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An Evaluation of Medico-Legal Documentation Systems at AIIMS

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Abstract:
Medico-legal documentation is crucial in trauma care centers, particularly in cases involving legal proceedings.
OBJECTIVE: This study aimed to evaluate the existing medico-legal documentation system at Jai Prakash Narayan Apex Trauma Centre (JPNATC), AIIMS, and propose improvements.
MATERIALS AND METHODS: A descriptive study analyzed 12,532 electronic medico-legal records, highlighting the need for efficient and accurate documentation.
RESULTS: As per results of analysis, it is seen that only 10 (18.2%) of the total 55 elements of the checklist were found to be well addressed with 100 percent compliance and (50.9%) of the total 55 elements were found to be partially compliant.
DISCUSSION: The study's findings emphasize the importance of standardized medico-legal documentation in trauma care centers, ensuring objective, self-explanatory, and reliable information for legal proceedings.
CONCLUSION: Medico-legal reports must be meticulously documented to serve as admissible legal evidence in court. These reports should be objective, concise, and provide accurate information to all stakeholders upon review. The current electronic documentation practice at JPNATC has effectively addressed previous manual documentation issues, significantly enhancing the quality and reliability of the information.

Keywords: Documention, Medico-legal documentation

INTRODUCTION

The medical record is the "Who, What, Why, When and Where of a patient's care during hospitalization"-*Edna Huffman*

Medico-legal documentation is a critical aspect of healthcare, particularly in cases involving trauma and injury. The documentation process involves recording patient information, medical history, examination findings, diagnosis, treatment, and outcome.[1] The accuracy and completeness of MLRs can significantly impact the outcome of legal proceedings, making it essential to ensure that the documentation process is robust and reliable.[2]

The Importance of Medical Records in Healthcare: Medical records serve as a central repository for planning patient care and documenting communication among healthcare providers. The information contained in medical records allows healthcare providers to determine a patient's medical history and provide informed care. Traditional medical records for inpatient care include various types of notes, such

as admission notes, progress notes, and discharge notes.[3]

Auxiliary Purpose of Medical Records: Medical records also serve as a document to educate medical students and resident physicians, provide data for internal hospital auditing and quality assurance, and provide data for medical research. Furthermore, medical records can be used as evidence in court and can protect hospitals, physicians, and patients by clearly showing the treatment provided and the care and service given.

Medico-Legal Case Records: Medico-legal case records are confidential, thorough, and complete documents that include personal particulars of the patient, identification marks, and fingerprints. These records should be prepared in duplicate, with all necessary details, and should be preserved meticulously in the medical record section indefinitely.

Guidelines for the Preservation of Medico-legal document

a. Original copies of the Medico-legal document will be produced whenever asked for in the court of law.
b. All original copies of certificates and reports issued for Medico-legal purposes are to be preserved until the finalization of the case in the court of law.
c. Documents should be kept in the custody of an appropriate officer until the case is finally decided or cleared by the police and judicial authorities.
d. Documents pertaining to admitted fatal Medico-legal Case (MLC) are to be processed and preserved as laid down in concerned policy letters.

The hospital is the sole owner of the medical record, which is confidential[4] and can only be provided to the patient/spouse or in a court of law by an order of competent authority. Medico-legal Record (MLR) form is the basic primary document required for legal purposes.

Medical record as a legal document serves as evidence in the event of legal complications since it is the only source of truth and tangible evidence in many cases. The documented facts in the medical records are far more reliable and valuable in the court, than memory.

According to the law a **Medico-legal Case (MLC)** is defined as the one "where an attending doctor, after taking a history and completing a physical examination of the patient, suspects that the injury or illness is not due to natural causes and some investigations by law enforcement agencies are required so as to fix the responsibility regarding the case according to the law of land".

Details of a medico-legal case must be entered in the medico-legal case register. The details should include date, time, name and address of the patient, name of the attending doctor, FIR reference/ Case diary number and the disposal of the case.

Medico-legal reports are prepared immediately after completing the case examination and providing the emergency treatment. The MLC report has a standard format and the forms, in duplicate, are available in a hardbound register (for safe preservation).

A Medico-legal Report (MLR) has three parts:

1. **Preamble: Preamble should include the following information:**

- Patient's name, age, sex, residential address, occupation
- Date, time and place of examination of the patient
- Name of the persons/police officials accompanying, DDR/FIR No.
- Informed consent of the person being examined and two marks of identification
- Alleged history of the case/reasons for medical examination

2. Body findings/observations: Detailed description of the injuries/and other findings present, any investigations/referrals asked for.
3. Post amble: This would include the opinion derived from the observations mentioned above, such as:
    1. Nature of injury
    2. Cause of injury
    3. Extent of injury
    4. Treatment required
    5. Prognosis of the patient

Custody of the Medico-legal CaseRecords[1]

MLC records should be kept separate from the other/routine records, under lock and key in the central MR department. The records are to be preserved indefinitely, until the case is finally settled. Medical Records Officer (MRO) can periodically liaise with the area police station to check the latest position of the cases concerned.

ELECTRONIC HEALTH RECORD (EHR)

ISO definition: EHR means a repository of patient data in digital form, stored and exchanged securely, and accessible by multiple authorized users. It contains retrospective, concurrent, and prospective information and its primary purpose is to support continuing, efficient and quality integrated health care.
The traditional paper record often lacks accessibility, legibility, and flexibility, reducing its effectiveness as a communications tool. These limitations have driven many institutions to adopt Electronic Health Records (EHRs).

EXISTING EMR STATISTICS IN DEVELOPING &DEVELOPED COUNTRIES

In a review by Kalogriopoulos et al[5], it was stated that even as the developed countries were leading the electric record revolution they were struggling to adapt to the new system, and at the current time, only 9% of hospitals in the United States had adopted electronic medical record keeping. In stark contrast to this figure, 60% of the Indian Hospitals were found using electronic medical record keeping in their surgery rooms.
EMR systems will eliminate problems, eliminate errors, save time, and save money in the long run. With further research, evaluation, and development, EMR systems will continue to get easier to implement and as a whole cheaper to establish and maintain. EMR systems are a must for developing and developed countries alike.

COST BENEFIT OF IMPLEMENTING EMR SYSTEM IN HEALTH CARE ORGANIZATIONS[6]

In 2002, a study was conducted by S.J. Wang et al to analyze the Cost-Benefit of Electronic Medical Records in Primary Care. The primary costs identified were related to hardware, software, support and maintenance costs. Financial benefits included averted costs and increased revenues. Benefits were divided into three categories: payer-independent benefits, benefits under capitated reimbursement and benefits under fee for-service reimbursement. A five way sensitivity analysis was performed using the most and least favorable conditions for five identified benefit variables. The estimated net benefit from using an electronic medical record for a 5-year period came to $86,400 (INR 48,38,400) per provider. Benefits accrued primarily from savings in drug expenditures, improved utilization of radiology tests,

better capture of charges, and decreased billing errors[6]. The study also noted that other potential areas of savings were not included such as savings in malpractice premium costs, storage and supply costs, generic drug substitutions, increased provider productivity, decreased staffing requirements, increased reimbursement from more accurate evaluation and management coding, and decreased claims denials from inadequate medical necessity documentation. Apart from potential savings, potential costs such as system integration costs, expenses associated with the clinic workflow process redesign, reassignment of clinic staff or productivity loss during unscheduled computer system or network outages. The study concluded that the magnitude and timing of financial return vary, but that it would be positive in the long run across a wide range of assumptions.

MEDICO-LEGAL CASE REGISTRATION AT JAI PRAKASH NARAYAN APEX TRAUMA CENTRE, AIIMS

Jai Prakash Narayan Apex Trauma Centre is the Level 1 Trauma Centre of AIIMS. This Centre started functioning on 26th November, 2007 when the casualty was thrown open to the general public. The workload on JPNATC has been continuously increasing ever since its inception. The enormity of work load is evident from the fact that in the year 2010-2011, the patient load in casualty was 47828 at an average of131 patients/day[7].

In a study done by Kurien et al[8], it was observed that out of the total number of patients reporting to the casualty of JPNATC, more than half (57 per cent) were medico-legal cases which is indicative of the need to have a proper system for their documentation.

AIM: To study the electronic medico-legal documentation at Jai Prakash Narayan Apex Trauma Center, AIIMS, to study the existing medico-legal documentation system at JPNATC, AIIMS.

METHODOLOGY: The study was conducted at the Jai Prakash Narayan Apex Trauma Centre (JPNATC), All India Institute of Medical Sciences (AIIMS), New Delhi, for a period of six months. This descriptive study aimed to understand the existing medico-legal documentation process at JPNATC, AIIMS, using a large data set of 12,532 electronic Medico-legal records of patients generated since August 2012 to January 2013.

Inclusion criteria: All e-MLCs generated at JPNATC, AIIMS from August, 2012 to January 2013.

Exclusions

1. Medico-legal cases registered at hospitals other than JPNATC.
2. Medico-legal records written manually.

STATISTICAL ANALYSIS: The data was entered using excel 2010. Analysis of data was done using stata 11.2 (descriptive statistics).

OBSERVATIONS, RESULTS AND DISCUSSION

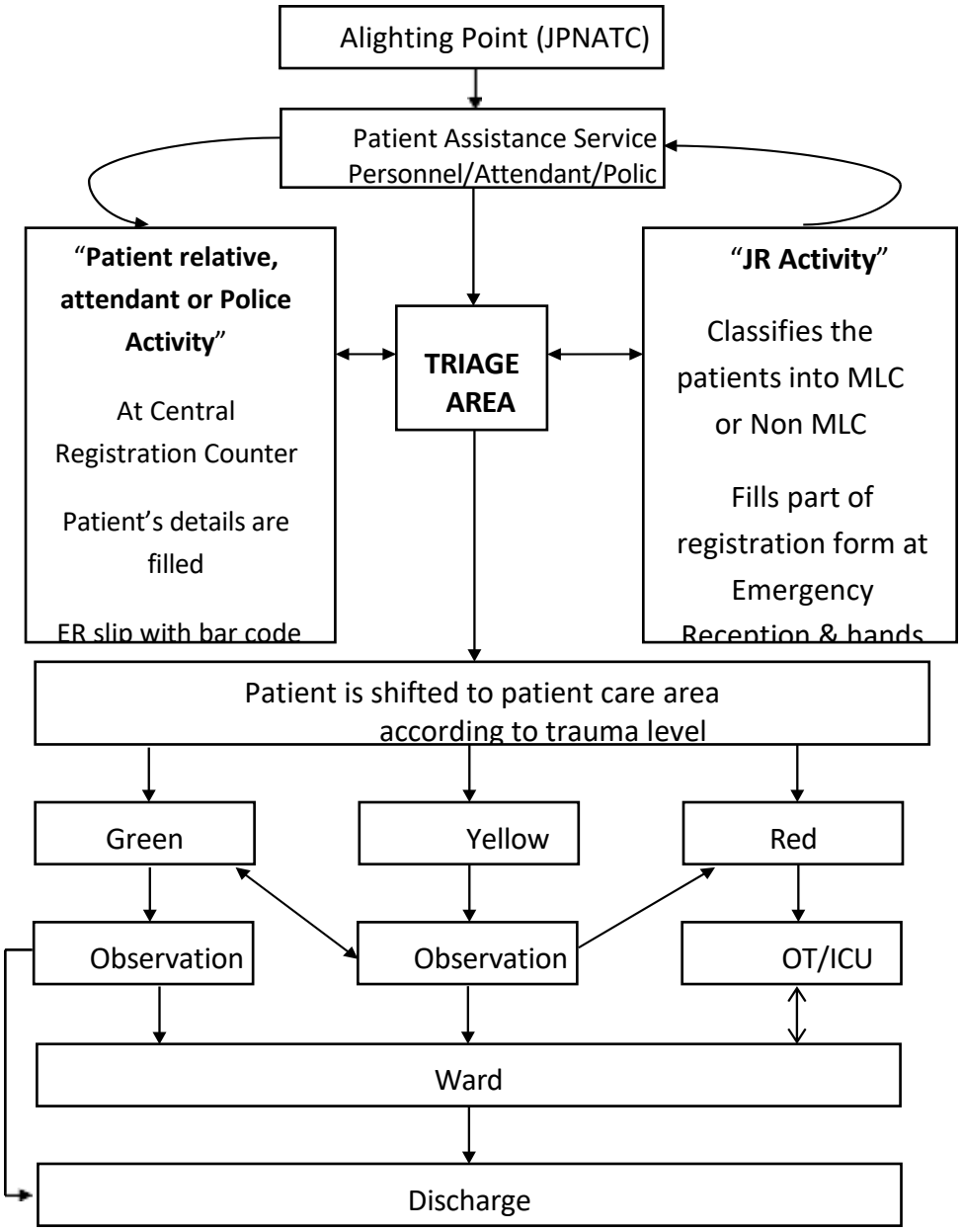

Fig.1: Patient Work flow at Emergency Department, JPNATC, AIIMS

A total of 12,532 e-MLCs have been generated at JPNATC, AIIMS between August, 2012 and January, 2013. Out of these, the required sample size of 1024 e-MLCs was calculated with the help of a statistician. This sample was taken out of retrospective studies of records for the purpose of gap analysis.

Analysis of each element for their compliance with the checklist

The data for the study was collected from 1024 MLCs over 6 months of study period at JPNATC, AIIMS. The data included the MLRs recorded during all the three shifts at the ED of JPNATC.

Table 1 : Overall compliance level with respect to each element (n= 1024)

S.No.	Element	Compliant		Non-compliant		Remarks
		No.	Percent	No.	Percent	
1	Hospital name	1024	100	-	-	
2	MLC No.	1024	100			
3	Security features	1024	100			
4	Consent	-	-	-	-	
5	Patient name	70	6.8	954	93.2	
6	Age	1024	100			
7	Gender	1024	100			
8	Occupation	-	-	-	-	
9	Religion	540	52.7	484	47.3	
10	Address type	-	-	-	-	
11	Address	896	87.5	128	12.5	
12	Brought by	754	73.6	270	26.4	See Table 8
13	Brought by person's name	1007	98.3	17	1.7	
14	Relationship with patient	679	66.3	345	33.7	
15	Name & no. of police officer	354	34.6	670	65.4	
16	Police station name & district	84	8.2	940	91.8	
17	Date & time of arrival	1024	100			
18	Exact date and time of examination	1024	100			
19	Brief alleged history	1024	100			
20	Pulse rate	980	95.7	44	4.3	
21	Blood pressure	981	95.8	43	4.2	
22	Respiratory rate	981	95.8	43	4.2	
23	Temperature with source	-	-	-	-	
24	Pupil condition	1024	100			
25	Level of consciousness	1024	100			
26	Alcohol intake exam (Breath test)	978	95.5	46	4.5	976- Breath alcohol absent
27	Blood alcohol level	1018	99.4	6	0.6	
28	Smell	-	-	-	-	
29	Posture	-	-	-	-	
30	Gait	-	-	-	-	
31	Speech	-	-	-	-	
32	Evaluation for malingering	-	-	-	-	
33	Bleeding & frothing	-	-	-	-	
34	Paralysis of body parts	-	-	-	-	
35	Condition of clothes	-	-	-	-	
36	Stains	-	-	-	-	

37	Foreign matter	-	-	-	-	
38	Preserving samples	-	-	-	-	
39	Type of injury	942	91.9	82	8.1	148-novisible injury present
40	Size of injury	712	69.5	312	30.5	
41	Shape of injury	152	14.8	872	85.2	
42	Location of injury	971	22.8	53	5.2	
43	Direction of injury	159	15.5	845	84.5	
44	Duration of injury	150	14.5	874	85.5	
45	Description of old injuries	22	2.2	1002	97.8	
46	Kind of Weapon used	1022	99.8	2	0.2	
47	Nature of injury	1019	99.5	5	0.5	Pending Investigation: 757
48	Opinion	1019	99.5	5	0.5	
49	Doctor's name in capitals	891	87	133	13	
50	Full designation of doctor	12	1.2	1012	98.8	
51	Address of doctor	1020	99.6	4	0.4	
52	Registration no.	428	41.8	596	58.2	
53	Signature with date	1018	99.4	6	0.6	
54	Identification marks	-	-	-	-	
55	Anatomical sketches or photographs	-	-	-	-	

Table 2: Compliance with respect to each element in shift1 (n=204)

S.No.	Element	Compliant		Non-compliant		Remarks
		No.	Percent	No.	Percent	
5	Patient name	20	9.8	184	90.2	
9	Religion	101	49.5	103	50.5	
11	Address	178	87.2	26	12.8	
12	Brought by	145	71.1	59	28.9	See Table 8
13	Brought by person's name	200	98	4	2	
14	Relationship with patient	135	66.2	69	33.8	
15	Name & no. of police officer	79	38.7	125	61.3	
16	Police station name & district	24	11.8	180	88.2	
20	Pulse rate	194	95.1	10	4.9	
21	Blood pressure	194	95.1	10	4.9	
22	Respiratory rate	194	95.1	10	4.9	
26	Alcohol intake exam (Breath test)	203	99.5	1	0.5	203- Breath alcohol absent
27	Blood alcohol level	203	99.5	1	0.5	

39	Type of injury	193	94.6	11	5.4	34-no visible injury present.
40	Size of injury	141	69.1	63	30.9	
41	Shape of injury	34	16.7	170	83.3	
42	Location of injury	196	96.1	8	3.9	
43	Direction of injury	36	17.6	168	83.4	
44	Duration of injury	34	16.3	170	83.7	
45	Description of old injuries	6	2.9	198	97.1	
46	Kind of Weapon used	204	100	-	-	
47	Nature of injury	200	98	4	2	Pending Investigation: 162
48	Opinion	200	98	4	2	
49	Doctor's name in capitals	172	84.3	32	15.7	
50	Full designation of doctor	3	1.5	201	98.5	
51	Address of doctor	204	100	-	-	
52	Registration no.	78	38.2	126	61.8	
53	Signature with date	200	98	4	2	

Table 3: Compliance with respect to each element in shift 2 (n= 292)

S.No.	Element	Compliant		Non-compliant		Remarks
		No.	Percent	No.	Percent	
5	Patient name	20	6.8	272	93.2	
9	Religion	146	50	146	50	
11	Address	255	87.3	37	12.7	
12	Brought by	217	74.3	75	25.7	See table 8
13	Brought by person's name	286	97.9	6	2.1	
14	Relationship with patient	198	67.8	94	32.2	
15	Name & no. of police officer	98	33.6	194	66.4	
16	Police station name & district	25	8.6	267	91.4	
20	Pulse rate	279	95.5	13	4.5	
21	Blood pressure	279	95.5	13	4.5	
22	Respiratory rate	280	95.9	12	4.1	
26	Alcohol intake exam (Breath test)	285	97.6	7	2.4	283- Breath alcohol absent
27	Blood alcohol level	292	100	-	-	
39	Type of injury	262	89.7	30	10.3	44- no visible injury
40	Size of injury	197	67.5	95	32.5	
41	Shape of injury	44	15.1	248	84.9	

42	Location of injury	271	92.8	21	7.2	
43	Direction of injury	48	16.4	244	83.6	
44	Duration of injury	46	15.7	246	84.3	
45	Description of old injuries	9	3.1	283	96.9	
46	Kind of Weapon used	292	100	-	-	
47	Nature of injury	291	99.7	1	0.3	Pending Investigation: 225
48	Opinion	291	99.7	1	0.3	
49	Doctor's name in capitals	259	88.7	33	11.3	
50	Full designation of doctor	4	1.4	288	98.6	
51	Address of doctor	289	98	3	1	
52	Registration no.	125	42.8	167	57.2	
53	Signature with date	291	99.7	1	0.3	

Table 4: Compliance with respect to each element in shift3 (n=528)

S.No.	Elements	Compliant		Non-compliant		Remarks
		No.	Percent	No.	Percent	
5	Patient name	30	5.7	498	94.3	
9	Religion	293	55.5	235	44.5	
11	Address	463	87.7	65	12.3	
12	Brought by	392	74.2	136	25.8	See table 8
13	Brought by person's name	522	98.9	6	1.1	
14	Relationship with patient	346	65.5	182	34.5	
15	Name& no. of police officer	177	33.5	351	66.5	
16	Police station name & district	35	6.6	493	93.4	
20	Pulse rate	507	96	21	4	
21	Blood pressure	508	96.2	20	3.8	
22	Respiratory rate	507	96	21	4	
26	Alcohol intake exam (Breath test)	490	92.8	38	7.2	488- Breath alcohol absent
27	Blood alcohol level	523	99.1	5	0.9	
39	Type of injury	487	92.2	41	7.8	70-no visible injury present
40	Size of injury	373	70.6	155	29.4	
41	Shape of injury	74	14	454	86	
42	Location of injury	504	95.5	24	4.5	
43	Direction of injury	75	14.2	453	85.8	

44	Duration of injury	69	13.1	459	86.9	
45	Description of old injuries	7	1.3	521	98.7	
46	Kind of Weapon used	526	99.6	2	0.4	
47	Nature of injury	158	100	-	-	Pending Investigation: 370
48	Opinion	158	29.9	-	-	
49	Doctor's name in capitals	460	87.1	68	12.9	
50	Full designation of doctor	5	0.9	523	99.1	
51	Address of doctor	527	99.8	1	0.2	
52	Registration no.	225	42.6	303	57.4	
53	Signature with date	527	99.8	1	0.2	

Table 4shows Compliance with respect to each element in shift3 (n=528). Out of the total cases, non-compliance was found in more than 90 percent of the cases in any shift with respect to name of the patient. It was also found that the compliance in the day shifts (Shift 1 & 2) were comparatively better compared to evening shift (shift 3), the shift wise compliance was 9.8%, 6.9% and 5.7% respectively.

Table 5 : Details with respect to the element 'brought by' shift wise

Brought by	**All shift**		**Shift 1**		**Shift 2**		**Shift 3**	
	No.	**percent**	**No.**	**percent**	**No.**	**percent**	**No.**	**Percent**
Police/ambulance	625	61	125	61.3	175	59.9	325	61.5
Self (walk in)	75	7.3	10	4.9	19	6.5	46	8.7
Relatives/bystanders	54	5.3	10	4.9	23	7.9	21	4
Not known	270	26.4	59	28.9	75	25.7	136	25.8
Total	1024	100	204	100	292	100	528	100

The element 'Brought by' refers to whether the patient came on his/her own (self/walk-in) or brought by someone else like the police, ambulance, relative or bystander. 'Not known' means the mode of bringing in the patients was not on record. Results show that majority of brought in was done by police/ambulance (61%) followed by 'Not known' at 26.4 %, Self (walk in) at 7.3% and Relatives/by stander sat 5.3%.

Table shows details with respect to the element 'brought by' shift wise. It was observed that Police/ambulance had the highest percentage of bringing in patients in all three shifts followed by 'Not known'. Next in order of bringing in patients were Self (walk in) followed by relatives/ bystanders.

Table 6: Compliance with respect to the element 'Details of brought by name and relation'

	Details of brought by, name and relation	**Complaint**		**Non-compliant**	
		No.	**Percent**	**No.**	**Percent**
Shift 1	Brought by	145	71.1	59	28.9
	Brought by person's name	200	98	4	2
	Relationship with patient	135	66.2	69	33.8
	Brought by	217	74.3	75	25.7

Shift 2	Brought by person's name	286	97.9	6	2.1
	Relationship with patient	198	67.8	94	32.2
Shift 3	Brought by	392	74.2	136	25.8
	Brought by person's name	522	98.9	6	1.1
	Relationship with patient	346	65.5	182	34.5

Table 6 shows compliance with respect to the element 'Details of brought by name and relation'. It was observed that there was 98 percent compliance with respect to the element 'name of the person who brought the patient' in any shift, there was only around 72 percent, 66 percent compliance with respect to the element 'brought by and relationship with the patient'.

Table 7 : Compliance with respect to the element 'Vital data of the patient'

	Vital data of the patient	Compliant		Non-compliant	
		No.	Percent	No.	Percent
Shift 1	Pulse rate	194	95.1	10	4.9
	Blood pressure	194	95.1	10	4.9
	Respiratory rate	194	95.1	10	4.9
Shift 2	Pulse rate	279	95.5	13	4.5
	Blood pressure	279	95.5	13	4.5
	Respiratory rate	280	95.9	12	4.1
Shift 3	Pulse rate	507	96	21	4
	Blood pressure	508	96.2	20	3.8
	Respiratory rate	507	96	21	4

Table 8 :Compliance with respect to element 'Breath Alcohol Test' in each shift

Shift	Breath test not done		Breath test done		Remarks
	No.	Percent	No.	Percent	
Shift 1	203	99.5	1	0.5	203-test absent
Shift 2	285	97.6	7	2.4	285-test absent
Shift 3	490	92.8	38	7.4	488-test absent

Table 8 shows compliance with respect to element 'Breath Alcohol Test' in each shift. Breath test done means alcohol intake suspected/ present and breath test not done means alcohol intake examination as absent. The three options available in the template were present, suspected and absent. Results of analysis showed that out of 204 in first Shift, 203 (99.5%) were not subjected to breath test. Similarly out of 292 in second shift, 285 (97.6%) and in third shift out of 528 MLRs 488 (92.6%) were not

subjected to breath test. It was seen also that the highest rate of conducting breath test was 7.4% seen in third shift.

Table 9: Compliance with respect to element 'blood alcohol level' in each shift

Shift	Compliant		Non-compliant	
	No.	Per cent	No.	Per cent
Shift 1	203	99.5	1	0.5
Shift 2	292	100	0	0
Shift 3	523	99.1	5	0.9

Table9 shows compliance with respect to element 'blood alcohol level' in each shift. The compliance level for the element 'blood alcohol level' was found to be more than 99% in any shift.

Table 10: Alcohol intake examination: Breath test Vs Blood alcohol level (n=48)

Breath alcohol test	Alcohol blood test	
	Sent	Not sent
Suspected/present with volume mentioned	2 (4.2%)	–
Suspected/present with volume not mentioned	40 (83.3%)	6 (12.5%)

Table 10 shows alcohol intake examination: Breath test Vs Blood alcohol level (n=48). Out of the total 48 cases, where breath alcohol test was suspected/present and volume was mentioned, alcohol blood sample sent was mentioned only in 4.2% of cases (2). Where breath alcohol test was present / suspected, but volume was not mentioned, blood sample was sent in 83.3 percent (40). Though breath test was present / suspected and volume not mentioned, blood sample was not sent found in 12.5 percent (6).

Table 11: Compliance with respect to the element 'Injury description'

	Injury description	Compliant		Non-compliant	
		No.	Percent	No.	Percent
Shift 1	Type of injury	193	94.6	11	5.4
	Size of injury	141	69.1	63	30.9
	Shape of injury	34	16.7	170	83.3
	Location of injury	196	96.1	8	3.9
	Direction of injury	36	17.6	168	83.4
	Duration of injury	34	16.3	170	83.7
	Old injuries	6	2.9	198	97.1
Shift 2	Type of injury	262	89.7	30	10.3
	Size of injury	197	67.5	95	32.5
	Shape of injury	44	15.1	248	84.9
	Location of injury	271	92.8	21	7.2
	Direction of injury	48	16.4	244	83.6
	Duration of injury	46	15.7	246	84.3
	Old injuries	9	3.1	283	96.9

Shift 3	Type of injury	487	92.2	41	7.8
	Size of injury	373	70.6	155	29.4
	Shape of injury	74	14	454	86
	Location of injury	504	95.5	24	4.5
	Direction of injury	75	14.2	453	85.8
	Duration of injury	69	13.1	459	86.9
	Old injuries	7	1.3	521	98.7

Table 11 shows compliance with respect to the element 'Injury description'. Injury was described under the terms: type, size, shape, location, direction and duration. Old injuries were described under another element which consisted of description of healing injuries, old scars, fracture deformities and congenital injuries. Compliance with respect to 'Old injuries' was 2.9, 3.1 and 1.3 percent in shift 1, 2 and 3 respectively.

Table 12: Compliance with respect to the element 'Details of the doctor'

	Details of the doctor	**Compliant**		**Non-compliant**	
		No.	**Percent**	**No.**	**Percent**
Shift 1	Full designation of doctor	3	1.5	201	98.5
	Address of doctor	204	100	-	-
	Registration no.	78	38.2	126	61.8
	Signature with date	200	98	4	2
Shift 2	Full designation of doctor	4	1.4	288	98.6
	Address of doctor	289	99	3	1
	Registration no.	125	42.8	167	57.2
	Signature with date	291	99.7	1	0.3
Shift 3	Full designation of doctor	5	1	523	99
	Address of doctor	527	99.8	1	0.2
	Registration no.	225	42.6	303	57.4
	Signature with date	527	99.8	1	0.2

Supplementary table 12 shows compliance with respect to the element 'Details of the doctor'.There was minimal compliance with respect to the element 'full designation of doctor' in any shift. Compliance was also low with respect to the element 'registration number' in any shift which was 38.2, 42.8 and 42.6 in shift 1, 2 and 3 respectively.

Table 13: Description of Nature of Injuries and Opinion

	Nature of injury	**Opinion given**					
		Correct		**Incorrect**		**Total**	
		No.	**Percent**	**No.**	**Percent**	**No.**	**Percent**
Shift 1	Mentioned	38	18.6	4	2	42	21
	Investigations pending	162	79.4	0	0	162	79.4
	Total	200	98	4	2	204	100

Shift 2	Mentioned	66	22.6	1	0.4	67	22.94
	Investigations pending	225	77.1	0	0	225	77.1
	Total	291	99.7	1	0.3	292	100
Shift 3	Mentioned	158	29.9	0	0	158	29.9
	Investigations pending	370	70.1	0	0	370	70.1
	Total	528	100	0	0	528	100

Supplementary table 12 shows description of Nature of Injuries and Opinion. Out of total nature of injuries was mentioned and incorrect opinion was given in 2 percent(4) and 0.4percent(1) in shift1and 2 respectively, whereas in shift 3 it was 100% correct.

Table 14: Result of final analysis and compliance of elements with the checklist

Elements Compliance	Result	Percentage	95 percent Confidence Interval
Fully Compliant Elements	10/55	18.2	9, 30.1
Partially Compliant Elements	28/55	50.9	37.1, 64.6
Not present in the Existing Template	17/55	30.9	19.2, 44.8

Table 14 shows result of final analysis and compliance of elements with the checklist. As per results of analysis, it is seen that only 10 (18.2%) of the total 55 elements of the checklist were found to be well addressed with 100 percent compliance. The list of fully compliant elements shown in table 15.

Table 15: List of fully compliant elements

S.No.	Element No.	Element Described
1	1	Name of the Hospital/Institute
2	2	MLR form number with date
3	3	Security features of the MLR form: Watermark/ Hologram
4	6	Patient's age
5	7	Patient's gender as male, female, transgender, unknown
6	17	Date, time of arrival of patient
7	18	Exact date, time of examination of the patient
8	19	Brief Alleged history
9	24	Condition of the pupils
10	25	Level of consciousness at the time of examination

Table 15 shows list of fully compliant elements. It has been observed that 28 (50.9%) of the total 55 elements were found to be partially compliant. These elements are as shown in table 16.

Table 16: List of partially compliant elements

S.No.	Element No.	Element Description
1	5	Patient name as first, middle and last(family)/unknown
2	9	Patient's religion
3	11	Patient's address

4	12	Patient brought by
5	13	Name of the person who brought the patient
6	14	Relationship with the patient
7	15	Name and number of the Police Officer
8	16	Name of the police station and district
9	20	Pulse rate
10	21	Blood pressure
11	22	Respiratory rate
12	26	Alcohol intake examination
13	27	If alcohol present, blood alcohol level
14	39	Type of injury: abrasion/ bruise/ laceration/ incised/ punctured/fracture dislocation/burns etc.
15	40	Size: Exact dimensions(in centimetres) of each injury(length, breadth & depth)
16	41	Shape of injury
17	42	Location of injuries
18	43	Direction of the injuries
19	44	Duration of injuries
20	45	Description of healing injuries, old scars, fracture deformities and congenital anomalies
21	46	Kind of weapon used
22	47	Nature of injuries: simple/grievous or dangerous
23	48	Opinion
24	49	Name of the examining doctor in capital letters at the bottom of MLR
25	50	Full designation of the examining doctor in capital letters at the bottom of MLR
26	51	Address of the examining doctor
27	52	Registration number of the examining doctor
28	53	Signature with date of the examining doctor

CONCLUSION

The JPNATC, AIIMS, as a premier trauma care center, requires efficient and accurate medico-legal documentation. Most patients treated at the center are medico-legal cases, making comprehensive documentation crucial. Medico-legal reports must be documented in a way that they serve as a document of legal evidence in the court of law. They must be objective, self-explanatory and provide reliable information to all stake holders as and when it is reviewed. The present practice at JPNATC has corrected many of the problems of manual documentation and is a great step to provide quality information.

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