

Annual Health Report 2017-18



Primary & Secondary **Healthcare Department**

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MISSION & VALUES

OUR MISSION

To provide quality health services to improve the quality of life of our people

OUR FUNDAMENTAL VALUES

Services that are accessible, equitable, culturally acceptable, affordable and sustainable

WE STRIVE TO

Provide and deliver a package of quality essential health care services

Develop and manage competent and committed health care providers

Generate reliable health information to manage and evaluate health services

Adopt appropriate health technology to deliver quality services

Finance the costs of providing basic health care to all

Reform the health administration to make it accountable to the public

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This annual health report presents the performance and operations of public health sector, Punjab during 2017-18. The report is prepared annually with the aim to review the overall progress on priority areas of health including but not limited to healthcare delivery at health facilities, outreach services, special provincial programs and new initiatives undertaken. It provides the opportunity to gauge the progress towards achieving sustainable development goals and to identify gaps and bottlenecks.



Previous Annual Health Report and other reports can be retrived from www.pspu.punjab.gov.pk and www.kmu.pspupunjab.com

Acknowledgement: We are thankful to all concerned departments for provding information for this report

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ACRONYMS

Admin Administration
ANC Ante Natal Care

ART Anti Retroviral Therapy
B&A Budget and Accounts

BCC Behaviour Change Communication

BHU Basic Health Unit

BMUs Basic Management Unit CCF Conditional Cash Transfer

CDC Communicable Disease Control

CDR Case Deduction Rate

CLMIS Contraceptive Logistic Management Information System

CMAM Community Moderate Acute Malnutrition

CM Chief Minister

CMWs Community Midwives
COP Care of patients

ODD Out to a set the Dressel

CPR Contraceptive Prevalance Rate

CPSP College of Physician & Surgeon Pakistan

CT Computed Tomography

CQI Continuous Quality Improvement

DCOs District Coordinator Officers

DGHS Director General Health Services

DHA District Health Authorities

DHDC District Health Development Centre
DHIS District Health Information System
DHQ District Head Quarter Hospital
DLI Disbursement Linked Indicators

DOH District Officer Health

DDOH Deputy District Officer Health
DSMs District Support Managers

EDO(H) Executive District Officer- Health

EH&MWMP Environmental Health & Medical Waste
EmONC Emergency Obstetric and Newborn Care
EPHS Essential Package of Health Services
EPI Expanded Programme on Immunization

EVM Effective Vaccine Management

FSW Female Sex Workers

GAIN Global Alliance for Improved Nutrition

GoPb Government of Punjab GPs General Practitioners

GRDs Government Rural Dispensaries

HBB Helping Babies Breathe

HCEs Healthcare Establishments
HDL High Density Lipoprotein

Hep B & C Hepatitis B and C

HFA Health Facility Assessment
HIC Hospital Infection Control

HISDU Health Information System Development Unit

HIV/AIDS Human Immunodeficiency Virus/ Acquired Immune Deficiency

Syndrome

HMIS Health Management Information System

HR Human Resource

HRM Human Resorce Management

HRMIS Human Resource Management Information System

HSW Home Based Sex Workers

HTSP Healthy Timing and Spacing of Pregnancy IBBS Behavioural & Biological Survelliance

IDD Iodine Deficiency Disorder

IEC Information, Education & Communication ILRS International Laser Ranging Service

IMNCI Integrated Management of Neonatal and Childhood Illness

IMS Information Management System
IPV Inactivated Injection Polio Vaccine

IRMNCH Integrated Reproductive Maternal Newborn and Child Health

IDUs Injecting Drug Users

JHEPIGO John Hopkins Program For International Education in Gyanecology &

Obstrectics

KMC Kangroo Mothercare

KMU Knowledge Management Unit KPIs Key Performance Indicators

LBW Low Birth Weight
LHV Lady Health Visitor
LHWs Lady Health Workers

LQAS Lot Quality Assurance Sampling Assessment

MAM Moderate Acute Malnutrition
MCH Mother and Child Health Centre
MEAs Monitoring & Evaluation Assistants

M.E Medical Education

M&E Monitoring and Evaluation

MERS Middle East Respiratory syndrome

MI Micronutrients Initiative

MIS Management Information System

MMS Multi micro Nutrient Supplement

MNCH Maternal Newborn and Child Health

MNTe Maternal and Neonatal Tetanus Elimination

MO Medical Officer

MOM Management of Medication

MPDD Management & Professional Development Department

MS Medical Superintendent

MSDS Minimum Service Delivery Standards

MSNS Multi Sectoral Nutrition Strategy

MSW Male Sex Workers

MVA Manual Vaccuum Aspiration
NCD Non Communicable Disease

NPFP&PHC National Program for Family Planning & Primary Health Care

NIDs National Immunization Days
NTS National Testing Services
OPD Outpatient Department
ORS Oral Rehydration Salt

OTPs OutpatientTherapeutic Programs
PACP Punjab AIDS Control Proram

P&SHD Primary & Secondary Healthcare Department

PCR Polymerase Chain Reaction

P&DD Planning & Development Department

PHC Primary Health Care

PHDC Provincial Health Development Centre

PHIMC Punjab Health Initiative Management Company

PHNP Punjab Health and Nutrition Programme
PHSRP Punjab Health Sector Reforms Project

PHS Punjab Health Survey

PHSS Punjab Health Sector Strategy

PITB Punjab Information Technology Board

PLWs Pregnant & Lactating Women

PMDT Progmmatic Management Drug Resistance

PMU Project Management Unit POL Petrol, Oil & Duplicants

PPFP Postpartum Family Planning
PPIUD Postpartum Intrauterine Devise

PPTCT Prevention of Parent to Child Transmission
PQCB Provincial Quality Control Board for Drugs

PSPU Policy & Strategic Planning Unit
PSMB Provincial Standing Medical Board
PVMS Product Vocablary Medical Store
PWD Population Welfare Department

QCL Quality Control Labs
RHC Rural Health Centre
RDT Rapid Diagnostic Test

RUTF Ready to Use Therapeutic Food

SAM Severe Acute Malnutrition
SBA Skilled Birth Attendance
SCs Stabilization Centers

SH&ME Specialized Healthcare & Medical Education

SHC Secondary Health Care
SMPs Standard Medical Protocols
SNF Specialised Nutritionist Food

SO Section Officer
TB Tuberculosis

TIH Toxic Inhalation Hazard THOH Teaching Hospitals

THQ Tehsil Headquarter Hospital TOVP Trivalent Oral Polio Vaccine

TPV Third Party Validation

TSFP Targeted Supplementry Feeding Program

TSR Treatment Success Rate

UCs Union Councils

UHS University of Health Sciences

UNICEF United Nations International Children's Emergency Fund

USAID United States Agency for International Development

USI Universal Salt Iodization
VAS Vitamin A Supplementation

VCCT Voluntary Counseling and Confidential Testing

WHO World Health Organization

WMS Women Medical Superitendent

Punjab has a vast infrastructure of primary and secondary level healthcare facilities spread over 36 districts with the sophisticated and specialized support from a network of teaching hospitals at tertiary level. Government of the Punjab is committed to bring visible change in the health of its people through improving the infrastructure, service delivery and filling the gaps of health work force. Health facility utilization in public sector of Punjab has shown a steady improvement when we look at the data of performance of health facilities but we have a long way to go to provide quality healthcare at the door step of community. Government is considering number of reform agendas and initiatives to bring our health system at par with the developed world. We have already under taken our revamping endeavors to improve the service delivery through restructured infrastructure and provision of quality medicines and ensuring state of the art technologies. Effective administration consulted with organized and coordinated service delivery will enable the Health Department to achieve the targets of Sustainable Development Goals. It is a great privilege to lead Punjab Health System and to work with our clinicians, health managers, policy makers, support staff, volunteers and others who are dedicated to provide state of the art health services.



Dr. Yasmin Rashid Minister for Primary & Secondary Healthcare, Punjab

This Annual Health Report 2017-18 is testament to the dedication and hard work of the people who make up our healthcare system. To conclude, I would like to congratulate Policy and Strategic Planning Unit and all those who were involved in the preparation of this Report.



Zahid Akhtar Zaman Secretary for Primary & Secondary Healthcare, Puniab

Primary & Secondary Healthcare Department's goal is to help people live healthier. We are striving to develop a healthcare delivery system in Punjab to ensure universal health coverage and health being a basic human right. It will ensure that people of Punjab experience a safe and quality healthcare with the view to protect and promote health with safe, effective and compassionate interventions. Punjab is steady on the road to progress in its health system and a number of efforts are being made to revamp the infrastructure, services and health work force with a robust mechanism of healthcare financing and governance. More and more efforts are diverted towards preventive interventions and all the preventive programs of Punjab are aligned to the theme of community based and family practices to prevent communicable & non-communicable diseases and promoting health & well-being.

"Annual Health Report 2018" prepared by Policy & Strategic Planning Unit (PSPU) is a common platform for all players in health sector of Punjab where they could share their performance, achievements and future plans.

I would like to take this opportunity on behalf of myself and my predecessor to extend my personal gratitude to the staff of all the wings and formations of the department who worked with dedication, passion and commitment to materialized the health dreams of the people of the Punjab. My all the heart felt well wishes and prayers with everyone who contributed in the development of this report and encompassing all the important areas of Punjab health system.

Development of the Annual Health Report has been a regular feature and an important activity of Policy & Strategic Planning Unit under the umbrella of its research and knowledge management function. This is the 3rd addition of the series of Annual Health Report, published since 2013-14. This report includes comprehensive information of Punjab health system and different initiatives & reform activities undertaken by the department. This also provides data about the trends of indicators over the reporting period. It provides information needed for various purposes such as planning, management, monitoring & evaluation and health related programs and projects.



Dr. Shagufta Zareen

I wish to extend my appreciation to all who contributed and put their hard Program Director, PSPU work to prepare this addition of Annual Health Report. I highly appreciate the Primary & Secondary Healthcare, valuable service and dedication rendered by the staff of PSPU.



Dr. Nadeem Zaka Additional Program Director, PSPU Primary & Secondary Healthcare.

Obtaining valid, reliable and updated information on progress in health sector has been always a problem for policy makers, health mangers, researchers, students and other stakeholders. This annual health report is an attempt to fill this information gap. To begin with, very essential information about the endeavors of P&SHD and its allied development partners has been inked but in times to come, the next report would be encompassing the progress of all key players of the health sector.

PSPU is looking forward to the continued support from all of you to work toward greater success in the coming years. We will make every effort to maintain the high quality of this AHR as one of the premier publications of the department.

Primary & Secondary Healthcare Department (P&SHCD) published addition of Annual Health Report encompassing activities of all departments/programs for the period of 2016-2017. Now, Annual Health Report 2017-18, is being published. It covers major activities of P&SHCD including 'Celebration of Health Week' a remarkable initiative of the department. I feel that it is a good platform for sharing the achievements and initiatives undertaken by the department. I am sure this information will be useful for all readers.

I would take this opportunity to pay my deepest regards to Dr. Shagufta Zareen, Program Director, PSPU and Dr. Nadeem Zaka, Additional Program Director (Technical), PSPU for reviewing this document. I am also thankful to all departments/programs for timely provision of data.



Abida Javiad

A Snapshot of 2017/18

A new vaccine, Rotavirus, was rolled out in all 36 districts of Punjab in October 2017.



From 2014 to 2017, immunization coverage improved by 35% points, from 49% to 84% of children.



Vaccinators are equipped with technological tools that track individual children throughout their vaccination schedule.



100,000 children each year are protected from measles, rotavirus, polio and other fatal disease through vaccination.



Skilled Birth Attendance (SBA) has increased from 68% in 2014 to 81% in 2017, the fastest increase ever registered globally.

(Punjab Health Survey 2017)



Over 325,000 additional children each year are born with medical care being provided from the first moments of their life.



Over 400 portable ultrasound machines have been procured to be used by trained Lady Health Visitors (LHVs) at BHUs.



In March 2018, 1034 ambulance service (433) is providing transfers from home to childbirth facilities, hospital transfers are also provided in case of complications and these also extend to transport for malnourished children.



The P&SHD has focused on improving curative facilities with Outpatient Therapeutic Program having increased from 27% in May 2017 to over 95% in January 2018.



An independent audit by Ernst & Young was also completed on the health screening week in August 2017 which screened over 350,000 across 400 facilities.

in February 2018, approximately 907, 240 people screened across 700 facilities.



On 9th March 2018, "Punjab Hepatitis bill" passed by the Punjab Assembly to regulate the public and private sector and reduce the spread of disease.



A Central Barbers and Salons Registration System has also been launched o-n 9th November 2017 to register barbers and salons so that they can be licensed and monitored.



Since the introduction of health camps across Punjab in 2016, over 3.8 million diagnostic tests have been conducted for a range of infectious diseases.



Over 300,000 patients are currently registered in hepatitis clinics, over 50,000 have been counselled through the hepatitis health line and over 60,000 are undergoing treatment.







2,505 **Basic Health Units**



317 **Rural Health Centers**



125 **Tehsil Head Quarter Hospitals**

1,513 Lab Tests



26 **District Head Quarter Hospitals**



42 Stabilization Center

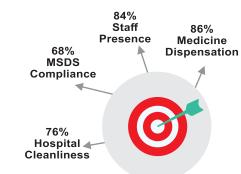


805 OTP



433 **Rural Ambulance Service**

1,005 Facilities



3,418 Medicine

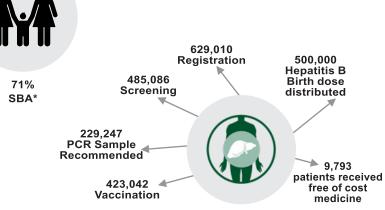
8,535 Hepatitis



19,489 Staff 744 Others Complaints Management System 36,124 Complaints 32,012 Complaints Resolved Received 26 Waste Managment 557 Referred to Private 447 Services 98 Cleanliness 125 Arrangements 167 Equipments

48,997 **Barbers & Beauticians** Registrations in CBSL-Punjab **Immunization** Coverage* 4,682 Inspections 500

License Issue



Hepatitis Clinics

Chapter 1

Introduction



PUNJAB PROFILE 1,2,3

Punjab is the most populous province of Pakistan with an estimated 1 population of 110 Million (56% of the country's population) and is the second largest province with an area of almost 205,345 km2. The annual growth rate of Punjab is slightly lower (2.64) compared to overall Pakistan's rate (2.69). Same is true for fertility rates which are 3.4 births per woman for Punjab and 3.6 for Pakistan 2. Approximately, 67% people of Punjab live in rural areas whereas 33% live in urban areas. In Punjab, male to female ratio is 107:100. Administratively, the province is divided into 9 divisions, 36 districts, 142 tehsils and 3,464 union councils. Based on some cultural variations the province is arbitrarily divided into three regions; the northern, central and southern regions.

Punjab Key Facts

Population¹: 110 million
Urban: 70 million
Rural: 40 million
Annual Growth Rate Population² 2.64
Fertility Rate² 3.40 Per woman

Maternal Mortality Rate 227/100,000 live births Infant Mortality Rate³ 76/1,000 live births Under-five Mortality Rate³ 96/1,000 live births

Contraceptive Prevalence Rate³ 38.3% Unmet Need for Family Planning³ 15.8% Stunting³ 29.8% Wasting³ 4.0 %

Sources:

- ¹ Bureau of Statistic, 2017
- ² Punjab Statistical Pocket Book, Bureau of Statistic, 2016
- ³ Pakistan Demographic Survey, 2012-13/2017-18
- MICS Survey Punjab 2014

History of Punjab Health Services

The Health System of Pakistan has been facing multiple challenges regarding service delivery to public at large. The rapid population growth and limited resources create an imbalance in demand and supply of health services. In Punjab, both the public and private sector play a pivotal role in the delivery of healthcare services. Public sector is responsible for providing curative and preventive healthcare services in Punjab.

Rural Health Ara: Early 1970s was the time of decentralized system with more focus on primary healthcare. Rural Health centres, Basic Health Units (BHUs) & dispensaries were established to provide healthcare to the rural population. To support primary healthcare services, there were secondary level healthcare comprising of Tehsil Headquarter Hospitals and District Headquarter Hospitals. Foremore sophisticated and specialised healthcare, tertially level hospitals were established in mega cities. Tertiary hospitals are teaching hospitals attached with medical colleges and are centres of undergraduate and postgraduate medical education, training and research. The patient requiring treatment at tertiary level are referred from lower health facilities to these tertiary hospitals.

Post Devolution Scenario: After 18th constitutional amendment, the provinces are responsible for provision of universal health coverage to their population. To develop their own health policies and strategies prioritizing the health needs of their people. All the preventive programs were implemented through the Federal PC-Is out of federal budgets. Now the provinces have approved their own PC-Is for these Preventive Programs with an integrated approach. Every province needed to develop a comprehensive health plan & strategy to streamline the health service delivery system. A series of consultative meeting with all the public & private stakeholders

resulted in the development of Punjab Health Sector Strategy 2012-2020 which was duly notified by the Government of Punjab. The strategy has given the direction for Punjab Health System but the need for an umbrella health policy has always been felt. Punjab Health Policy aligned to our national aspiration and international commitments is the need of time.

Punjab Health Sector Strategy: The strategy revolves around following WHO building blocks of health system.

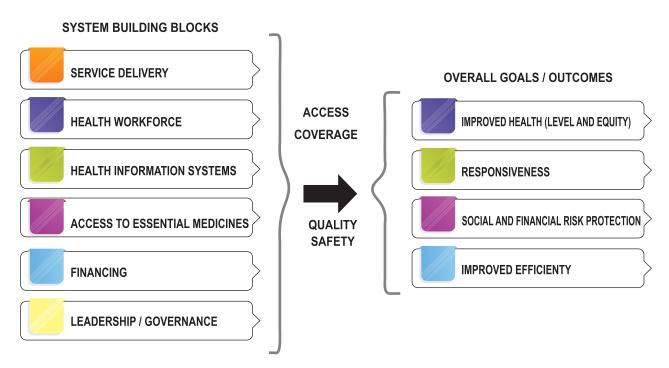


FIGURE 1-WHO BUILDING BLOCKS OF HEALTH SYSTEM

THE SIX BUILDING BLOCKS OF A HEALTH SYSTEM: AIMS AND DESIRABLE ATTRIBUTES

An operational plan was developed to describe the functional modalities of strategy. All the public & private sector providers were supposed to align their agendas with the operations of Punjab Health Sector Strategy. Punjab Health Sector Program of World Bank and Provincial Health & Nutrition Program of DFID were launched to support the strategy.

Bifurcation – Another Milestone: Punjab Health System had just taken of to implement Health Sector Strategy and achieved the MDGs targets that in November 2015, Government of the Punjab decided to bifurcate unified Health Department into Primary & Secondary Healthcare Department and Specialised Healthcare Department. The bifurcation opened the doors of a new development era for primary and secondary healthcare facilities being governed by an independent department and for tertiary hospitals under another department. A multiple reforms were envisioned by the bifurcated departments of health in Punjab to bring the healthy changes in the lives of the people.

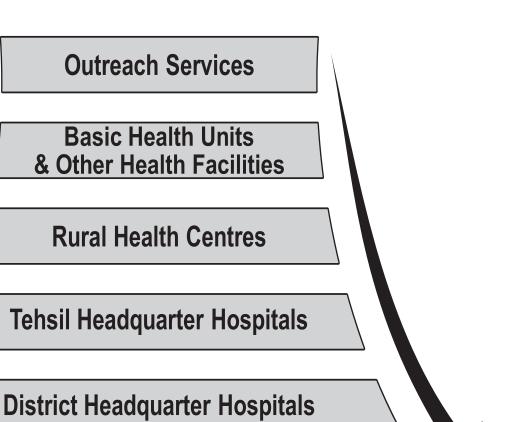
Given below are the components of the two newly formed departments:

Specialized Healthcare and Medical Education Department	Primary & Secondary Healthcare Department
Teaching Hospitals	Directorate General Health Services, Punjab
Punjab Healthcare Commission	Policy and Strategic Planning Unit (PSPU)
Directorate General Nursing	Project Management UnitPrimary and Secondary Healthcare Revamping Program
Surgeon Medico Legal	All vertical and preventive programs
Punjab Medical Faculty (PMF)	Drug Testing Laboratories
Punjab Health Foundation (PHF)	Medical Stores Depot (MSD)
Punjab Pharmacy Council (PPC)	District Headquarter Hospitals (DHQs)
Blood Transfusion Authority	Tehsil Headquarter Hospitals (THQs)
Internal Audit Wing	RHCs, BHUs, MCH Centers and Dispenseries
Medical Education Medical Universities / Colleges Nursing Schools / Colleges Post Graduate Medical Institute (PGMI) Post Graduate College of Nursing Institute of Public Health(IPH) Punjab Health Initiatives Management Company (PHIMC) Punjab Public Health Agency (PPHA)	Provincial Health Development Centre (PHDC) Punjab Health Facilities Management Company (PHFMC)

Existing Health Services Infrastructure

Health services are provided through a tiered referral system of health care facilities; with increasing levels of complexity and coverage from primary to secondary and tertiary health facilities. Primary care facilities include Basic Health Units (BHUs), Rural Health Centres (RHCs), Government Rural Dispensaries (GRDs), Mother and Child Health (MCH) Centres and TB Centres. All of these provide OPD, preventive and a limited number of curative services. RHCs provide a broader range of curative services round the clock. Primary care facilities also provide outreach preventive services to the communities through School Health & Nutrition supervisors (SH&NS), vaccinators, CDC Supervisors, sanitary inspectors, sanitary patrols, Lady Health Supervisors and Lady Health Workers. Tehsil and District Headquarter Hospitals provide increasingly specialized secondary healthcare while teaching hospitals form the tertiary level tier.

A brief overview of the health service delivery is reflected below while details of individual specialized/vertical Programs will be discussed in Section 2.



Tertiary Hospitals

Health Service Delivery Model

Chapter 2

Primary & Secondary Healthcare Department Punjab



Primary & Secondary Healthcare Department

Government of Punjab is focusing on improving primary healthcare services especially its preventive services to decrease the patient load at tertiary level. The type of services provided by the Department include the following:

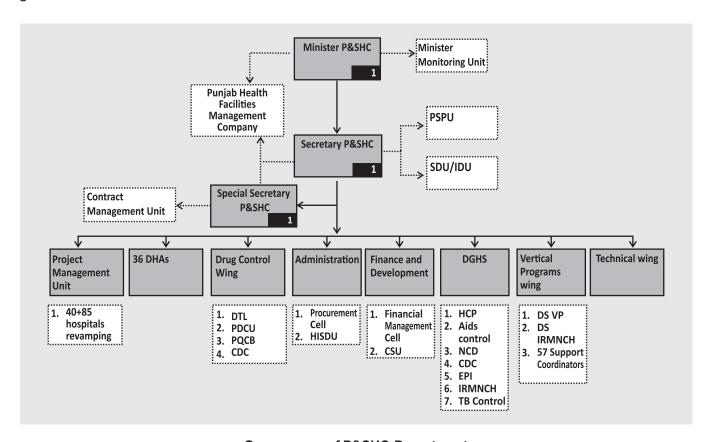


Services Provided By Department

This section provides information on organizational structure and associated organs along with functions.

Organizational Structure and Associated Programs

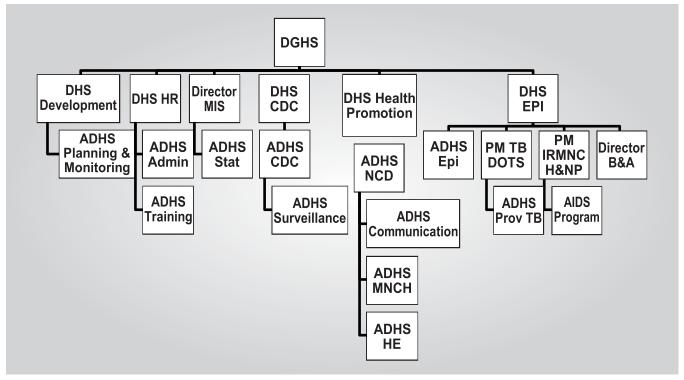
Secretary is the administrative head of the Department. He takes the lead role in setting provincial policies and translating new initiatives into strategic provincial plans. Organogram of P&SHD is given below:-



Organogram of P&SHC Department

Directorate General of Health Services

Directorate General of Health Services is the main programmatic coordination, implementation and monitoring arm of the Primary & Secondary Healthcare Department of Government of Punjab and is headed by the Director General Health Services (DGHS). The Directorate is responsible for overseeing provision of primary and secondary healthcare services throughout the province and liaises with all 36 district health offices in the province. It also provides support and leadership in responding to emergency health and medical issues in the Province, especially in prevention and control of communicable diseases. Collection and dissemination of information, advice to the provincial health department and working with development partners on their approved agendas with the Department are also included in the functions of the DGHS.



DGHS- DISTRIBUTION OF WORK

Policy & Strategic Planning Unit (PSPU)

PSPU evolved from the PMU-PHSRP and has been operational since 1st July 2013. The main aim of this project is to reorient public policies keeping in view the set Government targets and objectives. It is the focal unit of Health Department Punjab steering the various reform agendas of the Government of the Punjab. The Department, donors and development partners identified the need for such a unit mutually. It plays an important role in coordinating the World Bank and DFID health related DLI(s) with all stakeholders (P&SHD, SH&ME, IRMNCH & Nutrition Program, EPI, DG office etc.)

The main functions of PSPU are to:

- Provide support to the stakeholders and decision-makers in the health sector through health policy analysis and strategic planning.
- Coordinate technical assistance for developing and designing new initiatives.
- Analyses data and gives recommendations for planning future initiatives.
- Analyses health financing issues and works closely with the Financial Management Cell for advising the P&SHD on annual development planning and budgeting with a strategic vision.

- Monitoring of Primary & Secondary Healthcare Facilities through 177 PHC MEAs, 44 SHC MEAs and 5 Provincial Monitors.
- PSPU also coordinates with different development partners for designing new initiatives against health sector strategy.
- Develop a culture for participatory and evidence based decision making and needs based data collection in the health sector through Knowledge Management Unit (KMU).
- Conduct consultative sessions, seminars and workshops to reach consensus on various policy issues, for advocacy at public & policy level of important health issues/initiatives and capacity building of healthcare work force.

Project Management Unit - Primary and Secondary Healthcare Revamping Program

Under Government of Punjab's special initiative for revamping of DHQs and THQs hospitals a Project Management Unit (PMU) was established. The revamping envisages major overhauling of the hospitals in terms of provision of need based machinery/equipment, developing improved business processes, planning and designing civil works, contract management for outsourced non-clinical services and for other related innovative projects for over-all better service delivery through these health facilities. This revamping was covered 25 DHQs and 15 THQs in 2015-16 in the 1st Phase. In addition, emergency cases in DHQ and THQ hospitals were also covered under revamping. The PMU is responsible for the successful implementation of the Program through completion of all P&SHD related projects. The role of the PMU is to provide technical & administrative support to the P&SHD to ensure that DHQ & THQ hospitals have a well-constructed physical infrastructure with vibrant management model for efficient service delivery and improved processes, adhering to Minimum Service Delivery Standards (MSDS).

The Punjab Health Road Map

The Roadmap is an initiative of the Government of the Punjab, which aims to improve health outcomes for the province through a set of four priority reforms. The Roadmap was launched in February 2014.

Four areas identified as high priorities by the team are immunization, safe deliveries, primary healthcare, district health system strengthening and family planning. Nutrition and Hospital Waste Management is added in their system. By focusing on this set of priorities, the Roadmap aims to achieve dramatic and fast improvements in the health system. The Health Department drives the Roadmap, with support of the Roadmap team and the Special Monitoring Unit. The CM meets with the Health Department, politicians, donors and key stakeholders every two months to review progress on the Roadmap in a Stock-take meeting. These stock-take meetings provide a platform to monitor implementation and troubleshoot any obstacles in implementation.

Primary Healthcare Services

These include a) Facilities based services and b) Community based services. There are eight essential components of Primary Health Care (PHC) delivered through these services.

The primary healthcare facilities include Basic Health Units (BHUs) and Rural Health Centres (RHCs) responsible for preventive, outpatient and basic inpatient care. All the components of PHC are being provided at the PHC facilities.

Table: Essential Components of PHC Department

1. Health & Education	2. Prevention & Control of Diseases
3. Safe Water & Sanitation	4. Treatment of Common Diseases
5. MCH Care	6. Nutrition
7. Immunization	8. Essential Drugs

Outreach and Community Based Services

These focus on immunization by vaccinators, sanitation through sanitary inspectors, malaria and dengue control through CDC supervisors, maternal & child health, nutrition and family planning services through Lady Health Workers and Community Midwives. The outreach workers are connected with their respective vertical programs.

Basic Health Units

There are 2,505 BHUs in Punjab. Generally, every Union Council is provided with a BHU which serves as the First Level Care Facility (FLCF) dispensing basic curative, preventive, promotive and referral services. There are three types of BHUs; Routine 8/6 BHUs, 24/7 BHUs and BHU+. Presently, 700 BHUs in Punjab have been strengthened for the provision of Basic Emergency Obstetric and New Born Care (EmONC) Services and have therefore been designated as 24/7 BHUs. Each routine BHU was initially designed with two beds and staff strength of 25-30 health professionals to cater for an average population of 25,000 at Union Council Level (Current population coverage is 25,000-40,000). It provides all the static and outreach components of Primary Health Care (PHC).

Rural Health Centres

Punjab has 317 RHCs that provide promotive, preventive, curative, diagnostics and referral services along with inpatient care and round the clock emergency and medico legal coverage. The RHCs have 10-20 inpatients beds and each serves a catchment population of up to 100,000 people. The RHC also serves as Basic Management Unit (BMU)/Diagnostic Centre for TB DOTS Program and provides laboratory, radiology and dental care services to all the patients including those referred by the BHUs, LHWs, MCH Centres, and Dispensaries that fall within its geographical limits.

Secondary Healthcare Services

Secondary Health Care is an intermediate level of healthcare that is concerned with the provision of preventive, promotive, curative and rehabilitative health services. Secondary Healthcare facilities comprise of District Headquarter Hospitals, Tehsil Headquarter Hospitals and other Civil & THQ Level Hospitals. These facilities serve as specialized care health facilities and referral facilities for primary healthcare facilities (BHUs & RHCs). Following health facilities are working to provide Secondary Health Care (SHC)

Tehsil Headquarter Hospitals (THQ)

There are 125 THQ, Civil, or THQ Level Hospitals across Punjab. There is a THQ hospital in each tehsil serving a population of 0.5 to 1.0 million. It provides promotive, preventive, curative, diagnostics, inpatient, referral services and also specialised care. THQ hospitals are also supposed to provide Basic and Comprehensive EmONC. THQ hospital provides referral care to the patients from Rural Health Centres, Basic Health Units, Lady Health Workers and other primary care facilities.

District Headquarter Hospitals (DHQ)

There are 26 District Head Quarter Hospitals (DHQ) serving a population of 1 to 3 Million, depending upon the category of the hospital. A DHQ hospital provides promotive, preventive, curative, advance diagnostics, inpatient services, advance specialised and referral services. All DHQ hospitals are supposed to provide Basic and Comprehensive EmONC. DHQ hospital provides referral care to the patients including those referred by the Basic Health Units, Rural Health Centres, Tehsil Headquarter hospitals along with Lady Health Workers and other primary care facilities.

VERTICAL PROGRAMS

Expanded Program On Immunization (EPI)

The Expanded Program on Immunization is a preventive Program that envisions disease prevention through immunization. The Program started in Pakistan in 1978. The objectives of the program are to reduce illness, disability and mortality from vaccine preventable diseases, elimination of mother and neonatal tetanus, elimination of measles, poliomyelitis eradication, and reduction in child morbidity and mortality.

The program is currently providing immunizations against following nine vaccine preventable diseases:

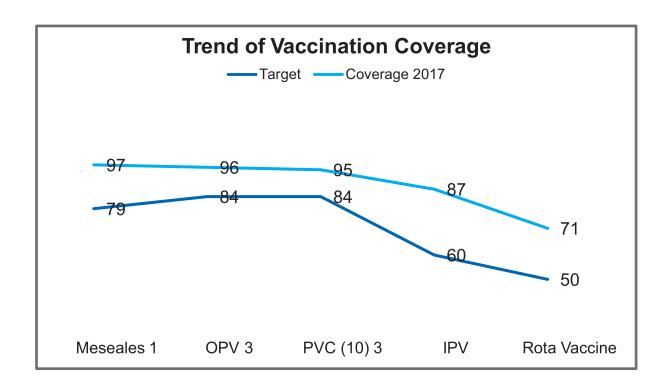
TABLE: EPI PROGRAM PROVIDING IMMUNIZATIONS AGAINST NINE VACCINE PREVENTABLE DISEASES

1. Poliomyelitis	4. Diphtheria	7. Pneumonia
2. Tetanus	5. Pertussis (Whooping Cough)	8. Meningitis
3. Measles	6. Hepatitis-B	9. Childhood Tuberculosis

The Program provides vaccination to children aged 0-23 months according to a schedule and provides tetanus toxoid vaccination to pregnant women. It aims at achieving 90 % immunization coverage, elimination of neonatal tetanus, elimination of measles, two third reductions of vaccine preventable diseases morbidity & mortality, certification of eradication of poliomyelitis after being free from polio and introduction of new recommended vaccines in the EPI immunization schedule. Rota has also been introduced in first quarter of 2017 for 2.5 million children each year. The highlights of the Program are as under:

Vaccination

To improve the immunization coverage, P&SHD rolled out a tech-enabled initiative called E Vaccs, with the support of Punjab Information Technology Board (Further detail is given in Section-VI). EVaccs is provided real time data which was regularly audited through telephone calls to parents of the children. Performance of the vaccinators is also managed through E-Vaccs.



All the above-mentioned indicators have shown a positive trend in the last quarter of 2017. Against the planned target of 84 per cent, the OPV III coverage was recorded at 96 per cent. Similarly, against the planned target of increasing PCV III coverage to 84 per cent, the programme managed to hit 95 per cent. Against the target of achieving the IPV coverage target of 60 per cent, the provincial coverage was recorded at 87 per cent. Similarly, Rota I coverage was recorded at 71 against the set target of 50 per cent. The activities of the program during 2017-18 are highlighted below:

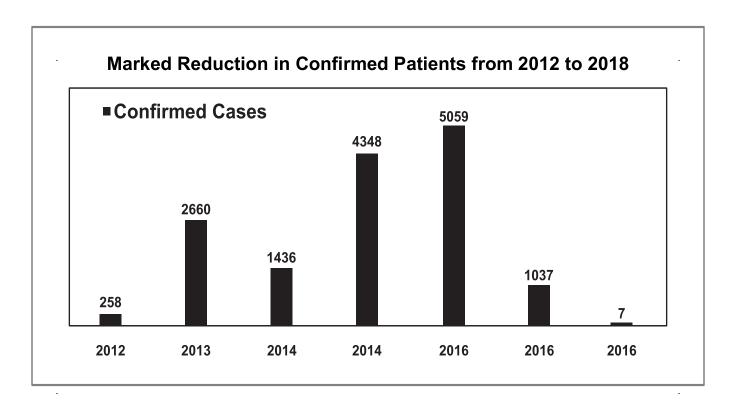
Immunization Campaigns

From October to December 2017 over 105 free medical camps were set up in eight districts of Punjab (Lahore, Rawalpindi, RY Khan, DG Khan, Mianwali, Multan, Rajanpur, Muzaffargarh). The free medical camps were set up to support vaccination of children who were either due, defaulter or zero doze i.e who had not received even a single doze of routine vaccination. In addition to improving routine immunization, the purpose of the camps was to build trust with the community in high risk areas with high risk populations including those living in deplorable conditions like nomads. The camps proved to be a huge success. Over 76,000 patients were treated during the camps for various ailments in over 96 union councils of the above-mentioned district. The staff deployed at the camps managed to vaccinate 489 children who were either missed in polio campaigns or unavailable at the time of campaign.

Epidemics Prevention and Control Program

This Program was initiated following 2011 Dengue epidemic. The enormity of this unprecedented epidemic compelled the Health Department to develop a comprehensive plan including standard operating procedures as well as regulations to combat not only Dengue but any other epidemics. The main activities of this Program are disease and vector surveillance, health education, communication, social mobilization and advocacy, institutional & capacity building and research & development. The activities of the program during 2017-18 are highlighted below:

- Better coordination between and within department by reviewing meetings
- Health Education and Public awareness through print and Electronic Media, Celebration of Anti-Dengue Days and walks
- Training of master trainers regarding dengue prevention of all districts of Punjab
- Monitoring of Prevention and control activities
- Facilitation in contingent paid staff hiring and budget provision to the districts from the Finance Department
- Revision of uptake of SOPs
- Administrative command and control
- Improvement in Case reporting -With these all efforts today we can claim that we have less Dengue patients as compare to previous years. We are providing better treatment plan and patient recovery is much improved. we have fully trained and well equipped Dengue staff in every district of the Punjab. Marked reduction in confirmed patients from 2012 to 2018.



Hepatitis Control Program

Worldwide viral Hepatitis is the eighth highest cause of mortality and an estimated 1.4 million deaths per year are occurring from acute infection and Hepatitis-related liver cancer and cirrhosis, a toll comparable to that of HIV and Tuberculosis. According to Hepatitis Prevalence Survey conducted by Pakistan Medical and Research Council (PMRC) in 2008, Hepatitis C prevalence of Punjab is 6.7% as compared to National Prevalence of 5% while Hepatitis B prevalence is 2.4% compared to National Prevalence of 2.5%. An estimated 12 million people stand infected with Hepatitis B & C in the country. Such a high prevalence of HCV in Pakistani population translating into 8 million population exposed to this virus.

Program for Prevention and Control of Hepatitis in Punjab

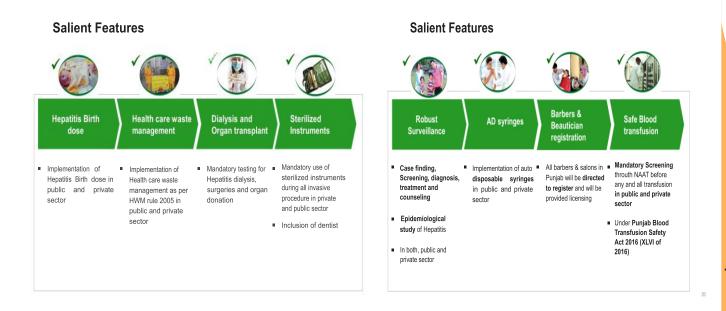
The Program for prevention and control of hepatitis is Punjab is a flagship program that promotes prevention through launch of hepatitis awareness campaign, provision of immunization to high risk groups, implementation of infection control measures and hospitals waste management rules and provision of diagnostic & treatment services to the Hepatitis patients.

Key Interventions and Achievements

Legal Framework

Hepatitis Control program, after a series of consultative meetings and transient all the legal steps, got successful in promulgating Hepatitis bill. The Hepatitis Bill was announced as Punjab Hepatitis Act March 2018 by Punjab Assembly. Currently HCP is drafting the rules and is expected to be framed by mid-May 2018.

Below are the salient features of Punjab Hepatitis Act



Hepatitis Clinic Model

One Stop Shop Mode of Operation

After thorough consultation with stakeholders and technical committee, decision was developed to revamp the select sites and uplift them to standardized facilities operating in a One Stop Shop Manner with following Salient Features;

- Dedicated Human Resource
- Provision of Diagnostic Requirements
- Logistics of Medicine, Vaccine and Specialized Supplies
- Branded Clinic Outlook (Special color theme, Space, Equipment & Branding)

Currently, 114 dedicated Hepatitis Clinics are functional at THQHs Level.

Established a High Quality Centralized Diagnostic Laboratory

Confirmatory Testing has hence been centralized with one flagship Central Lab located in Lahore, fully equipped, staffed and furnished to cater for the gigantic load.

• 220,168 samples processed.

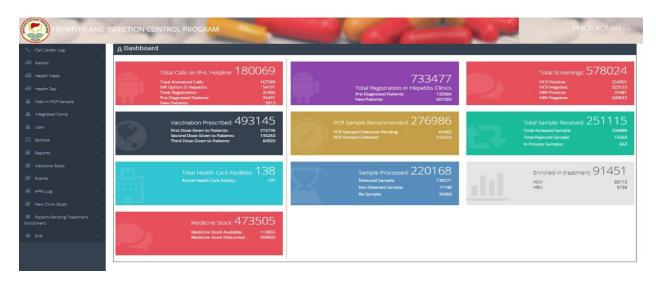
This outcome includes samples of initiatives of P&SHD, example: integrated health camps as well.

To date achievements of Centralized Laboratory for PCR testing shown on EMR is

The trend of increasing registration and PCR positive rate dictates important realities for demand of hepatitis related health services in province

Integrated Information Management System implemented as Electronic Medical Record in Hepatitis Clinic

Perhaps the most significant milestone of HCP was the implementation of an Electronic Medical Record System within Hepatitis Clinic as a component of the overarching Integrated Information Management System. Usage of this EMR is mandatory and aims in bringing a turnaround in the way Care is provided to Hepatitis Patients.



To date achievements of Hepatitis Clinics shown visualized live on EMR discloses that

- 733,477 clients have been registered so far through Hepatitis clinics.
- 578,024 clients have been screened.
- 493,145 clients have been vaccinated against Hepatitis B
- 91,451 patients have been enrolled in treatment.

Developed an Integrated (integral Portion of EMR), Inventory/Clinic Stock Maintenance System

Unlike previous paper-based systems, Medicine disbursement as well as other activities involving disbursement of centrally procured stock is now recorded via Electronic Medical Record System which is operational in all Functional Hepatitis Clinics on a mandatory basis. This allows for both confirmation of consumption via calls to clients as well as easy reconciliation of stock on ground vs stock reported.

To date achievements of Centralized Laboratory for PCR testing shown on EMR is

- 446,614 medicines have been distributed to Hepatitis Clinics.
- 237,800 out of the total distributed have been consumed.
- While a total of 208,144 are in stock representing a sum from all clinics

Provision and Use of Auto-Disabled Syringes

To curtail the spread of hepatitis from re-use of syringes HCP Through P&SHD procured AD syringes

- · Atotal of 185 master trainers got certified
- Procurement of 13 million AD Syringes.
- Distributed to all P&SHD healthcare facilities in 36 districts
- A third-party validation was conducted Scope of work for the assignment was divided in the following two categories:
- 1. Performing interviews of various stakeholders regarding usage of Auto Disable Syringes
- 2. Process review of usage of Auto Disable Syringes

Hepatitis B Birth Dose

In line with the importance of the timing of Hepatitis B vaccination, in 2009, WHO recommended that all infants worldwide should receive a birth dose as soon as possible after birth, preferably within 24 hours.

- Procured 500,000 birth dose.
- Distributed in 36 districts

Social Mobilizations and Awareness Campaigns

Communication interventions for social mobilization were developed which were implemented at the provincial, district, local government and community levels. These initiatives were great to involve civil society, non - governmental organizations, community-based organizations, religious groups, and the private sector as well.

INFECTION CONTROL PROGRAM

Till 2016 Infection control was one of the components of the Prevention and Control of Hepatitis Program. Keeping in view scope of the intervention which comes under the auspices of Infection Control Program, it was desired to develop separate PC-1 for infection control having major three components including i) Healthcare waste management, ii) Healthcare acquired infections and iii) antimicrobial resistance.

Objectives of Infection control program

- 1 Reduce the environmental health hazards associated with improper disposal of healthcare waste generated by all healthcare facilities, laboratories, and blood banks in Punjab.
- Reduce the incidence of Healthcare acquired infections in Public sector healthcare facilities of Punjab.
- Mitigate incidence of Antimicrobial resistant strains due to suboptimal management of medications and the lack of awareness.

Hospital Waste Management

Provincial efforts on Infectious waste management include a state-of art, safe and secure and scientific method of disposing the infectious waste generated at a health care facility.

Key Interventions

Provincial efforts on Infectious waste management include a state-of art, safe and secure and scientific method of disposing the infectious waste generated at a health care facility.

- Guidelines prepared and dissemination Hospital waste Management & Healthcare Acquired Infection
- Guidelines prepared and disseminated on development of HWM Plan
- Step down training by master trainers on HWM in their districts was completed.
- 316 Master Trainers on Hospital waste Management, Healthcare Associated Infections -2018. Details are revealed in the table below:

S.No	Activities	Total No. of Participants
1	Training of District officer's health - Preventive services	036
2	Training of Deputy District officers Health	114
3	Orientation of Medical Superintendents and Hospital waste management officers - DHQs	052
4	Orientation of Medical Superintendents and Hospital waste management officers THQs	114
Total: 2018		316

- Notification and activation of HWM Committees at secondary level healthcare facilities of P&SHC department.
- Hospital waste supplies i.e. Color-coded bins (Yellow, Red and White) and sharp containers have been distributed to every district. Installation of Environment friendly incinerators in 26 districts
- Thirty-seven (37) Yellow Vehicles for collection and transportation of Hospital Waste were procured, fabricated (Temperature of storage 2-8 c°) and branded.
- Hospital waste collection, interim-storage, transportation and disposal services are functional in all DHQ and THQ (155) Hospitals across Punjab.
- Development of yellow rooms & Burial Pits.

Installation of incinerators

Phase 1

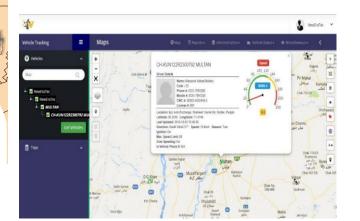
	District	Incinerator Site	Status
1	Attock	DHQ Hospital	FunctionI
2	Sialkot	RHC Jamke Cheema	FunctionI
3	Kasur	DHQ Hospital	FunctionI
4	Nankana Sahib	DHQ Hospital	FunctionI
5	Gujrat	Aziz Bhatti Hospital	FunctionI
6	Chiniot	DHQ Hospital	FunctionI
7	Sahiwal	THQ Hospital, Chichawatni	FunctionI
8	Bahawalpur	Civil Hospital	FunctionI
9	Pakpattan	DHQ Hospital	FunctionI
10	Vehari	DHQ Hospital	FunctionI
11	Bhakkar	DHQ Hospital	FunctionI
12	Rajanpur	BHU Kotla Ehsan	FunctionI
13	Gujranwala	BHU Dogranwala	FunctionI

Phase 2

Sr.No	District	Incinerator Site	Status
1	Khanewal	DHQ Hospital	FunctionI
2	Okara	DHQ Hospital	FunctionI
3	Jhang	DHQ Hospital	FunctionI
4	T.T.Singh	DHQ Hospital	FunctionI
5	Bahawalnagar	DHQ Hospital	FunctionI
6	Narowal	BHU Pejowall	FunctionI
7	Khushab	DHQ Hospital	FunctionI
8	Jhelum	DHQ Hospital	FunctionI
9	Muzaffargarh	DHQ Hospital	FunctionI
10	Hafizabad	BHU Karriala	FunctionI
11	Mandi Bahauddin	DHQ Hospital	FunctionI
12	Sargodha	DHQ Hospital	FunctionI
13	Chakwal	BHU Dharabi	In-Process

- Twenty-Six (26) environment friendly incinerators are installed and functional for infectious waste safe and secure disposal.
- Real-Time Tracking System for Yellow Vehicle: A real-time tracking system for yellow vehicle
 has been developed as part of the Web-based Management Information System (MIS). The
 tracking system enables to monitor the real-time location and status of vehicle in terms of
 movement.

- Management Information System: Each step of infectious waste management is digitalized
 with status of each bag uploaded on a web-based MIS, which can be traced from point of
 collection till disposal at incinerator. A dashboard is designed to depict the amount of waste
 collected and incinerated. The whole algorithm is designed to comply with national and
 international guidelines for infectious hospital waste management.
- Key Output: All these efforts have led to collection of 914,667.82 kg waste till date while 909,319.96 kg has been incinerated.







Hospital waste management protocol are being implemented in all secondary healthcare facilities



Apart from the above mentioned waste management, Environmental Health and Medical Waste Management Plan (EH&MWMP) was developed in 2013 by Punjab Health Sector Reforms Program (Policy & Strategic Planning Unit, PSPU). The implementation of agreed disbursement linked indicators (DLIs) was decided with the World Bank for the achievement.. The first phase was piloting the HWMR, 2014 at two Thehsil level hospitals of district Gujranwala (THQ Wazirabad) & district vehari (THQ Burewala).

The pilot phase was launched successfully and the DLI were achieved. After this achievement the department and World Bank agreed for scale up plan (DHQ/THQs) in 15 more selected districts.

Key Activities

Healthcare Facilities are bound to submit the monthly waste generation reports to PSPU on regular basis & on quarterly basis. PSPU submits reports to World Bank to proceed accordingly.

PSPU is also supporting to Hepatitis & Infection Control Program, PMU, PHFMC, PHC & EPD regarding policy, planning, operations, documentation & capacity building to manage the waste for the safeguard of public health and environment.

Key Outcomes

About 1500kg of infectious waste is being generated and incinerated Implementation HWMR, 2014 In Selected 17 Districts

S/N	DISTRICTS	HEALTH FA	CILITIES	IMPLEMENTATION STATUS			
		DHQs	THQs	Implemented	In process		
1	Gujranwala	0	3				
2	Sheikhupura	1	4				
3	Hafizabad	1	1				
4	Jhelum	1	2				
5	MB Din	1	3				
6	Okara	2	2				
7	Bhawalnagar	1	4				
8	Vehari	1	2				
9	TT singh	2	1				
10	Layyah	1	4				
10	Layyah	1	4				
11	Khanewal	1	2				
12	RY Khan	0	3				
13	Jhang	1	3				
14	Lodhran	1	2				
15	Norowal	1	1				
16	Chakwal	1	3				
17	Muzafargarh	1	3				
Total	17	17	43	60			



Daily waste generation is being recorded in color coded registers and

	of Hospital trength <u>40</u>	. IIIQII A	i.r.Jiai (J	mang)			Month -	July upancy ra	10-66	8%			
			Waste Generation (Solid Infectious) Kg				Disposal (Solid Infectious) (Kg)						
s/N	Depts.	No of Beds	,	Red Yellow		Placenta	Sharps	Total			Yellow		Total
			White		Yellow					Red	Incineration	Buried	Disposed (Kg)
1	F. Ward	10	74 Kg	106 Kg	55.15 Kg		1-60Kg	236.7549	7519	1.6 Kg	55.15kg		
2	M. Ward	10	38-7519	42.2 Kg	37.99 169		0.50 Kg	119.44Kg	- 0		37.99149		
3	Emerg	10		0	67.17 49		-	254.97949		-	67.17 Kg		
4	ОТ	_	14 K9	. 660 Kg	18.96 kg	30 KA		64-12/09	58 00 38	· 66 · 1cg	18.96 Kg	3049	
5	Lbr. Room	08	38Kg	23.5KA	11.03109	276 109		34903kg		23-5K9	11.03 49	276 Kg	
6	Lab	-	25.5kg	33.3149	20.56 Kg		0.50 kg	80.16 kg	Course to Michigan VI	33.3 Kg	20.56 Kg		
7	EPI	-	0.530kg	0.585Kg	0.391 49		0.90Kg	2.40 Kg	0.53 Kg	0.585 Kg	0.391 Kg		
8	Hep Clinic	_	4.61 Kg	10.41 159	0.93 109		0.50 kg	16.44Kg	4.61 Kg	10-41 Kg	0.93 Kg		
9	NCD	-	0.965 Kg	1.86Kg	1.86 169		-	4.685149	0.965 Kg	1.86 Kg	1.86 Kg		
10	Dental	-	3.72 Kg	1.30/69	5.9149		-	10.93Kg	3.72 Kg	1.30 19	5.91 Kg		
11	Eye Dept	02	3.00 K9	1.50Kg	4.93 Kg		0.5019	9.9349	3-00169	1.5018	4.93Kg.		
	Total	40	281·315kg	328.68549	224-881 Kg	306 kg	7.71Kg	1148.87	281-315Kg	328.685 87	224.881 Kg	306 Kg.	1141-1
5	ignature		U		Jaste Manag					14-15-12	perintendent		

Monthly reports are being generated and submitted to PSPU on regular basis





Waste recording, Color Codding and Displays to Ensure Proper Segregation





Interim transporation of infectious and non infectious waste





Waste recording, color coding and displays to ensure proper segregation



Disposal of anatomic and gynaecological wste in burial pit





Waste transportation to incinerator



Training of Mater Trainers Across the Punjab

Monitoring and Evaluation

To maintain the right balance of sustainable growth and efficiency, ICP continues to monitor what is done. This year as a part of ICP Phase-1 monitoring plan, six teams each consisting to two members each, went in field to evaluate where program stands against the defined targets, intervention and indicators.

Hospital Waste Management Indicators in DHQs

The chart below describes the proportion of DHQ health facilities fulfilling the criteria for composite indictors under investigation.

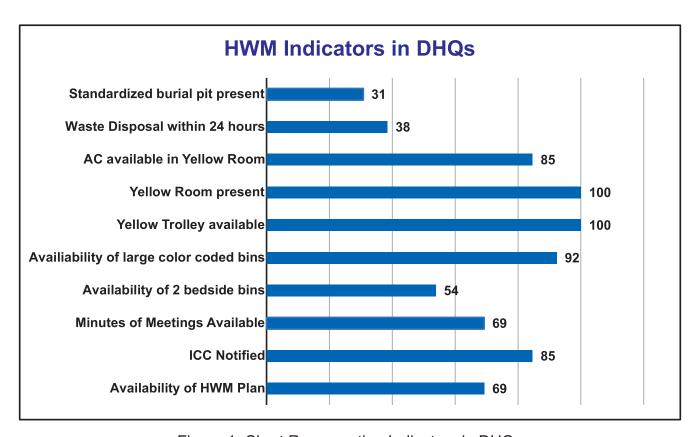


Figure 1: Chart Representing Indicators in DHQs

Hospital Waste Management Indicators in THQs

The chart below describes the proportion of THQ health facilities fulfilling the criteria for composite indictors under investigation.

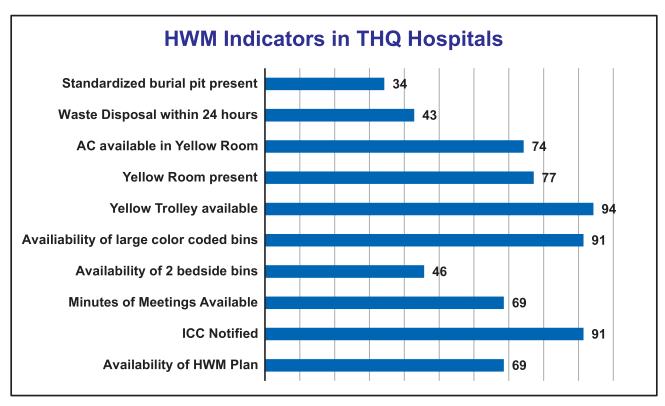


Figure 2: Chart representing indicators in THQs





Healthcare Associated Infections

ICP is one of the firsts public organization to take initiatives in the area of healthcare associated infections.

Key Interventions

- Capacity building of Master trainers and provincial guidelines have been developed and already disseminated, while a surveillance mechanism is currently in the works.
- Shoe-rollers and sinks were procured and distributed to healthcare facilities of P&SHD.
- Incidence -reporting and occupational hazard register guidelines have been developed.
- Information, education and communication material related to importance of hand hygiene was developed and disseminated.

Anti-Microbial Resistance

ICP has pioneered in cognizance towards Anti-microbial resistance and has currently directing efforts to the development of provincial policy to tackle the issue.

Key Interventions

 Anti-microbial Resistance policy advocacy seminar organized and conducted in November 2018

TB Control Program

Punjab contributes 63% of the total TB case load of the country. The goal of TB Control Program is to "reduce by 50% the prevalence of TB in the general population by 2025 as compared to 2012. The estimated incidence of all types of TB cases is 270/100,000 population. Free diagnosis and treatment of TB is available at health facilities in Punjab with contribution from Global Fund (GFATM) and Health Department, Government of Punjab. Private health sector has also been engaged by TB Control Program to facilitate care of TB patients. The activities of the program during 2017-18 are highlighted below:

One window TB Rooms and EMR

TB Control Program has established TB rooms in 125 health facilities to provide immediate diagnosis and treatment under the same facility. TB rooms are also recorded the patients information through EMR system and monitored through online TB dashboards.

Screening Camps

About 10,000 industrial workers have been screened for TB in districts Kasur, Gujrat, Faisalabad, Gujranwala and DG Khan through integrated screening camps conducted by TB Control Program, Primary & Secondary Healthcare Department, Punjab.

Establishment of Bio-Safety Level-III Bacteriology Laboratory

P&SHD has established Bio Safety Level III laboratory in Punjab for testing and diagnosis at advance level. Around 5,000 tests have been performed within the three months of its operations.

Identification of TB Cases

In March 2017, Government declared TB as a notifiable disease to improve identification of TB cases and it is compulsory to public and private facilities to report cases immediately. LHW program also use for identification for patients who don't reach facilities. Initially, this program has been implemented in Faisalabad, Gujranwala, Gujrat and DG Khan. LHWs have been collected around 10,000 sputum samples for testing till June, 2018.

Malaria Control Program

Malaria control has always been a priority in Pakistan. National Malaria Control Program started in 1950. In 1961, it was converted into Malaria Eradication Program under the auspices of WHO with the financial and technical support from WHO, UNICEF and USAID. In 1977, it was integrated into health services as part of Communicable Disease Control in Punjab. This Program forges consensus among key actors in malaria control, harmonizes action and mobilizes resources to fight malaria in endemic areas. Its aim is to reduce the malaria associated morbidity and mortality by keeping malaria under control. The Program has also been involved in Dengue prevention and control activities. As a result of concerted efforts the incidence of malaria has reached its lowest level in the Province. Moreover, the same staff is working for prevention and control of Avian Pandemic Influenza (AH1N1), Congo Crimean Haemorrhagic Fever (CCHF) and Leishmaniosis. The activities of the program during 2017-18 are highlighted below:

- Provision of Rapid Diagnostic Test (RDT) kits to the health facilities where malaria microscopy services are not possible.
- Provision of Radical Treatment to all the confirmed cases of malaria in accordance with National treatment policy within 24-hours of diagnosis.
- Training of Entomologists and Communicable Disease Control (CDC) Officers as master trainers on Integrated Vector Control Measures and spray operations regarding Dengue and Malaria fever.
- Trainings of master trainers on Malaria microscopy techniques to improve diagnostic skills for malaria detection. Training of laboratory staff at District level by master trainers. Training of CDC Inspector and CDC Supervisors working in the Districts by master trainers.

- Monthly review meetings at provincial level regarding CDC activities to evaluate performance
 of Districts and award best performing Districts with appreciation certificates. The best
 performing Districts in 2015-16 were Okara, Sahiwal, Pakpattan, Faisalabad, Jhang, Rahim
 Yar Khan, Muzaffargarh, Sargodha and Bahawalpur.
- Insecticide spray in the Districts to control the malaria and Leishmaniasis vector.

Punjab Aids Control Program

The AIDS Control Program was started in Punjab in year 1998. PC1 of Enhanced HIV/AIDS Control Program (2003-2008) was approved in year 2003. World Bank had to provide 80% of the cost of PC1 for the Phase II (2009-2013). Government of the Punjab has been fully funding the Program since year 2010-11. PC 1 of Phase IV (2016-19) of Enhanced HIV/AIDS Control Program, has been approved and is being implemented. The aim of the Program is to control and reverse the spread of HIV amongst the most at risk groups and to keep the epidemic from establishing among the bridging groups and the general population. The activities of the program during 2017-18 are highlighted below:

PACP initiated extraordinary initiatives during 2017-2018 to identify high risk population and treat patients:

- · Identification and screening of high risk groups
- Establishment of BSL-III lab for advanced testing
- Establishment of treatment centers

Screening of High Risk Population

High Risk group are divided into three categories

- 1 Jail Inmates
- 2. Transgender
- 3. Heavy Transport Vehicle Drivers

Jail inmates-The PACP has started screening of Jail inmates across Punjab in phases from January,2017. In the first round, over 47,000 prinsoners were tested. The prisoners were vaccinated and provided Hep C, HIV and syphilis treatment along with vaccination for Hep B. In the second round, the PACP intends to complete all 39 jails in Punjab. By the filling of this report as many as 28 jails were completed.

Transgender Community- First medical clinic has been established in Fountain House at Pecco Road with free testing, Hepatitis B vaccination and Hepatitis C treatment. Approximately 4000 transgender has been screened till June, 2018.

Heavy Transport Vehicle Drivers- Screening camps are also being conducted by PACP for HIV, Hepatitis B and C, Syphilis along with free vaccination for Hepatitis B and free treatment of Hepatitis C. More than 21,000 individuals have been screened till June, 2018.

Treatment of BSL-III Lab

BSL-III Lab has been established for advanced testing and diagnosis. The lab is capable of conducting complicated testing i.e. PCR testing, Haematological testing, serological testing etc.

Establishment of Treatment Centers

Program has established 16 treatment clinics in 9 districts of Punjab (Lahore, Gujrat, Rahimyar Khan, DG Khan, Faisalabad, Rawalpindi, Sargodha, Sheikhupura and Chiniot). Department is planning to establish 6 additional treatment centres in Okara, Jalapur Jattan, Mianwali, Muzaffargarh, Bhakkar and Khanewal.

IRMNCH & Nutrition Program

Lady Health Worker Program, Maternal, New-born & Child Health and Nutrition Programs have been integrated under the umbrella of an Integrated Reproductive Maternal New-born Child Health & Nutrition Program (IRMNCH & Nutrition Program). This was done to establish strong linkages amongst these overarching mandates of these Programs. The goal of this Program is to improve the health outcomes among women, children and new-borns by enhancing coverage of health and nutrition services for the underprivileged and vulnerable in rural and less developed urban areas through implementation of the Essential Package of Health Services (EPHS) and Minimum Service Delivery Standards (MSDS) in both outreach and facility based services. This integrated Program is covering:

- · Lady Health Worker Program
- Maternal, Neonatal & Child Health (MNCH) Program
- 24/7 Program (Basic EmONC)
- Nutrition Program

a) Lady Health Worker Component of IRMNCH & Nutrition Program

Lady Health Worker Component of IRMNCH & Nutrition Program of Punjab was previously an independent program named National Program for Family Planning and Primary Healthcare that was launched in 1994. The Program was devolved in July 2011. In 2014, it was integrated under the umbrella of IRMNCH & Nutrition Program. The aim of Program is to bridge the gap between the health facilities & communities and provide health education, basic healthcare and family planning services at the doorstep of the community. Presently, 44,835 Lady Health Workers (LHWs) and 1803 Lady Health Supervisors (LHSs) are providing community based healthcare services in rural and urban areas. Currently, LHWs coverage is 72% in Punjab (87% rural & 39% urban). Each LHW is supervised by a Lady Health Supervisor, each supervisor having an average of 25 LHWs reporting to her.

The specific LHW target groups include:

- 1. Pregnant and lactating women
- 2. Children under the age of 5 years
- 3. Eligible couples

b) Maternal, Neonatal & Child Health (MNCH) Program

This Program started in Punjab in 2006 for strengthening of MNCH services at facility as well as community level. The objectives of the Program are to achieve the committed indicators of maternal & child health. This Program aims to accelerate progress towards improving maternal, new-born and child health and nutrition services particularly among the poor, marginalized and disadvantaged segments of the society. It ensures accessibility of quality MNCH services through development and implementation of an integrated and sustainable MNCH programme at all levels of the health care delivery system using community midwives as outreach skilled birth attendants and strengthening Basic and Comprehensive EmONC services at the primary and secondary level health facilities.

CMWs provide MNCH services and each CMW covered a population of 10,000 till 2015 which now has been reduced to 5000 to decrease workload and improve performance subsequently. They are awarded diploma certificates by Nursing Examination Board Punjab on passing the examination after completion of the training course. Permission to practice is then granted by District Evaluation Committee.

The implementation of CMW component of the Program has enhanced the SBA coverage in Punjab significantly. Training of CMWs started in 2007-08 and approximately 8913 CMWs have been trained throughout the Province contributing to the increased deliveries by SBAs. Deliveries conducted by SBAs were 53% (MICS 2011) which increased to 65% (MICS 2014) reaching 85% in 2016 (Punjab Health Survey Report 2016). Currently, 5 deliveries per CMW per month are being performed and are successfully achieving their set targets.

c) 24/7 Program (Basic EmONC)

Basic EmONC services are being provided in all the RHCs of Punjab under MNCH Program since 2007 by provision of additional human resource in the form of MNCH WMO & MNCH LHV at RHCs. Under the Chief Minister's initiative for Attainment and Realization of MDGs 4 & 5 (CHARM) project, selected BHUs of flood affected districts were declared 24/7 BHUs in 2010 which also provided Basic EmONC services. These 24/7 BHUs were established as a pilot in D.G. Khan, Layyah, Muzaffargarh, Rajanpur, Mianwali, Bhakkar and R.Y. Khan in collaboration with development partners (UNICEF & UNFPA). After the success of this pilot, Government of the Punjab decided to implement it throughout the Province. Overall 700 BHUs (24/7) are fully functional in all 36 districts for provision of Basic EmONC services. The 24/7 BHUs are provided with additional HR in the form of additional LHVs, ayas and security guard for evening and night shifts. These BHUs provide the same package of services as any other BHU; however the obstetric services are provided round the clock. Additional supplies and support is also provided to these BHUs to cater for the increased consumption due to extended working hours.

d) Nutrition Component of IRMNCH & Nutrition Program

New PC-1 of nutrition specific interventions costing Rs. 3.8 billion funded by World Bank has been approved. Program target groups are adolescent girls, pregnant and lactating women and children (0-59) months. The aim of the Program is to provide preventive & curative services to reduce stunting from 33.5%- to 30% and decrease wasting from 17.5% to 13% till 2018. Preventive services are through provision of Vitamin A, Iron & Folic Acids, Zinc & ORS, iodized salt, Multi Micronutrient Supplement (MMS) to malnourished children and women, screening of PLWs & children for malnutrition and deworming. Curative services include treatment of SAM without complications at BHU & RHC, treatment of SAM (Severe Acute Malnutrition) with complication at THQ & DHQ, treatment of MAM pregnant and lactating women and children at BHU & RHC. The activities of the program during 2017-18 are highlighted below:

Performance Based Awards for Obstetric Services

Two best performing 24/7 BHUs per district were selected for best performance award based on the following weighted criteria:

- □ No. of Deliveries 40%
- □ No. of ANC visits 20%
- ☐ Functionality Index 40%

Facility Based Nutrition Services - OTPs and SCs

The nutrition related services, one of the most recently scaled up interventions by the program, has successfully treated 267,990 children through Outdoor Therapeutic Program (OTP) and Stabilization Centers (SCs). These children were enrolled at the OTPs / SCs after initial screening. The total number of SAM and MAM cases identified during screening at facility level were 304,501. Thus, the cure rate turned out to be 88%.

GE V-Scan Portable

- GE V- Portable Scan provided at 60 BHUs
- 300 health care providers have been trained

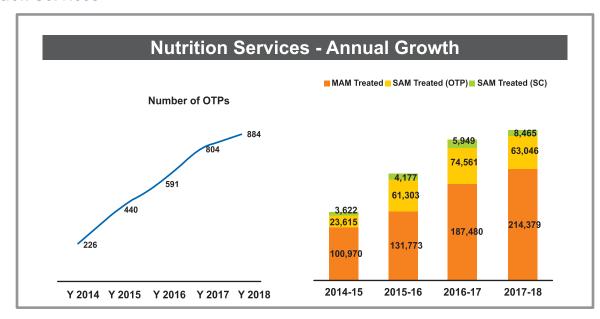
GE Color Doppler

- 200 machines provided at RHCs
- Training of HCPs has been completed in 20 districts and machines handed over, remaining in pipeline
- 45 additional machines in pipeline

Honda Ultrasound

Procurement of 200 machines has been completed to date

Nutrition Services



Nutritional Week For Urban Slums

The Program celebrated a special nutrition week for Urban slums during April 2017. During this week, Lady Health Workers from urban areas and slums were mobilized to cover 100% of the urban slums for screening of malnourished children, referral of identified SAM and MAM children, provision of ORS and Zinc syrup, iron folic acid and contraceptives. Moreover, counselling was also done on balanced diet and improved nutrition during pregnancy as well as during childhood. During this week, the Program achieved the following results:

- 12.3 Million urban slum population covered
- 1.38 Million children screened
- 13,167 SAM and 58,403 MAM identified, provided RUTF and referred for treatment
- 265,000 PLWs screened
- 6,875 MAM identified
- 170,000 children provided MMS
- 111,000 children provided ORS; 45,000 children provided Zn syrup
- 138,000 pregnant women provided iron folic acid
- 264,000 couples provided Contraceptives
- 580,000 Women counselled during health education sessions

Special Campaigns

Special Campaigns Key Performance Highlights Half a million children 0-2 year age reached for **Due Children** Dafaulter children vaccination per MCH Week Dewormed 6 million children 2-5 year dewormed per MCH Week Also screened for malnutrition Approx 3 million children dewormed in MCH Week Deworming of school children and adolescent girls Approx 1 million dewormed in nutrition week(slum) Approx 0.5 million girlds for anemia 3 million women reached through health education Pneumonia & Diarrhea Skilled birth attendance Nutrition & IYCF sessions per MCH Week Moved from LHW covered areas to Improved coverage uncovered rural Urban Slums covered in nutrition week 6 Million children screened in MCH Week in LHW coverad areas referred if required 1 million children screened in urban slums

Health Education Program

Health Education is one of the core public health strategies. All specialized programs have allocation and resources for health education. Health Education section of the Directorate General Health Services is entrusted with the responsibility of overarching support to the vertical programs. This section's functions include developing IEC resource centre, managing mass media campaigns, communication trainings, and monitoring of School Health Program. The activities of the program during 2017-18 are highlighted below:

- Developed IEC materials on the following; Congo Fever, MERS CoV, Dengue, Leishmaniosis, Diphtheria, Measles Tetanus, Naeglearia, Flu, Smog, Hepatitis, infection control, safe water, hand washing, and cough etiquettes, Pneumonia, Scabies, Malaria, and Zika Virus.
- Launch of mass media awareness campaign on Dengue, EPI, Hepatitis and alerts on seasonal diseases.
- Training of master trainers and dissemination of infection prevention and control protocols for primary and secondary level health facilities conducted in selected Districts of Punjab.
- Celebration of World Pneumonia Day.

Prevention & Control of Non Communicable Diseases & Mental Health

Prevention & Control of Non Communicable Diseases (NCD) & Mental Health Project was launched in 2016 under Director General Health Services Punjab by Primary & Secondary Healthcare Department Punjab. Main objective of the project is to strengthen the Districts to deliver integrated facility and community based NCD and mental health care in rural and urban areas of Punjab. The objective is to reduce premature mortality from non-communicable diseases by one third till the 2030. Government of Punjab is committed to achieve universal health coverage, setting quality standards through essential service package and access to affordable medicines. Project contains five key components which are given below:

- Care of diabetes & hypertension-cardiovascular diseases
- Care of chronic lung conditions
- · Care for cigarette smoking
- Care for child mental health & development
- Organizational strengthening for enhanced NCD control

Health Promotion



Electronic Media TVCs & Radio Spots



Print Media Newspaper Ads



Social Media Facebook, SMS



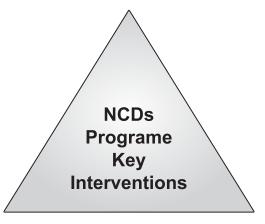
Seminars on NCDs & Risk Factors



LEDs at Health Facilities



Documentaries on NCDs



Control of NCSs





Treatment Protocols & IEC



Android App. for Screening Desks



Capacity Building of Health Professionals



Web-Portal for NCDs Clinics



Establishment of Screening Desks



Dashboard for Online Monitoring



Establishment of



Field Monitoring



Screening Camps



Third Party Validation

The activities of the program during 2017-18 are highlighted below

Establishment of Screening Desks and NCD Clinics

The program has established 130 Screening Desks (26 DHQHs and 104 THQHs). Every person (aged 40 and above) coming to the hospital at CRP is referred to the Screening Desks where trained paramedics register the person for demographics, screen for NCDs, assess for risk factors and counsel for risk factor modification and adopting a healthy lifestyle.

The program has established 92 NCDs Clinics in 26 DHQHs and 66 THQHs of Punjab. The screened positive people are referred to the NCDs Clinics for confirmation of diagnosis. Confirmed cases are registered on the web portal and provided appropriate standardized management according to the severity of their disease.

Health Weeks

Screening camps were conducted in health facilities across Punjab in the form of Health Week. The first Health Week was organized as five days long activity at 442 all healthcare levels facilities (DHQHs, THQHs, RHCs and BHUs) from 15th to 19th August 2017. During this activity a total of 362,017 individuals were screened for NCDs and their risk factors. The second Health Week was conducted from 19th to 24th February in which more than 900,000 people were screened for NCDs and their risk factors at 700 health facilities across Punjab.

S. No.	Screening Activity	Persons Screened
1	First Health Week August 2017	362,700
2	Second Health WeekFebruary 2018	907,240
	TOTAL	1,269,940

Conduction Of Screening Camps In Lahore

A total of 8 screening camps were organized in Lahore from July 2017 to June 2018 for screening of population for NCDs. 5,880 people were screened for NCDs and were counselled for their risk factors.

International Health Days (2017-18)

International Health Days relevant to the Program were celebrated across Punjab with full zeal and zest in form of diverse activities for public health awareness.

- Breast Cancer Awareness Week (October 2017)
- World COPD Day (14-Nov-2017)
- World Health Day (07-April-2018)
- World Asthma Day (02-May-2018)
- World Hypertension Day (17-May-2018)
- World No Tobacco Day (31-May-2018)

Drug Testing Laboratories

To ensure the availability of high quality medicines, P&SHD also ensured the testing of different batches of medicines received by the manufactures locally. The department employed the services of its state of the art drug testing laboratories in Lahore and Multan. Only those medicines having samples approved and cleared by the DTLs were dispatched to the health facilities.

In late 2015, the Primary and Secondary Health Department started revamping of all the DTLs in Punjab to overcome challenges of infrastructure, human resource, equipment, supply chain, quality management system; and standard operating procedures. Given the significance of DTLs, a number of initiatives have been taken to improve the quality and performance of the five labs. This includes revamping of personnel, introduction of state-of-the-art equipment as well as implementation of QMS for ISO 17025 certification with the assistance of LGC (Laboratory of the Government Chemists). DTL Lahore is expected to get ISO certification by the end of April 2018 while the process is underway for the DTL Lahore Faisalabad and Multan. DTL Rawalpindi and Bahawalpur are on track to get ISO certification in 2019 which will bring them on par with internationally recognized drug testing laboratories. Two staff members from DTL have also received training from Turkey for this purpose. Over the last two years, the number of personnel working at all DTLs has increased by more than 50%. Moreover, all the staff has received training from PFSA.

P&SHD has also initiated an automation program to improve the authenticity of test performed on different types of drugs. The primary step is the establishment of Drug Testing and Management System (DTMS) which is a web application that provides access to specific officials with real time stats of DTL regarding the drug testing procedure. DTMS has digitized a number of steps in the process including the assignment of drug samples received to specific labs, testing of samples received as well as the final approval from analysts. This includes the generation of a unique barcode for each sample once its data has been manually entered in the system software. The barcoding technique has been introduced to maintain the transparency of drugs from the analyst level staff, this will also eliminate the chance of any biasness. The DTMS applications has eliminated the chances/possibility of errors in the sampling system as well reduce the time taken to implement all the steps by a significant amount

In order to authenticate the results of DTL Lahore, 276 randomly selected drug samples were sent to five World Health Organization certified labs in Switzerland, Turkey, Singapore, South Africa and Thailand. With more than 198 results received, only three reports have been different/differed which depicts the quality and efficiency of DTL Lahore's testing process.

Provincial Health Development Centers

In 1990 the only training institute for Doctors in the province started working as Management Training Institute for Doctor at Katcha Ferozepur Road off Ferozepur Road, Lahore. The PHDC was established under the Second Family Health Project in 1994 and was located at 7-HumaBlock, Lahore.

- Eight Divisional DHDCs started functioning on 01-01-1995
- Twenty two more DHDCs became operational on 01-01-1998

Now, this network is working in the entire province of Punjab and comprises of Provincial Health Development Centre at Lahore with Health Development Centres in 31 Districts except Hafizabad, Nankana, Lodhran, Mandi Bahauddin & Chiniot. PHDC did take up its envisaged role to a partial extent by:

- Participation in decentralization and district health strengthening, devolution 2001
- Conducting Health Planning, Management, and Health Nutrition Education Courses for District Health Managers
- Management courses were declared a pre-requisite for promotion from BS 19 to BS 20

Punjab Health Facility Management

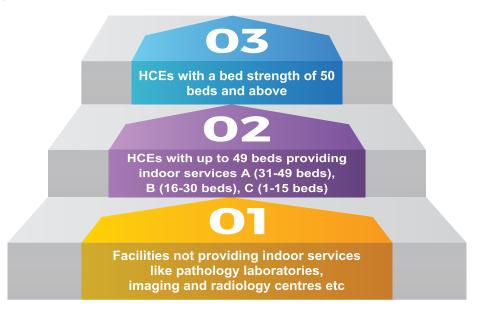
In order to strengthen the transparency and management capacity within the Health Department, PHFMC has developed a robust monitoring and evaluation mechanism for the primary health facilities. Under this mechanism, a specialized cadre of monitoring officers has been deployed at various levels of the district, comprising Regional Managers, District Managers, Deputy District Managers, Assistant Monitoring Managers and Monitoring Executives. About 80 percent of the capacity of this staff is spent in the field. Consequently, each Basic Health Unit in Punjab is visited four times per month by different tiers of the district's monitoring and management structure. These staff members are equipped with smartphones, which they use to record their observations during each visit. This data collection enables the Department to keep a check on the number and quality of inspections carried out by this staff.

However, in the future, this data has the potential to be used to implement localized solutions. There are four tablet-based applications that PHFMC uses to carry out its operations through the field staff: an indicator point system application for regional managers for monitoring health facilities; a daily visit report application for collecting, verifying and analyzing data on various KPI's and site visit reports to ensure effective implementation; Nizam- e-Tahafuz- e-Sehat underway to automate its outreach services and a Mobile Health Unit (MHU) monitoring portal to consolidate and monitor all data relating to MHUs using one platform, including a GPS-tagged summary of their travel routes.

	BHU Staff (as 2017)	of July	Monitoring Staff		
No. of Districts PHF MC Currently operates in	14	No. of Medical Officers	718	Regional Managers	2
No. of Basic Health Facilities taken over by PHFMC in 14 districts	931	Lady Health Worker	589	District Managers	14
No. of Rural Health Facilities taken over by PHFMC	5	Dispensers	752	Assistant Monitoring Manager	14
No. of operational Mobile Health Units	6			Monitoring Executive	14
No. of MHUs to be operational next year	14			Total Budget	Rs. 3,528.899 Million

Punjab Healthcare Commission

The Punjab Health Commission is an autonomous health regulatory body established under the PHC Act 2010. It is now fully operational and has been mandated with licensing and regulation of private as well as public sector health facilities and for defining standards of service delivery. All healthcare establishments (HCEs) are required to implement minimum service delivery standards (MSDS) to acquire a license to deliver healthcare services in Punjab. The Commission has so far issued provisional licenses to all health facilities both in the public and private sector, however some private and public sector hospitals have been awarded full license. The Commission has categorized HCEs into 3 levels so that standards can be prescribed according to various level of services offered.



PHC has developed a sophisticated system for the investigation of complaints lodged by both patients and healthcare service providers. Once intimated the complaint is scrutinized and authenticated followed by rigorous investigative process. HCEs has also been involved in conducting consultative workshops for MSDS development, dengue awareness seminars, antiquackery and capacity building workshops of their staff for implementation of MSDS.

Implementation Status of Minimum Service Delivery Standards and Revamping of Secondary Healthcare Facilities

- 1. Access, Assessment and Continuity of Care (ACC)
- 2. Care of Patients (COP)
- 3. Management of Medication (MOM)
- 4. Patient Rights and Education (PRE)
- 5. Hospital Infection Control (HIsC)
- 6. Continuous Quality Improvement (CQI)
- 7. Responsibilities of Management (ROM)
- 8. Facility Management and Safety (FMS)
- 9. Human Resource Management (HRM)
- 10. Information Management Systems (IMS)

Revamping Initiative and MSDS

To improve governance and service delivery and for optimal functioning, P&SHD is undergoing revamping phase 1 and phase 2. This priority agenda strengthens the implementation plans, along with operationalization of Punjab Health Sector Strategy. In order to address challenges in terms of quality service delivery implementation of MSDS is included as one of the main component of revamping.

Strategic Road Map for MSDS Implementation

- 1) Hiring of Technical Team for MSDS Implementation.
- 2) Trainings by Punjab Healthcare Commission on MSDS reference Manual.
- 3) Preparation and notification of standard operating procedures (SOP's) and standard medical protocols for improvement in health facility management.
- 4) Step wise orientation and sharing of targets through volumes in a monthly meeting and maintenance of scorecard for stepwise implementation.
- 5) Monthly feedback to Medical Superintendents on their compliance via a scorecard matrix.
- 6) Regular supervisory and monitoring visits to health facilities.

Issuance of Minimum Service and Delivery Standards Licenses for Primary Healthcare Facilities

Punjab Healthcare commission has issued licences for the following health facilities of primary healthcare in duration of 2017-18:

MSDS Licensing by PHC

Sr. No.	Name of District	Number of Faciliteis Licensed
1	Attock	5 BHUs
2	Gujrat	5 BHUs
3	Rawalpindi	4 BHUs
4	Layyah	2 BHUs
5	Jhelum	2 BHUs
6	MBDin	2 BHUs
7	Khanewal	2 BHUs
8	Sargodha	2 BHUs
9	Khushab	2 BHUs
10	Gujranwala	1 BHUs 1 RHC



Implementation of MSDS and Hepatitis Control Program

Hepatitis and Infection control program, P&SHD have poured in massive amounts of resources to improve implementation of MSDS related to the implementation of Punjab Hospital Waste Management Rules 2014.