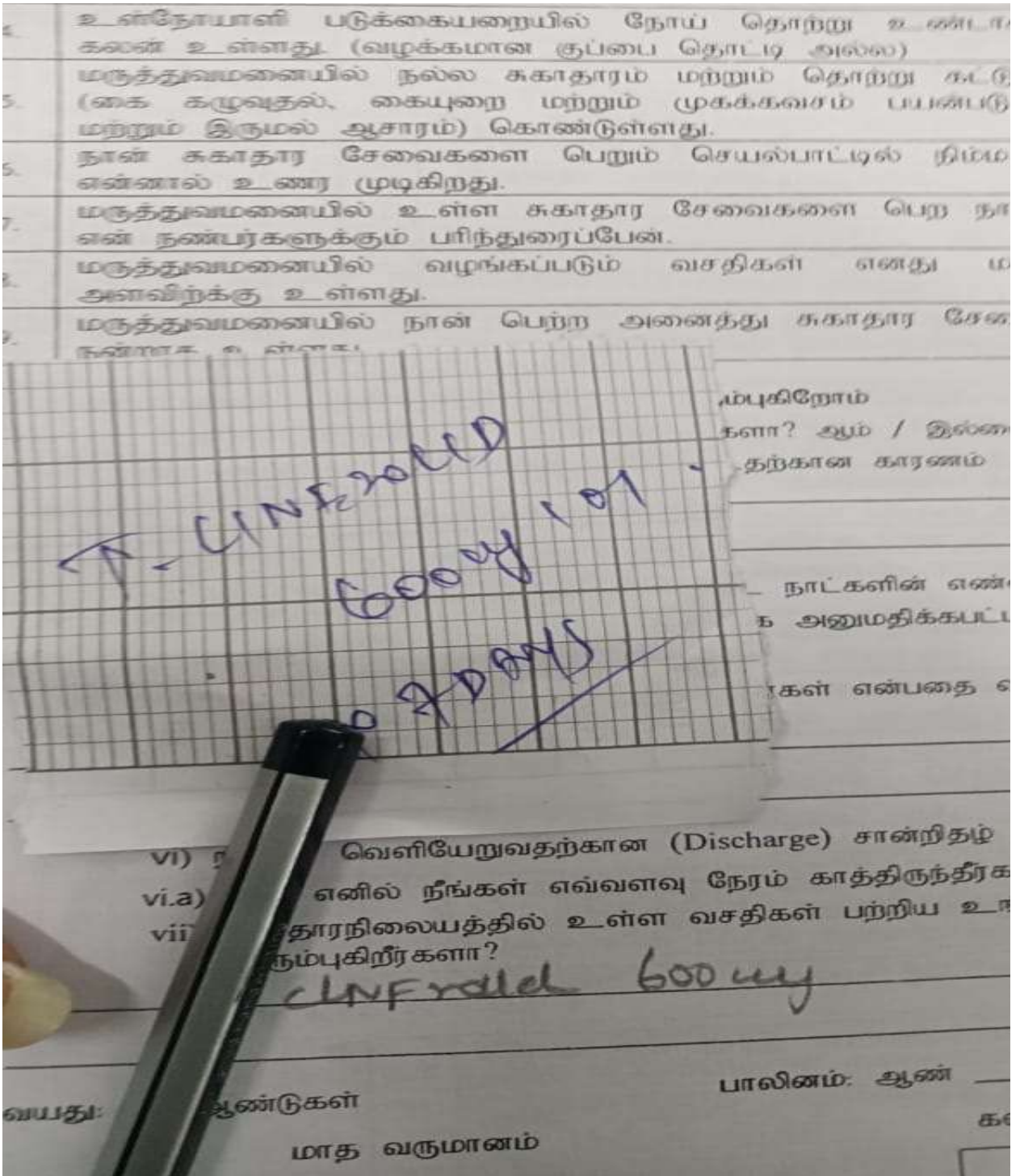
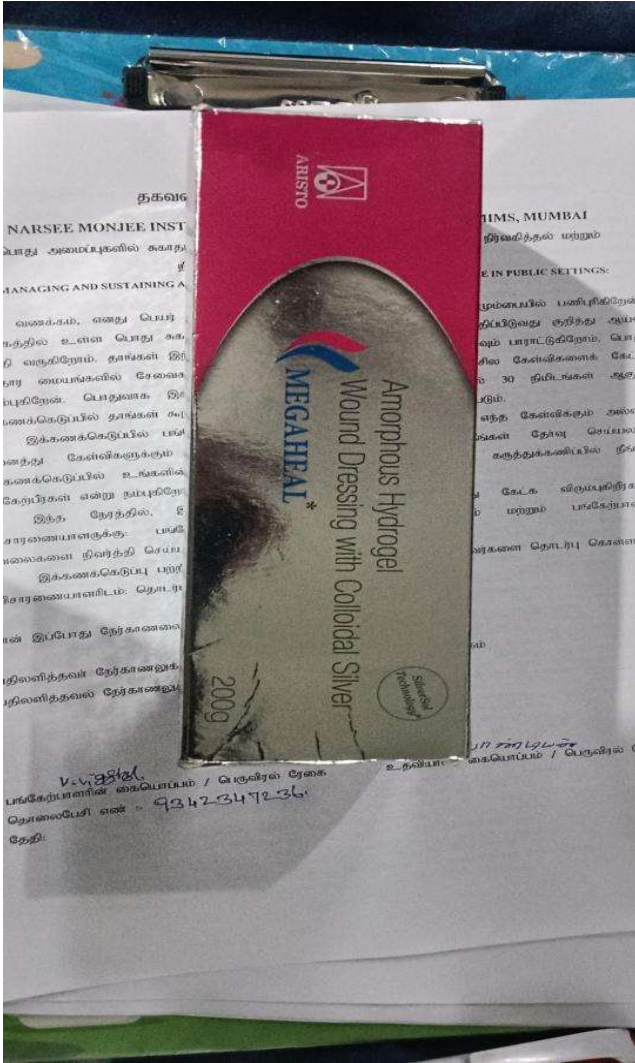


Figure 2.1: An outpatient from an accredited DH prescribed Linezolid 600 Mg worth MRP of Rs 400 approximately from private pharmacy

In an accredited DH, few prescribed medications are unavailable in the hospital's pharmacy. In Figure 2.1, an OPD patient was prescribed 14 tablets of Linezolid 600 Mg (worth MRP of Rs 400 approximately). Linezolid is regarded as the 'reserve antibiotic' prescribed as a last resort to fight bacterial infections that have been resistant to other antibiotics.

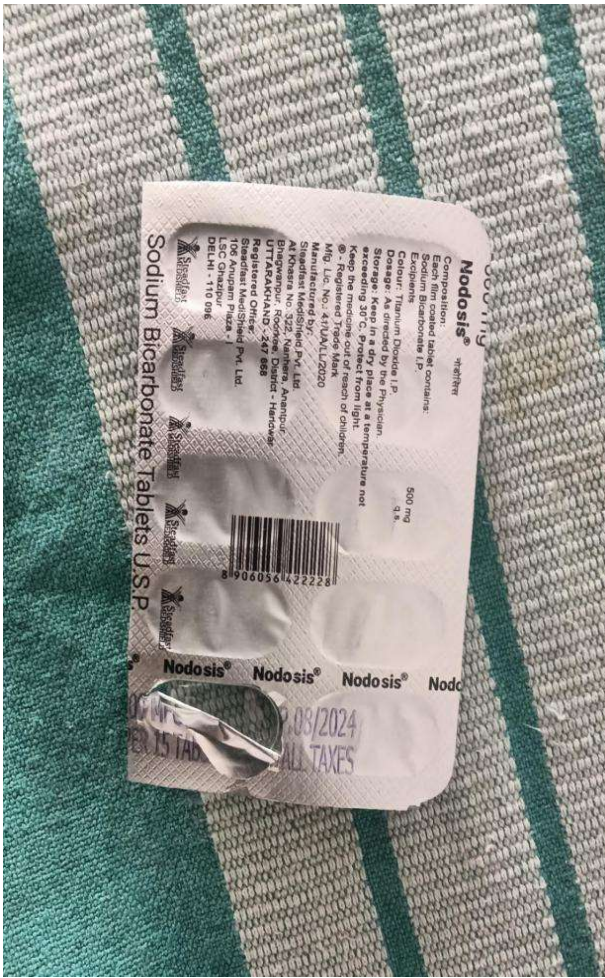


(a)

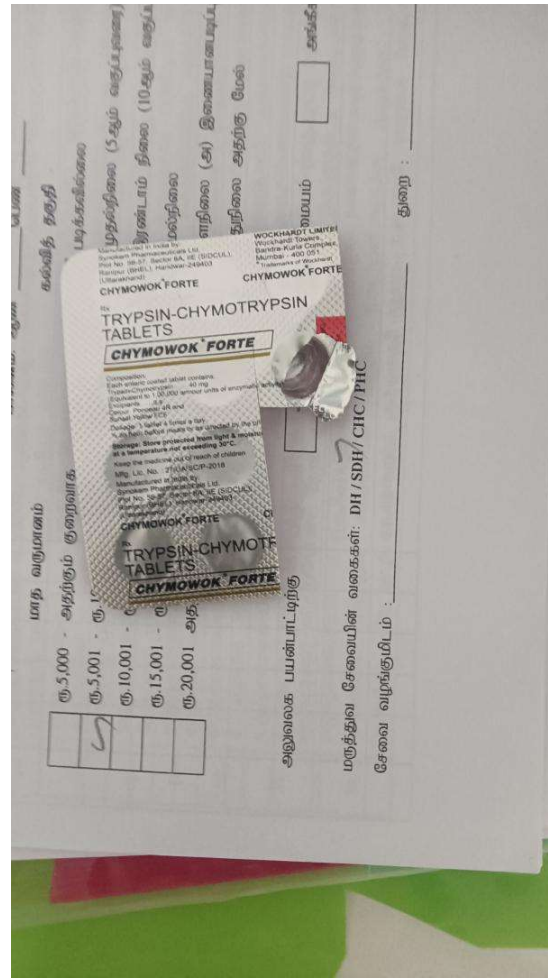


(b)

Figure 2.2: An inpatient from an accredited DH was asked to purchase Megaheal - Amorphous Hydrogel - Fast Healing Wound Dressing With Colloidal Silver 200g worth MRP of Rs 675 and Bactigras (10cm x 10cm) worth MRP of Rs 31.90.



(a)



(b)

Figure 2.3: Inpatients from an accredited GH prescribed Nodosis 500 mg worth MRP of Rs 25.50 and Trypsin- Chymotrypsin Tablets worth MRP of Rs 237 to be purchased from outside pharmacy

In an accredited GH, an inpatient prescribed Nodosis 500 mg worth MRP of Rs 25.50 to be purchased from an outside pharmacy at GH Arrupukotai Sodium Bicarbonate is used in the treatment of Indigestion. It is an antacid that is used to relieve acid indigestion, heartburn, and gas. Another inpatient prescribed Trypsin- Chymotrypsin Tablets worth MRP of Rs 237 to be purchased from an outside pharmacy. Trypsin Chymotrypsin is used in the treatment of pain and inflammation. It effectively alleviates pain and swelling in post-operative wounds and inflammatory diseases.

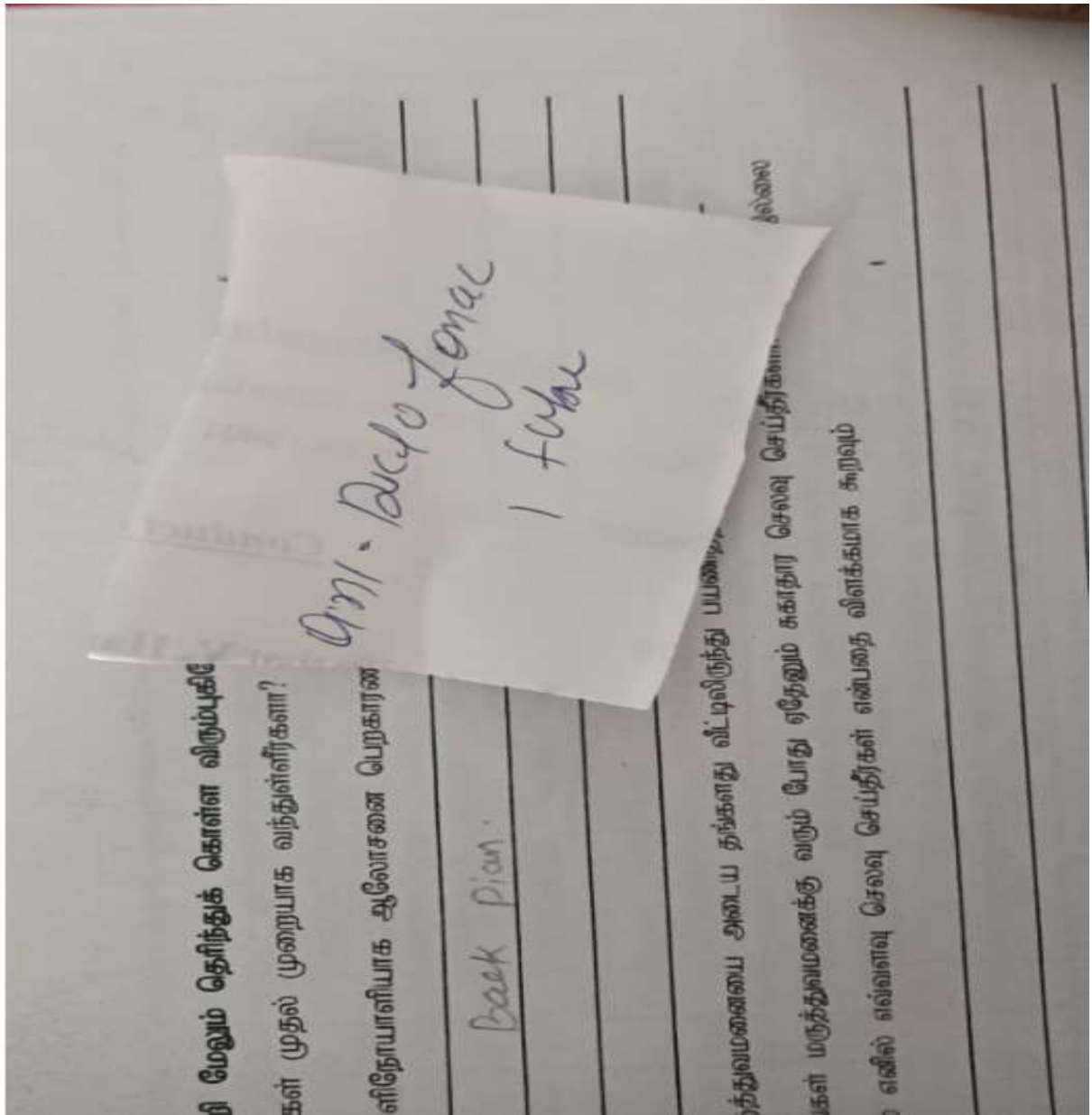


Figure 2.4: An inpatient from an accredited GH asked to purchase a Diclofenac Sodium Injection with a syringe worth Rs 20 to relieve back pain and inflammation



Figure 2.5: An inpatient in an accredited DH asked to purchase Savlon antiseptic disinfectant liquid worth MRP of Rs 92.

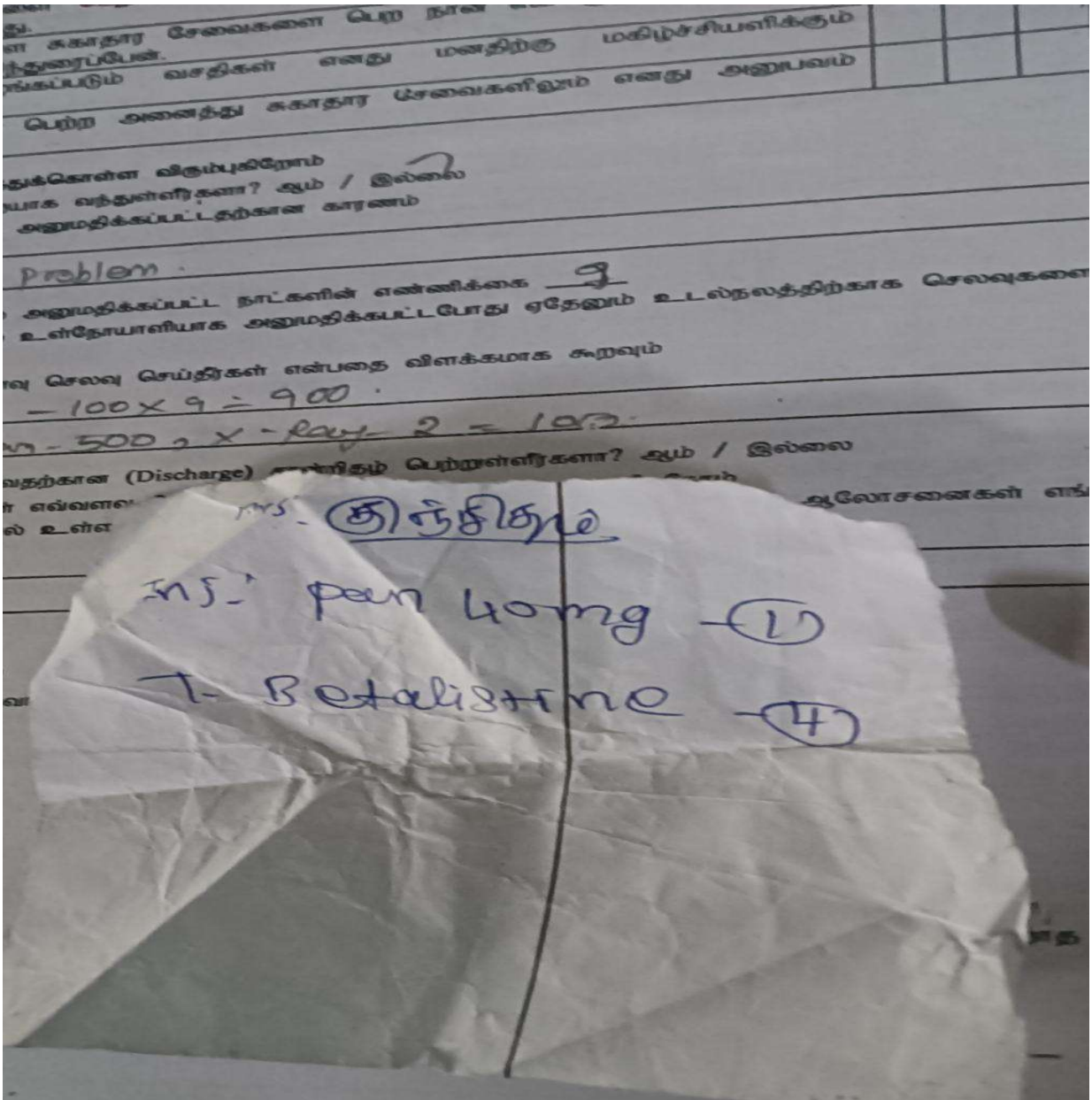
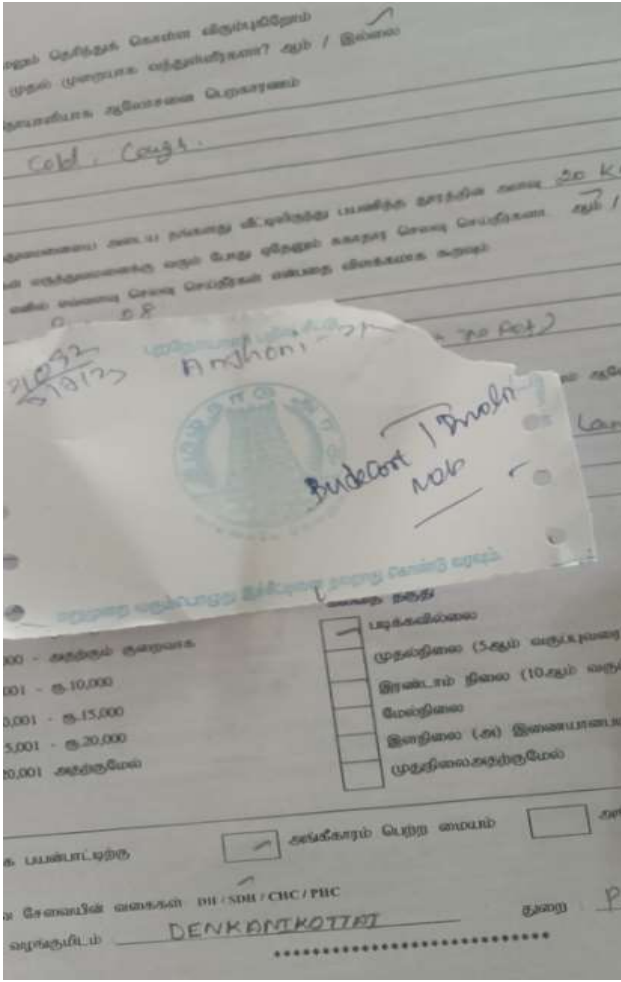
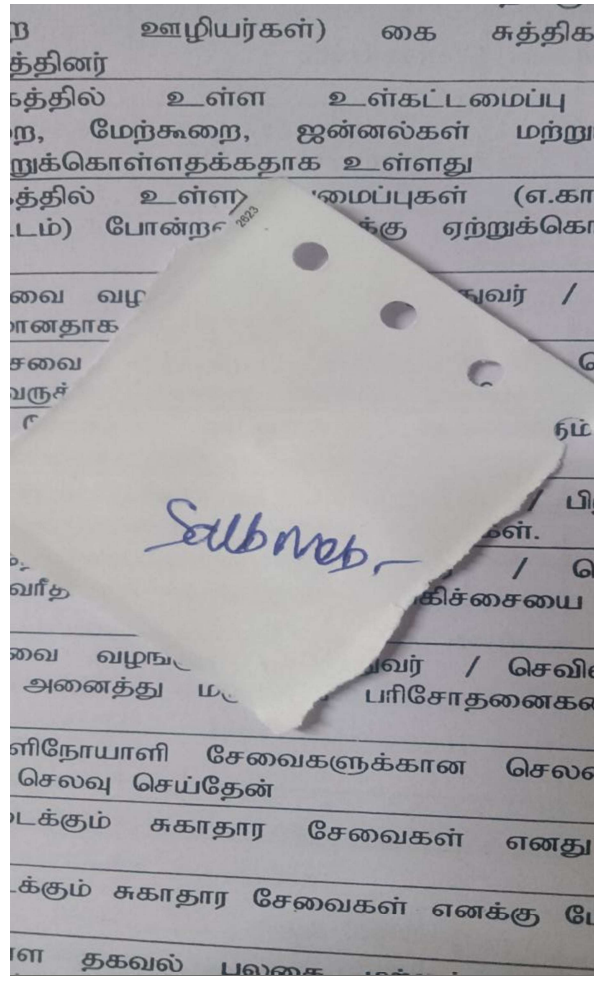


Figure 2.6: An inpatient in an accredited DH asked to buy an Injection Pan 40 Mg worth MRP of Rs 22 and Tab Betalistine -4 tablets worth MRP of Rs 48.



(a)



(b)

Figure 2.7: A pediatric inpatient in an accredited GH asked to buy Budecort Respules worth MRP of Rs 133 and another pediatric inpatient was asked to buy Salbair Neb 0.63 Transpules worth Rs 12. Salbair from a private pharmacy.

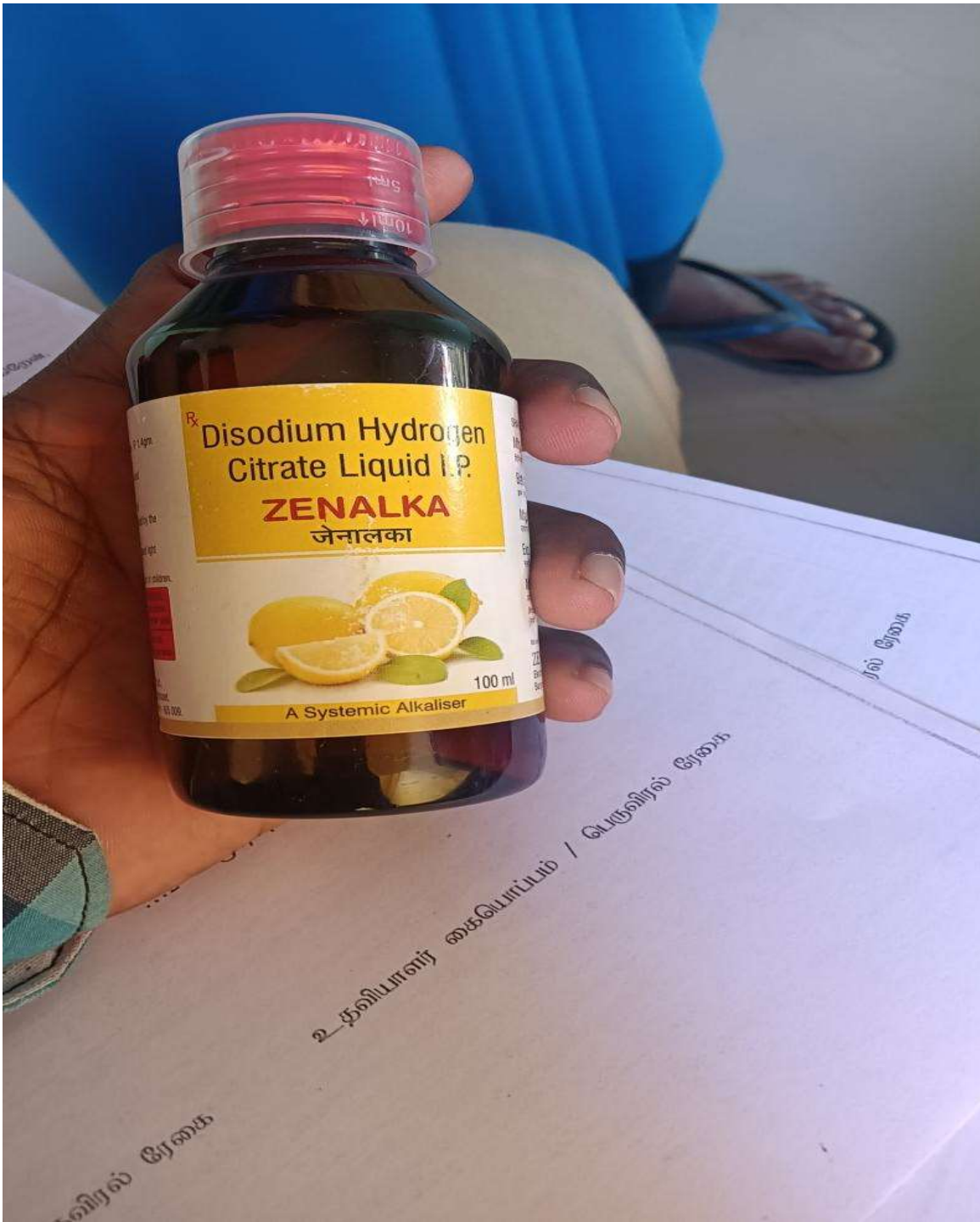
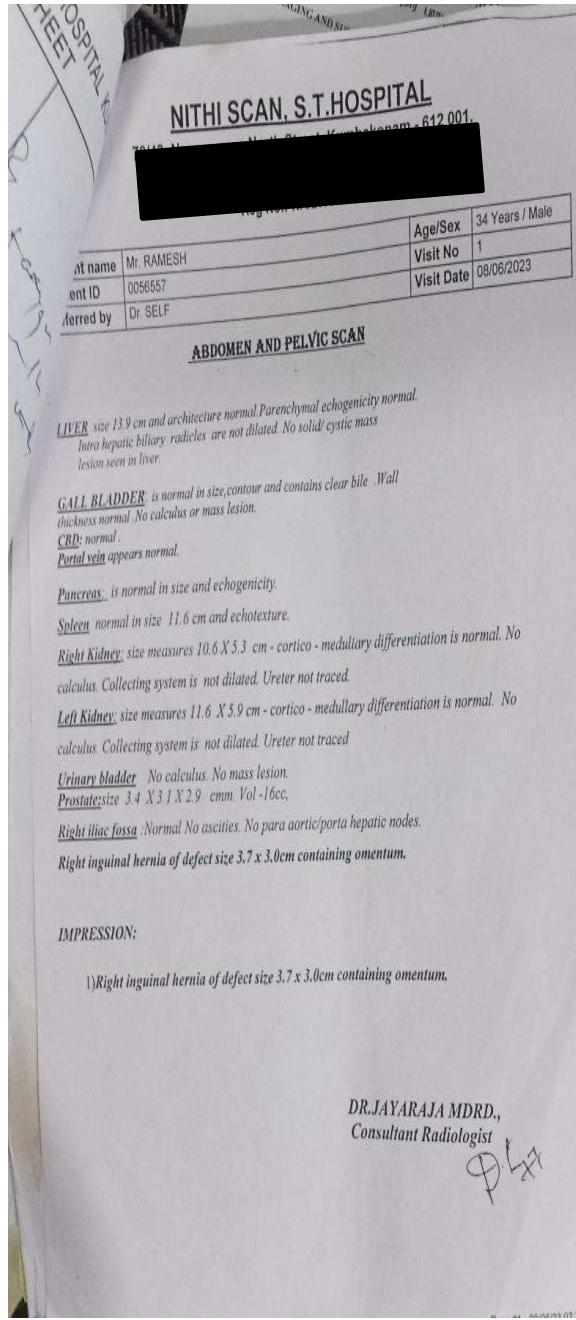
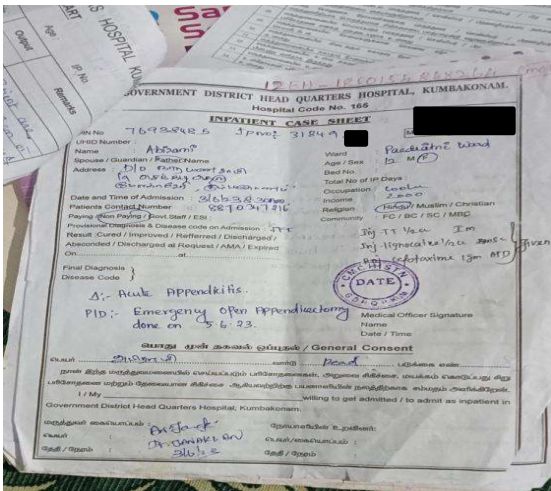
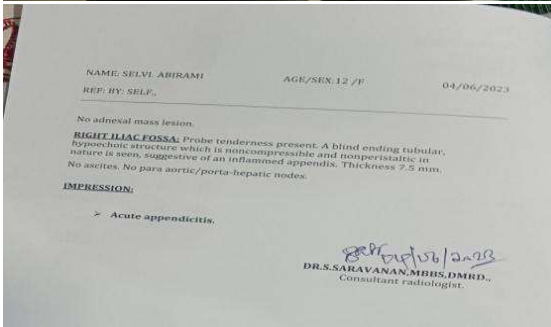
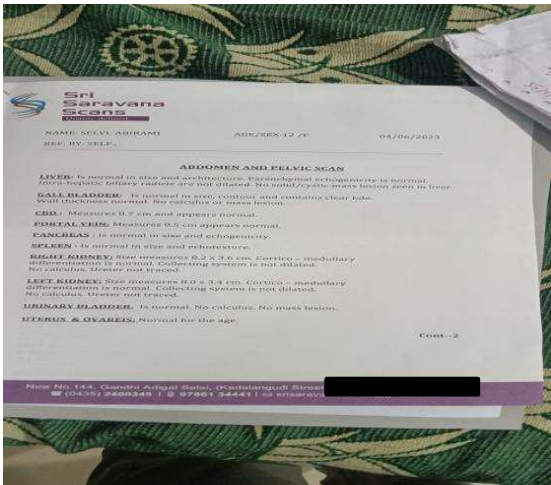


Figure 2.8: An outpatient from an accredited CHC was asked to buy Zenalka syp. Disodium hydrogen citrate 100 ml worth Rs 72 from a private pharmacy.



(a)

(b)

Figure 2.9: Inpatients from an accredited DH were referred to private radiologists for abdomen and pelvic scan.

Patients from an accredited DH referred to private radiologist for abdomen and pelvic scan. In Image (a), the female patient was diagnosed with Acute appendicitis (She had to pay Rs1200) and Image (b) the male patient has been diagnosed with right inguinal hernia of defect size 3.7 x 3.0 cm containing omentum. (He had to pay Rs 850).

Summary

Our study shows that patient experiences in accredited facilities are better than those in non-accredited facilities on average. Long wait times, lack of cleanliness of toilets and wards, lack of privacy, and communication issues are some common concerns expressed by patients. There is scope for improving patient-centric care, with a greater focus on reducing wait times, enhancing patient amenities such as clean toilets, ensuring privacy, and improving communication between healthcare providers and patients. The primary survey also revealed out-of-pocket expenses on drugs and diagnostic tests in accredited facilities.

III. Major challenges in managing and sustaining NQAS standards

3.1 Funding constraint

NQAS Gap Fund

During the preparation phase, each facility was asked to identify gaps in meeting the NQAS standards and estimate funds required to fulfill the gaps related to infrastructure, equipment, intercom and major maintenance and repair works. On 19th Jan 2023, the NHM released Rs 4,92,04, 130/- (four crores ninety-two lakhs four thousand one hundred and thirty only) for gap closure and incentives for implementing quality assurance framework under the NQAS program in 5 DH, 15 SDH, 21 CHC & 23 PHC facilities. The National Health System Resource Centre (NHSRC) mandates the gap fund received should be used in the ratio of 75: 25 for improving infrastructure and patient amenities in the facility, and incentives to be shared among individuals/teams who contributed towards NQAS.

On quality accreditation against NQAS, the National Health Mission (NHM) incentivizes public health facilities. The incentive rates for the first year is shown in Figure 3.1 and the incentives for the subsequent two years would be subject to the acceptance of the (State Quality Assurance Committee) SQAC report by the NHSRC.

QA Incentivisation Norm

Type of Health Facility	Areas for Assessment for QA Certification	Type of Certification	Incentive
1. DH/ SDH/ Area Hospital/ CHC & Equivalent	All Departments of Health Facility	Full Certification (meeting all criteria)	Rs. 10, 000 X Number of Functional Beds
2. DH/ SDH/ Area Hospital/ CHC & Equivalent	All Departments of Health Facility	Certification with conditionality	Rs. 7,000 X Number of Functional Beds
3. DH/ SDH/ Area Hospital/ CHC & Equivalent	Part of the Hospital / Services (Labour Room, Maternity Ward, Blood Bank, etc.)	Full Certification	Rs. 10,000 X Number of Functional Beds X No. of applicable check-lists/ total number of check-lists in the Standards
4. DH/ SDH/ Area Hospital/ CHC & Equivalent	Part of the Hospital / Services (Labour Room, Maternity Ward, Blood Bank, etc.)	Certification with conditionality	Rs. 7000 X Number of Functional Beds X No. of applicable check-lists/ total number of check-lists in the Standards
5. PHC/ U-PHC with beds	All Departments	Full Certification	Rs. 3.0 Lakh
6. PHC/ U-PHC with beds	All Departments	Certification with conditionality	Rs. 2.0 Lakh
7. U-PHC/ PHC without beds	All Check-lists	Full Certification	Rs. 2.00 Lakh
8. U-PHC/ PHC without beds	All Check-lists	Certification with conditionality	Rs. 1.50 Lakh

Figure 3.1: NQAS Incentives by the NHM for certified public facilities

Source: NHSRC website⁷

⁷https://qps.nhsrccindia.org/sites/default/files/2021-05/Incentive%20for%20National%20Level%20certification_1.pdf

Table 3.1: NQAS Gap closure from TNHSRP & incentives from NHM for selected secondary care facilities

Facilities	Assessed/ Actual Departments	Beds Available	Gap closure fund under TNHSRP during the preparation phase	Assessment date	Certification validity period	Incentives amount received per annum after certification (INR)
DH Mettur Dam	17/19	300	1,50,00,000/-	20-22 Dec 2021	31 Jan 2022 -30 Jan 2025	26,84,211/- *
DHQH Kumbakonam	17/19	526	2,63,00,000/-	29-31 Dec 2021	31 Jan 2022 -30 Jan 2025	47,06,316/- *
DH Cheyyar	17/19	226	1,13,00,000/-	29-31 Dec 2021	31 Jan 2022 -30 Jan 2025	20,22,105/- *
GHQH Wallajapet	17/19	330	1,70,00,000/-	8-10 Apr 2022	8 June 2022 - 7 June 2025	30,00,000/-
DH Tenkasi	17/19	547	1,50,00,000/-	13-15 July 2022	5 Aug 2022 - 4 Aug 2025	54,70,000/-
GH Aruppukottai	13/13	294	Not received	10-12 June 2019	10 Dec 2019 -31 Dec 2022	29,40,000/-
GH Rasipuram	13/13	142	2,25,000/-	20-13 Sep 2019	01 Nov 2019 -31 Oct 2022	1,420,000/-
GH Harur	13/13	111	Not received	20-22 July 2019	05 Aug 2019 - 04 Aug 2022	11,00,000/-
GH Denkanikottai	13/13	120	50,00,000/-	21-23 Dec 2022	30 Dec 2022 -29 Dec 2025	7,34,474/-

Source: Collated by the research team from the data shared by the Accounts section of the facility *Received in Jan 2023 after 2 years of certification.

The NQAS gap closure fund received by facilities was inadequate relative to the identified needs of facilities and the first-year incentives were received with a delay of two years after certification.

One key informant (22) from secondary facilities stated that

“We are receiving gap filling fund for NQAS preparation... if the infrastructure is clean and proper then the fund is sufficient. If the infrastructure is old and not clean, it would be remodification after remodification and the fund would not be sufficient. In the initial phase, we have do scrutiny of resources and state what is there and what is not there clearly...we will get the proper gap-filling fund.”

Table 3.2: NQAS Gap closure from TNHSRP & incentives from NHM for selected primary care facilities

Facilities	Assessed/ Actual Departments	Beds	Gap closure fund under TNHSRP during the preparation phase	Assessment date	Certification Validity Period	Incentives amount received per annum after certification (INR)
CHC Kunnur #	11/12	30	Not received	27-29 Feb 2020	20 March 2020 to 19 March 2023	2,75,000/-
CHC Mailam	12/12	30	1,46,000/-	19-21 July 2023	10 Aug 2023 to 19 Aug 2026	3,00,000/-
CHC Mugaiyur	12/12	30	Not received	27-29 Oct 2021	25 Nov 2021 to 24 Nov 2024	3,00,000/-
CHC Sayalkudi	12/12	30	Not received	15- 17 May 2018	17 June 2018 to 16 June 2021	3,00,000/-
CHC Kadugur (Ariyalur)#	11/12	30	Not received	15-16 Feb 2021	27 Apr 2021 to 26 Apr 2024	1,92,500/-
CHC Perungattur	12/12	30	10,000/-	29- 31 July 2019	10 Aug 2019 to Aug 2022	3,00,000/-
CHC Zamin Kollankondan *#	8/12	30	10,00,000	27-28 Feb 2023	27 March 2023 to 26 March 2026	2,00000/-
UPHC Therapuram	6/6	6	Not received	17 Feb 2021	27 April 2021 to 26 April 2022	Not received
PHC Belrampatti	6/6	6	75,000/-	23-24 Jan 2019	25 Feb 2019 to 20 Feb 2023	3,00,000/-
PHC Avatti	6/6	6	Not received	20-23 Feb 2023	20 April 2023 to 19 April 2026	3,00,000/-
PHC Agasthiarpatti @	6/6	6	1,15,000/-	17 July 2021	16 Aug 2021 to 15 Aug 2022	Not received

Source: Collated by the research team from the data shared by the Accounts section of the facility *Received in 2021 from TNHSRP
Conditionality @online

Several primary healthcare facilities in Tamil Nadu have not received any funds.

One of the key informants (62) stated “The previous MO put in his own salary money. Also this facility took a lot of small loans from nearby shops and local vendors for NQAS preparation...”

Another key informant (54) quoted that “NQAS gap closure fund needed was Rs 33 lakhs, but we received only Rs 3 lakhs for meeting infrastructural needs.”

Some primary facilities managed their NQAS preparation with the help of district administration. Another key informant (51) shared that

“We asked for Rs 7, 50,000 /- after doing NQAS Gap analysis. In the first phase of preparation, we did not get a lump sum as under the TNHSP, but the fund was diverted from various sources by the DDHS to our facilities for NQAS certification purposes. We got lead-lined doors for the X-ray room was done through adjustments with PWD, flooring for ANC labour ward, PN ward, and the post-operative ward was done, renovation work of the X-Ray room, electrical works, purchase and maintenance of important equipment such as autoclave, O2 cylinders, the printing of NQAS related IEC materials, ...for other things they did for the amount I asked. The amount given was sufficient for certification.”

NQAS incentive fund

The NQAS incentive fund received by primary facilities in the 1st year of certification was not sufficient to maintain quality standards.

To quote one key informant (52),

“For providing hygiene as per NQAS standards, using chemical, BMW management, we need 5 lakhs per annum. Maintenance of records, electrical works, and equipment calibration ...all together we get Rs 3 lakhs per annum.”

Another key informant (63) shared about the irregularity of the NQAS fund, in the following words, “Once we received 2020 April- 3 lakhs, then 2022 we got 6 lakhs together...difficult to manage during COVID time.”

One key informant (55) suggests performance-based incentives for primary institutions, as follows “incentives (for PHC) should be based on the volume of services- no of OPD, no of IP cases, no of injections given, lab investigations, CBCs done etc. Even if they give materials and resources based on the volume, it would be enough...we are not wanting money. If biomed engineers come and repair instruments, our problem is solved. In maintenance, if you give us mainly reagents, we will manage.”

Untied fund

United fund comes from the NHM, which is a flexible fund to meet unanticipated minor repairs, salary for contractual workers or local purchases. One key informant (55) described about untied fund as follows, “The untied fund for per quarter is Rs 45800. We get it at the end of the quarter. We use it to pay RCH workers salary, purchasing things from agency, we give cash first then reimburse the bills, and O2 cylinder for OT, Post op cases etc. “

To quote another key informant, “We don't have a specific NQAS maintenance fund but get through the untied fund. For example, for electric work or the purchase of chemicals for washbasins, we use untied funds.... it is accounted as NQAS quality work. However, this fund is insufficient to maintain the standards suggested by NQAS. “

There were a few instances reported by key informants when the NHM fund for national health programs received through the Single Nodal Account (SNA) has enhanced transparency and reduced entry work while paying to vendors, but it has an issue of being reversed due to non-utilization.

One key informant (55) stated, “SNA, fund for national health programs like RBSK, JSK, JSY, diet fund comes directly...it is used for Kayakalpa, the untied salary of contractual staff- these funds come yearly twice, often with delay in March, these funds have to be utilized immediately, otherwise these are taken back by the NHM.”

One key informant (52) admitted that

“It is little tough to maintain...because They (TN state) give untied fund. Say for 30 bedded, they give Rs 21000 for 6 months for additional PHC which gets exhausted in paying salary for RCH workers and repairing BP apparatus. For the block total, they give Rs 87000 for 6 months. Many times we don't have chemicals, we cannot say we cannot do blood tests... it is easy to establish a system, but continuing it is difficult. Suddenly one instrument in the blood bank may get repaired, refrigerator may get repaired. In OT, light may go off. AC may not work...little things like these is difficult to manage with funds that are given at the interval of 6 months. We have to adjust (put in our money first). Many doctors find it difficult to take funds, they put their own money for repair works and somehow adjust... but we are not sure if we get our money back ... we put our salary money...if there is a problem in PHC, I am ready to give money but will the money come back? Many are scared because of this....that's why in many places (PHC) you will find instruments not repaired, and reagents would be inadequate if fund is not received.”

CMCHIS fund

Another source of funds for accredited public facilities is through empanelment under the Chief Minister Comprehensive Health Insurance Scheme (CMCHIS). The public facilities get reimbursement for a listed set of medical and surgical packages. This reimbursement amount covers the costs of treatment procedures and incentives for individuals/teams conducting the procedures.

One key informant (3) explained, “ The CMHMIS fund is based on the number of cases admitted we get pre-authorized, 50 cases but during fund approval, only 35 cases would be given, 20 cases would be denied, 7 would be rejected and claim approval would be only for 28. In 100 rupees of the claim fund, 18% goes into GST & SGST and the remaining Rs 82, 25% of claimed funds is for incentives for drs, Staff nurses, workers, etc in the concerned facility. Only 57% remains for hospital improvements and there will be norms for spending 57% of the fund. Only 5 to 10 thousand would remain balanced. If you have to use this balance amount for hospital improvement, a huge number of CMHMIS cases should approved. For spending of more than Rs 5000, you need to take 3 quotations and purchase from the lowest quoting vendor. ...when there are a lot of norms, the focus is on observing norms and not on quality standards.”

Table 3.3: Net gains from CMHIS for selected public facilities in the last two years

Facilities	Top 5 diagnosis/ Procedures	Year (Jan –Dec)	Pre-authorized approved	Claim approved	Approved amount (in INR)	Corpus fund (in INR)	Net amount received (in INR) (a)	Expenditure incurred (in INR) (b)	Net gains (in INR) (a-b)
DH Cheyyar	Dialysis, Ortho, SNCU, ENT, Vascular, Medicine, Surgery	2022	1326	1249	1,19,13,925	24,19,262	94,94,663	94,14,757.2	79,905.8
		2023	1529	1479	129,16,150	21,64,239	107,51,911	1,24,36,629.6	16,84,718.6
GH Rasipuram	Dialysis, snake bite, Poison, hysterectomy, ENT surgery	2022	528	424	36,79,780	7,03,233	29,76,547	29,76,547	Nil
		2023	657	427	35,24,300	6,57,246	28,67,054	44,01,072	-15,34,018
GH Denkanikottai	NBSU, ENT, COPD, Poison, General Surgery	2022	689	681	29,65,900	8,30,452	21,35,448	15,95,155	5,40,293
		2023	763	740	32,52,400	9,10,672	23,41,728	19,91,592	3,50,136
GH Harur	Dialysis, NBSU, ENT, COPD, Poison, General Surgery	2022	953	780	28,21,200	2,19,472	26,01,728	31,39,747	-5,38,019
		2023	1094	945	53,87,700	8,35,484	45,52,216	42,44,783	3,07,433
CHC Mugaiyur	Hysterectomy, Hernia - with mesh – open & Hernioplasty – Inguinal	2022	19	17	2,50,850	70,238	1,80,612	1,80,612	Nil
		2023	2	2	27,000	7,560	19,440	19,440	Nil

Source: Collated by the research team from the data shared by the Accounts section of the facility

Table 3.3 shows that there are variations across public facilities in their ability to generate additional finances through the CMHIS fund. Some facilities have had positive net gains from CMHIS, Other facilities have not gained much. Some facilities have experienced a net loss in one year, followed by a net gain in the subsequent year. Much of these gains and losses were attributed to the availability of specialist doctors with supporting teams to conduct these procedures

Table 3.4: CMHIS Report for an accredited SDH Arrupukotai

Year (Jan1st - Dec 31st)	Pre Auth		Claims		Approved Claims	
	Count	Amount	Count	Amount	Count	Amount
2018	781	96,25,725	792	94,64,825	783	92,85,475
2019	781	9016900	740	82,80,900	744	84,37,750
2020	411	4098940	420	41,01,540	417	40,13,540
2021	721	8225950	708	75,06,350	708	75,34,350
2022	744	8866500	630	73,55,700	628	72,55,900

Source: Collated by the research team from the data shared by the Accounts section of the facility

We can observe from table 3.4 that the approved claim count and amount are much lower than pre-authorized count and amount. We find that the approved claims count and amount has gradually decreased for SDH Arrupukotai in the last few years. Similar observations in CHC Sayalkudi, where the approved claims count and amount has gradually decreased gradually over years (Table 3.5)

Table 3.5: CMHIS Report for an accredited CHC Sayalkudi

Chief Minister's Comprehensive Health Insurance Scheme 2018 to 2022 SAYALKUDI PHC PERFORMANCE REPORT							
Govt	Hospital	2018 Preauth Approved		2018 Claims Approved		2018 Claims Received	
		Nos.	Amt.	Nos.	Amt.	Nos.	Amt.
	PHC,Sayalkudi,Paramakudi,Ramnad TN.	289	1365500	288	1349500	288	730941
Govt	Hospital	2019 Preauth Approved		2019 Claims Approved		2019 Claims Received	
		Nos.	Amt.	Nos.	Amt.	Nos.	Amt.
	PHC,Sayalkudi,Paramakudi,Ramnad TN.	266	756500	266	750218	266	608723
Govt	Hospital	2020 Preauth Approved		2020 Claims Approved		2020 Claims Received	
		Nos.	Amt.	Nos.	Amt.	Nos.	Amt.
	PHC,Sayalkudi,Paramakudi,Ramnad TN.	221	552000	221	550900	221	476528
Govt	Hospital	2021 Preauth Approved		2021 Claims Approved		2021 Claims Received	
		Nos.	Amt.	Nos.	Amt.	Nos.	Amt.
	PHC,Sayalkudi,Paramakudi,Ramnad TN.	260	656500	259	650600	259	493901
Govt	Hospital	2022 Preauth Approved		2022 Claims Approved		2022 Claims Received	
		Nos.	Amt.	Nos.	Amt.	Nos.	Amt.
	PHC,Sayalkudi,Paramakudi,Ramnad TN.	259	734200	258	680400	258	472147
Govt	Hospital	2018 to 2022 Total Preauth Approved		2018 to 2022 Total Claims Approved		2018 to 2022 Total Claims Received	
		Nos.	Amt.	Nos.	Amt.	Nos.	Amt.
	Govt Upgraded PHC,Sayalkudi,Paramakudi,Ramnad TN.	1295	4064700	1292	3981618	1292	2782240

Some key informants from the accredited facilities stated that the rates of a few procedures like poisoning, phototherapy, ventilation, etc have been revised downward.

Summary

The financial support from the TNHSRP for NAQS gap closure and the incentives from NHM on certification have heightened the awareness and commitment towards quality assurance in health care personnel in public facilities. However, there were variations in the fund's allotment. Some primary-level facilities did not get adequate relative to the stated gaps in improving infrastructure, hiring contractual staff and workers, equipment calibration, and maintenance and repair works. Moreover, the funds are irregular and usually received at the end of the financial year, which creates uncertainty and practical difficulties in the utilization of the fund. Secondary facilities have an additional source of funding through the CMHIS, but lately, the rejection of claims has increased and the rates of a few procedures have been reduced. Several doctors have put in their salary money for NQAS preparation as well as when there are delays, while others doctors take no action for repair work or if there are shortages of chemicals if there is no fund. Hence, the NQAS gap fund must be provided adequately and timely to public facilities to manage and sustain quality standards. The fund flow from the NHM to public facilities, especially the untied fund and the NQAS incentives, should be evenly distributed monthly over the year, rather than as a lump sum amount at the end of the year. Also, the incentives to facilities should be redesigned with two parts: one part as a fixed component - payment based on the bed strength, and the second part as a variable component - payment based on performance (in terms of OPD, IP, Deliveries etc) and utilization of services.

3.2 Human Resource Constraint

Another major concern observed across public facilities under study is the shortage of skilled healthcare personnel, including doctors, nurses, pharmacists, lab technicians, support staff, and hospital workers, relative to the sanctioned bed strength. (Appendix tables a –d)) There is a manpower shortage in both regular and contractual personnel categories in most cadres.

Almost all key informants raised the issue of manpower shortages. Some of the quotes specific are as below:

One key informant (1) told the research team manpower relative to bed strength is inadequate, which in turn impacts service delivery and cleanliness of the facility, in the following words: *“There are 11 Drs XXX accredited GH...its a CEmONC centre, as per norms there should be 4 O&Gs...at present there is only 1 regular dr and another dr I have given in deputation. ..then how can we expect 24-hour service with dedicated service...may be 24-hour service we can expect, but dedicated service we cannot expect. There was previously 150 bed strength, now it is raised to 235...only bed strength increased, corresponding staff nurse, drs and hospital and sanitary workers have not been raised. Only 3 or 4 sanitary workers exist. How can 4 workers manage 235 beds? ...it is difficult, therefore when you visit GH you will not find it very clean. “*

Another key informant (26) highlights that inadequate numbers of healthcare professionals, including nurses, impose a strain on the existing workforce.

“Manpower shortages are experienced at all levels. Hospital workers are not sufficient, we are not able to post hospital workers at all floors. In morning hours we are posting one staff nurse per ward, but in the afternoon one staff nurse will be taking care of 2 or 3 wards...then quality gets reduced. She will not be present in wards, has to maintain registers, patient care with cleanliness become very difficult...bed strength is 226. Manpower criteria as per bed strength is not met. 6 Bed: 1 nurse in general ward ”

One key informant (34) states that more care is required in post-operative wards, as below:

“Surgery patients, the first day 24 hours is emergency, more manpower is required. Under sedation, under monitoring.”

Another key informant (46) stated the HR norms are not fulfilled and a day off by staff nurse impacts service delivery, *“As per state norms, we should have 4 Staff Nurses and 1 ANM and 2 MOs, it can be increased. We require 6 SNs but we have only 2Ns, if one takes week off leave, only one SN will be running around.”*

One key informant (59) shared about the referral out of patients due to shortages of lab technicians, as below:

“Here there is no posting sanctioned of lab technicians, we have a diverted MMU lab technician...he comes here. Every day we have 150 to 200 OPs we need lab investigation for HB, serum creatinine, fbs/ppbs, blood grouping typing, vdrl, hiv, hbacg, Widal, MPMF, urine albumin, bleeding time, clotting time, ...referral for CBC to Block PHC MMM.”

Another key informant (38) also stated how clinical care gets affected due to non-availability of 24x7 laboratory services, as below:

“We should have for 30 bed: 1 lab technician and for 235 there should be 7 atleast, but only 4 available...hence we cannot run lab services 24x7. Evening admission case, we can take lab test next morning, whatever be the case...we are blindly treating based on symptoms, next day morning only we do lab test...”

Another key informant (63) shared how their facility managed NQAS preparation as follows, “this is a block PHC, documentation is proper, but if you go to PHC, there would not be manpower. This is a big facility with separate buildings for each dept, so we get manpower on deputation from other PHCs on rotation for cleaning. Out of 6 additional PHC, only one is certified, other PHCs are under preparation...we rotate manpower to do the preparation for NQAS, they come for training...service gets affected from where they come from, continuity of care gets affected. “

There are variations in the workload and burn outs across different specialist doctors. Particularly among O&G specialists and staff nurses in CEmONC centres which provide 24x7 services, the self-reported workload and burnout is high. Increased workload and burnout among existing health personnel results in low employee satisfaction. Though employee satisfaction survey is undertaken in irregular intervals across facilities, there are concerns related to excessive workloads if any healthcare personnel avails leave.

Summary

Shortages of manpower as a major constraint for delivering quality services. It has been observed that the manpower available in most public facilities is lesser than sanctioned posts and the current sanctioned posts are inadequate relative to the norms of bed strength. Bed strength has increased in almost all secondary facilities and the range of services under the state and the national programmes has expanded and is expected to be available 24x7 days. Among departments in secondary facilities, the availability of O&G, specialist doctors, and staff nurses associated with critical care areas such as CEmONC centres, SNCU, and Accident and Emergency wards is deficient relative to bed strength. This has led to overworked healthcare personnel, and stress and burnout are observed particularly in the cadre of staff nurses (Junior and contractual). The deputation of healthcare personnel and reliance on PG bond medical students has eased the workload to some extent, but in the long run, such a strategy cannot ensure consistent quality clinical services across public facilities as clinical knowledge, skills, and attitudes vary. Furthermore, many in-service young physicians in primary facilities aspire for PG courses and career enhancement at a higher-level institution. It is observed that facilities with experienced hospital superintendents / Chief Medical Officers and staff nurses who have served continuously in the facility, have better quality processes as compared to other facilities. Transfers of NQAS-trained doctors and nurses disrupt the continuity of quality processes and management in the facility, requiring repeated training and starting preparation for recertification from scratch all over again in primary facilities. There are shortages of hospital workers across all facilities, despite outsourcing of facility management services in district hospitals. Hence, there is a clear need to resolve human resources constraints at all cadres in public facilities through a realistic assessment of the availability of healthcare personnel relative to bed strength and service utilization. Urgent attention is required to develop and implement state-level HR policy with stakeholders' consultation meetings on recruitment, transfers, pay, working conditions, training, and professional development.

3.3 *Infrastructural Constraint*

Considerable variations were observed across public facilities about infrastructure and facilities. In some places, the infrastructure was very well maintained while in other places new buildings/blocks are being expanded to accommodate additional beds after NQAS certification.



Figure 3.2a: Landscaping in an accredited GH



Figure 3.2b: The building exterior whitewashed in an accredited GH



Figure 3.3: New blocks being constructed in accredited facilities



Figure 3.4: New building for laboratory services and Office Administration in an accredited primary facility



Figure 3.5: Backside of the old block with sewage water stagnation and landscaping of an accredited DH



Figure 3.6a: SNCU ward in an accredited DH



Figure 3.6b: Children's ward with natural lighting and wall paintings at an accredited DH



Figure 3.7: Eye Operation theatre in an accredited GH



Figure 3.8: Maintenance and repair work being carried in OPD of accredited GH



Figure 3.9: Cracking ceiling in the male ward old block of an accredited GH, with risks to patient safety



Figure 3.10a: Roof falling apart in the pharmacy counter room where tablets are issued. Figure 3.10b Ambulance garage converted into pharmacy main store in an accredited primary facility.



Figure 3.11: Condemned staff quarters used by ANM, Drivers and as BMW store room at an accredited primary facilities

PWD compliance to NQAS

Several key informants expressed their concerns related to PWD compliance to NQAS standards as below: Key informant (1) states: “NQAS states to put jointless tiles and rounded corners in the OT, PWD cannot be made to do such things...once put, we cannot remove such tiles, such trivial points if joints are there, we cannot clean it thoroughly... we cannot remove all tiles and put sheets now in the OT, then we have to think of alternatives. PWD people do not often consult hospital people.”

Key informant (18) quotes: “We have a partial compound wall, we have been representing every year since 2018, still no response from PWD.”

Another informant (54) states: “ New building was sanctioned in 2021 to PWD from state.PWD did the construction work, they did not ask us, they did by their plan-... not build as per NQAS norms. They did not build toilets for disabled persons with side rails in OPD,they have given open cupboards and racks, not closed racks (we are losing marks), Lab has certain specifications of reporting room and sample collection rooms, but they build the room, but we are arranging things. They kept both rooms separately, then we had to connect them through building a wall , but we have not put door yet. If we put AC, there is open air. Reporting area should also have AC room. Newly constructed OT building is leaking during rains. Water seeps in thirdly, PWD contractor said they would give us separate electricity board and light outside the lab, but not yet given so far...night time patients find it difficult to walk around.”

Summary

Most facilities in the study are functioning through old buildings based on then population norms and defined services provision. In recent years state-level programs and national -level programs have expanded gradually. The existing infrastructure and facilities are inadequate, leading to overcrowding and congestion in the public facilities of the study. The NQAS standards specifications require separate spaces for specific purposes, say Kangaroo mother care corner within the Special Newborn Care Unit (SNCU), a shed for the patient waiting area, or separate reporting and collection areas in the laboratory. Most facilities are upgrading and adjusting their existing infrastructure and facilities to meet the required technical specifications. In some facilities, construction of new buildings/ blocks is in progress, while in other facilities, the approval for new buildings has been given. A related concern is the non-compliance of PWD to NQAS specifications such as elbow taps, and jointless tiles in operation theatres and critical care areas of the facilities. The PWD constructs new blocks and buildings as per their template and does not customize building works as per the specific requirements of the public facility. Hence the state government should continue to invest in improving the physical infrastructure of public facilities, including expanding facilities and upgrading outdated buildings, especially in CHC and block PHC facilities.

3.4 Documentation Burden

Another important concern relates to the maintenance of maintain numerous, voluminous registers and records. The responsibility of maintaining HMIS registers and records rests on staff nurses. Many key informants informed that out of 8 hours of duty, almost 5 to 6 hours go into writing case sheets (about 70 to 75% of their time), with little time for patient care. After NQAS certification, the pressure of documentation has increased considerably, with the expansion of national health programs and implementation of Kayakalp and LaQshya standards, across facilities resulting in stress and fatigue among healthcare staff. The list of registers shared by the TNHSP office is shown in Table 3.6.

Table 3.6: HMIS Registers at different levels of facilities

S.No	Department	DHQH	SDH	CHC	PHC	UPHC
1	A&E	45	45	36	22	21
2	OPD	41	41	34	28	28
3	Labour room	38	36	33	23	0
4	IPD	43	42	42	23	23
5	Auxiliary	75	75	75	0	0
6	Blood bank	94	94	0	0	0
7	PP Unit	31	31	29	0	0
8	SNCU	47	47	0	0	0
9	LAB	25	25	25	23	18
10	OT	18	18	18	0	0
11	Pharmacy	19	19	19	13	0
12	ICU	36	0	0	0	0
13	Radiology	17	17	17	0	0
14	Labour room	26	26	0	0	0
15	PPU	27	27	0	0	0
16	Maternity ward	27	27	0	0	0
17	HIC registers	8	8	0	0	0
18	HIC formats	6	6	0	0	0
	Total	623	584	328	132	90

Source: TNHSRP office, Chennai

1. Maternity OT - 101	Maternity - 18
Laundry - 38	BMW/HCC - 8
Gen Admin - 42	MTM - 12
Male IPD - 47	DHSS -
Female IPD - 47	
Kitchen - 42	
General OT - 72	
MRP - 10	
ICU - 48	
Pediatric OP - 70	
Pediatric Ward - 64	
Blood bank - 66+46	
OPD - 37	
Labour ward - 82	
PP/FW Unit - 66	
DMHP - 38	
Dialysis - 25	
Laboratory - 80	
SVCU - 125	
A&F - 85	
Radiology - 30	
Pharmacy - 27	
AN OP & Casualty - 35	
	1252
	Sunday 30

Figure 3.12: List of registers on an accredited DH compiled by a key informant

One of the key informant (42) from an accredited DH compiled the list of registers and found the number of registers to be double at 1252 then stated by TNHSRP.

To quote one key informant (78): “Every department takes a minimum of 1 hour to update documents. We were preparing for NQAS for more than 6 months to prepare these registers. Documentation work is new to us. We have to provide services also. We have 24 hours OPD...It is tedious.”

Another key informant (68) states, “We have about 40 opd registers. We have separate for LAQSHYA, KK, etc, register work is a big burden, we do not have any duplicate registers. If we have one separate person to do entry, it will good...we can give the information.”

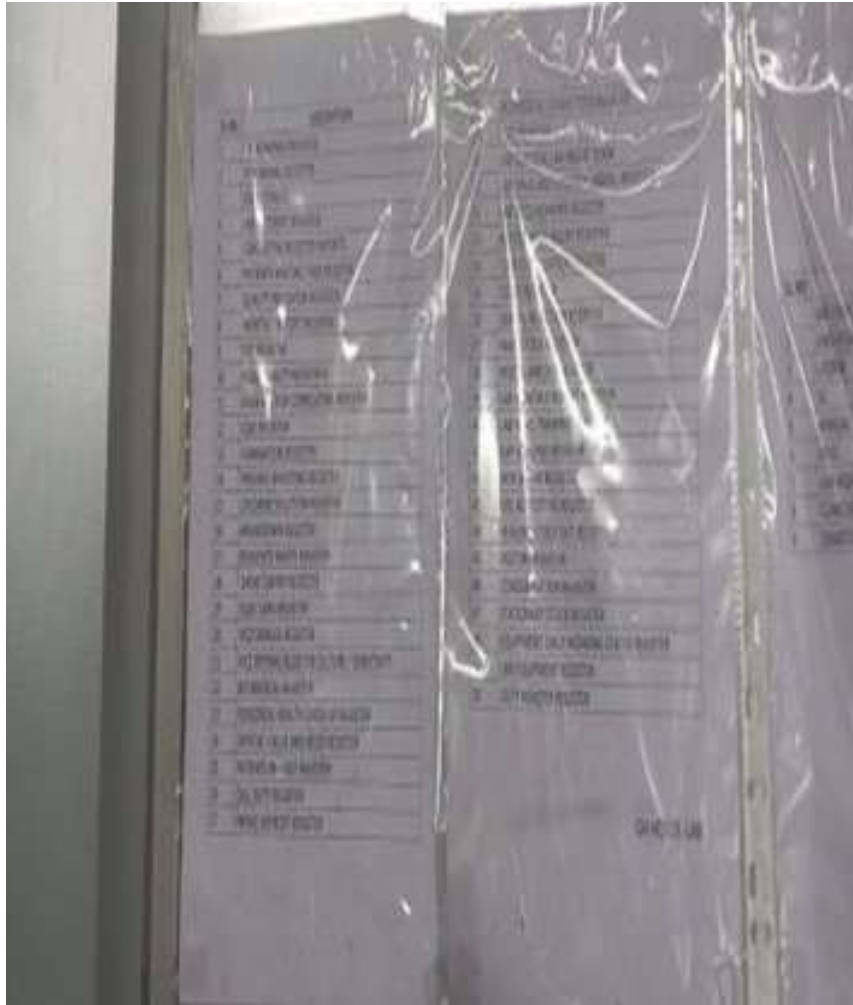


Figure 3.13: List of registers in a laboratory is clearly more than 25 in an accredited DH

Another key informant (63) felt documentation has improved, *“After NQAS, we have minimized duplication of registers. Before NQAS we used to write same content two or three times in different registers. For example, we have a separate register for a refrigerator for daily temperature checking... we added one column for weekly once defrosting. Another register is about breakdown register, when the equipment is not working, when we give the call, how many days was the equipment was nonfunctional, when did the biomedical engineer come and when the machine repair work gets done.”*

In several facilities, patient discharge sheets were checked. It was observed that discharge sheets were not maintained as per the guidelines, as the guideline mentions that doctor has to write his/her complete information like name, designation and a mandatory rubber stamp. These sheets had only the doctor's initials, with no rubber stamp mark of the designated MO in duty.

It was also observed many MRD departments were congested and has very little space to move around and few of them were not treated with pest control as per NQAS standards. This was due to the retention policy of keeping records of medico-legal cases for lifelong and non-medico-legal cases for 10 years.



Figure 3.14: Medical Records room full, with records kept on the floor in an accredited CHC



Figure 3.15: Medical Records congestion in an accredited CHC

Summary

NQAS requires extensive record keeping on the quality standards related to the eight areas of concern as well as reporting of key performance indicators for each department and filling of patient case sheets. With accreditation, the volume of routine documentation work, along with routine registers and patient records has gone up substantially. During the NQAS preparation phase, almost all staff nurses admitted to have put in extra hours of work beyond duty time for tedious documentation and updating of records, a task unto itself that takes focus away from patient care. Given the shortages of staff nurses and high patient caseloads, incomplete records and updating these registers on a daily and monthly basis remain a concern in all facilities. Many key informants wanted an exclusive post of data entry operator to update records and registers. Also, there is a space constraint in the medical records department. Hence, the state government should examine the optimal documentation requirement and initiate a process of rationalization of registers and records through stakeholders' consultation meetings. Possibilities of digitalization and transcription from voice to text may be explored by health administrators in collaboration with IT professionals to ease the documentation burden.

3.5 Knowing-Doing Gap

NQAS certification is currently perceived as a series of box-checking routines and scoring percentages department-wise and based on eight areas of concern. Almost all healthcare personnel were aware of what in theory quality improvement and patient safety activities are, but did not follow or adhere to standard operating procedures in practice.

Biomedical waste management



Figure 3.16a: Biomedical waste in an accredited CHC not collected regularly

Figure 3.16b: Placenta (biomedical waste) tied in a plastic bag in the peepal tree within the accredited CHC.

In an accredited CHC, Biomedical waste is not collected regularly. As per the contract, the vendor is supposed to collect biomedical waste from CHC once in 48 hours. In another accredited CHC, the placenta (biomedical waste) is tied in a plastic bag in the peepal tree within the facility. No boundary wall to restrict entry of stray animals such as pigs and dogs.



Figure 3.17: Mishandling of human waste by BMW vendor in an accredited GH



Figure 3.18: Chart of emergency code in an accredited facility.

The “Code Pink” signage stands for instructions in the case of child abduction, put in the maternity ward of the DH. But when the research team asked the duty-in-charge staff nurse to demonstrate the activation of the code pink alert, she was hesitant and was found searching for the public announcement system for 5 minutes. On inquiry, it was stated that the mock drill for various emergency codes had not been conducted since certification in 2019. (Date of our visit 04.04.2023).

Summary

*Considerable knowing-doing gaps were observed in healthcare personnel at all levels, such as inconsistent hand wash practices in OPD, no wash basins had handwash or soap, lack of crash cart arrangements in IP wards, poor competency and confidence in performing essential tasks related to emergency codes such as code pink or code blue; non- usage of personal protective equipment (PPE), not wearing gloves when giving injections to patients and laboratories, inappropriate handling of biomedical waste particularly used cotton and syringes and so on. Much of the NQAS-related activities are led by a nodal medical officer and junior staff nurses or brothers, with senior staff nurses showing resistance or being aloof of the quality assurance initiatives. **There is a dire need for an appreciative inquiry approach in the management of public facilities. Hospital workers as well as the outsourced staff members should be sensitized on infection control practices and handling biomedical waste hazards. The involvement of all duty medical officers and senior staff nurses in the quality management process is a must for building accountability structures at the facility level. Leadership attributes among duty doctors and senior staff nurses through rewards and recognition need to be enhanced.***

3.6 Cluttering of walls with signage/IEC



Figure 3.19: Signage boards excessively used in accredited DH

In many accredited DHs, signage boards are extensively used, cluttering the wall. This does not provide clear instructions to patients.



Figure 3.20: Too many signage boards on the window blocking the natural light in the laboratory of an accredited CHC



Figure 3.21: Too many signage boards at the OPD in an accredited GH



Figure 3.2: Unrelated signage boards are pasted on the glass wall of the nursing station.



Figure 3.23 Excessive IEC posters on the wall in an accredited CHC



Figure 3.24 Inappropriate use of signs and signage in the corridor of an accredited DH

In an accredited DH, inappropriate use of signs and signage of drugs availability and medications, 5s Clean workplace, Hand hygiene, patients' rights, and employees' responsibilities, snake bit treatment protocol, and year calendar are put on the corridor.

Summary

Too many signage boards were observed in the walls and passages of public facilities. A cluttered wall defeats the whole purpose of showing directions to patients. Despite directional signage boards, many patients coming to a facility for the first time were asking for directions in several facilities. Hand hygiene posture high up on the wall serves no purpose of informing patients or staff nurses. Regulatory signage was not relevant to patients for information, education, and communication were stuck in the wards' passage area. In some instances, older IEC materials were not removed and newer IEC materials were pasted over them. Many signage were pasted on glass windows, blocking natural light and view of the other side. Thus, the quality circle committee needs to pay attention to the appropriate use of signage and IEC materials on the walls/wards of public facilities. The committee could start with the classification of signage and IEC department-wise and relevance for patient and facility health personnel and workers. For instance, key emergency algorithms and infection control procedures based on SOPs can be printed in the form of booklets and kept as a separate folder in a corner or wall in the nursing station.

IV Conclusions and Recommendations

4.1 Conclusions

The state of Tamil Nadu has made commendable efforts in implementing the NQAS framework in public facilities. There are ongoing efforts towards improving the quality of services in public facilities across Tamil Nadu through initiatives such as the Kayakalp Award Scheme, LaQshya, and MusQan. Towards the implementation of the NQAS framework, several institutional mechanisms and incentivization for certification by the NHM along with the technical and support systems by the TNHSRP have been set up. By undergoing rigorous assessments at different intervals, public facilities are demonstrating their commitment to delivering high-quality healthcare services to the community.

The patient experience survey with 1756 respondents (from IPD and OPD together) across 40 facilities showed that clinical care, patient rights, quality management, and service provision were better in accredited public facilities as compared to non-accredited ones. However, other areas of concern such as inputs, support services, infection control, and outcomes were similar (as experienced by patients) in all public facilities, irrespective of their accreditation status.

The in-depth interviews from 102 providers/staff across selected public facilities of Tamil Nadu revealed that there were issues of financial and human resources constraints. Several key informants shared concerns related to inadequate NQAS gap funds and irregular flow of NQAS incentive funds, requiring many providers to put in their own salary money. While the range of services and bed strength had increased, corresponding manpower requirements were not sanctioned, resulting in shortages of manpower at all levels. A mixed picture exists related to infrastructural constraints, with services being provided in condemned buildings, particularly in a few CHCs. Further, accreditation has led to a rising documentation burden on staff nurses. Most healthcare providers are aware of standard protocols and quality standards, but do not practice in their daily routine and persistent process- gaps in service delivery are observed. These issues/challenges in managing and sustaining quality standards can be resolved through prioritization.

4.2 Recommendations

Based on several key informants' perspectives and Expert's opinions on the sustainability of NQAS standards for public facilities in Tamil Nadu, action plans can be categorized as below:

❖ *Vital – (Process gaps at facility level)*

It is necessary to address the "Knowing-doing" gap at the facility level. Process gaps must be filled as part of the facility routine, not by waiting for the certification assessment date. Together with the duty physicians and senior staff nurses, the hospital superintendent or block medical officer must recognize the value of incorporating quality improvements into routine operations, accept "responsibility" for implementing NQAS standards, and encourage the genuine development of "knowledge-skill-attitude." This can be accomplished gradually by using a cooperative and engaging approach that is ingrained in the "Kaizen" management philosophy.

Kaizen is a Japanese term that translates literally to "good change" or "improvement." It is composed of the words "zen," which means "good," and "kai," which means "change." Continuous improvement, or kaizen, approaches have been implemented in the healthcare field extensively. The principles of Kaizen simply state everyone should be involved in daily improvement, that managers and front-line staff work together, and that solutions should be small and incremental. Important case studies demonstrate how kaizen implementation can have a significant impact on organizational culture, including medical engagement. More details can be found in Goyal and Law, (2019).

Regular meetings of the facility-level Quality Circle committee, in conjunction with mentor staff/consultants and trained state and national level assessors (weekly, fortnightly, or monthly), can foster a sense of collective responsibility. It is necessary to create accountability frameworks to implement action plans within the allotted time. A few recommendations for facility-level initiatives include the following: -

- ✓ improving the efficiency of existing staff through smart work (say look into ergonomics-design and evaluation of tasks, jobs, equipment, laboratory, blood bank, environments, and systems to make them compatible with the needs, abilities, and limitations of people);
- ✓ classify and categorize directional and regulatory signage and IEC according to how relevant it is to patients, staff nurses, hospital employees, sanitary workers, assessors etc.;
- ✓ The five S's—sort, set in order, shine, standardize, and sustain—must be practiced daily for organizing, cleaning, developing, and sustaining a productive work environment. Arranging crash cart trolley at the end of duty hour regularly; organizing one department at a time, with an allotted time of 15 to 30 minutes as a routine.
- ✓ Practicing mock drills for emergency codes once a month; presentation of quality standards/ SOPs and their significance by each duty doctor and senior staff member once a week who can be “role models” for quality improvements.

Once the “culture of doing things right consistently” or organizational routine at all levels evolves in the facility, any new personnel joining the facility would follow the norms and existing processes, and the impact of any discontinuity of health personnel on quality services due to the diversion/transfer is likely to be minimized. The “culture” for quality improvements of the facility can be developed through a collaborative and engagement approach with appropriate rewards and recognition right from the sanitary workers' level to the doctors' level for significant contributions towards the NQAS.

❖ ***Essential – (Coordination between the facility, district level & state level, and community involvement)***

Rationalization of registers and records, through stakeholders' meetings is a must for consensus on the best practices and standards for recording keeping. Such a meeting can have two mandates: Identification of specific needs of recording keeping department-wise; addressing challenges and issues of documentation through simplification of record-keeping and case sheets, and innovative solutions collaboratively. (Ex, eliminate repetitive columns, introduce a logical sequence, explore IT solutions for data management, eliminate redundant entries, focus on critical information required for health service reporting, and make them visually appealing.) This would save time, improve data quality and morale of health workers, and make service delivery registers and records easy to use. Such a meeting could involve healthcare personnel and staff in nurses from primary as well as secondary facilities who directly interact with patients and maintain health records, relevant district-level health administrators responsible for managing healthcare facilities and overseeing recordkeeping processes, experts in information technology who can provide insights into the development and implementation of HMIS and experts in data analytics and medical statistics who can inform about the relevance and usefulness of the data being collected.

Proper management of waste in healthcare facilities and the technical requirements of waste handling need to be understood and practiced by each category of staff. Appropriate PPE kits, dustbins, linings etc should be adequately supplied to hospital workers as well as outsourced workers. Regular training and sensitization workshops on the BMWM Rules, 2016 involving representative members of the Common Bio-medical Waste Treatment Facility (CBWTF) Operator, should be conducted. For remotely located primary facilities with low-volume BMW generation and where the CBWTF is unable to visit regularly, alternative BMW practices such as deep burial or placenta pits may be considered. Community involvement in BMWM of public facilities (Say Rotary clubs, local village panchayat members, local MLA, local corporators, municipalities, Self Help Group members, etc) would enhance the accountability of all stakeholders and promote

awareness about BMW hazards and minimize community practices of placenta disposal in open places.

Ensuring PWD compliance with the NQAS-related infrastructural specifications related to the OT, critical care areas such as triage, width compliance, lift size, exits, separate rooms for collection and testing in the laboratory, etc must be made mandatory at the state level. Issues related to seepage in newly built blocks, and erroneous and incomplete constructions should be strictly dealt with and penalized suitably.

Conducting regular (surprise) checks and periodic medical audits of prescriptions, patient safety, clinical care, medical records, case sheets, energy use, AMC, and statutory compliances fulfilled (for renewal of various licenses and certificates). Such audits are essential to identify opportunities for improvement and develop action plans to manage and sustain improvements in the current practice. Use of technology for real-time monitoring from remote locations through Closed Circuit Television or CCTV (for ex, the time-motion study of patients visiting a remote PHC can be conducted by a centralized control room in Chennai.)

❖ ***Desirable – (policy deliberations and coordination between the state level and central government level)***

Policy-level deliberations and coordination between the Centre and the state-level health authorities to resolve persistent inadequacy of finance, skilled human resources, and infrastructure for quality improvement in public facilities. This would require an estimation of the gap between the current availability and requirement of health human resources within the state and determine optimal human resource norms relative to bed strength and utilization; assessment of the gap between current public health infrastructure in district health systems, and the need for additional investment to close such gaps.

To conclude the Tamil Nadu Health System has established the NQAS framework, institutional mechanisms, and quality assessment process. Accredited public facilities have better patient experiences than non-accredited ones. To sustain quality standards and patient experience, a coordinated effort between state government, district-level healthcare administrators, and facility-level personnel is needed. More accountability structures and recognition for quality improvement champions are needed. Accreditation is seen as a signal to enhance societal trust and confidence in the public health system.

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APPENDIX

Informed Consent Form

Narsee Monjee Institute Of Management Studies –NMIMS,Mumbai

Managing and sustaining accreditation for transforming health care in public settings: Evidence from Tamil Nadu

Introduction and informed consent

Namaste. My name is _____ and I am working with NMIMS, Mumbai. We are conducting a survey about the assessing the service quality at public health facilities in Tamil Nadu. We would very much appreciate the participation in this survey. I would like to ask you some questions about your experience of health facilities. The survey usually takes about 20 to 30 minutes to complete. Whatever information you provide will be kept strictly confidential and anonymous.

Participation in this survey is voluntary and you can choose not to answer any question or all of the questions. However, we hope that you will participate in this survey since your participation is important.

At this time, do you want to ask me anything about the survey? (To the investigator: **Answer any questions and address respondent's concerns**)

In case you need more information about the survey, you may contact these persons.
(To the investigator: **Give contact information**)

May I begin the interview now?

Respondent agrees to be interviewed . . . 1 **Begin Interview.**

Respondent does not agree to be interviewed . . . 2 **End**

Signature/Thumb impression of the participant /LAR:

Date:

தகவல் சேகரிப்புக்கான ஒப்புதல் படிவம்

NARSEE MONJEE INSTITUTE OF MANAGEMENT STUDIES – NMIMS, MUMBAI

பொது அமைப்புகளில் சுகாதார பராமரிப்பை மாற்றுவதற்கான அங்கீகாரத்தை நிர்வகித்தல் மற்றும்

நிலைநிறுத்துதல்: தமிழ்நாட்டின் சான்றுகள்

(MANAGING AND SUSTAINING ACCREDITATION FOR TRANSFORMING HEALTH CARE IN PUBLIC SETTINGS: EVIDENCE FROM TAMILNADU)

வணக்கம், எனது பெயர் _____ நான் NMIMS, மும்பையில் பணிபுரிகிறேன். தமிழகத்தில் உள்ள பொது சுகாதார நிலையங்களில் சேவையின் தரத்தை மதிப்பிடுவது குறித்து ஆய்வு நடத்தி வருகிறோம். தாங்கள் இந்த கணக்கெடுப்பில் பங்கேற்பதை நாங்கள் மிகவும் பாராட்டுகிறோம். பொது சுகாதார மையங்களில் சேவைகள் குறித்த உங்கள் அனுபவத்தைப் பற்றி சில கேள்விகளைக் கேட்க விரும்புகிறேன். பொதுவாக இக்கணக்கெடுப்பு முடிவதற்கு சுமார் 20 முதல் 30 நிமிடங்கள் ஆகும். இக்கணக்கெடுப்பில் தாங்கள் கூறும் அனைத்து தகவலும் ரகசியமாக வைக்கப்படும்.

இக்கணக்கெடுப்பில் பங்கேற்பது தங்களது சுயவிருப்பமாகும், மேலும் எந்த கேள்விக்கும் அல்லது அனைத்து கேள்விகளுக்கும் பதிலளிக்க வேண்டும்/வேண்டாம் என நீங்கள் தேர்வு செய்யலாம். இக்கணக்கெடுப்பில் உங்களின் பங்கேற்பு முக்கியமானது எனவே இந்தக் கருத்துக்கணிப்பில் நீங்கள் பங்கேற்பீர்கள் என்று நம்புகிறோம்.

இந்த நேரத்தில், இக்கணக்கெடுப்பு பற்றி என்னிடம் ஏதாவது கேட்க விரும்புகிறீர்களா? (விசாரணையாளருக்கு: பங்கேற்பாளரின் கேள்விகளுக்கு பதிலளிக்கவும் மற்றும் பங்கேற்பாளரின் கவலைகளை நிவர்த்தி செய்யவும்)

இக்கணக்கெடுப்பு பற்றி மேலும் தகவல் தேவைப்பட்டால், நீங்கள் இவர்களை தொடர்பு கொள்ளலாம். (விசாரணையாளரிடம்: தொடர்புத் தகவலை வழங்கவும்)

நான் இப்போது நேர்காணலை தொடங்கலாமா?

பதிலளித்தவர் நேர்காணலுக்கு ஒப்புக்கொள்கிறார் ...1 தொடக்கம்

பதிலளித்தவல் நேர்காணலுக்கு ஒப்புக்கொள்ளவில்லை ...2 முடிவு

பங்கேற்பாளரின் கையொப்பம் / பெருவிரல் ரேகை

தொலைபேசி எண் :-

தேதி:

Participant Information Sheet:

Place of Study:

Name of Field Investigator:

Name of the Participant:

Study Title: *Managing and sustaining accreditation for transforming health care in public settings: Evidence from Tamil Nadu*

Purpose/ Aim of the study :

The primary objective of this study is to assess the difference between patient experiences visiting accredited public facilities in comparison to those visiting non-accredited ones.

Procedure/methods of the study:

After obtaining the written consent, you will be given a questionnaire containing the socio-demographic details and medical history of the participant. Will be asked about your experience (s) visiting public health facilities. Will also be asked about the out of pocket health expenses during visit.

Freedom to participate/withdraw from the study at any time during the study period:

Your participation in the study is entirely voluntary. You are free to withdraw from the study at any given point of time without assigning any reason. You are free not to respond to any particular question that you don't want to answer. No further question will be asked.

Benefits and harms of participating in the study:

You may not have direct benefit but you may be benefitted with awareness about the services provided at Public Health Facilities. There is no harm as it involves only the interview questionnaire.

Maintenance of confidentiality of records:

Confidentiality will be maintained during data collection, analysis and publication. Data collected will be shared in scientific publications without revealing identity. The study records will be kept confidential. Records will be preserved for a period of 3 years.

Subject rights :

Right to Access: You are free to see what personal data are collected with the survey, for what purpose, for how long etc.

Right to Change: You may request a change or correction of personal data in the survey

Principal Investigator: Dr Subramania Raju Rajasulochana (Cell no 94456 19775)

Co-Investigator : Dr Sayantan Khanra (Cell no 9468430452)

Contact Address : School of Business Management,
Narsee Monjee Institute of Management Studies (NMIMS)
Mumbai – 400 0056.

Signature of the Respondent

பங்கேற்பாளரின் தகவல் தாள்

ஆய்வு நடத்தும் இடம்:

விசாரணையாளரின் பெயர்:

பங்கேற்பாளர் பெயர்:

ஆய்வின் தலைப்பு

பொது அமைப்புகளின் சுகாதாரப் பராமரிப்பை மாற்றுவதற்கான அங்கீகாரத்தை நிர்வகித்தல் மற்றும் நிலைநிறுத்துதல்: தமிழ்நாட்டின் சான்றுகள்.

ஆய்வின் நோக்கம்

இந்த ஆய்வின் முதன்மை நோக்கம், அங்கீகாரம் பெற்ற பொது சுகாதார மையத்தையும் அங்கீகாரம் பெறாத பொது சுகாதார மையத்தையும் பயன்படுத்தும் நோயாளிகளின் அனுபவங்களுக்கு இடையே உள்ள வித்தியாசத்தை மதிப்பிடுவதாகும்.

ஆய்வின் செயல்முறைகள் / வழிமுறைகள்

எழுத்துப்பூர்வ ஒப்புதலைப் பெற்ற பிறகு, பங்கேற்பாளரின் சமூக மற்றும் குடும்ப விவரங்கள் மற்றும் மருத்துவ வரலாறு அடங்கிய கேள்வித்தாள் உங்களுக்கு வழங்கப்படும். பொது சுகாதார வசதிகளைப் பார்வையிடும் போது உங்கள் அனுபவம் பற்றி கேட்கப்படும். பொது சுகாதார அமைப்புகளில் உள்ள சேவைகளை பெறும்போது தாங்கள் ஏதேனும் மருத்துவ செலவுகள் மற்றும் இதர செலவுகள் செய்துள்ளீர்களா என்பது குறித்தும் கேட்கப்படும்.

தாங்கள் எப்பொழுது வேண்டுமானாலும் இந்த ஆய்வில் இருந்து விலகவோ/பங்கேற்கவோ முழு சுதந்திரம் உண்டு

ஆய்வில் தாங்கள் பங்கேற்பது சுயவிருப்பமே. எந்தக் காரணமும் கூறாமல் எந்த நேரத்திலும் விலகிக்கொள்ளலாம். நீங்கள் பதிலளிக்க விரும்பாத எந்தவொரு குறிப்பிட்ட கேள்விக்கும் பதிலளிக்காமல் இருக்க உங்களுக்கு சுதந்திரம் உள்ளது. மேலும் உங்களிடம் வேறுஎந்த கேள்வியும் கேட்கப்பட மாட்டாது.

ஆய்வின் பங்கேற்பதன் பலன்கள் மற்றும் பாதிப்புகள்

இவ்வாய்வில் நீங்கள் பங்கேற்பதால் உங்களுக்கு நேரடியான பலன் கிடைக்காமல் இருக்கலாம் ஆனால் பொது சுகாதார வசதிகளில் வழங்கப்படும் சேவைகள் பற்றிய விழிப்புணர்வு தங்களுக்கு கிடைக்கலாம். இந்த கணக்கெடுப்பில் உள்ள கேள்விகளால் உங்களுக்கு எந்தவித பாதிப்பும் இல்லை.

பதிவுகளின் ரகசியத்தன்மையை பராமரித்தல்

தரவு சேகரிப்பு, பகுப்பாய்வு மற்றும் வெளியீடு ஆகியவற்றின் போது ரகசியத்தன்மை பராமரிக்கப்படும். சேகரிக்கப்பட்ட விபரங்கள் தங்களின் அடையாளத்தை வெளிப்படுத்தாமல் ஆய்வு அறிக்கைக்கு மட்டும் பகிரப்படும். ஆய்வு பதிவுகள் ரகசியமாக வைக்கப்படும். பதிவுகள் 3 ஆண்டுகளுக்கு பாதுகாக்கப்படும்.

பங்கேற்பாளரின் உரிமைகள்

அணுகுவதற்கான உரிமை: தகவல் அளிப்பவர் அளித்த தகவல்களை பார்ப்பதற்கும், எதற்காக தகவல் பெறப்பட்டது என கேட்பதற்கும் உரிமை உண்டு.

மாற்றுவதற்கான உரிமை: தனிப்பட்ட தகவல்களை மாற்ற/திருத்தம் செய்ய தகவல் அளிப்பவர்க்கு உரிமையுள்ளது.

தலைமை ஆய்வாளர்: Dr.சுப்ரமணிய ராஜ் ராஜசுலோச்சனா (கைபேசி எண் : 94456 19775)

துணை ஆய்வாளர் : Dr. சயந்தன் கார்ரா (கைபேசி எண் : 94684 30452)

முகவரி : ஸ்கூல் ஆஃப் பிசினஸ் மேனேஜ்மென்ட்

நர்சீமோன்ஜீ இன்ஸ்டிடியூட் ஆஃப் மேனேஜ்மென்ட் ஸ்டெடிஸ்,

மும்பை - 400 056.

பதிளிப்பவரின் கையொப்பம்.

Questionnaire for patient experience survey (Outpatient)

A team of researchers are assessing the service quality at public health facilities in Tamil Nadu with the help of this survey. You are cordially invited to participate in this survey and share your experience on this facility. Please report the extent you go along with following statements by selecting an appropriate number between 1 to 5, where '1' = strongly disagree, '2' = slightly disagree, '3' = neither agree nor disagree, '4' = slightly agree, '5' = strongly agree. All responses to the survey will be recorded anonymously and accessed by the researchers only. Please note that participation in the survey is a completely voluntary task. Thank you for your time and support for the study.

Instruction to field investigator: Put NA in the last column if not applicable

Waiting time for clinic registration was acceptable to me	1	2	3	4	5	
Waiting time between clinic registration and doctor consultation was acceptable to me	1	2	3	4	5	
Waiting time for counselling /sample collection /Blood bank/x-ray/diagnostic centre was acceptable to me	1	2	3	4	5	
Waiting time for getting certificates- Handicap certificate/ Death certificate/ Birth certificate/Medical certificate	1	2	3	4	5	
The consultation time with the doctor was adequate	1	2	3	4	5	
During this visit, the doctor explained things (medical condition, treatment etc) in a way that was easy for me to understand.	1	2	3	4	5	
I was kept informed often by providers (Doctors/Nurses/Other staffs) about all the medical procedures being done to me.	1	2	3	4	5	
I was asked to list or review all of the prescription drugs I was taking before the consultation	1	2	3	4	5	
The healthcare provider maintained confidentiality about my clinical records	1	2	3	4	5	
The healthcare provider maintained my physical privacy, e.g., by putting curtains/ asking people to move out, during the consultation	1	2	3	4	5	
I could get all drugs and consumables required by me free of cost within the facility.	1	2	3	4	5	
The facility has regular supply of drinking water	1	2	3	4	5	
The facility has regular supply of water in the toilets and bathroom	1	2	3	4	5	
The facility has regular supply of electricity and/or power back up	1	2	3	4	5	
Cleanliness and hygiene of OPD area in the facility is acceptable to me	1	2	3	4	5	
Providers (Doctors/Nurses/Other staffs) used hand sanitizers/gloves while examining me	1	2	3	4	5	
The physical infrastructure of the facility (clean toilets, walls, windows, ceilings, door etc) is acceptable to me	1	2	3	4	5	
The physical layout of the facility is convenient (light/heat/air) for me	1	2	3	4	5	
Providers (Doctors/Nurses/Other staffs) are adequate in the facility	1	2	3	4	5	
Providers (Doctors/Nurses/Other staffs) give equal treatment to all	1	2	3	4	5	
The healthcare provider often treated me with respect and dignity	1	2	3	4	5	
Providers (Doctors/Nurses/Other staffs) have a caring attitude towards patients in general	1	2	3	4	5	

Providers (Doctors/Nurses/Other staffs) ensure error free treatments for patients in general	1	2	3	4	5	
The clinical examination by providers (Doctors/Nurses/Other staffs) was acceptable to me.	1	2	3	4	5	
I spent a significant amount of money to cover the cost of outpatient consultation	1	2	3	4	5	
The available health services in the facility are appropriate to my needs	1	2	3	4	5	
The available health services in the facility are sufficient to my needs	1	2	3	4	5	
Signs and direction boards in the facility were easy to follow during the visit	1	2	3	4	5	
At least one infectious waste container (not the usual dust bin) is available in the outpatient department	1	2	3	4	5	
The facility has reasonable hygiene and infection control measures (hand wash, use of gloves & masks, respiratory hygiene / cough etiquette etc)	1	2	3	4	5	
I could feel relieved and safe in the process of getting healthcare services in the facility	1	2	3	4	5	
I will recommend this facility to my family and friends	1	2	3	4	5	
The facility considers the patients' best interests at heart.	1	2	3	4	5	
Overall, my experience with the service received at the facility is good	1	2	3	4	5	

We would like to know a little more about you.

Are you visiting the facility for the first time? Yes/ No

Reason for Outpatient consultation

Distance travelled from your home to reach the facility

Did you incur any out of pocket health expenses during your visit? Yes/ No

If Yes, how much? Please elaborate.

Any other information you would like to share about your experience in the facility?

Age: years

Gender: Male Female

Monthly Income:

- INR 20,000 or less
- INR 20,001 – 40,000
- INR 40,001 – 60,000
- INR 60,001 – 80,000
- INR 80,000 or more

Educational background:

- Primary (till 5th standard)
- Secondary (till 10th standard)
- Higher Secondary (10+2)
- Undergraduate or equivalent
- Postgraduate and above

For office use only: Accredited facility

Non- accredited facility

Type of facility: DH / SDH / CHC / PHC

Department: _____

மருத்துவமனைக்கு வரும் வெளிநோயாளிகளின் அனுபவக் கணக்கெடுப்புக்கான கேள்விதாள்

இந்த ஆய்வின் மூலம் தமிழகத்தில் உள்ள பொது சுகாதார நிலையங்களில் சேவை தரத்தை ஆய்வாளர்கள் குழு மதிப்பீடு செய்து வருகிறது. ஆய்வாளர்கள் குழு மதிப்பீடு செய்வதற்கு இக்கணக்கெடுப்பு மிகவும் பயனுள்ளதாக இருக்கும். இந்த கணக்கெடுப்பில் தாங்கள் பங்கேற்று, பொது சுகாதார நிலையங்களில் உள்ள மருத்துவ வசதிகள் குறித்த உங்களது அனுபவங்களை பகிர்ந்து கொள்ள ஆய்வாளர் குழு தங்களை அன்புடன் வரவேற்க்கிறோம். பின்வரும் கேள்விகளுக்கு 1 முதல் 5 வரையிலான குறியீடுகள் மூலம் உங்களது பதில்கள் பதிவு செய்யப்படும். அவைகள் பின்வருமாறு. 1. உறுதியாக மறுக்கிறேன் 2. சிறிதளவு மறுக்கிறேன் 3. ஏற்கவுமில்லை / மறுக்கவுமில்லை 4. சிறிதளவு ஏற்கிறேன் 5. உறுதியாக ஏற்கிறேன் 6. பதில் கூற விரும்பவில்லை. இந்த ஆய்வில் தாங்கள் கூறும் சுயவிபரங்கள் மற்றும் கருத்துக்கள் அனைத்தும் ரகசியமாக வைக்கப்படும். இந்த கணக்கெடுப்பு ஆய்வுக்காக மட்டுமே பயன்படுத்தப்படும். இந்த ஆய்வுக்காக உங்களது நேரம் மற்றும் ஆதரவுக்கு மனமார்ந்த நன்றிகளை ஆய்வாளர் குழு தெரிவித்துக் கொள்கிறது.

வ. எண்	கேள்விகள்	1.	2.	3.	4.	5.	6. (N/A)
1.	பொது சுகாதார நிலையங்களில் வெளிநோயாளி பதிவுக்காக காத்திருப்பு நேரம் எனக்கு ஏற்படையதாக இருந்தது						
2.	பொது சுகாதார நிலையத்தில் பதிவிற்கும் மற்றும் மருத்துவரின் ஆலோசனைக்கும் இடையே உள்ள காத்திருப்பு நேரம் எனக்கு ஏற்படையது						
3.	பொதுசுகாதார நிலையத்தில் மருத்துவரின் ஆலோசனை மாதிரி சேகரிப்பு / ரத்த வங்கி / எக்ஸ் ரே / நோயின் தன்மை கண்டறியும் சோதனை மையத்திற்கான இடையே உள்ள காத்திருப்பு நேரம் எனக்கு ஏற்படையதாக இருந்தது						
4.	மருத்துவமனையில் மாற்று திறனாளி சான்றிதழ் / இறப்பு சான்றிதழ் / பிறப்பு சான்றிதழ் / மருத்துவ சான்றிதழ் பெறுவதற்கு இடையே உள்ள காத்திருப்பு நேரம் எனக்கு ஏற்படையதாக இருந்தது						
5.	மருத்துவருடனான ஆலோசனை நேரம் எனக்கு போதுமானதாக இருந்தது						
6.	பொது சுகாதார நிலையத்திற்கு இந்த முறை வந்த போது மருத்துவர் தங்களுக்கு (தங்களின் மருத்துவ நிலை மற்றும் சிகிச்சைமுறை இதர) தெளிவாக, எளிமையாகவும் புரியும்படி அறிவுறுத்தினார்						
7.	தாங்கள் மருத்துவமனைக்கு வந்தபோது எனக்கு செய்யப்படும் அனைத்து மருத்துவ சிகிச்சை மற்றும் நடைமுறைகள் பற்றி (மருத்துவர் / செவிலியர் / பிற ஊழியர்கள்) அடிக்கடி தெரிவித்தனர்						
8.	மருத்துவரின் ஆலோசனைக்கு முன் தங்களிடம் இதற்கு முன்பு தாங்கள் எடுத்துக்கொண்ட மருந்துகளின் பட்டியல் மற்றும் உடல் ஆய்வு அறிக்கை பற்றி என்னிடம் கேட்கப்பட்டது.						
9.	மருத்துவ சிகிச்சை அளிப்பவர்கள் எனது மருத்துவ அறிக்கைகளை ரகசியமாக பாதுகாத்தனர்.						
10.	மருத்துவ ஆலோசனையின் போது மருத்துவ சிகிச்சை அளிப்பவர் தங்களது உடல்நிலை குறித்து தனியுரிமையை பராமரித்தார் (எ.கா திரை போடுதல் / கூட்டத்தை தவிர்த்தல்)						
11.	எனக்கு தேவையான அனைத்து மருந்துகளையும் மருத்துவமனை வசதிக்களையும் இங்கு இலவசமாக பெற முடிந்தது						
12.	இந்த மருத்துவமனை வளாகத்தில் குடிநீர் வசதி உள்ளது						
13.	இந்த மருத்துவமனை வளாகத்திலுள்ள கழிவறை மற்றும் குளியல் அறைகளில் தண்ணீர் வசதி உள்ளது.						

14.	சுகாதார மையத்தில் மின்சாரம் மற்றும் பவர்பேக் அப் வசதி உள்ளது.						
15.	மருத்துவமனையில் உள்ள வெளிநோயாளி பகுதி தூய்மையாகவும், சுகாதாரமாகவும் உள்ளது.						
16.	சுகாதார மையத்தில் என்னை பரிசோதிக்கும் போது (மருத்துவர் / செவிலியர் / பிற ஊழியர்கள்) கை சுத்திகரிப்பு மற்றும் கையுறைகளை பயன்படுத்தினர்						
17.	மருத்துவமனை வளாகத்தில் உள்ள உட்கட்டமைப்பு வசதிகளான (தூய்மையான கழிவறை, மேற்கூறை, ஜன்னல்கள் மற்றும் கதவுகள்) போன்றவை தங்களுக்கு ஏற்றுக்கொள்ளத்தக்கதாக உள்ளது						
18.	மருத்துவமனை வளாகத்தில் உள்ள அமைப்புகள் (எ.கா வெளிச்சம், வெப்பநிலை, காற்றோட்டம்) போன்றவை தங்களுக்கு ஏற்றுக்கொள்ளத்தக்கதாக உள்ளது						
19.	மருத்துவமனையில் சேவை வழங்கும் (எ.கா மருத்துவர் / செவிலியர் / பிற ஊழியர்கள்) போதுமானதாக உள்ளனர்.						
20.	மருத்துவமனையில் சேவை வழங்கும் (மருத்துவர் / செவிலியர் / பிற ஊழியர்கள்) அனைவருக்கும் சமமான சிகிச்சை அளிக்கிறார்கள்						
21.	மருத்துவமனையில் சேவை வழங்கும் அனைவரும் என்னை மரியாதையுடனும் கண்ணியத்துடனும் நடத்தினார்கள்.						
22.	பொதுவாக நோயாளிகளிடம் (மருத்துவர் / செவிலியர் / பிற ஊழியர்கள்) அக்கறையுடன் கூடிய அணுகுமுறையை கையாளுகிறார்கள்.						
23.	இங்கு பொதுவாக நோயாளிகளுக்கு (மருத்துவர் / செவிலியர் / பிற ஊழியர்கள்) பிழையற்ற சிகிச்சையை பாகுபாடின்றி வழங்குகிறார்கள்.						
24.	இங்கு செய்யும் அனைத்து மருத்துவ பரிசோதனையும் (மருத்துவர் / செவிலியர் / பிற ஊழியர்கள்) நான் ஏற்றுக் கொண்டேன்.						
25.	வெளி நோயாளிகளுக்கான ஆலோசனை செலவை குறைவான தொகையை செலவு செய்தேன்						
26.	மருத்துவமனையில் கிடைக்கும் சுகாதார சேவைகள் தங்களது தேவைக்கு ஏற்றவையாக உள்ளது.						
27.	மருத்துவமனையில் கிடைக்கும் சுகாதார சேவைகள் எனக்கு போதுமானதாக இருந்தது						
28.	மருத்துவமனையில் உள்ள தகவல் பலகை மற்றும் குறியீட்டு பலகை வருகையின் போது பின்பற்ற எளிதாக இருந்தது.						
29.	வெளிநோயாளிகள் பிரிவில் குறைந்த பட்சம் ஒரு நோய் தொற்று உண்டாக்கும் கழிவு அகற்றும் கலன் (வழக்கமான குப்பை தொட்டி இல்லை) உள்ளது.						
30.	இங்கு வசதியான நல்ல சுகாதாரம் மற்றும் தொற்று கட்டுப்பாட்டு நடவடிக்கைகளான (கை கழுவுதல், கையுறை மற்றும் முகக்கவசம் பயன்படுத்துதல், சுவாச சுகாதாரம் மற்றும் இருமல் ஆசாரம்) கொண்டுள்ளது.						
31.	நான் இம்மருத்துவமனையில் பெற்ற சுகாதார சேவைகளால் நிம்மதியாகவும் மற்றும் பாதுகாப்பாகவும் உணர்ந்தேன்.						
32.	நான் இம்மருத்துவமனையை என் குடும்பம் மற்றும் நண்பர்களுக்கு பரிந்துரைப்பேன்.						
33.	மருத்துவமனையில் வழங்கப்படும் வசதிகள் பெறுவது மனதை மகிழ்ச்சியளிக்கும் அளவிற்கு உள்ளது.						
34.	மருத்துவமனையில் நான் பெற்ற அனைத்து சுகாதார சேவைகளிலும் எனது அனுபவம் நன்றாக உள்ளது.						

உங்களை பற்றி மேலும் தெரிந்துக் கொள்ள விரும்புகிறோம்.
நீங்கள் முதல்முறையாக வந்துள்ளீர்களா? ஆம் / இல்லை

வெளிநோயாளியாக ஆலோசனை பெற காரணம்

மருத்துவமனையை அடைய தங்களது வீட்டிலிருந்து பயணித்த தூரத்தின் அளவு _____

நீங்கள் மருத்துவமனைக்கு வரும் போது ஏதேனும் சுகாதார செலவு செய்தீர்களா. ஆம் / இல்லை
ஆம் எனில் எவ்வளவு செலவு செய்தீர்கள் என்பதை விளக்கமாக கூறவும்

சுகாதார நிலையத்தில் உள்ள வசதிகள் பற்றிய உங்களது அனுபவங்களை எங்களிடம் பகிர் விரும்புகிறீர்களா?

வயது: ____ ஆண்டுகள்

பாலினம்: ஆண் _____ பெண் _____

மாத வருமானம்

கல்வி தகுதி

<input type="checkbox"/>	ரூ.20,000/- அதற்கு குறைவாக
<input type="checkbox"/>	ரூ.20,001 - ரூ.40,000
<input type="checkbox"/>	ரூ.40,001 - ரூ.60,000
<input type="checkbox"/>	ரூ.60,001 - ரூ.80,000
<input type="checkbox"/>	ரூ.80,001 அதற்கு மேல்

<input type="checkbox"/>	முதல்நிலை (5ஆம் வகுப்பு வரை)
<input type="checkbox"/>	இரண்டாம் நிலை (10ஆம் வகுப்பு வரை)
<input type="checkbox"/>	மேல்நிலை
<input type="checkbox"/>	இளநிலை (அ) இணையான படிப்பு
<input type="checkbox"/>	முதுநிலை அதற்கு மேல்

அலுவலக பயன்பாட்டிற்கு

அங்கீகாரம் பெற்ற சேவை

அங்கீகாரம் பெறாத சேவை

துறை : _____

மருத்துவ சேவை வழங்குமிடம்: DH / SDH / CHC / PHC

துறை : _____

Questionnaire for patient experience survey (Inpatient)

A team of researchers is assessing the service quality at public health facilities in Tamil Nadu with the help of this survey. **You are cordially invited to participate in this survey and share your experience on this facility.** Please report the extent you go along with following statements by selecting an appropriate number between 1 to 5, where '1' = strongly disagree, '2' = slightly disagree, '3' = neither agree nor disagree, '4' = slightly agree, '5' = strongly agree. All responses to the survey will be recorded anonymously and accessed by the researchers only. Please note that participation in the survey is a completely voluntary task. Thank you for your time and support for the study.

- Instruction to field investigator: Put NA in the last column if not applicable

Waiting time for clinic registration was acceptable to me	1	2	3	4	5	
Waiting time between clinic registration and doctor consultation was acceptable to me	1	2	3	4	5	
Waiting time between doctor consultation and admission to the ward was acceptable to me	1	2	3	4	5	
Waiting time for counselling /sample collection /Blood bank/x-ray/ diagnostic centre was acceptable to me	1	2	3	4	5	
Waiting time for getting certificates- Handicap certificate/ Death certificate/ Birth certificate/Medical certificate	1	2	3	4	5	
Waiting time for getting discharge summary was acceptable to me	1	2	3	4	5	
During this hospital stay, the nurses often treated me with respect and dignity	1	2	3	4	5	
During this hospital stay, the nurses often gave most information about my test results.	1	2	3	4	5	
During this hospital stay, the nurses often maintained confidentiality about my clinical records	1	2	3	4	5	
During this hospital stay, the nurses often maintained my physical privacy eg, putting curtain/ asking people to move out	1	2	3	4	5	
During this hospital stay, the nurses often listened carefully about my health needs.	1	2	3	4	5	
During this hospital stay, the nurses often explained things in a way that was easy for me to understand.	1	2	3	4	5	
During this hospital stay, the nurses often encouraged me to ask questions.	1	2	3	4	5	
During this hospital stay, the doctor often treated me with respect and dignity	1	2	3	4	5	
During this hospital stay, the doctor often gave most information about my test results.	1	2	3	4	5	
During this hospital stay, the doctor often maintained confidentiality about my clinical records	1	2	3	4	5	
During this hospital stay, the doctor often maintained my physical privacy eg, putting curtain/ asking people to move out	1	2	3	4	5	

During this hospital stay, the doctor often listened carefully about my health needs.	1	2	3	4	5	
During this hospital stay, the doctor often explained things in a way that was easy for me to understand.	1	2	3	4	5	
During this hospital stay, the doctor often encouraged me to ask questions.	1	2	3	4	5	
During this hospital stay, the response time taken by providers (Doctors/Nurses/Other staffs) to my immediate health care needs was acceptable to me.	1	2	3	4	5	
During this hospital stay, my consent was sought by providers (Doctors/Nurses/Other staffs) for all treatments and procedures done to me.	1	2	3	4	5	
I was kept informed often by providers (Doctors/Nurses/Other staffs) about all the medical procedures being done to me.	1	2	3	4	5	
My consent (written), wherever required, for medical procedures was taken by providers (Doctors/Nurses/Other staffs)	1	2	3	4	5	
I was asked to list or review all of the prescription drugs I was taking before admission	1	2	3	4	5	
I could get all drugs and consumables required by me free of cost within the facility	1	2	3	4	5	
The quantity of food served is sufficient	1	2	3	4	5	
The quality of food served is acceptable	1	2	3	4	5	
Food is given on time in the facility	1	2	3	4	5	
The facility has regular supply of drinking water	1	2	3	4	5	
The facility has regular supply of water in the toilets and bathroom	1	2	3	4	5	
The facility has regular supply of electricity and/or power back up	1	2	3	4	5	
The facility is free of foul smell	1	2	3	4	5	
The facility is free of insects/flies/mosquitoes/bugs/rodents	1	2	3	4	5	
The facility is free of stray dogs/cats	1	2	3	4	5	
Cleanliness and hygiene of wards in the facility is acceptable to me	1	2	3	4	5	
Cleanliness and hygiene of toilets in the facility is acceptable to me	1	2	3	4	5	
Cleanliness and hygiene of bed and linen in the facility is acceptable to me	1	2	3	4	5	
Cleanliness and hygiene of waiting hall in the facility is acceptable to me	1	2	3	4	5	
Providers (Doctors/Nurses/Other staffs) used hand sanitizers/gloves while examining me	1	2	3	4	5	
The physical infrastructure of the facility (clean toilets, walls, windows, ceilings, door etc) is acceptable to me	1	2	3	4	5	
The physical layout of the facility is convenient (light/heat/air) for me	1	2	3	4	5	

The gates of the facility is locked during night	1	2	3	4	5	
There is no fear of theft of personal belongings in the facility	1	2	3	4	5	
Visitors are allowed only during specific hours	1	2	3	4	5	
The facility allows only one attender with the patient	1	2	3	4	5	
Providers (Doctors/Nurses/Other staffs) give equal treatment to all	1	2	3	4	5	
Providers (Doctors/Nurses/Other staffs) have a caring attitude towards patients in general	1	2	3	4	5	
Providers (Doctors/Nurses/Other staffs) ensure error free treatments for patients in general	1	2	3	4	5	
The clinical examination by providers (Doctors/Nurses/Other staffs) was acceptable to me.						
I spent a significant amount of money to cover the cost of hospital services	1	2	3	4	5	
The available health services in the facility are appropriate to my needs	1	2	3	4	5	
The available health services in the facility are sufficient to my needs	1	2	3	4	5	
Signs and direction boards in the facility were easy to follow during the visit	1	2	3	4	5	
Adequate amenities for the attender is available in the facility	1	2	3	4	5	
At least one infectious waste container (not the usual dust bin) is available in the ward	1	2	3	4	5	
The facility has reasonable hygiene and infection control measures (hand wash, use of gloves & masks, respiratory hygiene / cough etiquette etc)	1	2	3	4	5	
I could feel relieved and safe in the process of getting healthcare services in the facility	1	2	3	4	5	
I will recommend this facility to my family and friends	1	2	3	4	5	
The facility considers the patients' best interests at heart	1	2	3	4	5	
Overall, my experience with the service received at the facility is good	1	2	3	4	5	

We would like to know a little more about you.

Are you visiting the facility for the first time? Yes/ No

Reason for Hospitalization

Number of days hospitalised: _____

Did you incur any out of pocket health expenses during your stay? Yes/ No

If Yes, how much? Please elaborate.

Age: years

Gender: Male Female

Monthly Income:

<input type="checkbox"/>	INR 20,000 or less
<input type="checkbox"/>	INR 20,001 – 40,000
<input type="checkbox"/>	INR 40,001 – 60,000
<input type="checkbox"/>	INR 60,001 – 80,000
<input type="checkbox"/>	INR 80,000 or more

Educational background:

<input type="checkbox"/>	Primary (till 5 th standard)
<input type="checkbox"/>	Secondary (till 10 th standard)
<input type="checkbox"/>	Higher Secondary (10+2)
<input type="checkbox"/>	Undergraduate or equivalent
<input type="checkbox"/>	Postgraduate and above

For office use only: Accredited facility Non- accredited facility

Department: _____

Type of facility: DH / SDH / CHC / PHC

Department: _____

மருத்துவமனைக்கு வரும் உள்நோயாளிகளின் அனுபவக் கணக்கெடுப்புக்கான கேள்விதாள்

இந்த ஆய்வின் மூலம் தமிழகத்தில் உள்ள பொது சுகாதார நிலையங்களில் சேவை தரத்தை ஆய்வாளர்கள் குழு மதிப்பீடு செய்து வருகிறது. ஆய்வாளர்கள் குழு மதிப்பீடு செய்வதற்கு இக்கணக்கெடுப்பு மிகவும் பயனுள்ளதாக இருக்கும். இந்த கணக்கெடுப்பில் தாங்கள் பங்கேற்று, பொது சுகாதார நிலையங்களில் உள்ள மருத்துவ வசதிகள் குறித்த உங்களது அனுபவங்களை பகிர்ந்து கொள்ள ஆய்வாளர் குழு தங்களை அன்புடன் வரவேற்க்கிறோம். பின்வரும் கேள்விகளுக்கு 1 முதல் 5 வரையிலான குறியீடுகள் மூலம் உங்களது பதில்கள் பதிவு செய்யப்படும். அவைகள் பின்வருமாறு. 1. உறுதியாக மறுக்கிறேன் 2. சிறிதளவு மறுக்கிறேன் 3. ஏற்கவுமில்லை / மறுக்கவுமில்லை 4. சிறிதளவு ஏற்கிறேன் 5. உறுதியாக ஏற்கிறேன் 6. பதில் கூற விரும்பவில்லை. இந்த ஆய்வில் தாங்கள் கூறும் சுயவிபரங்கள் மற்றும் கருத்துக்கள் அனைத்தும் ரகசியமாக வைக்கப்படும். இந்த கணக்கெடுப்பு ஆய்வுக்காக மட்டுமே பயன்படுத்தப்படும். இந்த ஆய்வுக்காக உங்களது நேரம் மற்றும் ஆதரவுக்கு மனமார்ந்த நன்றிகளை ஆய்வாளர் குழு தெரிவித்துக் கொள்கிறது.

வ. எண்	கேள்விகள்	1.	2.	3.	4.	5.	6. (N/A)
1.	பொது சுகாதார நிலையத்தில் பதிவுக்காக காத்திருப்பு நேரம் எனக்கு ஏற்படையது						
2.	பொது சுகாதார நிலையத்தில் பதிவிற்கும் மற்றும் மருத்துவரின் ஆலோசனைக்கும் இடையே உள்ள காத்திருப்பு நேரம் எனக்கு ஏற்படையது						
3.	மருத்துவரின் ஆலோசனைக்கும் உள்நோயாளியாக அனுமதிக்கப்பட்டதற்கும் இடையே காத்திருப்பு நேரம் எனக்கு ஏற்படையது						
4.	பொதுசுகாதார நிலையத்தில் மருத்துவரின் ஆலோசனை மாதிரி சேகரிப்பு / ரத்த வங்கி / எக்ஸ் ரே / நோயின் தன்மை கண்டறியும் சோதனை மையத்திற்கான இடையே உள்ள காத்திருப்பு நேரம் எனக்கு ஏற்படையது						
5.	மருத்துவமனையில் மாற்று திறனாளி சான்றிதழ் / இறப்பு சான்றிதழ் / பிறப்பு சான்றிதழ் / மருத்துவ சான்றிதழ் பெறுவதற்கு இடையே உள்ள காத்திருப்பு நேரம் எனக்கு ஏற்படையதாக இருந்தது						
6.	மருத்துவமனையில் டிஸ்சார்ஜ் சான்றிதழ் வாங்குவதற்கான காத்திருப்பு நேரம் எனக்கு ஏற்படையதாக இருந்தது						
7.	உள்நோயாளியாக தங்கியிருக்கும் காலத்தில் உங்களை மருத்துவமனை செவிலியர்கள் மரியாதையுடனும்/கண்ணியத்துடனும் நடத்து கொண்டார்கள்						
8.	மருத்துவமனையில் உள் நோயாளியாக அனுமதிக்கப்பட்ட சமயத்தில் மருத்துவமனை செவிலியர்கள் உங்களுக்கு எடுக்கப்பட்ட சோதனை முடிவுகளை பற்றி பெறும்பாலான தகவல்களை பற்றி தெரிவித்தனர்						
9.	மருத்துவமனையில் உள் நோயாளியாக அனுமதிக்கப்பட்ட சமயத்தில் செவிலியர்கள் தங்களது மருத்துவ பதிவுகள் குறித்து ரகசியம் காத்தனர்						
10.	மருத்துவமனையில் உள் நோயாளியாக அனுமதிக்கப்பட்ட காலத்தில் செவிலியர்கள் தங்களது உடல்நிலை குறித்து தனியுரிமையை பராமரித்தனரா எ.கா திரை போடுதல் / கூட்டத்தை தவிர்த்தல்						
11.	மருத்துவமனையில் தங்கியிருந்த காலத்தில் செவிலியர்கள் எனது உடல்நலத் தேவைகளைப் பற்றிக் கவனமாக கேட்டனர்.						
12.	மருத்துவமனையில் உள் நோயாளியாக அனுமதிக்கப்பட்ட சமயத்தில் செவிலியர்கள் அடிக்கடி எனக்குப் புரியும் வகையில் உடல்நலம் பற்றிய விசயங்களை விளக்கினார்கள்						
13.	மருத்துவமனையில் உள் நோயாளியாக அனுமதிக்கப்பட்ட சமயத்தில் செவிலியர்கள் உடல்நிலை பற்றிய விசயங்களில் கேள்விக்கேட்க தங்களை ஊக்குவித்தார்கள்						
14.	மருத்துவமனையில் தங்கியிருந்த போது மருத்துவர் என்னை மரியாதையுடனும் கண்ணியத்துடனும் நடத்தினார்						
15.	மருத்துவமனையில் உள் நோயாளியாக அனுமதிக்கப்பட்ட போது எனது உடல் பரிசோதனை முடிவுகள் குறித்து பெறும்பாலான தகவல்களை மருத்துவர் தெரிவித்தார்.						

16.	மருத்துவமனையில் உள் நோயாளியாக அனுமதிக்கப்பட்ட சமயத்தில் மருத்துவர் தங்களது மருத்துவ பதிவுகள் குறித்து ரகசியம் காத்தார்								
17.	மருத்துவமனையில் உள் நோயாளியாக அனுமதிக்கப்பட்ட சமயத்தில் மருத்துவர் தங்களது உடல்நிலை குறித்து தனியுரிமையை பராமரித்தார் என திரை போடுதல் / கூட்டத்தை தவிர்த்தல்								
18.	மருத்துவமனையில் தங்கியிருந்த போது மருத்துவர் அடிக்கடி தங்களது உடல்நிலை தேவைகள் பற்றி கவனமாக கேட்டறிந்தார்								
19.	மருத்துவமனையில் உள் நோயாளியாக அனுமதிக்கப்பட்ட சமயத்தில் மருத்துவர்கள் அடிக்கடி எனக்குப் புரியும் வகையில் உடல்நலம் பற்றிய விசயங்களை விளக்கினார்.								
20.	மருத்துவமனையில் உள் நோயாளியாக அனுமதிக்கப்பட்ட சமயத்தில் மருத்துவர் உடல்நிலை பற்றிய விசயங்களில் கேள்வி கேட்க என்னை ஊக்குவித்தார்								
21.	மருத்துவமனையில் உள் நோயாளியாக அனுமதிக்கப்பட்ட சமயத்தில் உங்களது உடனடி உடல்நல ஆரோக்கிய தேவைகளுக்கு (மருத்துவர் / செவிலியர் / பிற ஊழியர்கள்) எடுத்துக்கொண்ட நேரம் ஏற்றுக் கொள்ளக்கூடியதாக இருந்தது								
22.	மருத்துவமனையில் உள் நோயாளியாக அனுமதிக்கப்பட்ட சமயத்தில் தங்களுக்கு செய்யப்படும் மருத்துவ சிகிச்சைகள் மற்றும் நடைமுறைகளுக்கு (மருத்துவர் / செவிலியர் / பிற ஊழியர்கள்) என்னிடம் சம்மதம் கேட்டார்கள்								
23.	மருத்துவமனையில் அனுமதிக்கப்பட்ட சமயத்தில் எனக்கு செய்யப்படும் அனைத்து மருத்துவ நடைமுறைகள் பற்றி (மருத்துவர் / செவிலியர் / பிற ஊழியர்கள்) அடிக்கடி தங்களுக்கு தெரிவித்தனர்								
24.	மருத்துவ நடைமுறைகளுக்காக தேவைப்படும் இடங்களில் (மருத்துவர் / செவிலியர் / பிற ஊழியர்கள்) என்னிடம் எழுத்துபூர்வ ஒப்புதல் கேட்டனர்.								
25.	மருத்துவமனையில் அனுமதிக்கப்படுவதற்கு முன் தங்களிடம் இதற்கு முன்பு தாங்கள் எடுத்துக்கொண்ட மருந்துகளின் பட்டியல் மற்றும் உடல் ஆய்வு அறிக்கை பற்றி தங்களிடம் கேட்கப்பட்டது.								
26.	மருத்துவமனையில் அனுமதிக்கப்பட்ட சமயத்தில் மருத்துவமனை அனைத்து மருந்துகளும் மருத்துவ வசதிகளும் இலவசமாக பெற்றேன்.								
27.	உங்களுக்கு உணவுகளின் அளவு பொதுமானதாக இருந்தது								
28.	உங்களுக்கு வழங்கப்பட்ட உணவுகள் தரமாக இருந்தது								
29.	உணவு நேரத்திற்கு தங்களுக்கு வழங்கப்பட்டது								
30.	மருத்துவமனையில் தங்களுக்கு தினந்தோறும் குடிநீர் வழங்கப்படுகிறது								
31.	மருத்துவமனையில் தினந்தோறும் தண்ணீர் கழிவறைக்கும் குளியல் அறைக்கும் வழங்கப்படுகிறது								
32.	மருத்துவமனையில் தினந்தோறும் மின்சாரம் மற்றும் பவர் பேக் வசதி உள்ளது.								
33.	உள்நோயாளி படுக்கையறையில் துர்நாற்றம் இல்லாமல் உள்ளது								
34.	மருத்துவமனையில் பூச்சிகள், ஈக்கள், கொசுக்கள், வண்டுகள், கொரித்துன்னிகள் இல்லாமல் இருக்கிறது								
35.	மருத்துவமனையில் தெரு நாய்கள் மற்றும் பூனைகள் நடமாட்டம் இல்லாமல் இருக்கிறது								
36.	உள்நோயாளி படுக்கையறை சுத்தமாகவும் சுகாதாரமாகவும் ஏற்கத்தக்கதாக உள்ளது.								
37.	மருத்துவமனையில் உள்ள கழிவறைகள் சுத்தமாகவும் சுகாதாரமாகவும் ஏற்கத்தக்கதாக உள்ளது.								
38.	உள்நோயாளியின் படுக்கையறைகள், போர்வை சுத்தமாகவும் சுகாதாரமாகவும் இருக்கிறது								
39.	மருத்துவமனையில் உள்ள காத்திருப்பு கூடம் சுத்தமாகவும் சுகாதாரமாகவும் இருக்கிறது								
40.	மருத்துவமனையில் (மருத்துவர் / செவிலியர் / பிற ஊழியர்கள்) என்னை பரிசோதிக்கும் போது கை சுத்திகரிப்பு, கையுறைகளை பயன்படுத்தினர்								
41.	மருத்துவமனை வளாகத்தில் உள்கட்டமைப்பு வசதி (தூய்மையான கழிவறை, மேற்கூறை, ஜன்னல்கள் மற்றும் கதவுகள்) போன்றவை தங்களுக்கு ஏற்றுக்கொள்ளக்கூடியதாக உள்ளது								

42.	மருத்துவமனை வளாகத்தில் உள்ள அமைப்புகள் எ.கா (வெளிச்சம், வெப்பநிலை, காற்றோட்டம்) போன்ற அமைப்புகள் வசதியாக உள்ளது								
43.	மருத்துவமனையில் வளாகத்தில் உள்ள கதவுகள் பாதுகாப்பிற்காக இரவு நேரங்களில் பூட்டப்பட்டுள்ளது தங்களுக்கு ஏற்புடையதாக உள்ளது								
44.	மருத்துவமனையில் வளாகத்தில் தனிப்பட்ட பொருள்கள் திருடப்படும் என்ற அச்சமில்லை								
45.	மருத்துவமனையில் பார்வையாளர்களின் நேரத்தில் மட்டும் பார்வையாளர்களை அனுமதிக்கிறார்கள்.								
46.	மருத்துவமனையில் உள்ள வார்டுகளில் ஒரு நோயாளிக்கு ஒரு உதவியாளரை மட்டுமே அனுமதிக்கிறார்கள்								
47.	மருத்துவமனையில் சேவை வழங்கும் (மருத்துவர் / செவிலியர் / பிற ஊழியர்கள்) அனைவருக்கும் சமமான சிகிச்சை அளிக்கிறார்கள்								
48.	மருத்துவமனையில் சேவை வழங்கும் (மருத்துவர் / செவிலியர் / பிற ஊழியர்கள்) அனைத்து நோயாளிகளையும் சமமாகவும் பாகுபாடின்றியும் நடத்துகிறார்கள்.								
49.	மருத்துவமனையில் சேவை வழங்கும் (மருத்துவர் / செவிலியர் / பிற ஊழியர்கள்) பொதுவாக பிழையற்ற சிகிச்சையை பாகுபாடின்றி சமமாக வழங்குகிறார்கள்.								
50.	மருத்துவமனையில் செய்யப்படும் (மருத்துவர் / செவிலியர் / பிற ஊழியர்கள்) மருத்துவ பரிசோதனை தங்களுக்கு ஏற்றுக்கொள்வதாக உள்ளது								
51.	மருத்துவமனையில் சேவைகளுக்கான செலவை ஈடுகட்ட கணிசமான தொகையை செலவிட்டேன்.								
52.	மருத்துவமனையில் கிடைக்கும் சுகாதார சேவைகள் தங்களது தேவைக்கு ஏற்றவையாக உள்ளது.								
53.	மருத்துவமனையில் சுகாதார சேவைகள் தங்களுக்கு போதுமானதாக உள்ளது.								
54.	மருத்துவமனையில் உள்ள தகவல் பலகை மற்றும் குறியீட்டு பலகை வருகையின் போது பின்பற்ற எளிதாக இருந்தது.								
55.	மருத்துவமனையில் உள்நோயாளிக்கான உதவியாளருக்கு வசதிகள் போதுமானதாக உள்ளது.								
56.	உள்நோயாளி படுக்கையறையில் நோய் தொற்று உண்டாக்கும் கழிவுகள் அகற்றும் கலன் உள்ளது. (வழக்கமான குப்பை தொட்டி அல்ல)								
57.	உள்நோயாளி படுக்கையறையில் நியாயமான சுகாதார சேவை மற்றும் தொற்று கட்டுப்பாட்டு நடவடிக்கைகளை கொண்டுள்ளது. (கை கழுவுதல், கையுறைகள் மற்றும் முககவசம் பயன்படுத்துவது, சுவாச சுகாதாரம் போன்றவை)								
58.	நான் சுகாதார சேவைகளை பெறும் செயல்பாட்டில் நிம்மதியாகவும் பாதுகாப்பாகவும் என்னால் உணர் முடிகிறது.								
59.	மருத்துவமனையில் உள்ள சுகாதார சேவைகளை பெற நான் என் குடும்பத்தினருக்கும் என் நண்பர்களுக்கும் பரிந்துரைப்பேன்.								
60.	மருத்துவமனையில் வழங்கப்படும் வசதிகள் பெறுவது மனதை மகிழ்ச்சியளிக்கும் அளவிற்கு உள்ளது.								
61.	மருத்துவமனையில் நான் பெற்ற அனைத்து சுகாதார சேவைகளிலும் எனது அனுபவம் நன்றாக உள்ளது.								

உங்களை பற்றி மேலும் தெரிந்துகொள்ள விரும்புகிறோம்.

நீங்கள் முதல்முறையாக வந்துள்ளீர்களா? ஆம் / இல்லை

மருத்துவமனையில் அனுமதிக்கப்பட்டதற்கான காரணம்

மருத்துவமனையில் அனுமதிக்கப்பட்ட நாட்களின் எண்ணிக்கை _____

மருத்துவமனையில் உள்நோயாளியாக அனுமதிக்கப்பட்டபோது ஏதேனும் உடல்நலத்திற்காக செலவுகளை செய்தீர்களா?
ஆம் / இல்லை
ஆம் எனில் எவ்வளவு செலவு செய்தீர்கள் என்பதை விளக்கமாக கூறவும்

வயது: ____ ஆண்டுகள்

பாலினம்: ஆண் _____ பெண் _____

மாத வருமானம்

கல்வி தகுதி

<input type="checkbox"/>	ரூ.20,000/- அதற்கு குறைவாக
<input type="checkbox"/>	ரூ.20,001 - ரூ.40,000
<input type="checkbox"/>	ரூ.40,001 - ரூ.60,000
<input type="checkbox"/>	ரூ.60,001 - ரூ.80,000
<input type="checkbox"/>	ரூ.80,001 அதற்கு மேல்

<input type="checkbox"/>	முதல்நிலை (5ஆம் வகுப்பு வரை)
<input type="checkbox"/>	இரண்டாம் நிலை (10ஆம் வகுப்பு வரை)
<input type="checkbox"/>	மேல்நிலை
<input type="checkbox"/>	இளநிலை (அ) இணையான படிப்பு
<input type="checkbox"/>	முதுநிலை அதற்கு மேல்

அலுவலக பயன்பாட்டிற்கு

அங்கீகாரம் பெற்ற சேவை

அங்கீகாரம் பெறாத சேவை

துறை : _____

மருத்துவ சேவை வழங்குமிடம்: DH / SDH / CHC / PHC

துறை : _____

FACILITY OBSERVATION CHECKLIST

Date of Initial Internal Gap Analysis Done :

Date of NQAS Gap Filling Fund Received :

Date of NQAS State Assessor Visited :

Date of NQAS National Assessor Visited :

Date of NQAS certification :

If not certified, when is the expected date of NQAS Certification?

Bed Details in the facility : Sanction Functional

01. Volume of patients:(April – March)

Services	Apr' 17 - Mar'18	Apr'18 - Mar'19	Apr'19 - Mar'20	Apr'20 - Mar'21	Apr'21- Mar'22	Apr'22 - Mar'23	Last Month
Number of Outpatients							
Number of Inpatients							
Normal Deliveries							
LSCS							
Major surgeries(exclude O&G)							
Minor surgeries (exclude O&G)							
Bed occupancy rate*							
Average length of stay**							

* Inpatient Days of Care / Bed Days Available) x 100

** the total number of days in the hospital for all patients during a certain amount of time by the number of admissions or discharges.

In which specific department do you get the highest number of In-Patients? _____

In which specific department do you get the lowest number of In-Patients? _____

How many Specialist Department available in the Facility ? _____

Please Mention the Names of Department available in the facility:

02.Human Resources:[Please Collect Total HR position in the Facility (Regular / Scheme / Contract)]

	Ideal requirements	Position filled	Currently available (as on today exclude transferred & diverted personnel)
Doctors (with speciality)			
Nurses			
Pharmacist			
Lab Technician			
Hospital workers			

03.Physical Infrastructure:

Total Area of the facility: _____(Square metres)

Build up area: _____(Square metre s)

Is the physical infrastructure (buildings/blocks) of your facility adequate to provide the services mentioned in the sign board outside the facility? Yes/No

Any New Building Sanctioned? Yes / No

Construction Started ? Yes / No

Positive Things	Requirements / To Be Improve
1.	1.
2.	2.
3.	3.

04.Operation Theatre:

How many OTs within the facility? _____

How many are functional today? _____ How many are non-functional today? _____

How many major surgeries take place in a last month? _____

What kind of major surgeries done _____

How many minor surgeries take place in a last month? _____

What kind of minor surgeries done _____

Positive Things	Requirements / To Be Improve
1.	1.
2.	2.
3.	3.

05.Equipment Utilisation:

List the type of equipment/s that are non-functional (Ask department wise)

Whether all Equipment's calibration Done ? Yes / No

If Yes, Please check Equipment calibration Register, and When was it done ? _____

Next due on _____

If No, please mention which equipment (Department wise) require calibrations?

How much amount of money is spent on annual calibration? How do you pay for it?

(United fund or anything else)

Do you have on Annual Maintenance contract with any vendor? Can you please share your experience related to AMC?

Positive Things	Requirements / To Be Improve
1.	1.
2.	2.
3.	3.

06. Laboratory Services :

How many tests are taken within the lab? _____

Please mention test that are currently not available in the lab? _____

Whether your Lab is CMC- EQAS Certified? Yes / No When was it done last? _____

Is the EQAS certificate displayed in the lab?

(Please Collect Last Month EQAS Summary Report)

Is the CBC machine External Quality Test (State DPH LAB) Done ? Yes / No. If Yes when will get report ?

Whether your Lab Equipment's Calibration done ? Yes / No Please Mention Expiry Date ?

Do you maintain internal Quality Sample testing Register? Yes / No

Whether the Lab is following is Liquid Management system (Twin Bin or any other method)? Yes / No

Does the LAB have a BMW corner? Yes / No (FI : Please Observe Note)

Are Colour Coded Bins are present in the lab ? Yes / No (FI : Please Observe Note)

Can you share your experiences with LIMS?

Positive Things	Requirements / To Be Improve
1.	1.
2.	2.

07. Biomedical Waste Management (BWM) :

Please mention BMW CTF Contract Date _____ Renewal Date _____

Please mention TPCB – BMW Certificate Date _____ Renewal Date _____

Are you maintain BMW Inward / Outward Register ? Yes / No

How frequently does the Out Source agency come to collect BMW ?

Last year (Apr'22–Mar'23) how much weight (Kg) categorize wise dispose ?

RED _____; YELLOW _____; WHITE _____; BLUE _____

Are you using BMW Trolley in the facility ? Yes / No

How do you dispose the Umbilical in the facility? Outsource PIT

Positive Things	Requirements / To Be Improve with regards to BMW
1.	1.
2.	2.

08. Pharmacy services:

Can you share your experience with regards to the availability of drugs (stock outs) and quality of drug availability under TNMSC?

Which drugs required by your respective department are not available under TNMSC?

(Ask department wise)

Please Mention SPIRIT LICENSE Date: _____ Renewal Date: _____

Please Mention NARCOTIC LICENSE Date:_____ Renewal Date:_____

Please Mention PATIENT WELFARE SOCIETY Registration Date:_____ Renewal Date _____

Double Lock System is available ? Yes / No Main Store (FI : Please Observe Note)

Sound-Alike Drugs Corner / Rack maintain ? Yes / No (FI : Please Observe Note)

Look-Alike Drugs Corner / Rack maintain ? Yes / No (FI : Please Observe Note)

Short Expiry Drug Corner / Rack maintain ? Yes / No (FI : Please Observe Note)

High Risk Drug Corner ? Rack maintain ? Yes / No (FI : Please Observe Note)

ILR/ Defreeze Temperature Chart? Chart maintain ? Yes / No (FI : Please Observe Note)

Are you display Is the thermo meter working functional in the ILR ,Defreezer & Refreigerator ? Yes / No
(FI : Please Observe Note)

Are you maintain Vaccine Cold Chain Procedure ? Yes / No (FI : Please Observe Note)

Prescription Audit Done ? Yes /No (FI : Please Observe Note)

Drug Audit Done? Yes / No (FI : Please Observe Note)

Can you share your experience?

** Please collect CSR Kind Details for past 5 years (2018 – 2022).

** Please collect Patient Welfare Society fund details (2018 – 2022).

Positive Things	Requirements / To Be Improve with regards to BMW
1.	1.
2.	2.
3.	3.

09. Dialysis Department :

Is the Dialysis Unit available in the facility ? Yes / No

How many bed in the Dialysis Unit ? _____

How many Dialysis machine available in the Unit ? _____

How many Patients dialysis in the Unit per month? _____ How many CMCHIS _____

Dialysis Technician available in the Unit? Yes / No ; If yes are a regular or contract ?
 If No, Who manages it?

Positive Things	Requirements / To Be Improve
1.	1.
2.	2.

10. Blood Bank / Blood Storage :

Available in the facility ? BB BSNone

Blood Bank License Available ? Yes / No Renewal Date ? _____

Trained Technician Available in the Unit ? Yes / No

Physician Available in the Unit ? Yes / No

Staff Nurse Available in the Unit ? Yes / No

How many In-house Collection Units Per month? _____

How many camps conduct blood donation per month? _____ how many Units get are donated? _____

Is there any you tie up with Rotary / Lions Club? Yes / No

No of Units discarded last month? _____ What were the reasons for discarding units?

No of Adverse transfusion reaction noted ? _____ per month _____ per year

No of Allergy transfusion reaction noted ? _____ per month _____ per year

No of units not meeting QC Standards ? _____ per month

Any specific issue related blood bank you would like to share?

11. Medical Record (MRD) :

1 . Record Medical officer : Yes / No 2. Record Officer : Yes / No

3. Record Technician / Clerk : Yes / No 4. Record Assistant : Yes / No

System Available in the MRD : Yes / No Scan Machine Available : Yes / No

Are you Following Track ID : Yes / No Are you following ICD Code :Yes / No

Are you following MRD Checklist : Yes / No

(FI : Observe and Note)

How many register are you following ? _____

Please mention name of the register:

Do you face/experience any challenges related to MRD record keeping?

12. Auxiliary Department :

(1)Kitchen :

Head Cook available : Yes / No

Cooke available : Yes / No

Assistant Cook Available : Yes / No

Helper Available : Yes / No

Do you maintain Room Temperature : Yes / No

Is there Digital Thermometer in Display : Yes / No

Is there Refrigerator Thermometer In Display : Yes / No

Do you keep food sample stored in the refrigerator for 24hrs : Yes / No

Have you done Master Health Check up : Yes / No

Did you undergo Nasal Swab test? Yes / No How frequently ?

When was it last done:

How many register are you following ? _____

Please mention name of the register :

(2) Laundry :

How many staffs are working in the Laundry Dept ?

What are the equipment's available in the Laundry Dept ?

Are you following the Solid Pre-Treatment Procedure ? Yes / No

How many register are you following ? _____

Please mention name of the register :

13. Complaint / Grievance :

Do you have Grievances Redressal/ complaint cell in your facility? Yes / No

Total number of grievances received in the last month ? _____

Number of persons working at GR Helpdesk (against the sanctioned) ? _____

In which department maximum grievances received ?

Number of grievances resolved in the last month ?

Total number of grievances received last year ?

Number of grievances received category wise?

Total number of real time grievances resolved last year ?

Frequency of opening of suggestion/feedback box ?

Availability of feedback forms with the GR helpdesk ?

Maintained database of all complaints/ suggestions/ feedback received ? Yes / No

(FI : Please Observation all related document)

09. CMCHIS Department :

Is the Ward Manager present in the facility ? Yes / No

Is the Insurance Co-ordinator present in the facility ? Yes / No

Is the CMCHIS (500) ward available in the facility ? Yes / No How many Beds sanctioned ?

Is the CMCHIS how many staff appointed in the facility ? Please mention category wise ?

NOTE :Can you please give us break up of CMCHIS fund receipt Categories wise diagnose (ex: general surgeries, dialysis etc) and expenditure (Incentives, maintenance and repair, salary of contract workers etc) across different heads since 2018?

12. Admin Department :

Can you please give us break up of NQAS GapFilling Fund /NQAS Annual maintain Fund / Kayakalp Fund /Lakshya Fund / State Head Funds / CSR Fund & Donation Receipt and Expenditure since 2018?

13. Chief Medical Officer & NQAS Staff Nurse :

1. Key gaps identified by NQAS committee within the facility Initially ?

2.How much fund requested and how much fund received ?

3.Please elaborate NQAS Gap Filling Fund Utilization ?

4.To maintain quality standards, what efforts are being taken by the facility?

5.How much fund is required regularly?

6.Are untied fund or CMCHIS fund being utilized towards NQAS? If yes, can you please elaborate on this with examples

7. No of the COMMITTEE working in the Facility ?


8. Name of the COMMITTEE List Out ?

9. Last 6 months COMMITTEE minutes of the meeting and action taken elaborate ?

(FI : Observe and Note)

10. Please tell about what type of Certificate you have maintain in the Facility and Expiry Date ?

Investigator Observation :



Office Use:

Name of the Facility

Date of Survey :

Type of Facility : Accredited / Non – Accredited

Appendix table a : Human Resources in Accredited DH in the study

FACILITY DETAILS	POST SANCTIONED		POST FILLED		CURRENTLY AVAILABLE(AS ONTODAY- EXCLUDE TRANSFERRED, DIVERTED AND ABSENT)
	Regular	Contract	Regular	Contract	
METTUR DAM DHQH(SALEM) BED SANCTIONED- 325 BEDS					
Doctor(with speciality)	35	0	35	0	26
Superintendent (GR-I, GR-II)	7	0	3	0	2
Staff Nursing	50	26	50	25	67
Nursing Assistant GR-II	12	0	3	0	2
Maternity / Theatre Assistant/ FW Assistant	6	0	0	0	0
ANM	2	0	1	0	1
Pharmacist	4	0	3	0	3
Lab technician	3	3	2	3	4
Radiographer	2	0	2	0	1
Chief X-Ray technician / X- Ray Attender	2	0	1	0	1
Diver	4	0	1	0	1
Hospital worker	23	0	2	0	1
Sanitary worker/Dhoby/co ok	17	0	4	0	4
Administrative Staff	14	0	13	0	9
QPMS (Contract worker)	0	56	0	56	48
KUMBAKONAM DHQH(tHANJAVUR) BED SANCTIONED-526 but now available 774 Beds					
Doctor(with speciality)	45	0	44	0	27
Nursing Superintenden t (GR-I, GR-II)	10	0	8	0	4
Nursing Assistant GR-II	24	0	8	0	4
ECG Technician	4	0	0	0	0
Staff nurses	71	27	71	26	72
Maternity / Theatre Assistant/ FW Assistant/ Dark Roo m Assistant/Ophthal Ass/	7	0	3	0	2
ANM	3	0	2	0	1
Pharmacist	13	0	11	0	9
Lab technician	4	3	1	3	4
Radiographer	2	0	2	0	1

Chief X-Ray technician / X-Ray Attender	2	0	1	0	1
Diver	4	0	0	0	0
Hospital worker	23	0	5	0	3
Sanitary worker/Dhoby/cook	30	0	9	0	7
Administrative Staff	19	0	11	0	9
QPMS	0	109	0	109	0

CHEYYAR DHQH (TIRUVANAMALAI) BED SANCTIONED-226	Regular	Contract	Regular	Contract	
Doctor(with speciality)	33	0	29	0	22
Nursing Superintendent (GR-I, GR-II)	5	0	4	0	3
Nursing Assistant GR-II	-	-	-	-	-
ECG Technician	-	-	-	-	-
Staff nurses	40	36	37	26	52
Maternity / Theatre Assistant/ FW Assistant/ Dark Ro m Assistant/Ophthal Ass/	4	0	0	0	0
ANM	1	0	0	0	0
Pharmacist	3	0	2	0	2
Lab technician	5	1	4	1	5
Radiographer	1	0	0	0	0
Chief X-Ray technician / X- Ray Attender	1	0	1	0	1
Diver	3	0	1	0	1
Hospital worker	10	0	1	0	1
Sanitary worker/Dhoby/cook	10	0	1	0	1
Administrative Staff	10	0	8	0	8
QPMS	0	27	0	27	25
WALAJAPET DHQH(RANIPET) BED SANCTIONED-330	Regular	Contract	Regular	Contract	
Doctor(with speciality)	34	0	33	0	27
Nursing Superintendent (GR-I, GR-II)	5	0	5	0	3
Nursing Assistant GR-II	4	0	2	0	2
ECG Technician	-	-	-	-	-
Staff nurses	45	44	45	35	62
Maternity / Theatre Assistant/ FW Assistant/ Dark Ro m Assistant/Ophthal Ass/	5	0	3	0	3
ANM	1	0	1	0	1
Pharmacist	5	0	5	0	4
Lab technician	2	3	2	3	4
Radiographer	-	-	-	-	-
Chief X-Ray technician / X- Ray Attender	1	0	1	0	1
Diver	-	-	-	-	-
Hospital worker	5	0	2	0	2
Sanitary worker/Dhoby/cook	4	3	0	2	2
Administrative Staff	6	3	6	3	9
QPMS	0	65	0	65	54
TENKASI DHQH (TENKASI) BED SANCTIONED-547	Regular	Contract	Regular	Contract	
Doctor(with speciality)	46	0	43	0	33

Nursing Superintendent (GR-I, GR-II)	6	0	5	0	3
Nursing Assistant GR-II	11	0	0	0	0
ECG Technician	-	-	-	-	-
Staff nurses	48	28	48	28	62
Maternity / Theatre Assistant/ FW Assistant/ Dark Room Assistant/Ophthal Ass/	5	1	0	1	1
ANM	2	0	1	0	1
Pharmacist	8	0	7	0	5
Lab technician	4	2	4	2	4
Radiographer	3	0	3	0	2
Chief X-Ray technician / X-Ray Attender	1	0	1	0	1
Diver	7	0	1	0	1
Hospital worker	19	0	2	0	2
Sanitary worker/Dhoby/cook	24	0	5	0	5
Administrative Staff	23	0	22	0	16
QPMS	0	89	0	89	79

Appendix table b: Human Resources in Accredited SDH in the study

FACILITY DETAILS	POST SANCTIONED		POST FILLED		CURRENTLY AVAILABLE(AS ON TODAY- EXCLUDE TRANSFERRED, DIVERTED AND ABSENT)
	Regular	Contract	Regular	Contract	
HOSUR SDH (Krishnagiri) BED SANCTIONED-355 BEDS					
Doctor(with speciality)	28	0	27	0	19
Superintendent (GR-I, GR-II)	4	0	3	0	2
Staff Nursing	23	32	23	30	40
Nursing Assistant GR-II	4	0	2	0	2
Maternity / Theatre Assistant/ FW Assistant	4	0	1	0	1
ANM	2	-	1	0	1
Pharmacist	5	0	2	0	2
Lab technician	3	3	3	3	4
Radiographer	1	0	1	0	1
Chief X-Ray technician / X-Ray Attender	1	0	1	0	1
Diver	2	0	1	0	1
Hospital worker	20	0	11	0	9
Sanitary worker/Dhoby/cook	11	0	6	0	4
Administrative Staff	12	0	10	0	6
QPMS (Contract worker)	0	47	0	47	33
Arupukottai SDH (Viruthunagar) BED SANCTIONED-294 BEDS					
Doctor(with speciality)	28	0	25	0	23
Superintendent (GR-I, GR-II)	6	0	5	0	3
Staff Nursing	53	21	53	18	59
Nursing Assistant GR-II	1	0	0	0	0
Maternity / Theatre Assistant/ FW Assistant/ opthal . Assistant	6	0	4	0	4
ANM	3	0	1	0	1
Pharmacist	7	0	7	0	5
Lab technician	5	2	5	2	7
Radiographer	3	0	2	0	2
Chief X-Ray technician / X-Ray Attender	1	0	1	0	1
Diver	3	0	0	0	0
Hospital worker	29	0	6	0	6
Sanitary worker/Dhoby/cook	14	0	4	0	4
Administrative Staff	10	0	8	0	6
QPMS (Contract worker)	0	63	0	63	52
RASIPURAM SDH (NAMAKKAL) BED SANCTIONED-142 BEDS					
	Regular	Contract	Regular	Contract	

Doctor(with speciality)	21	0	21	0	18
Superintendent (GR-I, GR-II)	3	0	3	0	2
Staff Nursing	28	4	28	4	29
Nursing Assistant GR-II	5	0	2	0	2
Maternity / Theatre Assistant/ FW Assistant/ opthal . Assistant	3	0	0	0	0
ANM					
Pharmacist	3	0	2	0	2
Lab technician	2	3	1	3	3
Radiographer	1	0	1	0	1
Chief X-Ray technician / X-Ray Attender	-	-	-	-	-
Diver	1		1	0	1
Hospital worker	10	0	3	0	3
Sanitary worker/Dhoby/cook	12	0	9	0	8
Administrative Staff	3	0	2	0	2
QPMS (Contract worker)	0	25	0	25	25
Harur SDH (Dharmapuri) BED SANCTIONED-111 BEDS	Regular	Contract	Regular	Contract	
Doctor(with speciality)	18	0	18	0	15
Superintendent (GR-I, GR-II)	3	0	3	0	3
Staff Nursing	22	24	20	24	34
Nursing Assistant GR-II	3	0	1	0	1
Maternity / Theatre Assistant/ FW Assistant/ opthal . Assistant	4	0	0	0	0
ANM	2	0	1	0	1
Pharmacist	2	0	2	0	2
Lab technician	2	3	2	3	5
Radiographer	1	0	1	0	1
Chief X-Ray technician / X-Ray Attender	-	-	-	-	-
Diver	2	0	2	0	2
Hospital worker	11	0	5	0	5
Sanitary worker/Dhoby/cook	2	2	0	2	2
Administrative Staff	2	0	2	0	2
DENKANIKOTTAI SDH (Krishnagiri) BED SANCTIONED-113BEDS but now 120 beds	Regular	Contract	Regular	Contract	
Doctor(with speciality)	14	0	14	0	13
Superintendent (GR-I, GR-II)	2	0	0	0	0
Staff Nursing	13	16	12	8	17
Nursing Assistant GR-II	3	0	0	0	0
Maternity / Theatre Assistant/ FW Assistant/ opthal . Assistant	4	0	1	0	1
ANM	1	0	1	0	1
Pharmacist	2	0	2	0	2
Lab technician	0	2	0	2	2
Radiographer	-	-	-	-	-
Chief X-Ray technician / X-	-	-	-	-	-

Ray Attender					
Diver	2	0	2	0	2
Hospital worker	6	0	4	0	4
Sanitary worker/Dhoby/cook	4	0	3	0	3
Administrative Staff	3	0	1	0	1

Appendix table c: Human Resources in Accredited CHC in the study

FACILITY DETAILS	POST SANCTIONED		POST FILLED		CURRENTLY AVAILABLE (AS ON TODAY- EXCLUDE TRANSFERRED, DIVERTED AND ABSENT)
	Regular	Contract	Regular	Contract	
CHC KUNNUR (VIRUDHUNAGAR) BED SANCTIONED- 30 BEDS					
Doctor (with speciality)	9	-	6	-	4
Ophthalmic Assistant	1	-	-	-	1
Dental assistant	1	-	1	1	1
Staff nurses	2	5	2	5	5(2 staff nurses deputation for additional PHC)
ANM	3	-	1	-	1
Village health nurses	3	-	3	-	3
Community health nurse	1	-	1	-	1
Sector health nurses	2	-	2	-	2
Radiography technician	1	-	0	-	0
Health inspector	3	-	3	-	2
Lab technician	1	1	1	1	1
Pharmacist	1	2	1	2	1(1 deputation and 1 pharmacist absent)
Non-medical supervisor	1	-	1	-	0 absent
Diver	2	1	2	1	3
Sanitary worker and Multipurpose workers	1	2	1	2	2
Administrative Staff	9	-	9	-	7
CHC MUGAIYUR (VILLUPURAM) BED SANCTIONED- 30 BEDS					
Doctor(with speciality)	4		3	-	3

Ophthalmic Assistant	0	1	0	1	1
Dental assistant	Nil	-	-	-	-
Staff nurses	3	3	0	1	1
ANM	2	2	2	2	2
Village health nurses	4	20	4	19	18
Community health nurse	1	-	1	-	1
Sector health nurses	2	2	2	2	3
Radiography technician	-	1	-	1	1
Health inspector	9	-	3	6	2
Lab technician	1	2	1	2	2
Pharmacist	2	3	0	3	3
Non-medical supervisor	0	1	0	1	0
Diver	1	2	1	2	3
Sanitary worker and Multipurpose workers	5	2	2	1	2
Administrative Staff	5	2	5	2	7
CHC MAILAM BED SANCTIONED-30 BEDS	Regular	Contract	Regular	Contract	
Doctor(with speciality)	4	1	4	1	5
Ophthalmic Assistant	1	0	1	0	1
Dental assistant	1	0	1	0	1
Staff nurses	5	6	5	6	7
ANM	3	-	2	-	2
Village health nurses	4	-	4	-	4
Community health nurse	1	-	1	-	1
Sector health nurses	1	-	1	-	1
Radiography technician	1	-	1	-	1
Health inspector	2	1	0	1	1
Lab technician	1	1	1	1	2
Pharmacist	2	-	0	0	0
Non-medical supervisor	0	0	0	0	0
Driver	2	1	1	1	2
Sanitary worker and	0	2	0	2	2

Multipurpose workers					
Administrative Staff	5	2	5	2	7
CHC SAYALKUDI BED SANCTIONED- 30 BEDS	Regular	Contract	Regular	Contract	
Doctor(with speciality)	9	-	6	-	4
Ophthalmic Assistant	1	-	1	-	1
Dental assistant	1	-	1	-	1
Staff nurses	5	9	5	9	7
ANM	2	-	1	-	1
Village health nurses	7	-	5	-	4
Community health nurse	1	-	1	-	1
Sector health nurses	3	-	2	-	1
Radiography technician	1	-	1	-	17
Health inspector	3	-	1	-	1
Lab technician	1	2	1	2	2
Pharmacist	1	2(RBSK)	0	2	2
Driver	2	1	2	1	2
Sanitary worker and Multipurpose workers	3	1	2	1	3
Administrative Staff	7	2	7	2	9
CHC KADUGUR (ARIYALUR) BED SANCTIONED- 30 BEDS	Regular	Contract	Regular	Contract	
Doctor(with speciality)	7	1	4	1	4
Ophthalmic Assistant	1	-	1	-	1
Dental assistant	-	-	-	-	-
Staff nurses	3	6	3	6	5
ANM	2	-	1	-	1
Village health nurses	2	-	2	-	2
Community health nurse	1	-	1	-	1
Sector health nurses	2	-	2	-	2
Radiography technician	1	-	1	-	1

Health inspector	2	-	1	-	1
Lab technician	1	1	0	1	1
Pharmacist	1	2	1	2	2
Non-medical supervisor	-	-	-	-	-
Driver	2	1	1	1	2
Sanitary worker and Multipurpose workers	3	4	0	4	4
Administrative Staff	6	2	6	2	7
CHC PERUNGATTUR (THIRUVANAMALAI) BED SANCTIONED- 30 BEDS	Regular	Contract	Regular	Contract	
Doctor(with speciality)	8	1	5	1	5
Ophthalmic Assistant	1	-	1	-	1
Dental assistant	0	1	0	1	1
Staff nurses					
ANM	2	-	1	-	1
Village health nurses	7	-	7	-	5
Community health nurse	1	-	1	-	1
Sector health nurses	3	-	3	-	3
Radiography technician	1	-	1	-	1
Health inspector	3	-	3	-	2
Lab technician	1	1	1	1	2
Pharmacist	0	2	0	2	2
Non-medical supervisor	0	1	0	1	1
Driver	2	1	0	1	1
Sanitary worker and Multipurpose workers	0	4	0	4	4
Administrative Staff	4	2	2	2	4
CHC ZAMIN KOLLAM KONDANBED SANCTIONED- 30 BEDS	Regular	Contract	Regular	Contract	
Doctor(with speciality)	7	-	4	-	3

Ophthalmic Assistant	1	-	1	-	0
Dental assistant	0	0	0	0	0
Staff nurses					
ANM	2	-	0	-	0 (2 POST VACANT)
Village health nurses	4	-	2	-	2
Community health nurse	1	-	1	-	1
Sector health nurses	2	-	2	-	2
Radiography technician	1	-	1	-	1
Health inspector	1	1	1	0	1
Lab technician	1	1	1	0	1
Pharmacist	1	-	1	-	1
Non-medical supervisor	1	-	1	-	1
Driver	1	1	1	-	1
Sanitary worker and Multipurpose workers	4	4	0	4	3
Administrative Staff	6	2	4	2	6(2 Assistant deputation)

Appendix table d: Human Resources in Accredited PHC in the study

FACILITY DETAILS	POST SANCTIONED		POST FILLED		CURRENTLY AVAILABLE (AS ON TODAY- EXCLUDE TRANSFERRED, DIVERTED AND ABSENT)
	Regular	Contract	Regular	Contract	
UPHC THERESPURAM (TUTICORIN) BED SANCTIONED-6 BEDS					
Doctor(with speciality)	1	0	1	0	1
Staff nurses	3	2	3	2	4
ANM	1	0	0	0	0
Urban health nurses	3	2	3	2	3
Sector health nurses	1	-	1	-	1
Lab technician	0	1	0	1	1
Pharmacist	0	1	0	1	1
Sanitary worker and Multipurpose workers	0	1	0	1	1
Administrative Staff	0	1	0	1	1
PHC BELRAMPATTI (DHARMAPURI) BED SANCTIONED-6 BEDS					
Doctor(with speciality)	2	0	1	0	1
Staff nurses	1	4	0	3	2
ANM	1	0	0	0	0
Village health nurses	4	0	3	0	2
Sector health nurses	1	0	1	0	1
Health Inspector	2	0	1	0	1
Lab technician	1	0	1	0	1
Pharmacist	1	0	1	0	0 (Deputation go other PHC)
Sanitary worker and Multipurpose workers	1	2	0	2	2
PHC AVATTI (CUDDALORE) BED SANCTIONED-6 BEDS					
Doctor(with speciality)	2	0	1	0	1
Staff nurses	0	4	0	4	3
ANM	1	0	1	0	0

Village health nurses	4	0	4	0	3
Sector health nurses	1	0	0	0	0
Health Inspector	1	1	1	1	1
Lab technician	1	0	1	0	1
Pharmacist	1	0	1	0	1
Sanitary worker and Multipurpose health workers	0	2	0	2	1
MLHP	0	2	0	2	2
PHC TIRUVALAMPOZHIL BED SANCTIONED-6 BEDS	Regular	Contract	Regular	Contract	
Doctor(with speciality)	2	0	2	0	2
Staff nurses	0	4	0	4	4
ANM	1	0	1	0	1
Village health nurses	9	0	9	0	7
Sector health nurses	1	0	1	0	1
Health Inspector	1	1	0	1	1
Lab technician	1	0	1	0	1
Pharmacist	1	0	1	0	1
Sanitary worker and Multipurpose health workers	0	3	0	2	2
MLHP	-	-	-	-	-
PHC SWAMIMALAI BED SANCTIONED-6 BEDS	Regular	Contract	Regular	Contract	
Doctor(with speciality)	2	0	2	0	2
Staff nurses	0	4	0	4	2
ANM	1	0	0	0	0
Village health nurses	6	0	5	0	4
Sector health nurses	1	0	1	0	1
Health Inspector	1	1	1	0	1
Lab technician	1	0	1	0	1
Pharmacist	2	0	2	0	1
Sanitary worker and Multipurpose health workers	1	2	0	2	1
PHC AGATHIYARPATTI BED SANCTIONED-6 BEDS	Regular	Contract	Regular	Contract	
Doctor(with speciality)	2	0	0	0	0
Staff nurses	1	2	1	2	2

ANM	1	0	0	0	0
Village health nurses	6	0	6	0	4
Sector health nurses	1	0	1	0	1
Health Inspector	1	2	0	2	1
Lab technician	1	0	1	0	1
Pharmacist	1	0	1	0	1
Sanitary worker and Multipurpose health workers	0	2	0	2	1
MLHP	0	2	0	2	2