

Patient Safety: Global Ministerial Summit 2018-19



Ministry of
Health & Family Welfare
Government of India

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Overview

- Health Infrastructure in India
- Key aspects of Patient safety
- GoI Initiatives for Patient Safety
- IT Systems in improving Patient Safety
- Patient safety through Safe Blood Transfusion Services

Health Infrastructure in India

The public health facilities in India are as under;

✓ Medical colleges	462
✓ AYUSH colleges	544
✓ Paramedical colleges	777
✓ District Hospitals	779
✓ Sub-District Hospitals	1108
✓ Community Health Centres	5624
✓ Primary Health Centres	25850
✓ Sub Centres	156231
✓ Railway Hospitals	706 (Hospitals-126 and Dispensaries 580)
✓ ESI Health facilities	1618 (Hospitt.151 & Disp.1467)
✓ CGHS Dispensaries	392
✓ Central Govt. Hospitals	26

Key Aspects of Patient Safety (1/3)

- **Diagnostic errors-** These are the result of cognitive, systemic, or a combination of cognitive and systemic factors. It is the most common and costly form of medical malpractice claims.
- **Medication errors-** Medication errors are largely communication errors, be it between patient and provider, provider and pharmacist or pharmacist and patient. Patients are harmed because of medication naming, packaging, labelling, erroneous prescription and patient is misinformed.
- **Internal Care Coordination-** Poorly coordinated care puts patients at risk for safety events such as medication errors, lack of necessary follow-up care, and diagnostic delays.
- **Device Cleaning, Disinfection, and Sterilization-** Failure to follow proper cleaning, disinfecting, and sterilization protocol at any point can result in a compromised device—and devastating effects for patients. To avoid outbreaks of potentially deadly diseases, a proactive approach is important.

Key Aspects of Patient Safety (2/3)

- **Management of Behavioural Health Needs in Acute Care Settings-** When acute care patients' behavioural health needs go unmet, issues such as self-harm or violence toward others, leaving against medical advice, poor behavioural health outcomes, or interference with care of the acute medical condition can result.
- **All-Hazards Emergency Preparedness-** Major emergencies such as hurricanes, wildfires, mass shootings, and ransomware attacks has brought a host of challenges for healthcare facilities. Some resulted in mass casualties. Others led to power outages or computer shutdowns, which forced organizations to alter their day-to-day operations.
- **Incorporating Health IT into Patient Safety Programs-** A health IT safety program can play a pivotal role in improving the safety and quality of healthcare, but its success depends on the ability of users to recognize, react to, and report health-IT-related events for analysis and action.
- **Patient & Leadership engagement and Health Literacy-** Patients are consumers of healthcare- by involving patients in their treatment plans and processes, they become allies in their care and can serve as another layer of defence against many safety issues. Leadership engagement in Patient Safety efforts is essential and must be on both intellectual and emotional level.

Key Aspects of Patient Safety (3/3)

- **Opioid Safety across the Continuum of Care-** It's a patient safety concern because of the seriousness of the side effects and has brought attention to outpatient prescriptions and illicit drugs. But the impact stretches across the healthcare continuum.
- **Workforce safety-** Clinicians can't treat others if they themselves are not well.
- **Workarounds-** Workarounds are pervasive in healthcare. They occur when staff bend work rules to circumvent or temporarily fix a real or perceived barrier or system flaw. As workarounds become entrenched in unit-level work, they are difficult to detect. They are further classified into three broader categories.
 - i. **omission of process steps** include things like failure to scan patient identification barcode, failure to scan the medication barcode etc.
 - ii. **steps performed out of sequence** include things like documenting the medication as administered before they actually administered it or observed the patient take it.
 - iii. **unauthorized process steps** include things like disabling the audio alarms or removing the scanner from the computer cart

GoI Initiatives for Patient Safety – (3/3)

Patient safety is in the foremost agenda for the Government of India, which is working with the states and service providers for establishing a pragmatic, universal and resilient system for patient safety in the country.

a) National Health Policy

The Government of India has released new National Health Policy last year (2017), which mandates for improvement in quality of health services with focus on Blood, Vaccine and Drug safety.

b) Policy framework for the patient safety

National Patient Safety Implementation Framework has developed and finalized and ready for implementation. The mandate of the policy framework would be:

- To define minimum standards and indicators for the patient safety.
- Instituting IT enabled reporting mechanism for reporting of patient safety indicators and patient grievances.
- Improve infection control and waste management practices at the facility level.
- Specific focus on safe birth, surgical safety, medication safety & blood safety.
- Promoting research on patient safety related themes.

GoI Initiatives for Patient Safety (1/3)

- To improve the structural system and to support quality and efficiency of health care and place patient safety at the core at national, subnational and health care facility level:
 - GOI has already developed a National framework for implementation of Patient safety programme and is under implementation.
- To assess the nature and scale of adverse events in health care and establish a system of reporting and learning:
 - All national programme have system of Reporting the progress and events. To streamline the system GOI has developed a common HMIS so as to have centralized data base and assess the problems of patient safety.
- To ensure a competent and capable workforce that is aware and sensitive to patient safety.
 - Need assessment exercise has already been completed. The training material will be developed after the approval of National framework and the same will be rolled out.

GoI Initiatives for Patient Safety (2/3)

- To prevent and control health-care associated infections:
 - A Multipronged approach is being implemented through National Anti-microbial Resistance, Hospital Infection prevention and control.
 - In addition Ministry has also launched a programme on Quality Assurance Health care programme as well Kayakalp programme to promote cleanliness, hygiene and infection control practices in public health facilities
- To improve implementation of global patient safety campaign and strengthen patient safety in all health programmes:
 - India is committed to be part of the WHO Global patient safety Campaign.
- To strengthen capacity for and promote patient safety research and wide dissemination of research in patient safety:
 - After Implementation of patient safety programme Apex Institutes will be identified that will undertaken resaerch in patient safety.

IT Systems in improving Patient Safety (1/5)

large scale IT systems are involved in gathering, storing, aggregating and reporting health information on the patient and potential patient safety incidents. Some of the IT systems are highlighted below:-

- **Electronic health records (EHR)-** Improves patient safety by access to medical records & helps reduce healthcare cost, Storing health records electronically can improve patient safety through improving communication across the patient journey (such as reduced adverse drug interactions), reducing the loss of patient information, and removing errors associated with translation factors (such as poor handwriting).
 - India has Notified EHR Standards in 2016 for adoption for sharing and interoperability of electronic health records in Country.
- **Computerized care documentation-** It allows the health facility to directly enter information about service delivered into patient charts via a computer.
 - In this direction India has initiated My Health Record Management System (PHRMS) which has feature to stores prescriptions, lab test results and also images. It also enables individuals to record allergies and immunization details, medications being taken and medical procedure undergone by individuals. Presently application is integrated with Hospital Information System of Telangana and is running well and would be rollout country wide soon.

IT Systems in improving Patient Safety (2/5)

- **Clinical Decision Support Systems-** Helps in evidence based planning & decision making and to improve clinical decision making by generating case-specific advice, increase coordination between practitioners and promote the use of guidelines. CDSSs match patient characteristics against a knowledge base and computer algorithms then generate patient management recommendations.
 - In this direction Hospital Information System (HIS) has developed where patient health record would capture. Presently HIS have been implemented in more than 700 central & state govt. health facilities
- **Incident notification systems-** Obtaining information regarding how many incidents are occurring, where they are occurring and how they are occurring is vital if the incidents are to be prevented in the future.
 - India has implemented Mother & Child Tracking System for Online tracking beneficiaries to ensure maternal and child health service delivery. MCTS Facilitation Centre for feedback from beneficiaries and verification of service delivery. Presently more than 140 Million mothers & ~120 Million children registered.
- **Nikshay–TB Patient Tracking System-** Tracking system to ensure treatment compliance. Missed Call Centre facility for reaching unreached TB patients. cases. Nikshay tracks and manages TB disease related information of a patient through his entire life. Presently more than 9.9 million public sector and 1.3 million private sector

IT Systems in improving Patient Safety (3/5)

- **Patient engagement in healthcare workflows** - Using Web based services such as Personal Health Record Management System (PHRMS) , portable devices and mobile applications for personalized (or patient-centric) health data storage, online access and sharing.
 - India has launched Mera Aspataal (My Hospital) application a Patient feedback system where patient can give feedback on the treatment received in a hospital. The feedback will help health facilities to improve functions of healthcare. Presently around 1.3 million feedback received and application is adopted by around 1100 Hospitals since launch 2016
- **Healthcare Devices and Equipments Interfacing** - Real time data collection from healthcare devices and equipments, eliminating manual data collection and entry (which are susceptible to error) leading to fast availability of lab reports to patients.
 - India is focusing on Telemedicine which offers scope to provide services in remote areas, Presently Pilots/nodes in select States have implemented, Nation-wide network under progress for telemedicine, e-learning and Tele-education. 50 Medical Colleges are being integrated in first phase.

IT Systems in improving Patient Safety (4/5)

- **Online Drug Dispensing** – Using software system for online drug dispensing directly to patient has brought safety, transparency and accountability. It prevents issuance of expired drug and Adverse Drug Reactions (ADRs).
 - India has developed National DRUG Codes as SNOMED CT Extension for common drug codes in prescription, drug inventory, distribution and the application is ready for launch.
 - Also Drug & Vaccine Distribution Management system is in place for supply chain management system and is running in all public health facilities in 16 states.
- **Self Service Kiosk and Online Web Services** - Patients can easily check into hospitals without the help of medical administrators. Self service kiosk and online web services is an advanced healthcare technology that reduces patient wait time (Online Registration facility and Appointments), Registration and appointments through Self-Kiosk, Online Lab report view/print, hospital enquiry and also facilitate patients with easier payment methods.
 - Govt has launched Online Registration System for appointment scheduling system for tertiary care hospitals. It is used by more than 140 Hospitals and 1.3 million appointments have been done online since 2015.

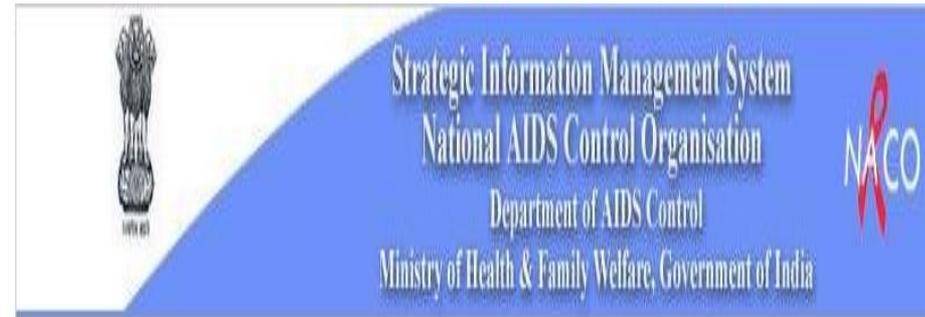
India has also developed Integrated Disease Surveillance Program (IDSP) for strengthening of disease surveillance system for epidemic prone diseases to detect and respond to disease outbreaks.

- Presently, 18 disease conditions are on routine surveillance Outbreaks are investigated and responded through trained Rapid Response Teams (RRTs) trained at apex institutes.
 - 1935 outbreaks in 2015
 - 2679 outbreaks in 2016
 - 1714 outbreaks in 2017

- All districts reporting data into the system on 33 disease/ conditions. Outbreaks reported by states (lab confirmed)

Patient safety through Safe Blood Transfusion Services

- Blood and blood products being of human origin, risk of transmission of infections and other adverse reactions can compromise patient safety.
- Steps taken include:
 - Mandatory licensing of blood banks: 2903 licensed blood banks in India
 - Mandatory testing for HIV, Hepatitis B, Hepatitis C, Malaria and syphilis: 11 million units tested per annum
 - Adverse reactions through blood are monitored through a hemovigilance programme: 7722 reactions reported in last three years



- 2712 Blood Banks registered on website of NBTC and reporting on Strategic Information Management system for effective monitoring
- 1200 blood banks update real time stock status on E Rakt Kosh
- 658 blood banks are enrolled in Haemovigil software

Thanks