

# MedLEaPR-

## FIRST STEP TOWARDS ICT ENABLED INTEGRATED JUSTICE DELIVERY SYSTEM

“Medico Legal Examination and Post-mortem Reports System” (MedLEaPR) is a generic software developed by NIC-Haryana to facilitate computerization of MLRs & PMRs. Further, the system is workflow based, which provides requisite access security, based on roles & responsibilities of concerned Doctors and Health Institutes.



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### INTRODUCTION

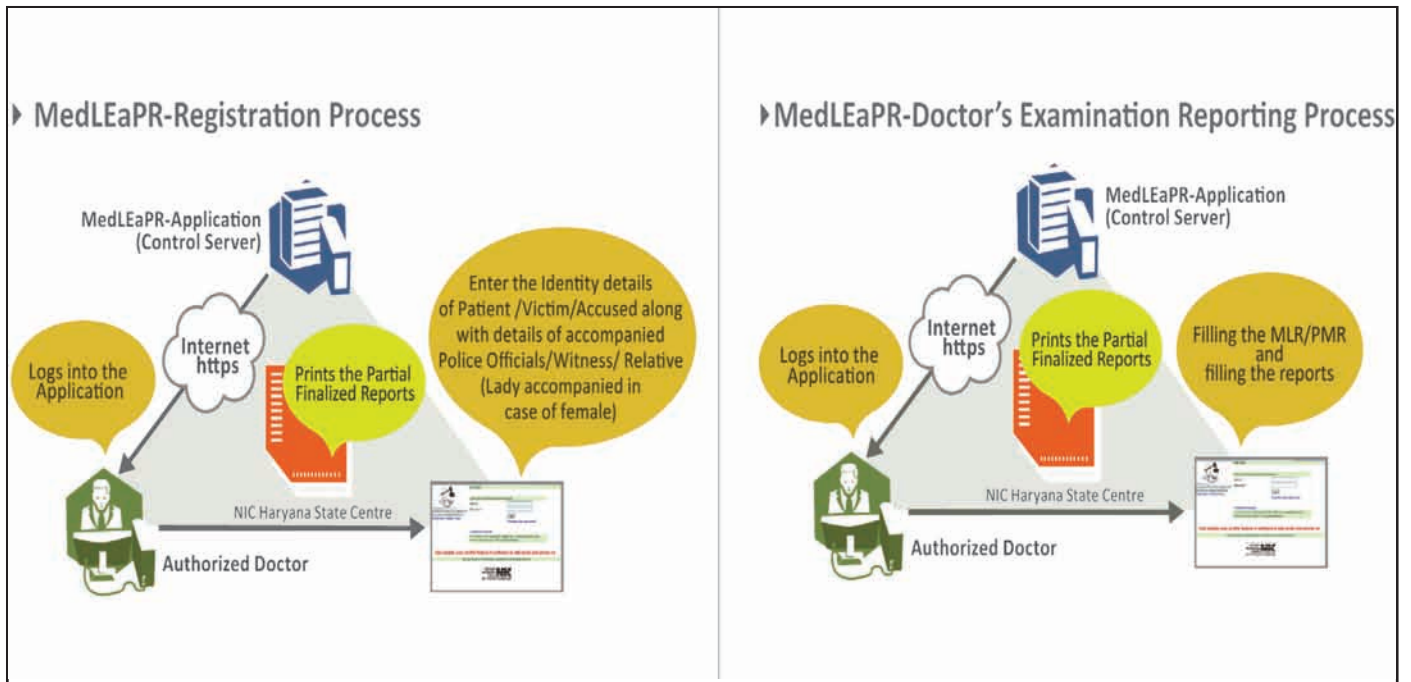
The medico legal examination of persons involved in accident, assault, poisoning etc. is an important function of the Health department. The MLRs are sent to investigating officers (IO) for further investigation and is important for the individual, institutions, family of the deceased, physicians, undertaker and those authorizing burial, legal certification, police, judiciary, insurance company etc. The MLR (Medico Legal Reports) & PMR (Post Mortem Legal Reports) are mostly penned down by the doctors and it is difficult for the courts, prosecution and defence to understand it during the trials as the writing is illegible in most of the cases.

During the hearing of a criminal case, related to attempted murder, wherein hand-written MLR was submitted, the Hon'ble High Court (Punjab & Haryana) passed orders that only computer generated MLRs & PMRs will be submitted to the judicial courts and no hand written report shall be accepted after a prescribed date. The State Governments of Haryana, Punjab, UT Chandigarh & Post Graduate Institute of Medical Education and Research (PGIMER) Chandigarh submitted a requirement of generic software to undertake this activity, for which NIC was asked to explore the possibility.



**RAJESH BINDAL**  
Hon'ble Judge, Punjab & Haryana High Court

Earlier post mortem reports /medico legal reports were handwritten by doctors and photo copies of the same used to be submitted in the courts. At the time of trial, it was difficult to appreciate what was mentioned therein. Considering that we are in the era of technology, it was decided to use the expertise of NIC for developing a software for preparation of post mortem reports/medico legal reports. The states of Punjab & Haryana and Union Territory, Chandigarh were requested to finance the project, which they happily agreed. After strenuous efforts made by a team of the officers from NIC, Haryana and High Court and the doctors from the States of Punjab, Haryana, Union Territory Chandigarh and the Advocates, a web based software was developed for preparation of post mortem reports/medico legal reports. The software developed is user friendly and will help in a long way in administration of criminal justice and solve the difficulties being faced by all the stake holders on account of non-readable post mortem reports/medico legal reports being submitted in the courts. The effort of all concerned deserves to be appreciated.



NIC Haryana took initiative and developed the software with inputs from experts in the field including prestigious institutes like PGIMER Chandigarh and Rohtak. The software, “Medico Legal Examination and Post-mortem Reports System” has the software product name as MedLEaPR.

## OVERVIEW OF MEDLEAPR SYSTEM

The software is a web based system, as per legally approved forms related to MLRs and PMRs. The domain inputs were provided by the designated doctors from the states of Haryana, Punjab, UT Chandigarh, PGIMER Chandigarh & Rohtak and ESI Hospital Chandigarh.

## BASIC WORKFLOW OF THE SYSTEM

**A. Registration of a Case –** When a victim/accused is brought to a Health Institute, his/her registration process is completed. Details of persons, including police,

accompanying the victim/accused are also captured.

**B. Doctor's Examination Reporting Process –** Thereafter, the victim/accused is examined and the opinion and observations are fed online by the doctor, in the relevant prescribed format.

**C. On-line Graphical/Pictorial Representation Module –** These modules takes care of the cases where some injury is found on the body of the person, including burns etc. This needs to be clearly illustrated on the sketch of the human body. The requirement was given by a core team of doctors handling domain specific requirements. The NIC Haryana team, spent days with doctors at Hospitals in Panchkula, Mohali, Chandigarh and PGIMER to understand the requirements and explored the requirements.

The required sketches of human body (Male & Female) were obtained from Directorate of Health Services Haryana and stored in the software.

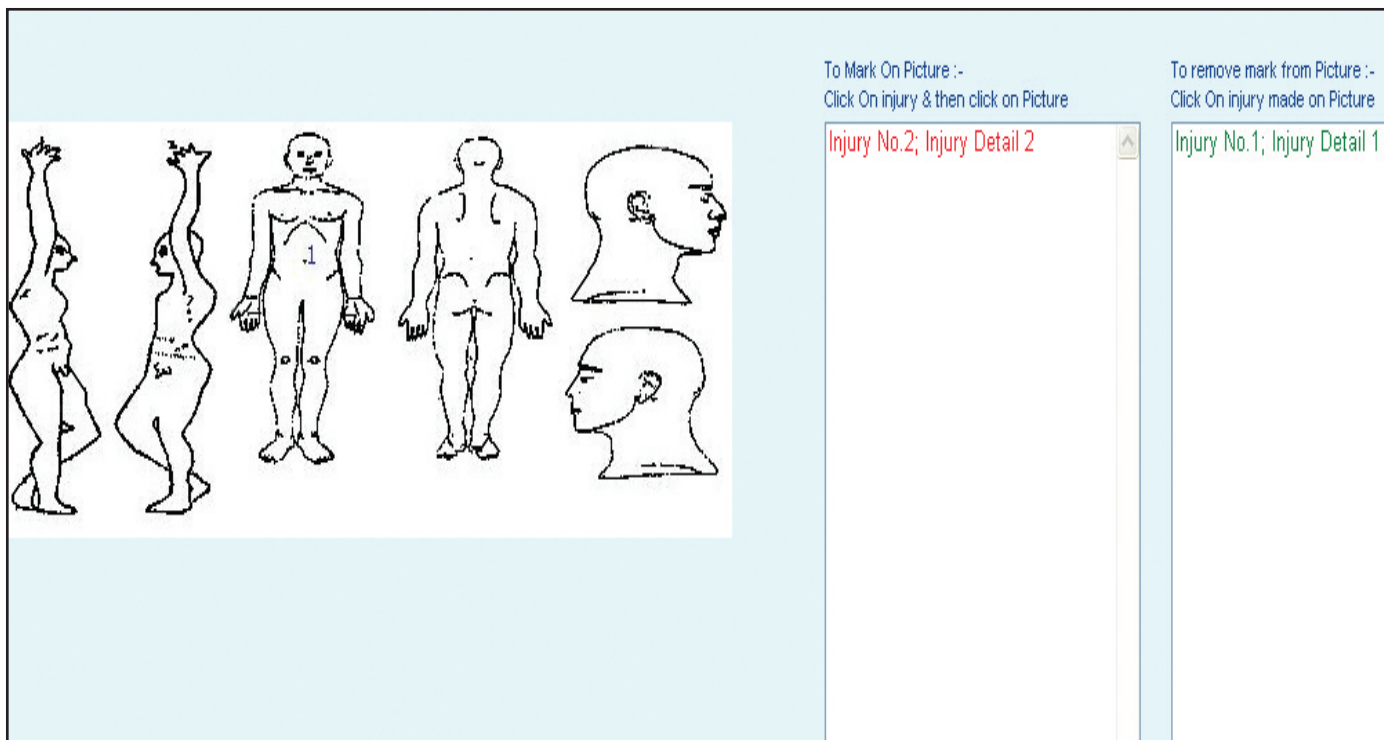
The access was provided to the concerned doctor, with a facility to mark injuries at the exact location on the sketch, along with the facility to enter the injury details.

**D. Subsequent Opinion Process -** Often samples of body parts, viscera, clothes etc are sent to various specialist forensic/chemical laboratories for examination. Based on the reports received from these laboratories, doctor opinion is sought by law enforcement agencies, which becomes the base for the final opinion on the case. After receiving the laboratory reports, the doctor enters his/her final opinion in the system, using his credentials.

## SALIENT FEATURES

(a) Data entry by doctor in stages (keeping in mind, typing speed of doctor and speed of Internet connectivity).

(b) Centralized web enabled solution, hosted at the State Data Centre. Only a system with Internet connectivity required by the doctor.



(c) In case of some problem with the system, blank formats available for offline entry, which can be entered subsequently when the system is working.

(d) Complete audit trail in Admin module for maintaining User Log and Status details.

(e) The mandatory consent form has been provided in Hindi, English and Punjabi languages.

(f) Since the role of doctors is very crucial in the whole working of the system and transfer of doctors is a regular event, a mechanism has been incorporated in the system in which there is no intervention of System Administrator to accomplish this. A user can make required transfer request in the system and HOD of the transferee institute accepts the request at the time of joining of the doctor in the institute.

**SECURE ACCESS CONTROL TO ENSURE PRIVACY OF VICTIM,**

**ACCUSED & DOCTOR**

(a) There is restricted access to the system and only authorised users can gain entry into the system based on the login User-ID and Password issued to them.

(b) Passwords are generated using strong password policy. Users are forced to change their passwords, on the first login and passwords are stored in encrypted form.

(c) The doctor conducting the examination and entering/uploading data of a particular MLR / PMR is able to enter, edit and update the complete record, till it is converted into a read-only, view-only format.

(d) The access to the system is role-based only.

**IMPLEMENTATION MANDATE & STATUS**

After the acceptance of software by the designated doctors & hospitals in the states of Haryana, Punjab and UT Chandigarh, Hon’ble High Court

made it mandatory for these states to implement the MedLeaPR software w.e.f. 03/12/2012. The software implementation progress is regularly monitored by the Hon’ble High Court and the system is now being used by the doctors in Government Health Institutes and Private Nursing Homes/Hospitals in these states.

On the directions of Hon’ble High Court, NIC Haryana has apprised all the States and Union Territories, National Judicial Academy and State Judicial Academies, through respective NIC State/UT Centres, about the availability of MedLEaPR software for preparation of PMRs/ MLRs for use in their respective areas.

**FOR FURTHER INFORMATION:**

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