

# THE AWARE CONSUMER

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## IN FOCUS

World Patient Safety Day &  
Observation of Indian  
Medical Colleges

## OUT OF THE BOX

Technology Enhancing  
Patient Safety Standards



## THE LAST MILE

Patient Monitoring System  
Helpful in Patient Safety

## PATIENT SAFETY

**PLUS**

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### Campaign Partners



# VIEWPOINT

BEJON KUMAR MISRA | bejonmisra@consumerconexion.org

## Analyzing Causes of Patient Safety Improvement

**PATIENT SAFETY IS** defined as "the pursuit of the reduction and mitigation of unsafe acts within the healthcare system, as well as the use of best practices shown to lead to optimal patient outcomes." There are many aspects of patient safety, and it's important that everyone involved in patient safety, including patients, their families, and healthcare professionals, be aware of the issues, mitigation strategies, and best practices for ensuring patient safety for everyone.

It is important to be aware that improving patient safety involves more than the tangible policies and procedures and learning about the latest drugs and interventions. It is also about the effective team working and learning from mistakes.

Much of this learning arises from understanding the human factors involved.

There is never one cause of any accident. There are causal factors which may be already recognized and staff may have an unofficial "workaround", and there are unrecognized dangers. There are failures of the system itself and, of course, the ever-present, unavoidable "human error".

Essentially, there are two types of error, as follows.

**Latent failures:** failures of policies, decisions, and culture that are an everyday part of organizational life (resource allocation, staff training, documentation provision, management, etc).

**Active failures:** errors of front-line operators (eg doctors, nurses, allied health professionals and administrative staff).

Since it is not possible to stop humans making errors, it is necessary to analyze what circumstances and environmental factors lead them to make mistakes, try to prevent those mistakes that it is possible to do so, and tailor the systems to allow for mistakes without endangering patient safety.

It is essential to create a risk-conscious culture, in which all staff is actively encouraged to speak up about safety concerns and in which their input is valued. If this "speaking up" does not occur, then the single most valuable source of information will be cut off at the source. Only visible threats are manageable and therefore potentially avoidable.

Medical errors, or "any preventable event (such as a mistake related to medication, a mistake in diagnosing or treating a condition, or a problem with medical equipment) that may cause or lead to unintended outcome or patient harm" needs to include a return to patient-centeredness.

Even though patient centered care is widely understood to be

a key component for enhanced health care, the term is interpreted in a number of different ways in medical literature. Definitions of patient-centeredness range from patient satisfaction about interactions with health care providers, to the role of patient/physician attitudes, to how health care systems might affect patient-centered care.

When we talk about patient safety, we're really talking about how hospitals and other health care organizations protect their patients from errors, injuries, accidents, and infections. While many hospitals are good at keeping their patients safe, some hospitals aren't. As many as 1.5 million people die every year from preventable errors in hospitals. It's up to everyone to make sure that patient safety is the number one priority at every hospital across the country. Some hospitals have hidden dangers, but there are things one can do to protect themselves and their loved ones.

Patient safety is a serious global public health issue. In recent years, countries have increasingly recognized the importance of improving patient safety. According to the WHO, 50% of medical equipment in developing countries is only partly usable due to lack of skilled operators or parts. As a result, diagnostic procedures or treatments cannot be performed, leading to substandard treatment.

Patient safety is a fundamental principal of healthcare. Medical care occurs in complex systems. The goal of a Health care organization is to deliver safe, high quality health care to patients. Despite the best intentions, however, a high rate of largely preventable adverse events of medical errors occur that cause harm to the patients. Adverse events also increase costs for additional treatment, claims and litigation. There is a need to have a culture that overtly encourages and supports commitment to patient safety, open communication in a blame free environment. We need to develop safety designs and reporting mechanisms for any situation or circumstance that threatens, or potentially threatens, the safety of patients or caregivers. The system should be able to view the occurrence of errors and adverse events as opportunities to make the health care system better.



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Max Healthcare is working towards making quality healthcare available to every person in India through adoption of innovative technologies.

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The importance of patient education is an example of critical study and evidence based practice by nurses that has shown that knowledge, can reduce re-admission rates, decrease healing time, improve mental discomfort.

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Hand washing is one of the most important actions to prevent the spread of infections and therefore prevent loss of health, or even death. Hand washing will also protect health workers from infection and save money by reducing the need for expensive treatments once infection has occurred.

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Bejon Kumar Misra  
EDITOR & PUBLISHER  
Address: F - 9, Second Floor, Kailash Colony,  
New Delhi - 110048  
E-mail: bejonmisra@consumerconexion.org

## EDITORIAL CONSULTANTS

S. Krishnan  
Suman Misra  
Pawendra  
Pyush Misra

## DESIGN

SR. CREATIVE DIRECTOR: Pooja Khaitan  
DESIGNER: Galaxy  
WEB DESIGNER: Manish Mohan

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For any queries, please contact us at  
pooja@consumerconexion.org  
Phone: 011-26271421/22/23

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PROF. DIDIER PITTET

WID CO-FOUNDER, UNIV. OF GENEVA HOSPITALS, SWITZERLAND

"Hand hygiene is a central pillar of infection control. The first Global Patient Safety Challenge has seen hand hygiene improvement act as a gateway to health-care facilities turning their attention to broader infection control and patient safety improvement.



# ROUNDUP



PATIENT SAFE.  
It's up to ALL of us.

## PATIENT SAFETY

### Introduction, Knowledge, Evaluation & Objectives

#### Patient Safety in Indian Healthcare System

Since the rise of medical tourism, India has got global recognition and is considered for major and minor medical services. In the meanwhile, with such bolstering image all over the world, it's time to know the exact face of patient safety standards in Indian health care. Undoubtedly, people across the world traveling to India wouldn't have weak imagination and research work. The data collected from different sources must have strengthened their aspirations, approaches, and confidence to visit India seeking a supreme level of medical services.

#### A Way towards Knowing Indian Patient Safety

##### Standard of Patient Safety

Public patient safety asks for registration, and re-registration, certification, and re-certification along with regular professional education of healthcare. These are available for three diverse categories of health care workers. Additional exploration and detailing is also required and can be pursued in association with National and State respective councils, State Health Directorates, and similar agencies.

#### DATA BRIEFING

In low- and middle-income countries, adverse events may develop from unsafe care in as many as 18.4% of patients, with **30%** of those events leading to the patient's death.

However, it is tough to approximate the proper number of adequately trained and skilled healthcare workers in India. Numerous training takes place under the name of different programs and projects for educating patient safety workers, at various levels of governance (central and state) and health care (from primary through tertiary) organizations but in many incidences these trainings and programs along with number of participating and trained staff are not well maintained.

**Timely Evaluation is Also Necessary-**

Timely evaluation made by Government authorities, institutional bodies and private organizations would help in increasing awareness and understanding of primary patient safety principles and practices in various categories of healthcare in which patient safety workers are not included in public sector. Information collected from the private sector is also required for its further/better evaluation.

While patient safety treated as a separate topic may not be available in various curricula, concepts along with numerous elements of patient safety are also seen across different syllabuses including undergraduate, postgraduate and regular medical education.

Separate patient safety syllabus should be incorporated in Medicine & Bachelor of Surgery (MBBS) curriculum, which will cover well-known basic concepts to aspects such as communication, facility management, etc to raise the quality of overall Indian healthcare structure.

STGs (Standard Treatment Guidelines) and other practices are available in the most imperative national health programs (TB, HIV/AIDS, Neglected tropical diseases (NTDs), Maternal and Child Health (MCH), etc.). Under CEA, the STGs for 215 medical conditions for 21 specialties have been approved and that is an added benefit. Different STGs and SOPs may be available for similar disease/condition/procedure, especially when compared to private and public sectors.

IPHS, Indian Public Health Standards get various elements of patient safety and infection control to ensure healthcare quality remains optimum. However, it's not compulsory as there are some reasonable choices to adopt and execute these standards. These standards run from sub-center to district levels.

Key elements including fire safety, device safety, along with the physical safety of health care amenities are also essential in the Indian perspective and that must be included in the Indian Public Health Standards.

**Prevention and control of HAI**

NCDC, National Centre for Disease Control acts as the key source for executing Anti-Microbial Resistance (AMR) program. It has identified 10 network laboratories in the first phase to start antimicrobial resistance scrutiny of four general bacterial pathogens of public health concern to find the trends and



magnitude of AMR in different geographical regions of the country.

NCDC has published a short and temporary set of guidelines on its website as a readymade reference for the hospitals to start executing infection control practices in their organizations. ICMR also come to the center issuing infection control guidelines. There are other sorts of guidelines available made by institutions/ under various programs, e.g.

Hospital Manual national by DGHS, RMNCH, and NACO manual. HAI reporting has no structure at any level and there is no administrative body to collect, analyze and report HAI at the national

level.

To raise the bar of patient safety, an advance institution based procedure for infection controls have been created, but due to lack of integrated national level program, there is no such growth at any level. A network of laboratories for Antimicrobial Resistance surveillance created by NCDC and ICMR is although functioning to makeup the deficiency.

For patient safety, biomedical waste management is critically important and thus, the BWM rules were first implemented in 1998. The rules are being revised comprehensively in the recent times and have helped in regulating the biomedical waste management by healthcare institutions. 3 years back, National Guidelines on Clean Hospitals were published to ensure a quality environment for pre and post medical treatment of patients. The Government of India (GoI) launched Kayakalp program to augment general cleanliness and hygienic conditions of the hospitals.

A specialist group by the PMO office is given charge of national recommendations which have been discussed in Ministry of Health with all the central government hospitals for the execution of sterilization practices.

In the RMNCH program, environmental plan and infection management was introduced in 2007 and executed at the national level. Similarly, in the course of outbreaks, the separate rules for infection prevention and control are being released. At the DGHS level, the central public hospitals have a hospital manual with elements of infection control which is executed with sincerity. Developed in 2006, NACO manual for infection control is available in the public domain.

It was seen that sporadic institute based system does occur, but not at the country level, and a lot of actions are occurring that have not been institutionalized.

Hospital Infection Control Committee are compulsory in affiliation program/s. The main involved in the committee could lead the facility (administrator/manager), biomedical engineer with illustrated roles and responsibilities (e.g., biomedical engineer is responsible for doing construction and maintenance, which is also a major element in infection prevention and control), key clinicians, lab specialist/microbiologist. Presently, only 192 combined Biomedical Waste Treatment Facilities (CBMWTF) occur in the nation against the needed 500 to 600. Enforcement of biomedical waste management must be done on a priority basis. ▶



# Patient safety in different programmes

**S**till today, a national policy and plan for surgical services at different levels of health care have not been thought about. Surgical checklist is not evenly implemented. As such 24x7 Indispensable Surgical care standards for numerous trauma, abdominal emergencies e.g. perforations, obstructions etc. at First Referral Units (FRUs) are needed.

24x7 Major Emergency Obstetric and Newborn Care (BEmONC) and Complete Emergency Obstetric and Newborn Care (CEmONC) advantages up to community health center (CHC) level are open in most of the states.

Various rules for even up to Primary Health Centre (PHC) level are accessible; JananiSurakshaYojana, JananiShishuSurakshaKaryakaram, BEmONC, CEmONC, Integrated Management Neonatal Childhood Illnesses, Indian Public Health Standards, Sick Newborn Care Units, and, SBA. In any case, private sector institutionalization of the provision of desired services is tremendously needed.

National Centre for Disease Control, Safe Injection Guidelines by Indian Academy of Pediatrics and new Policy Guidance by WHO are accessible.

A magnificent surveillance of Needle Stick Injuries (NSIs) in all affiliated hospitals is used. Improved compliance with Biomedical Waste Management (BWM) rules in both public and private organizations are conceived. But the data is internal and bigger picture of issue of NSIs isn't accessible. This is a noteworthy occupational hazard and a large number of the episodes are not getting announced.

Variable execution of the rules, particularly in private sector, is vital to address. Direction by National and state level for usage and monitoring, selection of WHO guidelines across India is needed.

Guaranteeing all healthcare providers are immunized against Hepatitis B (National Health Policy Recommendation) and waste handlers against tetanus is pivotal to assure safety from occupational hazards of health care providers. Accessibility of Post-Exposure Prophylaxis (PEP) or needle stick wounds at all causalities/Operation Theaters (OTs) and other mediation destinations are a major missing area.

As prescribed in an expert group's meeting on injection safety in 2016, a section on injection security ought to be made a part of MBBS curriculum. MCI and NCI ought to embrace modules on this current recommendation by the expert group.

Since frontline health workers such as ASHAs and other village level volunteers are effectively involved in diagnostic practices, for example, taking rapid diagnostic tests (e.g. for malaria) through finger pricking and as such, BWM practices should come to the frontline health workers to guarantee their safety and in addition patient safety.

Important Drug List is accessible and is being

prescribed and practiced by the government institutions. High-Quality control by DCGI at manufacturing level is accessible. National STGs for general health conditions are accessible.

Medical institutions collect information and inputs related to adverse drug reactions. National Portal is available for registering instances of spurious drugs. In the dispersed mechanism of drug storage, at the sub-district level, safety standards are not sufficiently followed.

Blood is explained as a "drug" under the Drugs and Cosmetics Act and Rules, therefore blood banks are taken as manufacturing units and only work under a license issued by the State Food and Drug Administration (FDA) with approval of DCGI.

All units of collected blood through licensed Blood Banks go for mandatory screening for hepatitis B virus (HBV), human immunodeficiency virus (HIV), Malaria, Syphilis and hepatitis C virus (HCV), before being released for transfusion.

National Blood Transfusion Council gives policy directions to each and every licensed Blood Bank to be executed through respective State Blood Transfusion Councils.

All blood banks report to NACO/ National Blood Transfusion Council (NBTC) with the help of Strategic Information Management System (SIMS). Apart from that, a web- cum-mobile application was developed on the National Health Portal, which helps to find the nearby blood banks, available blood groups and units accessible.

NACO/ NBTC has recently released a standard Assessment Report of 2626 Indian Blood Banks and gaps in quality of Blood Transfusion Services have been recognized.

DCGI approves a few national medical device regulatory and monitoring programs but in a limited number.

Clinical Trials Services Unit (CTSU) covers medical devices. A draft bill is in the public field. A separate legislation is in the offering. And more to that the product act is coming pertinently as part of the new consumer protection act which would go to the parliament.

In fact there is no much efforts done on medical device safety in India. A Health Technology Assessment Division occurs in NHSRC and that was lately designated as a WHO Collaborating Centre. Good Manufacturing Practices (GMP) approves safer medical devices and there is existence of WHO standards for infection control and patient safety.

Biomedical engineers should be given full employment in order to bring advance medical devices so that most of the deaths which occur in coronary care unit (CCU) occur due to failure of machine could be stopped.

Implementation of BWM rules which cover chemical/ cytotoxic, infectious plastic, and glass waste should be stopped. Although it does not cover medical tools other than syringes and plastic waste. ▶

# GUIDING PRINCIPLES



**ARTICULATING HEALTH SYSTEM approach:** Invest more in strengthening the healthcare system as a whole across all its core elements:

Ensure health services which deliver effective, safe, quality personal and non-personal health interventions to those that need them, when and where needed, with minimum waste of resources

Invest in a well-performing health workforce that works in ways that are responsive, fair and efficient to achieve the best health outcomes possible, given available resources and circumstances (i.e. there are sufficient staff, fairly distributed; they are competent, responsive and productive)

Establish and maintain a well-functioning health information system that ensures the production, analysis, dissemination and use of reliable and timely information on health determinants, health system performance and health status

Ensure equitable access to essential medical products, vaccines and technologies of assured quality, safety, efficacy and cost-effectiveness, and their scientifically sound and cost-effective use

Design effective and efficient health financing system that raises adequate funds for health, in ways that ensure people can use needed services, and are protected from financial catastrophe or impoverishment associated with having to pay for them

Strengthen leadership and governance to ensure strategic policy frameworks exist and are combined with effective oversight, coalition building, regulation, attention to system-design and accountability

**Defining evidence-based interventions:** Prioritize and implement those interventions that proved to be effective and efficient in improving patient safety at global, regional and country levels. Continuously invest in evidence generation to

ensure the required adjustments throughout implementation.

**Targeting all levels of care:** Bring patient safety to the core of healthcare provision given its cross-cutting nature and applicability to all modalities of healthcare provision, including prevention, diagnosis, treatment and follow up.

**Adopting patient-centric approach:** Put the patients in the centre and involve and empower them to become equal partners in ensuring provision of healthcare that is respectful of, and responsive to, individual preferences, needs and values, and ensure that patients value the guide to all clinical decisions.

**Promoting collaborative action:** Engage all stakeholders to improve patient safety - not only within, but also outside the health sector. There should be not only healthcare workers,

health managers and decision-makers but also patients and their families, professional organizations, civil society and media. Everybody has different, but crucial role to play in patient safety. While it is important to recognize these differences in roles and responsibilities, it is equally important to recognize the connections between them.

**Ensuring sustainability and monitoring progress:** Make interventions sustainable through addressing patient safety as policy objective with strong political commitment and respective institutionalization efforts and monitor implementation of interventions at different levels; national, sub-national and institutional levels with collectively agreed key performance indicators. ▶

## Objectives

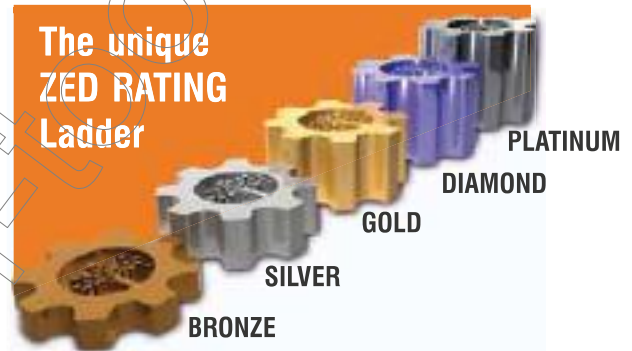




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### HIGHLIGHTS

- A scheme by Ministry of MSME, Govt. of India
- Certification on the systems and processes of MSMEs
- Handholding MSMEs towards world class manufacturing
- Special emphasis on MSMEs supplying to Defence Sector
- Direct subsidy to participating MSMEs
- Creating a credible database of MSMEs for OEMS/CPSUs/Foreign Investors under "Make in India initiative"
- Quality Council of India (QCI) to function as the NMIU (National Monitoring and Implementing Unit) of the scheme

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"Let's think about making our product which has 'Zero Defect'; so that it does not come back (get rejected) from the world market and 'Zero Effect' so that the manufacturing does not have an adverse effect on our environment."

**SHRI NARENDRA MODI**  
Hon'ble Prime Minister



# CONSUMERS, BEWARE !!

## Patient Safety Education Improves Healthcare Standards

**ONE OF THE** most difficult challenges facing health care and education institutions is to manage change while continuing to fulfill the day-to-day mission. Quality improvement, service and curriculum development, as well as staff training and education all require dedicated professionals who will lead and be accountable. Partners Medical International helps to develop programs that provide leadership teams with the tools to take their institutions to the next level.

Reports in medical literature indicate that large number of deaths occur world over (many even go un-reported) due to errors in medical care which are otherwise preventable.

Patient Safety has become one of the most important factors in the healthcare and concerns equally to all the stakeholders. Ensuring patient safety requires open communication between physicians, hospital staff, patients and their families. It is our belief that everyone has a role in patient safety and in creating a safety culture in the hospital.

AHPJ will educate members on all aspects of patient safety. It will provide comprehensive guidance on Patient Safety



Protocols. It will initiate development of Standard Treatment Guidelines based on evidence based clinical pathways.

**Safety can be implemented if following initiatives are taken:-**

1. Leadership Initiative
2. Organizational commitment
3. Culture of safety
4. Routine audits and proactive Risk assessment of the Hazards
5. Implementation of safe practices and Identified Improvement

6. Educate Health care Providers , Visitors , Patient and Family
7. Accountability for patient safety

### **PATIENT SAFETY GOALS**

The following are the International patient safety goals and Implementation of these reduces many Healthcare errors:-

1. Identify Patients Correctly
2. Improve Effective Communication
3. Improve the Safety of High-alert Medications
4. Eliminate Wrong-side, Wrong-patient, Wrong-procedure Surgery

5. Reduce the Risk of Health Care-acquired Infections
6. Reduce the Risk of Patient Harm Resulting from falls

### Safety Culture Initiatives-

#### Leadership Initiative:

Improving patient safety should be among the highest priorities of healthcare leaders and managers. Healthcare executives should embrace error reduction as a key strategic priority and make patient safety improvement an ongoing active process in their organizations.

To achieve reduction in healthcare errors, requires concerted efforts in terms of infrastructure, creating a culture of safety, implementing error reporting systems, providing safety training, to name a few.

Patient safety work should be built into the schedule of healthcare executives and managers and this work should be regularly reviewed with the management team. Healthcare CEOs and senior clinical leaders need to be present and engaged when patient safety issues are discussed.

Healthcare leaders should strive to make their management teams and staff take ownership for improving patient safety.

#### Organizational commitment:

Patient safety Improvement activities should be led by committed leadership and supported by dedicated resources. Patient safety improvement program encourages the identification of errors and hazards; evaluates their causes; and then takes appropriate action to improve performance. Safety Practices should be reviewed on a regular interview to ensure the implementation.

#### Culture of safety:

A healthcare culture of safety should be an integrated part of individual and organizational philosophy and values that identifies hazards and risk that result from the process of care.

A healthcare culture of safety promotes understanding and reporting of the errors and incidents. Culture of safety facilitates reporting of errors and safety concerns in a



non-punitive environment as culture ensures analysis of the incidents and errors which help in improvement of the healthcare processes.

#### Routine audits and proactive Risk assessment of the Hazards:

Healthcare providers should routinely conduct self-assessments, or audits, to identify error-prone or high-risk processes, systems, or settings. A proactive Risk assessment ensures the hazards and by which risks get identified before they occurs. This should be done for all the clinical, Managerial, infrastructure processes.

#### Implementation of safe practices and Identified Improvement:

Safe practices are published and shared by National and International accreditation agencies which should be implemented and practiced by organizations to ensure an error proof processes. All identified Improvement after analysis of incidents and errors should be implemented across hospitals and reviewed to ensure the implementation and sustainability of the process.

### Patient Safety Goals

#### Identify Patients Correctly:

Patient identification is an important process while providing any services. Using of two identifiers is the best practices as patient's location or room number alone is not the right way in identifying a patient.

#### Improve Effective Communication:

Follow a verification process like read back or repeat back to ensure all the orders verbal or telephonic are verified before administering.

#### Improve the Safety of High-alert Medications:

To avoid medication error, storage and administration of all high Alert medication (concentrated electrolytes, including, but not limited to, potassium chloride, potassium phosphate, sodium chloride >0.9%) are ensured as per the protocol.

#### Eliminate Wrong-side, Wrong-patient, Wrong-procedure Surgery:

To eliminate Wrong-side, Wrong-patient, Wrong-procedure, time out procedure has to be followed.

#### Reduce the Risk of Health Care-acquired Infections:

To reduce the HAI, Hand Hygiene process and guideline has to be implemented and all caregivers should be educated and trained about the same.

#### Reduce the Risk of Patient Harm Resulting from falls:


To decrease or eliminate any identified risks of patients falling, assess and periodically reassess the potential risk associated with the patients.

Safety culture has to be established in all the Healthcare Organizations to eliminate risk to the patients during the care process and ensure the safety to all the patients, family and staff. ▀

# RESEARCH FEATURE

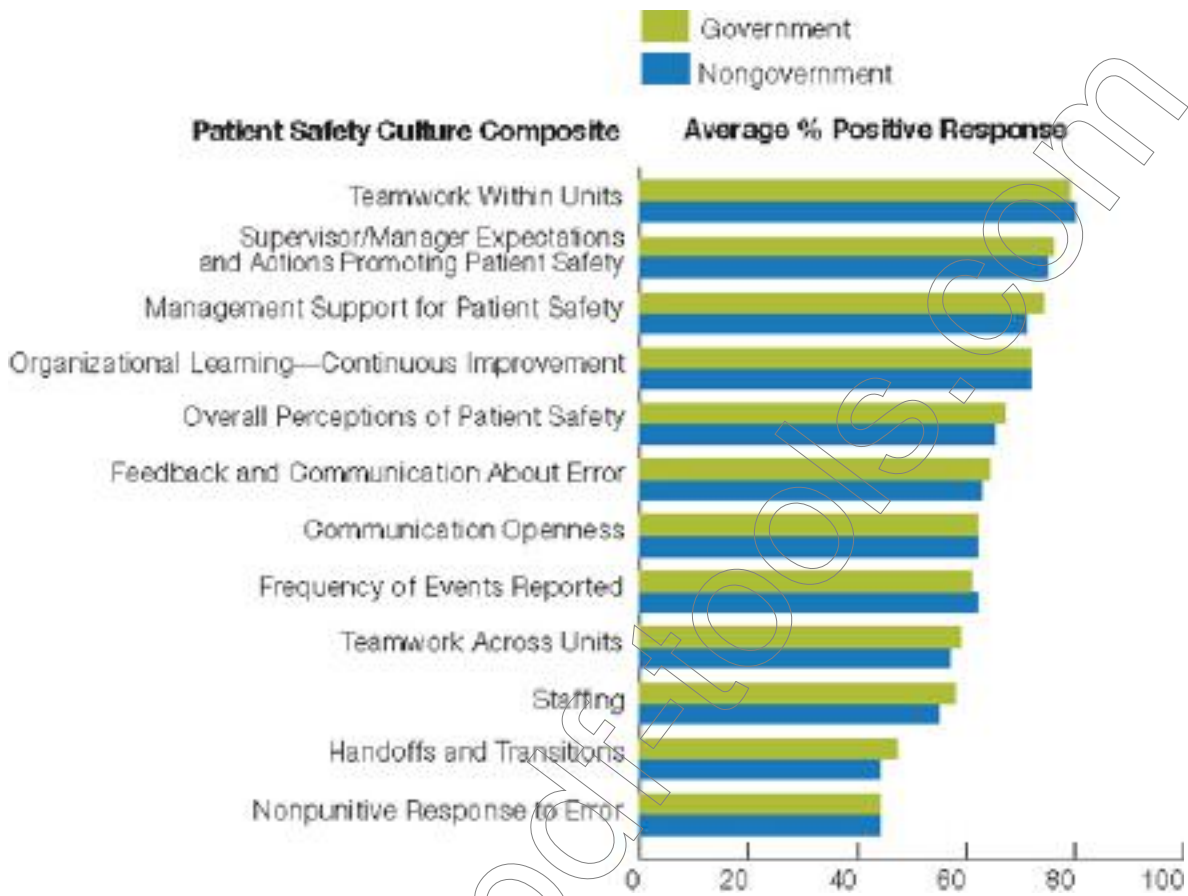
Complete Market Analysis of Patient Safety In India

## QUALITY, STANDARDS AND PATIENT SAFETY



India's health care sector is poised at a crossroads, and the direction taken now will be critical in determining its trajectory for years to come. In a recent study on the Indian government's health care policy, we argue that it should prioritize expanding and effectively delivering those aspects of health that fall under the definition of "public goods" for example, vaccination, health education, sanitation, public health, primary care and screening, family planning through empowering women, and reproductive and child health.

These are all aspects of health with significant externalities and thus cannot be efficiently provided by markets. Large gains in the nation's health, and particularly the health of the poorest and most marginalized, can be made with this limited focus. As just one estimate, a 2010 World Bank study showed that India lost 53.8 billion USD annually in premature mortality, lost productivity, health care provision and other losses due to inadequate sanitation.



**Not about the money: Reforming India's management systems**

Importantly, these gains can come very cost effectively, as demonstrated by India's neighbors Bangladesh and Sri Lanka, which spend less as a percentage of GDP on health than India, but have better outcomes. It is not an expansion in spending that is critical for improving health outcomes: Instead, India needs to set appropriate goals and reform the public health care sector's governance and management systems so that it is able to deliver on those goals. Evidence gathered globally and within India suggests that without good governance, additional spending would be worth little. One potential model to adopt is to set up publicly owned corporations at the state level that can take over the existing state health infrastructure and health delivery operations, thus permitting greater flexibility in management than the government's notoriously inefficient and hidebound administrative systems.

**Quality in healthcare has been a very recent phenomenon in our country. The quality in healthcare means saving life of the patient.**

Today we have got NABH which is an internationally acclaimed society for quality in healthcare. Accreditation relies on establishing technical competence of healthcare organizations in

terms of accreditation standards in delivering services with respect to its scope. It focuses on learning, self-development, improved performance and reducing risk. Accreditation is based on optimum standards, professional accountability and encourages healthcare organization to pursue continual excellence.

Why quality in healthcare is still a farfetched concept is because the demand supply ratio controls the quality. Demand still is huge and supply is very limited and with these circumstances you can't build quality. This is a very simple market phenomena but today 83 percent expenditure in healthcare is coming from the private sector. So hopefully in the next five years the demand and supply issue should be appropriate when supply of quality healthcare will increase. NABH has done something wonderful. A framework is available from NABH but in so many years only few hundreds of hospitals got accredited. It is to see if the demand for accreditation increases in the years to come so that more and more healthcare providers go for accreditation.

India needs a healthcare system that can meet the demand of over a billion people. Each year 39 million people are pushed into poverty because of their inability to meet healthcare costs. India leads the world in terms of maternal deaths. 5,70,000 maternal deaths in 2010, MMR 212 as against 109 of MDG in



2015. Dearth of qualified medical professionals in rural areas is observed. Health insurance covers only about a fifth of the population. Unorganized private sector accounts for almost 80 percent of outpatient healthcare. This is the canvas on which we are talking about the quality standards, patient safety and improvement. There has been a paradigm shift in healthcare delivery mechanism. Today from large public sector hospitals, we have corporatization happening with a chain of clinics, day care centers and primary health centers coming up in places such as Podukota, Trichy and Madhurai. In Trichy hospital qualified pharmacists are working, which is a good improvement. When you say a particular hospital is approved or recognized by any insurance company, they also look for some standard requirement and that is indeed a very basic requirement. Insurance company, whether it is private or public, also introduces some kind of standardization and quality parameters. Some standards developed by NABH should be more precise.

Quality is an attitude, if you don't have that attitude you will never have Quality. Accreditation is very important. Its like passing a test; you get to have a degree but that is only a degree, it does not give you a stamp of high quality. We have 1.2 billion people's views taken on that. There should be quality healthcare for all. We've heard about health infrastructure which is improving, we've heard about quality accreditation which provides NABH, NABL, etc. We have a lot of data that needs to be transferred to intelligence which then is used for all quality standard, etc.

Indian hospitals are gaining reputation as high quality service providers, several new projects with world-class infrastructure, quality driven organizations are investing in latest equipment, IT, SOPs and patient-centric delivery systems. Medical service excellence is achieved to ensure best patient experience and clinical outcomes. There is a program in the US which is called WINGS. It is supported by an insurance company, which creates the same concept which is used in a plane. As per the initiative, when you get into the plane whether the pilots have flown the aircraft 50,000 times or once, they all need to go through the check-list. That check list is regardless of who the person is. The checklist is verified by five or ten people before the plane flies. Same thing needs to be replicated in healthcare. Issues that lead to medical errors are majorly due to four most important things. These are communication, orientation/training, patient assessment and staffing ratios. If you address just four of these, you actually take



care of very significant reduction of lots of these events which happen. So there are a lot of factors which need to be addressed when we talk about quality and standard.

Vision of GVK EMRI is to respond to 30 million emergencies and save 1 million lives annually, to deliver services at global standards through leadership, innovation, technology and research and training. And for that these factors of safety are very important. Quality care is a very important standard. The organization thought that we need to be proactive by creating a leadership liverish technology. Do not be complacent about yesterday's glory but ensure that there is a significance innovation & refinements on continuous spaces and capacity building research so that the efficiency and effectiveness can also be enhanced.

This organization has attempted in the pre-hospital care by an ambulance based emergency response services. Developed detailed process understanding and well-defined responsibilities throughout the organization. They have started a very unique process where the patient uses three digit numbers-108. They have established an emergency response center; only with a focus that they can quickly identify the exact location. They have also realized that the medical emergency should also have police emergency integration.

### Adopting Technology to Redefine Medical Education

Patient safety is improving the system by learning where people fail and not by holding people accountable for failure-John R Clarke

Patient safety in the operating room has long been a concern for hospitals. Numerous initiatives to improve the care have had some impact, but problems persist.

### Patient safety lacks system-

When we talk about patient safety and quality, we mean prevention of harm to patients while receiving healthcare. It is about eliminating preventable medical mistakes, guarding against the impact of human errors, establishing systems to safeguard patients. Quality means continuous improvement.

NABH accreditation plays a major role in healthcare delivery systems in India.

World Alliance for Patient Safety (WAPS) was formed in 2004 and its a great initiative. Momentum to this movement came only after initiative was taken to include Patient Safety in July 2007. Jakarta Declaration was

made for our Southeast Asia Region, which highlighted the role of involvement of Patient for Patient Safety. The Foundation urges member states to engage patients, consumer associations, healthcare workers, and professional associations, hospital associations, healthcare accreditation bodies and policy makers in building safer healthcare systems and creating a culture of safety within the healthcare institutions. Our challenges in patient safety is lack of systems in our hospitals and other healthcare institutions, lack of awareness/ realization of its importance even among the healthcare providers, no scientific data base is available and lack of dedicating funding for promoting patient safety.

The healthcare sector of the nation and nursing are two inseparable fields like two sides of a coin. WHO bulletin says 24 million nurses are required in India. Increasing the number of nurses and midwives alone is not sufficient. Improving capacities, nursing services and healthcare delivery require concentrated, strategic interventions to improve the quality of nursing and midwifery education. Nursing education is a very demanding task and the situation at present times is that it is multi-factorial and complicated. It is good for nursing and midwives to learn the teaching methodology that is used in nursing like the theory, lab procedures and actual patient care. In Andhra Pradesh, there are increasing number of institution and the number of seats, multipurpose health worker schools are 301, school of nursing for GNM program around 400, and the colleges of nursing for BSc Nursing program is 216+, 13 post basic program and 25 MSc Nursing program, facilities for nursing education are needed in various ways. There should be infrastructure and building. Teacher and faculty is a major problem because a nursing teacher should be an expert nurse herself. There is a problem of gender also as in India most of the nurses are women, there is also medical domination in most of the hospitals and healthcare settings.

### IT for Healthcare Delivery

When the Prime Minister announced, in his Independence Day address of 2011, that health would be among the foremost priorities of the 12th Five-Year Plan (2012-17), it was both an admission that health has been hitherto an area of great neglect and a promise that policy would now accord it the priority it deserved. Are we now on that path? Can technology come handy in taking us on that path?

### Vision for all inclusive healthcare

If you look at today's standards, India will equate its healthcare professional ratio to the number of patients in year 2022. Hospitals to fulfill this demand is impossible because the demand is way too much than supply. The geographical and rural footprint for healthcare is not adequate. 70 percent of the population in India is rural and there is no way of reaching doctors who are living in urban areas. So a section of population in India do not get proper healthcare. Technology has to fill this

gap especially in large private hospitals. So far, they all have failed due to non-capability to capitalize the opportunities, poor quality of healthcare and non-transparent pricing. In last 50 years, the big private hospitals could not rise up to the challenges or create some regulations and standards. Nowadays, hospitals are forced to optimize their operations for profitability and customer satisfaction for survival. There is lots of push and pull in the whole landscape where we have to perform like any other corporation. The growth of specialized healthcare facilities as retail healthcare is booming in India. There are lots of hospitals that are coming up with 100 beds, 200 beds or 75 beds; all are specialty centers. So specialized healthcare has arrived. Consumer empowerment is now the trend among the masses as everybody has access to a smart phone, ipads for maintaining their health record, blood sugar level, stress level and self-monitoring.

The Integrated healthcare eco-system is now cloud based. This is a much untapped green field where the major IT companies are not able to capture big private hospitals. Government is struggling in their own way, so there is a need to open the doors for small players to get into the market and optimize. The biggest challenge is the enormous data that comes from various different sources. People do not want to spend unnecessary money, but they want access to anywhere anytime healthcare at optimal cost. There is 3G, broadband, Internet; social media is playing a very active role in moving forward that something you cannot avoid. So now these elements like cloud computing, social media, smart consumer access are coming together and completely changing the landscape and this brings forth to us an interconnected world.

### Implementing IT is very important

IT helps a patient before he/she steps in the hospital and when steps out too. For driving better healthcare services, six parameters that include quality, safety, effectiveness, patient-centeredness, timeliness, efficiency, and equity is important. Wide role of IT is implemented in front office, inventory, human resource, application management, finance and budgeting, life science, clinical management and ancillary modules. Now mHealth is coming very aggressively. The top five mHealth areas of applications are appointment scheduling, patient information, tracking the patient, patient records and patient monitoring. We have designed Centralized Telephone Based Appointment System at Rainbow Hospitals. When a patient schedules the appointment, the system generates an SMS automatically. Video conferencing system plays a major role in medical consultation, treatment, meetings, trainings and demonstration of live surgeries.

### Indian Diagnostics: A Leap in the Dark

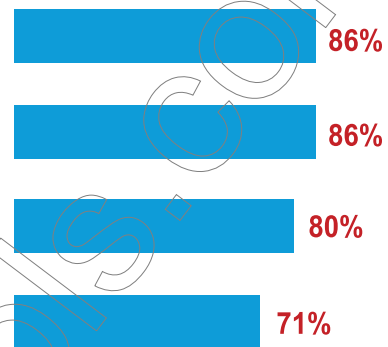
In vitro diagnostics (IVD) has seen much technological advancements that have benefitted the end consumers. India's diagnostic segment is so far dominated by

**Survey Items By Patient Safety Culture Composite**

**1. Teamwork Within Units**

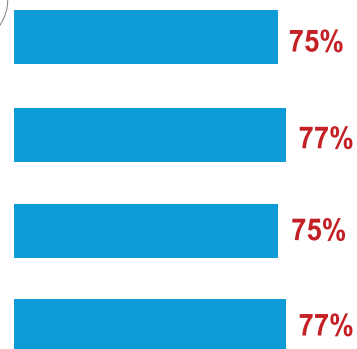
- 1. People support one another in this unit. (A1)
- 2. When a lot of work needs to be done quickly, we work together as a team to get the work done. (A3)
- 3. In this unit, people treat each other with respect. (A4)
- 4. When one area in this unit gets really busy, others help out. (A11)

**Survey Item % Positive Response**



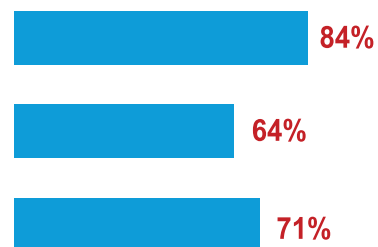
**2. Supv/Mgr Expectations & Actions Promoting Patient Safety**

- 1. My supv/mgr says a good word when he/she sees a job done according to established patient safety procedures. (B1)
- 2. My supv/mgr seriously considers staff suggestions for improving patient safety. (B2)
- 3. Whenever pressure builds up, my supv/mgr wants us to work faster, even if it means taking shortcuts. (B3R)
- 4. My supv/mgr overlooks patient safety problems that happen over and over. (B4R)



**3. Organizational Learning - Continuous Improvement**

- 1. We are actively doing things to improve patient safety. (A6)
- 2. Mistakes have led to positive changes here. (A9)
- 3. After we make changes to improve patient safety, we evaluate their effectiveness. (A13)



unorganized local players. However, there are no doubts few organized players too like Roche Diagnostics, Abbott, Tulip Group, Transasia Biomedical, Span Diagnostics, etc. are making their presence felt in this domain. As per the industry experts, the diagnostics market in India is witnessing a 20 percent growth which is faster than any country in the world. In the financial year 2011-12, revenue earned by the diagnostics sector is USD 600 million as against USD 510 million in 2010-11. The growth factors can be attributed to facts such as improved diagnostics tools, treatment monitoring, faster response times, and increased availability of over-the-counter (OTC) tests, which patients can perform in the comfort and convenience of their homes.

**Market facts**

The global IVD market is forecasted to grow at a Compounded Annual Growth Rate (CAGR) of 6.8 percent during 2011-18 to reach a value of 3, 61,500 crore (USD 72.3 billion) by 2018. The United States was the largest market for IVD and accounted for 50 percent of the global IVD market in 2011. The Asian region is expected to be ruled by the emerging economies such as China and India, showing the highest CAGR. China is the largest IVD market among emerging countries and Molecular diagnostics segment is gradually emerging as the fastest growing vertical in the diagnostics industry.

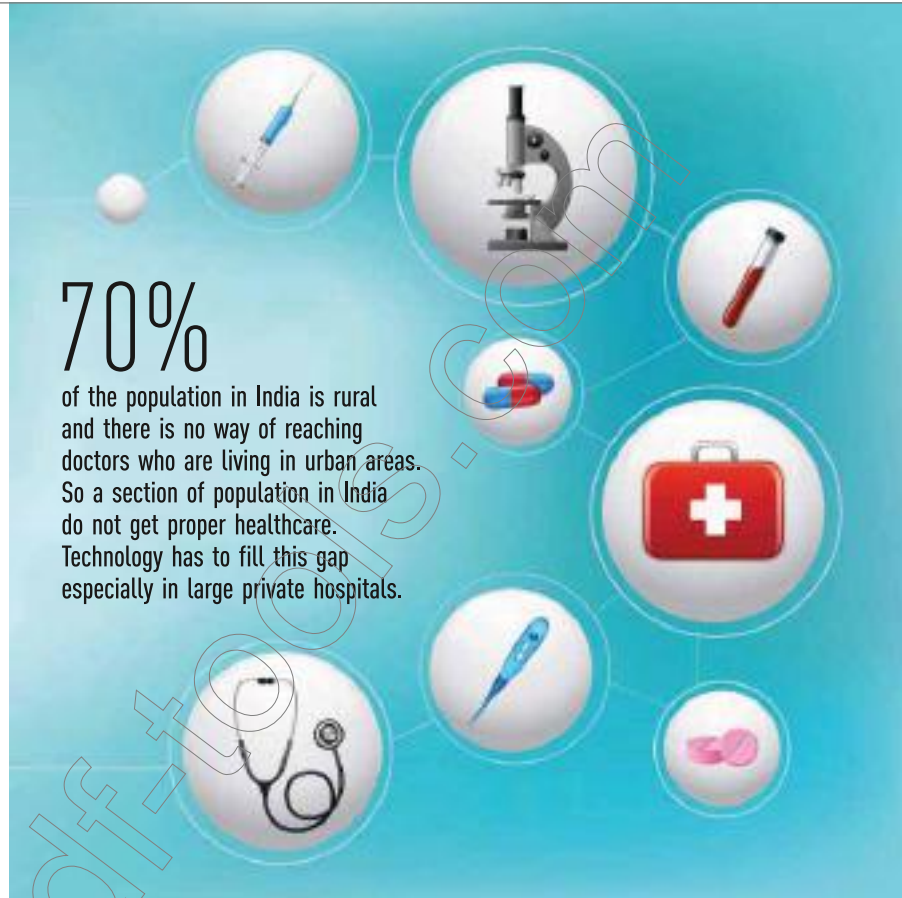
The pathology industry in India is around 10,000 crore and about 1,000 crore is managed by organized sector comprising handful of top laboratories. The industry is highly competitive and price-driven with kickbacks and business referral payments in the absence of a regulatory body.

**The sub categories**

The Indian diagnostics market can be broadly divided into equipment and services segments. The service sector is largely unorganized, with a large presence of players located at the regional or city level.

Backed by immense potential characteristics including a large population of qualified clinicians, huge number of patients, cost-efficient treatments, and a well-trained medical community, the lab services market, a leading segment of the Indian diagnostics market is estimated to only grow.

John Thomas, Managing Director, Agappe shares that the current IVD market is shifting gradually towards semi-automated and fully-automated laboratory instrument. The number of tests conducted in the last decade has doubled to over 500 million tests. The major reason is the increase in awareness coupled with increasing middle class income which is leading to the increased IVD tests. Recent advances in the areas of molecular level and genetic testing are dramatically changing clinical practice. New testing techniques are more sensitive and



specific and allow clinicians to detect, diagnose, and manage disease more effectively than ever before. Technologies that analyze DNA, RNA, and protein composition diagnose disease at initial level, permitting earlier detection and a more personalized approach to patient care.

Rajesh Pandya, Country Manager, Abbott Diagnostics, India, feels the market will exhibit steady growth in the future considering high patient population growth rate, increasing number of hospitals and diagnostic labs, innovation by pharmaceutical companies, unhealthy lifestyle leading to chronic diseases, demand for cost-effective, faster and sensitive results, increased affluence and increased healthcare awareness.

**Expanding horizon**

When around 70 percent of the treatment decisions in the country are based on lab results, Indian diagnostics players are too smartly putting their foot forward to meet the demand. They are too expanding their presence not only in India, but also in overseas territories like the Middle East and the United States. The spectrum of their test menu is expanding in the areas of genetics, cancer, endocrinology, infectious diseases, and molecular diagnostics. They are coming up with various business models to penetrate not only in tier-I, but also to tier-II and tier-III cities. The organized segment can explore the opportunities of expanding to semi-urban and rural areas and here mergers and acquisitions would likely be a route for expansion. ▀

## Market Survey of Patient Safety Standards



**The Partnership for Safe Medicines (PSM) India Initiative** along with International Alliance of Patients' Organisations (IAPO), Alliance for Safe Online Pharmacies (ASOP Global), Indian Pharmacopoeia Commission (IPC), U.S. Pharmacopoeial Convention (USP), and leading consumer organisations have worked with the Government of India (GoI) to organize the March 1 - 2, 2017 International Forum titled "Patient Safety and Access to Safe Online Pharmacies".

**A**lmost four million bed days have been lost since 2011 due to problems putting patients into community care once they have received hospital treatment.

A study concluded that the number of days lost is still on the rise with patients struggling to access post-hospital care in the community or in their homes.

The largest increase was between 2015-16 and 2016-17 when a 27% increase was recorded in the number of beds being taken by people who could be moved to other arrangements.

One factor could be the prevalence of older people staying within the community rather than in specialised homes. Since 2011/12 the number of ageing patients stuck in hospitals has more than doubled.

It suggests that the problem has a specific impact on older people because of the changes in post-hospital care and says that the issue puts patients at risk of psychological stress, infections and loss of mobility.

“These delayed discharge figures show the disastrous impact of our failing social care system on the NHS, as well as on older people themselves,” commented Caroline Abrahams, director of Age UK.

“Increasing numbers are being marooned in their hospital beds, losing muscle tone and risking infection when they are medically fit enough to leave, often because of acute shortages of social care, especially of the home visiting kind.

“There is no doubt that some older people's chances of a good recovery are being totally undermined as a result.”

“To add insult to injury, this ridiculous and sometimes tragic situation costs the tax payer over £173m last year alone, money that would have been much better spent giving older people the social care they need,” Abrahams continued.

“This is why the government must stand by its pledge to bring forward proposals soon for putting social care on a sustainable footing.

“In the medium and longer term we need new mechanisms so people can



“It is very important to engage and collaborate with international experts and organizations to learn from and adopt relevant global best practices as we leverage technology to enhance medicine access & quality for citizens of India.

pool their risk of developing care needs, but with winter approaching the immediate imperative is an injection of resources into social care and fresh efforts to tackle the galloping delayed discharge crisis that is threatening to engulf our hospitals.”

Bed blocking is an increasing issue within NHS hospitals and with winter approaching, health organisations such as NHS England have called on the government to urgently deal with the problem.

In addition, the King's Fund recently warned that the continuing decrease in available beds was “unrealistic”, citing the halving of beds in the last 30 years.

The Partnership for Safe Medicines (PSM) India Initiative along with International Alliance of Patients' Organisations (IAPO), Alliance for Safe Online Pharmacies (ASOP Global), Indian Pharmacopoeia Commission (IPC), U.S. Pharmacopoeial Convention (USP), and leading consumer organisations have worked with the Government of India (GoI) to organize the March 1 - 2, 2017 International Forum titled “Patient Safety and Access to Safe Online Pharmacies”. “It is always a good practice to engage with all the stakeholders, especially the Patients, whenever policy makers contemplate to change existing laws or bring new laws in the interest of

citizens,” said Shri Bejon Kumar Misra, Founder of PSM India Initiative and a leading activist in India on Patients' Rights and access to safe and quality healthcare. Govt. of India is considering changes to the Drugs & Cosmetics Act to enable sale of prescription medicines through digital platforms (herein after “medicines”).

“It is very important to engage and collaborate with international experts and organizations to learn from and adopt relevant global best practices as we leverage technology to enhance medicine access & quality for citizens of India. The Government is taking significant steps to strengthen the pharmaceutical supply chain right from the manufacturer to the consumer, and evolving a technology based model to enable this. We intend to deliver the best model to our citizens, providing eAccess with proper safeguards. Specifically, we evolving a mechanism to register all pharmacies, including ePharmacies, and creation of a National Portal to act as the nodal platform for transacting and monitoring sale of drugs. The registered ePharmacies would come under direct purview of the regulator and would require to meet compliance requirements. All unregistered entities would then be easy to identify and address, once the legitimate players are known to all,” said

Shri K L Sharma, Joint Secretary Ministry of Health and family welfare Government of India.

Forum speakers include high-level Government of India officials, India industry experts and international experts from the United States, Great Britain, Nigeria, Indonesia, France, the Alliance for Safe Online Pharmacies (ASOP Global), INTERPOL, the National Association of Boards of Pharmacy, the International Alliance of Patient Organizations, India Internet Pharmacy association and others.

According to Libby Baney, Executive Director of the Alliance for Safe Online Pharmacies, "ASOP Global is very pleased to be one of the partners in organizing this International India Forum. As India moves to allow Indian patients to purchase prescription drugs through Internet websites, it is important for the GoI to implement best practices to promote consumer awareness and to encourage cooperative activities with Internet companies, credit card companies and shipping companies so law enforcement and regulators to improve access to safe online pharmacies and take down websites selling illegal drugs."

According to ASOP Global Board Member and former senior US Government Department of Commerce official Jeffrey Gren, "ASOP Global also recommends that GoI consider using pharmacy as a way for India to accredit and distinguish safe online pharmacies from illegal actors. ASOP Global stands ready to continue to provide expertise and assistance to India following the Forum."

#### Forum's goals and objectives include:

1. Share information on global best practices on improving access to safe online pharmacies while combating illegal Internet drug sales

2. Facilitate interactive discussion on safe online pharmacies public awareness campaigns.
3. Facilitate interactive discussion on effective regulatory, customs and law enforcement coordination to remove spurious and not-of-standards medicines not sold through the legitimate supply chain.
4. Coordination to develop a patient safety implementation framework by engaging with all the players in the healthcare delivery mechanism.
5. Develop an Action Plan for India to implement and to promote patient safety utilizing all existing expertise and technology to empower Indian patients to make an informed choice.

#### Quality, Standards and Patient Safety

Realising the importance of patient safety in an Indian scenario, and the importance of equipping medical practitioners to combat the growing Challenges in patient safety in India ranging from unsafe injections and biological waste management to medication and medical device safety, high rates of health care associated infections, anti-microbial resistance etc, the government is in the process of bringing a uniform patient safety framework for the entire country.

For the same, the government has made public Draft Patient Safety Implementation Framework, with a goal to improve patient safety at all levels of healthcare across all modalities of health care provision, including prevention, diagnosis, treatment and follow-up within overall context of improving quality of care and progressing towards UHC in coming decade. The framework lays down 6 major objectives including improving structural systems to support quality and efficiency of healthcare and place patient safety at the core at national, subnational and healthcare facility levels.

One of the objectives also includes a

competent and capable workforce that is aware and sensitive to patient safety. To achieve this objective, the government has proposed that the licensing/certification and re-certification standards of all categories of health workforce be revised to include knowledge of patient safety.

Proposed-Revise licensing/certification and recertification standards of all categories of health workforce, ensuring the requirement for a specific number of credit hours on Patient Safety. The target for the above intervention has been set-forward as 2019. Another intervention proposed for the same calls for the inclusion of patient safety in the medical curriculum at both UG and PG levels.

Develop/adjust the Patient Safety pre-service educational curricula/training modules through mapping and converging the available materials with their further institutionalization at undergraduate and postgraduate level (reference to WHO Patient Safety Curriculum Guide).

The responsibility of both the interventions has been left with the respective councils, including the Medical council of India (MCI), DCI, INC and the like.

#### Some of the Other measures include

Identify institutions by central/state govt. and develop a sustainable framework for ongoing education and capacity building of Healthcare workers both in public and private sectors.

Establishing national institutional framework and methodology for collating, developing and commissioning evidence-based STGs ( Standard Treatment Guidelines) for Indian context. The proposal further calls for Developing and implementing unified national STGs for each disease/condition (through collation/revision of existing) and development of new ones.

For training the workforce, at the employer level, the proposal calls for Incorporating patient safety basic principles and practice in all in-service education/on job training for all categories of health workforce. ▀



5 million preventable  
deaths occur every  
year



**Helpline**

**1800-11-0456**

Reach out to us before  
you are one of them



## Global Measures for Improving Patient Safety Standards

**HEALTH CARE CONSUMERS** benefit from understanding some of the issues involved in providing them with the best care, and some things they can do themselves to prepare for and learn about these issues. Doctors, nurses, and other health professionals dedicate their lives to caring for their patients. But providing health care can be complicated. There are often multiple steps involved in a health care visit. A number of different medical staff may take part in the care of a single patient. And patients may be confused by unfamiliar words and technical language.

Although hospitals, clinics, and doctor's offices take many steps to keep their patients safe, medical errors can happen. Often, medical errors (also called adverse events) happen when there is a single misstep in a chain of activities.

Researchers and experts in the field of patient safety have identified a number of ongoing patient safety challenges. Below are descriptions of some of the most common and worrisome issues.

### Diagnostic Errors

Diagnostic errors mean a diagnosis that was either “wrong, missed, or unintentionally delayed.” No-fault errors may happen when there are masked or unusual symptoms of a disease, or when a patient has not fully cooperated in care. Diagnostic errors may also result from system-related problems, such as equipment failure or flaws in communication. A wrong diagnosis may also occur when the clinician relies too much on common symptoms, and choosing an obvious answer, without looking further into what may be causing them.

### Health Care-Acquired Infections

A health care-acquired infection (HAI) is



an infection a person gets while being treated for a medical condition. HAIs may occur in patients who are treated at a medical facility or in their homes. An infection is considered to be an HAI when it occurs after treatment begins. HAIs are often discovered within 48 hours of admission to a health care facility, but other infections may also be considered HAIs.

In the United States, 1 out of 20 hospitalized patients contract HAIs. These complications of care lead to extra time in the hospital and longer recovery times.

### The three most common types of HAIs are

- Catheter-related bloodstream infections: Catheter-related bloodstream infections, or CRBSIs, are among the most common infections in patients who are admitted to critical care units. These infections occur when bacteria and other germs travel down a “central line” and enter the bloodstream.
- Hospital-acquired pneumonia: Hospital-acquired pneumonia (HAP) is

an infection of the lungs that occurs 48 hours or longer after admission to a hospital. This pneumonia tends to be more serious because patients in the hospital are often sicker and unable to fight off germs than otherwise healthy people. Hospital-acquired pneumonia occurs more often in patients who are using a respirator (machine) to help them breathe. Ventilator-associated pneumonia (VAP) falls into the HAP category. It may occur in patients who need a tube to breathe.

- Surgical site infections (SSI): A surgical site infection is an infection that occurs after surgery in the part of the body where the surgery took place. Surgical site infections sometimes only involve the skin. Others are more serious and can involve tissues under the skin, organs, or implanted material (such as knee or hip replacements).

Your pharmacist and pharmacy staff play an important role in safe medication use. The pharmacist and pharmacy technicians must understand the physician's order, enter the order accurately into the computer record,

identify potential problems with the prescription that the physician may have missed, pick the correct drug and strength from their supply, and place the drug in a container that has been correctly labeled for the drug. Most pharmacies use a system of checks and double checks designed to help optimize the safety of patients.

You are part of that team every time you take your medications. It is very important that you double check that you are taking the right dose of the right drug, at the right time, in the correct way. To accomplish this, you need to know as much as possible about your medications. Your pharmacist is available to provide this information.

#### Here are additional tips for medication safety.

When dropping off prescriptions or requesting refills

- Tell your pharmacist all the medications and over-the-counter drugs you take – especially those vitamins and herbal remedies purchased at health food or grocery stores, nutrition or smoothie shops. Your pharmacist has references that identify potential drug interactions.
- Confirm that the computer has your current prescription benefit information, allergies and/or drug intolerances, and phone number.
- Find out how many refills you can get. Make sure that your physician has provided enough refills until your next visit. Prescriptions and refills are only valid for one year.
- Call ahead for refills. You should expect to have your refill ready within 24 hours.

#### When picking up your medications at your pharmacy

- Confirm the drug is correct at the pharmacy counter. Compare the instructions given by your physician to the drug name on the pharmacy label.
- Open the bottle and look at the medications to confirm that the medications are imprinted with the

correct drug name and strength. If there is no imprint, ask the pharmacist technician or the pharmacist to show you the bottle from which the medication was dispensed for comparison. Also learn what your medications look like if you take them over a period of time.

- Liquids usually have a unique scent. Learn to recognize your liquid medications by smell.
- Confirm the dosage is correct. Compare the instructions given by your physician to the instructions on the pharmacy label.
- Pediatric medications are at high risk for dosage errors. Most drugs' dosages are based on weight. Confirm your child's medication dose with your child's doctor and/or pharmacist.

#### Know about your medications

All new prescriptions must be dispensed with verbal and written pharmacist instructions. When receiving your medication, make sure that you understand all of the information below:

- What did your physician tell you the medication was for?
- What are both names of your medication ("brand" and generic name)?
  - Brand name — the name given to a medication by the manufacturer.
  - Generic name — the chemical name of the medication.
- What will the medicine do?
- How did your physician tell you to take the medication?
  - How many times a day?
  - How much to take at one time?
  - How long to take the medicine?
  - How to take the medication (with water, juice, etc.)?
  - When to take the medication (before or after meals)?
- What did the physician tell you to expect from the medication?
  - What results to look for?
  - What to do about possible side effects?
  - What monitoring will be need to be done?

- How should you store the medication?
- How do you refill the medication if necessary?

Maintain a list of your medications and the times of day you take each medication. This drug list and schedule of doses is critical in keeping your medications organized. Ask your pharmacist to review your medication list and schedule.

#### Falls

Falls are a common cause of injury, both within and outside of health care settings. According to the U.S. Centers for Disease Control and Prevention, more than one-third of adults over 65 fall each year. Injuries that result from falls can include bone fractures, excessive bleeding, or even death.

Researchers estimate that more than 500,000 falls happen each year in U.S. hospitals, resulting in 150,000 injuries. Patients may be at increased risk of falls if

- They have an impaired memory
- They have muscle weakness
- They are older than 60
- They use a cane or walker to help them walk

Medications may also play a role in increasing a person's risk for a fall. Studies have also shown that elderly patients taking four or more prescription medications are at three time's greater risk for falls than are other patients.

Hospitals and other health care organizations take steps to prevent falls among their patients. You can help prevent falls by asking your doctor or nurse about your risk and taking steps to reduce your chance of a fall.

#### What is the post-discharge tool?

A: The post-discharge tool was created to help patients and families take action to keep the patient's recovery on track. The tool's main focus is to keep patients out of the hospital. One way to do this is to make sure patients follow their care plan, and this tool can help. The NPSF post-discharge tool was