



VELAMMAL MEDICAL COLLEGE

HOSPITAL AND RESEARCH INSTITUTE

MADURAI - 625009

7.2.1

Department wise Clinical Audit Report

Sl. No.	Particulars	Page No.
1.	Dept. wise consolidated Clinical Audit Information	2 - 15
2.	Department of Orthopaedics	16 - 20
3.	Department of Critical Care	21 - 22
4.	Department of Psychiatry	23 - 26
5.	Department of Ophthalmology	27 - 31
6.	Department of Paediatrics	32 - 34
7.	Department of Dermatology	35
8.	Department of General Medicine	36
9.	Department of General Surgery	37 - 39
10.	Department of ENT	40 - 42
11.	Department of Obstetrics & Gynaecology	43
12.	Department of Emergency Medicine	44 - 45
13.	Department of Cardiology	46
14.	Department of Cardiothoracic Surgery	47
15.	Department of Neurology	48
16.	Department of Urology	49
17.	Department of Vascular Surgery	50
18.	E Room	51
19.	Department of Gastroenterology	52
20.	Department of Oncology	53
21.	Department of Respiratory Medicine	54
22.	Speciality Intensive Care Unit	55 - 59



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Department Wise Consolidated Clinical Audit Information

S. N.	Department	Title	Objectives	Practice	Observation	Success	Problems
1	Ophthalmology	Improving post operative visual outcome by avoiding intra operative complications	To improve the quality of patient care in patients undergoing various surgical procedures in the ophthalmology department including cataract surgery, avoiding intraoperative complications and improve post operative visual outcome.	A standard checklist was created which included intraoperative IOL calculation, IOP recording, slit lamp and fundal examination. Liberal Viscose application to reduce corneal edema and delicate handling of tissues during procedure was to be ensured as well.	6 out of 55 pts had post operative visual outcome not meeting the required standard of 6/24 acuity	After the policy was implemented, only 2 had such vision less than 6/24.	During the process there few issues related to drug prescription and administration to patient by the doctor and staff, which required retraining and awareness to all the care givers involved.



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2	Cardiology	To assess comprehensive treatment quality given to patients admitted for cardiac care.	The objective of the practice was to assess whether cardiac inpatients receive quality and comprehensive care.	The cardiac unit is one of the busiest units in the hospital, receiving maximum inpatients. Patients admitted belong to varied age groups, with variety of comorbidities and varied severity spectrum as well. A good medical team approach is needed to provide comprehensive care to these patients.	From retrospective case sheet record assessments, it was found that 25 % of these cardiac inpatients had multiple comorbidities which was not addressed adequately during hospital stay.	After having a consensus on comprehensive assessment, the cardiac team involved general physicians and other specialists in their team to provide quality care to these patients which was evidenced in the subsequent days when 100% inpatients were discharged after multiple consultant opinions.	It was indeed a challenging task to co-ordinate various specialists and plan a consensual treatment and get the approval of patient for treatment adherence and effective follow up.
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3	Cardiothoracic Surgery	To compare sheathed and unsheathed technique of Intra-Aortic Balloon Pump insertion.	The objective is to find out which of the technique for IABP insertion is superior to other in terms of ease of procedure and incidence of complications like acute limb ischemia.	Both techniques were routinely practiced in the cardiothoracic unit. We wanted to study which among the two had lesser incidence of intraoperative complications. The choice of procedure generally varied from patient-to-patient basis, decided by the operating surgeon on table generally.	The review and analysis of inpatient records showed that unsheathed/sheath less technique had some advantage over sheathed technique in that the incidence of acute limb ischemia was 0% with unsheathed technique.	Subsequently, post this assessment, sheathed technique was preferred for IABP insertion and none of the patients had acute limb ischemia intraoperatively.	Based on the advantages observed with unsheathed IABP insertion technique, all operating cardiothoracic surgeons and cardiac anesthetists had to be convinced for practice unsheathed technique for better outcome.
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4	Dermatology	To assess the quality of wound care management given to inpatient leprosy patients	To identify the adherence of standard wound care management plan for all leprosy inpatients and prevention infection	To identify the adherence of standard wound care management plan for all leprosy inpatients and prevention infection	The inspected case sheets proved that the incidence of infection was 3 out of 39(<10%).	A strict glycemic control and early IV antibiotics were planned after departmental consensus, following which no inpatient developed chronic infection	Repeated wound care training had to be given for every batch intern during their posting. Frequent auditing of the process was also required for better outcomes.
5	Neurology	To assess the quality of rehabilitative care given to stroke patients.	Objective is to improve the neuro rehabilitative care given to stroke patients which significantly improves early recovery and mobilization.	Stroke patients who present early are thrombosed at the earliest if it's an infarct. These patients have early recovery. But many patients present late and have a prolonged	Nearly 10% of stroke patients assessed and followed up have a delayed recovery. The main reason was late referral, delayed thrombolysis and late initiation and	Code Stroke was created and patients were treated with emergency care and early thrombolysis was done. Physiotherapy was also initiated early.	Rehabilitative care is always a team effort. The biggest challenge faced was timely co-ordination and integration of all these care givers.



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				recovery course. These patients, if given timely and effective rehabilitative care by physiotherapist, speech therapist and dietician, can recover early.	poor compliance to physiotherapy.	Technique was taught to attender and observed as well. The stroke patients managed subsequently had <1 % incidence of delayed recovery	
6	Obstetrics & Gynaecology	To assess timely Antenatal steroid and MGSO4 prophylaxis for preterm delivery	All antenatal mothers expecting preterm delivery should be provided with steroid and magnesium sulphate prophylaxis to prevent preterm	All antenatal mothers expecting preterm delivery should receive antenatal steroids & MGSO4 for better neonatal outcome.	All AN mothers (100%) received antenatal steroids. Only 45% received MGSO4 and 33% had tocolysis for completion of prophylaxis.	After discussions with neonatologists, the importance of these prophylaxis was further stressed and subsequently all mothers (if not	All referral centers were educated about need for timely referral to ensure completion of prophylaxis. All staffs and doctors in the



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			complications like RDS, IVH, neurological damage in preterm neonate.			emergency) received tocolyses till completion of prophylaxis.	care area were educated about the valuable time window for prophylaxis, which required extensive training to all.
7	Paediatrics	To assess whether all Paediatric inpatients get nutritional assessments and advice irrespective of the primary disease condition, during their stay in hospital.	The objective was to ensure whether children, who are in their developmental phase, get some nutritional assessments and advice from health care workers during their stay.	All inpatient children admitted for various medical illness require a proper nutritional assessment and advice for optimal growth, development and prevention of diseases	Retrospective assessments with case records revealed that nearly 30 % Paediatric patients did not have nutritional assessments or advice. This was due to lack of knowledge of nutritional assessment and nutritional advice	After regular training sessions on nutritional assessments and after adding nutritional advice to discharge checklist, almost all patients are receiving valuable	The interns and residents are in a rotational posting and hence frequent training sessions are needed along with random auditing of assessments to ensure their application of



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					among interns and residents.	nutritional advice. An initial assessment chart also includes nutritional assessment now, so that all patients get assessed on admission.	knowledge is correct.
8	Urology	To identify the incidence of post operative UTI in patients undergoing urological procedures	All postoperative patients should receive standard post-surgical care to prevent complications like UTI, drainage site infections and blood clots and ensure normal urinary flow.	The standard practice includes meticulous assessment of care of surgical wound by staff daily and care of urinary catheters. Ideally no patient should develop UTI, post procedure.	There were 4 patients (5%) who developed UTI among the cases operated over a month.	After proper education to staff and interns regarding wound care and management, the incidence reduced to nil the next month.	The interns and staffs in the post operative care area working in rotation duties had to be educated repeatedly and their knowledge, attitude and



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							practices had to be accessed at regular intervals.
9	Vascular Surgery	To assess ulcer care given to patients with vascular problems	Objective was to assess adherence to standard wound care policies and decrease the incidence of chronic ulcers.	All patients with chronic vascular ulcer should be provided with appropriate support, timely repositioning, ulcer debridement, appropriate dressing, and correction of underlying disease.	Ulcer care given as evidenced in the case sheets showed an adherence of only 70% to the standard wound care policy	The wound care of ward inpatients is usually done by interns who are posted in the department in rotation. So, regular training sessions were done monthly after which the compliance to standard care increased to >90%	Repeated wound care training had to be given for every batch intern during their posting. Frequent auditing of the process was also required for better outcomes.
10	Emergency Room	To assess the average patient holding time in	Objective is to find out the average duration of patients stay in	Generally patients in Emergency room are assessed by	The assessments of ER stay of patients for a period was assessed by	After identifying the reasons for delay, the concerned	The reasons for delay involved various



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		the Emergency room.	Emergency room. Also find out the reasons for probable delay and ensure that waiting time is reduced	multiple specialists at the earliest and care plan decided and shifted to the respective care area.	reviewing old records and was found that the average duration of stay was around 3 hours. The major reasons for delay were identified as delay in billing, investigations, and counselling.	department staffs were oriented towards the need for faster actions to avoid prolonged stay at ER. The very next month, the assessment revealed a decrease in waiting time by 1 hour.	supporting ancillary departments like Front desk, billing, ER staffs, Lab, PRO, and radiology. So, all staffs in these departments had to be trained for quick and efficient care to avoid the delay.
11	Gastroenterology	To assess the quality of Pre-procedural care for endoscopy	The objective is to assess whether all patients posted for endoscopy receive good quality preprocedural	All patients undergoing endoscopy should have optimal fasting with adequate pre procedure	Two of the patients who underwent endoscopy in the study period developed aspiration post procedure due to	All the staff nurses, interns on rotational shifts were then regularly trained regarding the	Staffs and interns in the ward were shunted to other allied departments which again



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			care like adequate duration of nil per oral before procedure.	preparation for safe procedural and post procedural status.	inadequate fasting, which was due to inadequate knowledge and communication between staffs.	preprocedural care and the same was ensured by the consultant as well. The subsequent month none of the patient developed aspiration or other complications.	made the training and execution of quality care challenging.
12	Intensive Care Unit	To assess adherence to APACHE II/FASTHUGBID scoring in ICU for disease severity assessment.	The objective was to assess whether all patients admitted in ICU are assessed for severity of their illness, which may prioritize the care given to them.	Ideally all patients admitted in ICU should be scored within 24 hours.	The retrospective case sheet assessments showed that nearly 25 % didn't get the assessment done at admission which was due to lack of knowledge and manpower issues in ICU.	After a couple of training sessions for interns, residents and staffs, the subsequent month all patients got the assessment and	The interns and residents who are in rotational posting need to be trained frequently for using these scoring systems. Their knowledge



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						predictions done on time.	and application of scoring also need to be assessed at regular intervals.
13	General Medicine	To assess the number of code blues announced in medical ward during a month.	Patients who are admitted in medical ward are relatively stable and are assessed by the primary consultant at least once a day. However, they will be monitored by junior residents and staffs throughout the day. They need ensure that these patients if developing any	Ideally none of the patient in ward care should require paging for emergency code if monitored meticulously with MEWS scoring.	There were two instances of code blue during the month in the ward. The practical difficulty was that the ward had occupancy of 30 patients and only one resident and one staff to monitor them all. So, it was difficult to monitor regularly. The Modified Early Warning Signs	The subsequent month, after proper training and orientation of staffs and junior residents to MEWS scoring, code blue reported was zero.	The main problems encountered were, the manpower and time for training all staffs and residents in identification of sick patients through MEWS score. The understanding pre and post training was also tested.



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			complication, should be immediately shifted to ICU. If not attended at right time, they may land up in mortality or morbidity.		scoring was not adhered strictly.		
14	Oncology	To assess the correct prescription and administration of chemotherapeutic drugs for oncology patients	Objective is to check whether correct dose, frequency, route, and administration of chemotherapeutic drugs is followed in oncology patients for better outcome.	All patients receiving chemotherapeutic drugs are properly assessed for drug allergies. Their blood counts, liver and renal functions are also assessed before initiation of treatment. Care is taken to ensure correct dosage,	8% of case files accessed didn't have proper entry of medications in drug chart.	After which, an orientation to drug prescription administration was taken for all staffs and junior residents and double checking of orders was planned before drug administration	Every oncology disease had a different regime of treatment. Many of these drugs were high risk medications requiring proper storage and correct administration. So, all staffs in



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				administration and prevent infections and adverse drug reactions.		to avoid mistakes in future. Repeat assessment next month showed 100% compliance	the care area and interns in rotational posting must be trained at regular intervals and assessed for compliance to standard care practice.
15	Respiratory Medicine	Adherence to NTEP for TB treatment	To ensure all the newly diagnosed tuberculosis patients are treated as per the NTEP program.	Ideally all patients diagnosed to have any form of tuberculosis, should be diagnosed and treated based on the latest NTEP protocol	15% cases were found to either not complete investigation for TB or lost to follow up which made adherence to NTEP a challenge.	After NTEP orientation to all concerned health professional and appropriate follow up, the adherence improved significantly to >95%.	As tuberculosis is a disease with varied spectrum of symptoms, these patients can be under care of various specialists and hence a large number of staffs had to



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							be trained and knowledge assessed and regular intervals which is was challenging
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Department of Orthopaedics



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ORTHOPAEDICS DEPARTMENT

Specialty : Orthopaedics

Date of Audit: 01.02.2022

Source: Inpatient files

Clinical audit done by : Dr. V. Raviraman

Dr. Shanmuganathan

Dr. Hari Sudhan

Assisted by: Dr. Ganesan G Ram, Dr. Lokesh kumar

PURPOSE & SUMMARY OF CLINICAL AUDIT

The purpose of the audit is to find out the waiting time in Orthopaedics OPD.

STANDARDS

All the patient should be seen within 10 minutes from the time of registration in the Orthopaedic OPD by the consultant.

TARGET

All the patient should be seen within 10 minutes from the time of registration in the Orthopaedic OPD by the consultant.

METHODOLOGY

The OPD file records of the patients were analysed from 01/01/2022 to 31/01/2022. The OPD records have all the necessary data's like Patient name, age, sex, OP in time, time seen by consultant, post operative / General OP case, Advise of consultant.



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FINDINGS

Total of 1400 patient came to orthopaedic OPD. Out of with only 10 patients were consulted late in OPD. The average time of Consulting was 6 minutes and average time of the late consulted patient was 12 minutes

OBSERVATIONS

The morning time when all the morning consultants were available the average registration to consultation time was 3 minutes. During lunch time when a single or two consultants are managing the OPD the consultation time was 8 minutes.

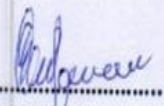
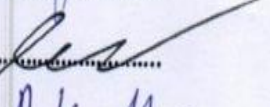
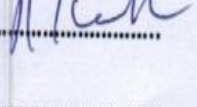
The 10 late consultations were analyzed out of which 2 were consultant factors and 8 were patient factors. The 4 patients were post op cases came without discharge summary and waited for duplicate copy from MRD. 4 patients came on wrong consulting date & day. 2 consultant factors were consultant were busy doing dressing or minor procedure in OPD dressing room.

SUGGESTIONS

Patient at the time of discharge should be advised to come on the exact day and date for review.

Consultant should make arrangement for covering the op when he is busy doing dressing & minor Procedure in OPD dressing room.

SIGNATURE OF MEMBERS INVOLVED IN AUDIT

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ORTHOPAEDICS DEPARTMENT

Specialty : Orthopaedics

Date of Audit: 03.01.2022

Source: Inpatient files

Clinical audit done by : Dr. V. Raviraman

Dr. Shanmuganathan

Dr. Hari Sudhan

Assisted by: Dr. Ganesan G Ram, Dr. Karthick Raj

PURPOSE & SUMMARY OF CLINICAL AUDIT

The purpose of this audit is to support practice in assessing the quality to attend & Handling the compound fracture cases for consultants for improvement in patient safety.

STANDARDS

All compound fractures treated by external fixator or internal fixation, 20% of the cases are prone to the infections (either HAI or community acquired). All the compound fracture with neurovascular injury treated by external fixator or internal fixation & Neurovascular repair, 30% of the cases are prone to the infections (Either HAI or community acquired)

TARGET

All the compound fractures treated by external fixator or internal fixation, not more than 10% of the treated cases should get infections (either HAI or community acquired). All the compound fractures with neurovascular injury treated by external fixator or internal fixation & neurovascular repair, 15% of the treated cases should get infections (either HAI or community acquired).



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METHODOLOGY

Inpatient files record of the patient with chief complaint of severe pain & fracture treated in our hospital from 01.11.2021 to 30.11.2021 were audited for the purpose of improvement in quality of treatment.

FINDINGS

IPD Case files from 01.11.2021 to 30.11.2021 were audited, out of those 4 cases were admitted with compound fracture associated with vascular injury. Infection rates were checked & it was found that in 10% of the treated cases of compound fracture & infection was found in 5% of the treated cases of compound fracture associated with vascular injury.

OBSERVATIONS

- During the audit it was observed that in some cases, patients were not reached to the hospital in right time.
- Inappropriate 1st aid taken from some other hospital or previous surgery done in another hospital.
- In adequate wound care done in few cases.

OBSERVATIONS REGARDING NURSING RECORD

- In 10% of the case files, all entries were dated time, change of condition was not documented properly & all investigations were not attached.
- In 6% of the cases, input/output charting was not done.
- In 12.2 % of the cases transfer notes were not documented.
- In one case vital monitoring & in 8% of the cases, blood sugar charting was not done properly.
- In few cases nursing notes were not legible & discharge notes were not complete properly.
- In few cases, files were not attached in chronological order

SUGGESTIONS

- To assess & treat the patient on right time.
- Culture should be sent at the time of arrival in the emergency, for the culture tubes should be provide in the emergency department so that immediate culture should be taken.
- Irrigation & lavage should be done in emergency
- Lavage machine & Lavage set should be provided in emergency so that, patient can be treated at the right time.



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REGARDING TRAINING OF STAFF

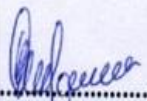
- To properly implement wound care & SSI Prevention bundle to minimize the infection rate, for this bundle checklist form should be implemented in the patient file.
- Training should be provided to the nursing staff regarding mentioning the entries with date & time, properly documenting the changes of condition, input- output charting, vital monitoring, blood sugar charting.
- Training should be provided to the nursing staff regarding properly writing the notes in legible handwriting, discharge notes, attaching the investigation reports & to tie the files in chronological order.

WHAT IS NOT TO BE DONE

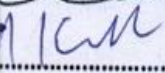
Lavage should not be done in the following conditions

- In case of suspected cases of compound fracture with blood loss or hypovolemic shock.
- In case of associated vascular injury.
- In case of patient having low B.P & Low pulse rate.

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Department of Critical Care

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MADURAI

CRITICAL CARE DEPARTMENT

Specialty : Critical care

Date of Audit : 01.02.2022

Source: Inpatient case sheets

Clinical Audit done by : Dr. Varun. R

Assisted by : Dr. Munish

Dr. Mouli shankar

PURPOSE & SUMMARY OF CLINICAL AUDIT

This is for assessing patient care in neuro critical ICU. This is to monitor proper practices in central venous access.

STANDARDS

As neuro ICU has patient on need for long term IV drugs and hyperosmotic medications (mannitol, 3% NS), IV access is needed. Nearly 40% of patients require long term (>5 days) IV drugs world wide

TARGET

To assess central line placement rate and other alternatives.

METHOLOGY

Neuro ICU cases were audited from 01.01.2022 to 31.01.2022 and number of CV cannulation noted.



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FINDINGS

Out of 58 cases admitted, 14 cases had central line cannulation subclavian line was the preferred site, lines were kept on an average of 9.4 days, No CLABS was reported. 2 Case of UL DVT noted, treated with heparin and recovered.

OBSERVATIONS

EJV was the alternate in many cases, central line was not inserted in few cases due to logistics of the patient family.

Patient needing more than 12 days had different source reinsertion of lines done.

OBSERVATION IN CASE SHEET

- 100% of central venous cannulation notes were noted.
- USG guidance was used in 25% of cases
- Proper care was documented in case sheets

SUGGESTIONS

- To asses need for long term therapy early and insertion of central line recommended.
- Peripheral veins may be spared for convalescence therapy in ward.

TRAINING OF STAFF

- ideal training of staff and biomedical technician for assisting and daily care of line
- proper use of Hep-lock to prevent blockage of lumens
- proper protocol for central line care during mobilization to prevent accidental removal (7% noted)

Dr. VARUN.R M.D.,D.A.,E.D.I.C
HOD Critical Care Unit



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Department of Psychiatry

Velammal Medical College Hospital And Research Institute, Madurai

Speciality: Psychiatry

Date of audit: 18.02.2022

Source: Out patient records

Clinical audit done by: Dr. Ramanujam

Assisted by: Dr. Rena, Dr. Vidhya, Dr. Nivedita

PURPOSE AND SUMMARY OF CLINICAL AUDIT:

This clinical audit was issued for assessing quality improvement in our hospital. The purpose of this audit is to assess rate of follow up in recently discharged patients with Alcohol Dependence.

STANDARDS:

- High follow up rate strongly correlates with higher rates of abstinence.
- Among Alcohol dependent persons, the average abstinence rate at 1 year was found to be 30%.
- No estimates were found regarding follow up rates immediately post discharge.

TARGET:

- To attain 90% follow up rate during the first 90 days post discharge.

METHODOLOGY

Records of recently discharged in-patients with a diagnosis of Alcohol dependence syndrome from the Male Deaddiction Ward at our hospital was obtained. Their follow up dates in out-patient department was extracted from the Out Patient Nominal register. The rate of follow up in the first 90 days post discharge was audited for the purpose of improvement in quality of treatment.

FINDINGS:

- From the present audit we noted that 72 patients were admitted and discharged from the male deaddiction ward in the 3 months preceding this audit.
- The audit revealed that :
 - 93% followed up immediately (1-2 weeks) post discharge.
 - At 1 month post discharge, 77% of the patients followed up



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- At 3 months post discharge, 75 % of the patients followed up.
- Those who were not on regular follow up were contacted by the Social Worker and CRRIs to elicit reasons for non-follow up.
- The most common reason cited was that the family believed that the follow up was not necessary as the patient was maintaining well (37%).
- Other reason cited included: Forgetting date of follow up/ travelling out of home town/ monetary issues/relapse of drinking.

OBSERVATIONS:

- During the audit it was observed that 7% of those who were not on regular follow up could not be contacted due to wrong contact details/ did not answer calls/registered number belonged to distant relative

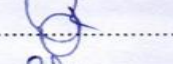
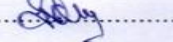
SUGGESTIONS:

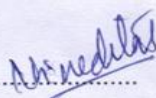
- Pre discharge counselling of patient and bystander regarding follow up, adherence to treatment
- To create a registry of all patients discharged from the deaddiction ward.
- To schedule fortnightly tele follow up calls with these patients to assess follow up rates and abstinence rates.
- To liaise with Department of Community Health and Nursing College to make home visits to patients who are not on follow up, and re- engage them in the therapeutic process.
- To periodically repeat this audit at 30 day intervals, till the target of >90% follow up at 90 days post discharge can be consistently achieved.
- To organise Annual Camps on World Mental Health Day to commemorate and incentivise those who are on follow up and maintain abstinence.

REGARDING TRAINING OF STAFF:

- Training should be provided to the Social workers and CRRIs posted to Psychiatry to do tele follow ups with patients with Alcohol Dependence Syndrome with the aim of encouraging follow up.

SIGNATURE OF MEMBERS INVOLVED IN AUDIT

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Velammal Medical College Hospital And Research Institute, Madurai

Speciality: Psychiatry

Date of audit: 21.01.2022

Source: Out patient records

Clinical audit done by: Dr. Ramanujam

Assisted by: Dr. Rena, Dr. Vidhya, Dr. Nivedita

PURPOSE AND SUMMARY OF CLINICAL AUDIT:

This clinical audit was issued for assessing quality improvement in our hospital. The purpose of this audit is to assess rate of follow up in recently discharged patients with Alcohol Dependence.

STANDARDS:

- High follow up rate strongly correlates with higher rates of abstinence.
- Among Alcohol dependent persons, the average abstinence rate at 1 year was found to be 30%.
- No estimates were found regarding follow up rates immediately post discharge.

TARGET:

- To attain 90% follow up rate during the first 90 days post discharge.

METHODOLOGY

Records of recently discharged in-patients with a diagnosis of Alcohol dependence syndrome from the Male Deaddiction Ward at our hospital was obtained. Their follow up dates in out-patient department was extracted from the Out Patient Nominal register. The rate of follow up in the first 90 days post discharge was audited for the purpose of improvement in quality of treatment.

FINDINGS:

- From the present audit we noted that 64 patients were admitted and discharged from the male deaddiction ward in the 3 months preceding this audit.
- The audit revealed that :
 - 95% followed up immediately (1-2 weeks) post discharge.
 - At 1 month post discharge, 88% of the patients followed up



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- At 3 months post discharge, 68 % of the patients followed up.
- Those who were not on regular follow up were contacted by the Social Worker and CRRIs to elicit reasons for non follow up.
- The most common reason cited was that the family believed that the follow up was not necessary as the patient was maintaining well (43%).
- Other reason cited included: Forgetting date of follow up/ travelling out of home town/ monetary issues/relapse of drinking.

OBSERVATIONS:

- During the audit it was observed that 10% of those who were not on regular follow up could not be contacted due to wrong contact details/ did not answer calls/registered number belonged to distant relative

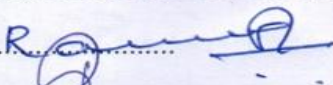
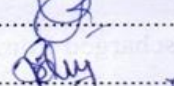
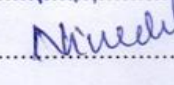
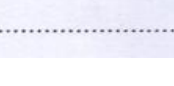
SUGGESTIONS:

- To create a registry of all patients discharged from the deaddiction ward.
- To schedule fortnightly tele follow up calls with these patients to assess follow up rates and abstinence rates.
- To liaise with Department of Community Health and Nursing College to make home visits to patients who are not on follow up, and re- engage them in the therapeutic process.
- To periodically repeat this audit at 30 day intervals, till the target of >90% follow up at 90 days post discharge can be consistently achieved.
- To organise Annual Camps on World Mental Health Day to commemorate and incentivise those who are on follow up and maintain abstinence.

REGARDING TRAINING OF STAFF:

- Training should be provided to the Social workers and CRRIs posted to Psychiatry to do tele follow ups with patients with Alcohol Dependence Syndrome with the aim of encouraging follow up.

SIGNATURE OF MEMBERS INVOLVED IN AUDIT

1. 
2. 
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Department of Ophthalmology

VELAMMAL MEDICAL COLLEGE HOSPITAL AND RESEARCH CENTRE

DEPARTMENT OF OPHTHALMOLOGY

SPECIALTY; OPHTHALMOLOGY

DATE OF AUDIT; 31-1-2022

SOURCE ; INPATIENT FILES

CLINICAL AUDIT DONE BY ; Dr.k.Ilango

Dr.Ramapriya

Dr.Remi

purpose and summary of clinical audit

the purpose of this audit is improve the quality of patient care in patients under going various surgical procedures in the dept of ophthalmology including cataract surgery ,avoid intraoperative complications and improve post operative visual outcome

standards

a standard check list is followed including intraoperative iol power calculation, slitlamp and fundus examination. Other investigations like iop recording ,syrringing of nasolacrimial duct is undertaken. In cases with visual prognosis is guarded like Retinal pathology the outcome is explained to the patient.

Target

all patients who undergoes cataract surgery should get vision 6/24 or better with unaided vision in the month of february. There should be zero infection rate in cataract surgery.

Methodology

in patient records were audited from 1-1-2022 to 31-1-2022 for post operative visual acuity and looked for type of complications during cataract surgery

Findings

patients with unaided vision without spectacle correction
6/60 less than=2

6/18 to 6/60=11

6/6 to 6/18=16



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observations ; during the audit it was observed that the pre existing pathology was the contributing factor for poor visual out come than intra operative visual outcome.

Observation in nursing recording

in 4 % of the cases it was found that the doctors drug prescription was not carried to the nursing charts
the time of eye drops applied were not mentioned in the nursing charts

suggestions

1. to explain the post operative visual out come clearly to the patient and get consent explaining those complications that are eye related than following the general format
2. the eye to be operated should be marked with black X mark over the eye brow for clear identification
3. patients with Glaucoma undergoing surgery should have a sticker on the op book for easy identification and alert the surgeon.

Signature of the members



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VELAMMAL MEDICAL COLLEGE HOSPITAL AND RESEARCH CENTRE

DEPARTMENT OF OPHTHALMOLOGY

SPECIALITY; OPHTHALMOLOGY

DATE OF AUDIT; 28-1-2022

SOURCE ; INPATIENT FILES

CLINICAL AUDIT DONE BY ; Dr.k.Ilango

Dr.Ramapriya

Dr.Remi

purpose and summary of clinical audit

the purpose of this audit is improve the quality of patient care in patients under going various surgical procedures in the dept of ophthalmology including cataract surgery ,avoid intraoperative complications and improve post operative visual outcome

standards

a standard check list is followed including intraoperative iol power calculation, slitlamp and fundus examination. Other investigations like iop recording ,syrringing of nasolacrima duct is undertaken. In cases with visual prognosis is guarded like Retinal pathology the outcome is explained to the patient.

Target

all patients who undergoes cataract surgery should get vision 6/24 or better with unaided vision in the month of february. There should be zero infection rate in cataract surgery.

Methodology

in patient records were audited from 1-1-2022 to 31-1-2022 for post operative visual acuity and looked for type of complications during cataract surgery

Findings

patients with unaided vision without spectacle correction

6/60 -6/18=6

6/18 - 6/60 =34

6/18-6/6=15

observations

During the audit it was observed that



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observations ; during the audit it was observed that some patient had corneal oedema post operatively

Observation in nursing recording

in some of the cases it was found that the doctors drug prescription was not carried to the nursing charts

the time of eye drops applied were not mentioned in the nursing charts

suggestions

1. to reduce the corneal oedema liberal viscoe should be used and unneccary handling of the tissues with the irrigating fluid and surgical trauma.
2. all patients with cardiac and hypertensive and high myopia should received a plain xylocaine block through the subtenon route only.
- 3.all standard check list that is listed in the AIOS recommendations should be followed

signature of the members



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Best Practice Ophthalmology

Title of the Practice

Improving post operative visual outcome by avoiding intra operative complications

Objectives of the Practice : To improve the quality of patient care in patients undergoing various surgical procedures in the ophthalmology department including cataract surgery, avoiding intraoperative complications and improve post operative visual outcome.

The Context: The objective of this practice is to improve the quality of treatment given. Right from diagnosis to procedure, various personnel are involved and hence all of them had to be oriented towards achieving quality care, which required adequate training of the team.

The Practice : A standard checklist was created which included intraoperative IOL calculation, IOP recording, slit lamp and fundal examination. Liberal Viscose application to reduce corneal edema and delicate handling of tissues during procedure was to be ensured as well.

Evidence of Success: Prior to implementing this practice 6 out of 55 pts had post operative visual outcome not meeting the required standard of 6/24 acuity. After the policy was implemented, only 2 had such vision less than 6/24.

Problems Encountered and Resources Required: During the process there were a few issues related to drug prescription and administration to patient by the doctor and staff, which required retraining and awareness to all the care givers involved.



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Department of Paediatrics



VELAMMAL MEDICAL COLLEGE HOSPITAL & RESEARCH INSTITUTE **MADURAI** **PAEDIATRICS DEPARTMENT**

Specialty : Paediatrics & Neonatology

Date of Audit: 05.01.2022

Source: Inpatient files & discharge summaries (November 2021 (254), December 2021(223))

Clinical audit done by : Prof. Dr.G.Mathevan
Prof.Dr.S.Natarajarathinam
Prof.Dr.R.V.Jeyabalaji

Assisted by: Dr. T.Karthik raj

PURPOSE & SUMMARY OF CLINICAL AUDIT

This clinical audit is used for assessing quality improvement in our hospital and our department. The purpose of this audit is to assess whether all inpatients admitted in our ward have a documented nutritional assessment on admission and specific nutritional advices at discharge.

STANDARDS

Nutritional assessment is a vital component in pediatric healthcare service. A child with good nutrition is expected to have a healthy growth and development. It is also an essential component of prevention and recovery of illnesses. It also has a long-term impact on future health and quality of life.

Again, nutrition is an area where parent and care givers have lot of ignorance and doubts. To make things worse we have exposure to lot of unhealthy food choices these days. So, it becomes our duty to guide the parent for healthy food choices at every pediatric health visit.

TARGET

A proper nutritional diet and healthy lifestyle can affect young children throughout the rest of their lives. With rising incidence of malnutrition, especially obesity, it is mandatory that we do a nutritional assessment of children at every health care visit. Inpatients give us the opportunity for proper nutritional assessment and allaying parental concerns about their child's nutritional status. So, the target is to achieve **100%**, where all inpatients are nutritionally assessed and given guidance for adopting healthy food habits & lifestyle.

METHODOLOGY

Inpatient file records and discharge summaries of all the children admitted in pediatric ward between 01.11.2021 to 31.12.2021 were audited for this purpose of improvement in quality of treatment.



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VELAMMAL MEDICAL COLLEGE HOSPITAL & RESEARCH INSTITUTE MADURAI PAEDIATRICS DEPARTMENT

FINDINGS

A total of 477 (254+223), were assessed for the audit. 312 case sheets (65.4%) had a complete nutritional assessment documented, 109 (22.8%) had an incomplete assessment and 56(11.7%) did not have any evidence of nutritional assessment in the case sheet. Around 372(77.9%) discharge summaries had some comment on dietary advices at discharge.

OBSERVATIONS

- During the audit it was found that nearly 35-40% case sheets did not have a complete nutritional assessment and nearly 20% did not have evidence of dietary advice on discharge.
- It was also observed that many of these assessments done by interns were not counter checked or verified and authorized by the primary consultant.

SUGGESTIONS

- To give an induction training to all interns regarding correct nutritional assessment and proper documentation.
- Nutritional assessments to be completed within 24 hours of admission.
- Primary consultant/Ward AP to ensure that nutritional assessments are done correctly and documented at least by day 2 of admission and check for the same before discharge also.
- To make dietary advice as a part of the discharge checklist in future.
- To ensure that we use the services of our dieticians in planning diet for malnourished children.
- To share tamil pamphlets of dietary and lifestyle advices to all children during or at discharge.

SIGNATURE OF MEMBERS INVOLVED IN AUDIT

G. Mathew
Prof. Dr. G. Mathew.

Dr. S. Narayana Kumar
Dr. S. Narayana Kumar

Dr. R. V. Jaya Balaji
Dr. R. V. Jaya Balaji

(Dr. T. K. Mani)
Dr. T. K. Mani

Dr. S. Mohammed Azamudeen
Dr. S. Mohammed Azamudeen

Dr. B. Nirmal Kumar
Dr. B. Nirmal Kumar

Dr. V. Veeramani
Dr. V. Veeramani

Dr. P. Nishitha
Dr. P. Nishitha

Dr. S. Jinisha
Dr. S. Jinisha



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Paediatrics Best Practice

Title of the Practice

To assess whether all Paediatrics inpatients get nutritional assessments and advice irrespective of the primary disease condition, during their stay in hospital.

Objectives of the Practice: The objective was to ensure whether children, who are in their developmental phase get some nutritional assessments and advice from health care workers during their stay.

The Context: Parents of children admitted with illness are usually worried primarily about the present disease status and fail to get to know about ideal nutrition for their children. The consultants and residents also forget to give valuable nutritional advice that can create a significant impact on the child's health and disease prevention.

The Practice: Retrospective assessments with case records revealed that nearly 30 % Paediatric patients did not have nutritional assessments or advice. This was due to lack of knowledge of nutritional assessment and nutritional advice among interns and residents.

Evidence of Success: After regular training sessions on nutritional assessments and after adding nutritional advice to discharge checklist, almost all patients are receiving valuable nutritional advice. An initial assessment chart also includes nutritional assessment now, so that all patients get assessed on admission.

Problems Encountered and Resources Required: The interns and residents are in a rotational posting and hence frequent training sessions are needed along with random auditing of assessments to ensure their application of knowledge is correct.



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Department of Dermatology Best Practice

Title of the Practice

To assess the quality of wound care management given to inpatient leprosy patients

Objectives of the Practice: To identify the adherence of standard wound care management plan for all leprosy inpatients and prevention infection

The Context: The wound care of ward inpatients is usually done by interns who are posted in the department in rotation. So, a training session is needed every month and requires auditing of correct practice as well. Again, the wound care leprosy patient is usually different from other wound care plans.

The Practice: All leprosy patients with trophic ulcer are inspected for maggots, removed with turpentine oil manually. Debridement is done, followed by sending for pus C&S. Routine cleaning and dressing of wound daily. Advice change of position frequently and ensure less than 10% develop infections.

Evidence of Success: The inspected case sheets proved that the incidence of infection was 3 out of 39 (<10%). Strict glycemic control and early IV antibiotics were expected to improve the outcomes.

Problems Encountered and Resources Required: Repeated wound care training had to be given for every batch intern during their posting. Frequent auditing of the process was also required for better outcomes.



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Department of General Medicine

Best Practice

Title of the Practice

To assess the number of code blues announced in medical ward during a month.

Objectives of the Practice: Patients who are admitted in medical ward are relatively stable and are assessed by the primary consultant at least once a day. However, they will be monitored by junior residents and staffs throughout the day. They need ensure that these patients if developing any complication, should be immediately shifted to ICU. If not attended to at the right time, they may land up in mortality or morbidity.

The Context: There were two instances of code blue during the month in the ward. The practical difficulty was that the ward had occupancy of 30 patients and only one resident and one staff to monitor them all. So, it was difficult to monitor regularly. The Modified Early Warning Signs scoring was not adhered strictly.

The Practice: Ideally none of the patient in ward care should require paging for emergency code if monitored meticulously with MEWS scoring.

Evidence of Success: The subsequent month, after proper training and orientation of staffs and junior residents to MEWS scoring, code blue reported was zero.

Problems Encountered and Resources Required: The main problems encountered were, the manpower and time for training all staffs and residents in identification of sick patients through MEWS score. The understanding pre and post training was also tested.



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Department General Surgery



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MADURAI

GENERAL SURGERY DEPARTMENT

Specialty : GENERAL SURGERY

Date of Audit: 01.12.2021

Source: Inpatient files

Clinical audit done by : Prof. Dr. S.R.Dhamotharan

Prof.Dr. S.SelvaChidambaram

Prof.Dr. C.Karpagavel Chandrabose

Assisted by: Dr.P.Thangapprakasam

Dr. K.Arun Guru

PURPOSE & SUMMARY OF CLINICAL AUDIT

This clinical audit is used for assessing the quality of Services at our hospital. The purpose of this audit is to support the practice in assessing the quality and handling the Cholelithiasis cases.

STANDARDS

All Cholelithiasis cases are treated by Laparoscopic Cholecystectomy among which almost 5% of the cases are prone for complications.

All the cases of acute abdomen diagnosed as Perforated cholecystitis and cases with Common Bile Duct Calculi are Proposed to undergo MRCP followed by ERCP with retrieval of CBD stones and if not possible, proceeded with Open Cholecystectomy with CBD Exploration.

TARGET

All Cholelithiasis, Calculous Cholecystitis cases should be performed by Laparoscopic Cholecystectomy with least expected complications which include vascular injury, Visceral injury and Preperitoneal Insufflation at the time of primary trocar placement and bowel injury, CBD injury at the time of Surgery.



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METHODOLOGY

Inpatient records of the patients who presented with chief complaints of pain abdomen over right Hypochondrium, increased intensity of pain after Fatty meals presented to our OPD & Emergency Department who are treated with either Laparoscopic Cholecystectomy or open Cholecystectomy at our hospital from 01.11.2021 to 30.11.2021 were audited for the purpose of improvement in quality of the treatment.

FINDINGS

IPD Case files from 01.11.2021 to 30.11.2021 were audited, out of those 4 cases were admitted with pain abdomen over right Hypochondrium and was diagnosed as Cholelithiasis.

All the above mentioned complications were looked for and it was found that the complications were observed only in <2% of the treated cases.

OBSERVATIONS

- During the audit it was observed that in some cases, patients with acute abdomen were not reached to the hospital in right time.
- Inappropriate 1st aid or Improper or missed diagnosis made from the previously treated hospitals resulted in increased morbidity.

OBSERVATIONS REGARDING NURSING RECORD

- In 6 % of the case files, change of condition was not documented properly and all investigations were not attached.
- In 2% of the cases, input/output charting was not done.
- In 12 % of the cases transfer notes were not documented.
- In one case vital monitoring and in 4% of the cases, blood sugar charting was not done properly.
- In few cases, nursing notes were not legible and discharge notes were not completed properly.
- In few cases, files were not attached in chronological order

SUGGESTIONS

- To assess and treat the patients on appropriate time.
- Time delay with the Blood investigations and Shifting the patients should be corrected.
- Anaesthetist fitness must be provided at the earliest in case of Emergency cases with Comorbidities.
- Laparoscopic Instruments should be provided with good quality.
- Proper insulation and periodical service of the Laparoscopic instruments must be verified.
- Adequate Perioperative care in Intensive Care Units.



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REGARDING TRAINING OF STAFF

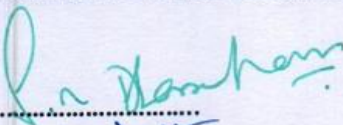
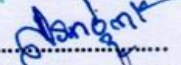
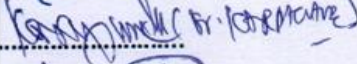
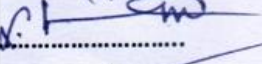
- Proper implementation of the Strict Aseptic protocols in the operation theatre, proper Sterilisation of the Laparoscopic instruments.
- Proper maintenance of SSI Prevention bundle to minimize the infection rate. For this bundle, checklist form should be attached in the patient file.
- Training should be provided to the nursing staff regarding mentioning the entries with date & time, properly documenting the changes of condition in postoperative period, input- output charting, vital monitorings, measuring the Drain tube, to look for any change in content of the drain, blood sugar charting.
- Training should be provided to the nursing staff regarding properly writing the notes in legible handwriting, discharge notes, attaching the investigation reports & to tie the files in chronological order.

WHAT IS NOT TO BE DONE

Diagnostic Laparoscopy can precede Laparoscopic Cholecystectomy in the following conditions :

- In suspected cases of Perforated Cholecystitis.
- In case of Severe Abdominal Pain in Diabetic Patients with differential diagnosis as Emphyema Gallbladder.

SIGNATURE OF MEMBERS INVOLVED IN AUDIT

1. 
2. 
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Department of ENT

9/8/22

DEPT OF ENT

CASE AUDITING FOR THE

MONTH

OF

JANUARY 2022.



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Case: 1

Mrs. Jothi 55yrs / F

2201190003

Non MLC

DoA: 19.1.22

DoD: 20.1.22

DNS is Right $\bar{c}$

Bil. Sinus nasal Polyps. $\bar{c}$ Diabetes mellitus
Covid 19 +ve.

Admission: Signatures; updated Prescript
Discharge Summary enclosed.

Covid 19 +ve included but

Remarks: - Secondary diagnosis
"Diabetes mellitus" not
included.

- Since became Covid 19 +ve

This is not
mentioned
in Case Sheet.

- pt has discharged & sent
Govt. Rajaraj Hospital
Madurai

Case Sheet Audited

Ramya Jeyaraj

Dr. P. RAJASEKARAN, M.S., DLO.,
Professor & HOD
Department of ENT
Velammal Medical College
Hospital and Research Institute
Madurai-625 009



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Case NO 1.. 2.

MLC

Mr. Palaniappan. K. 65yrs/M

2201180230

Blunt.
A Bull gox Injury Neck
Covid-19 Pneumonia
(RT) Zygomat arch#

DOA: 22.1.22
DOB: 05.2.22.

Tracheostomy done: 18.01.22

Decannulated.
Healed.

Rt Zygomat Arch
Open Reduction &
Internal fixation
done: 27.01.22

Ryle's tube feeding - healed.

Case Sheet finalized

Ramya
Dr. P. RAJASEKARAN, M.S., D.L.B.
Professor & HOD
Department of ENT
Velammal Medical Institute
Hospital, Madurai



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Department of Obstetrics & Gynaecology

Best Practices

Title of the Practice

Antenatal steroid and MGSO4 prophylaxis for preterm delivery

Objectives of the Practice: All antenatal mothers expecting preterm delivery should be provided with steroid and magnesium sulphate prophylaxis to prevent preterm complications like RDS, IVH, neurological damage in preterm neonate.

The Context: There were few instances where the antenatal mother was referred in late and didn't have adequate time window for prophylaxis and hence missed out.

The Practice: All antenatal mothers expecting preterm delivery should receive antenatal steroids & MGSO4 for better neonatal outcome.

Evidence of Success: All AN mothers (100%) received antenatal steroids. Only 45% received MGSO4 and 33% had tocolysis for completion of prophylaxis. After discussions with neonatologists, the importance of these prophylaxis were further stressed and subsequently all mothers (if not emergency) received tocolyses till completion of prophylaxis.

Problems Encountered and Resources Required: All referral centers were educated about need for timely referral to ensure completion of prophylaxis. All staffs and doctors in the care area were educated about the valuable time window for prophylaxis, which required extensive training to all.



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Department of Emergency Medicine

Department of Emergency Medicine

CLINICAL AUDIT

PURPOSE OF CLINICAL AUDIT

This clinical audit is done for quality improvement in our department. The purpose of this audit is to assess the average duration of emergency department stay for patients getting admitted and to find out the delays and their reasons.

STANDARD

Understanding the path of the patient from the entry to the exit of ED - which is the time a patient spends in the ED, or length of stay is the key to improve patients' experiences and ED services.

TARGET

To achieve a target length of stay ≤ 2 Hrs for all patients getting admitted via ED.

METHODOLOGY

The time lines for all patients getting admitted via emergency department from 01-01-2022 to 28-02-2022 are audited using emergency department patient nominal.

FINDINGS

MONTH	TOTAL NO OF PATIENTS	TOTAL NO OF INPATIENTS	AVERAGE TIME FOR INPATIENTS	PATIENTS STAYING IN ER > 3 HRS
JANUARY	1516	1036	> 3.10HRS	272
FEBRUARY	1109	784	> 2.10HRS	114

OBSERVATION

During the audit it was observed that the following are the causes for patients' increased length of stay in emergency department,

- Delay in billing
- Delayed decision by patients relatives
- Delays during CT /MRI
- ICU Bed availability
- Delay in getting other department consultations

SUGRESSIONS

- Monitoring Radiology turnaround time
- Monitoring Laboratory turnaround time



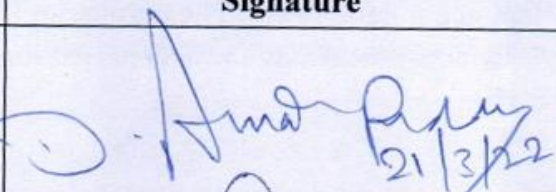
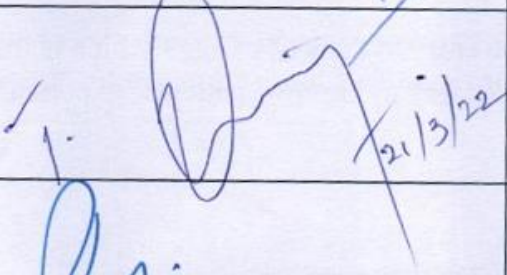
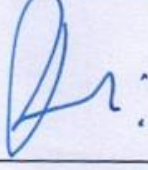
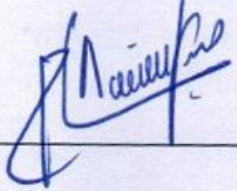
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- Holding patients in ED-ICU while awaiting bed in ICU.
- Shifting patients to CDU (Clinical Decision Unit) while awaiting other consultations or Lab reports.

MEMBERS INVOLVED IN THE AUDIT:

Sl.No	Signature	Seal
1.		Dr. D. AMARESWAR REDDY Reg. No. 80103 Consultant Emergency Physician Dept. of Emergency Medicine Velammal Medical College & Hospital, Madurai
2.		Dr. D. DINESH MURUGAN Emergency Physician Reg. No. 95997
3.		Dr. R. Ram Kirubakar Thangaraj Reg. No: 113365
4.		Dr. NAVIN KUMAR Emergency Physician Reg. No. 122905



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Department of Cardiology Best Practices

Title of the Practice

To assess comprehensive treatment quality given to patients admitted for cardiac care.

Objectives of the Practice: Objective of the practice was to assess whether cardiac inpatients receive quality and comprehensive care.

The Context: The cardiac unit is one of the busiest units in the hospital, receiving maximum inpatients. Patients admitted belong to varied age groups, with variety of comorbidities and varied severity spectrum as well. A good medical team approach is needed to provide comprehensive care to these patients.

The Practice: From retrospective case sheet record assessments, it was found that, many of these cardiac inpatients had multiple comorbidities which was not addressed adequately during hospital stay.

Evidence of Success: After having a consensus on comprehensive assessment, the cardiac team involved general physicians and other specialists in their team to provide quality care to these patients which was evidenced in the subsequent days when all patients were discharged after multiple consultant opinions.

Problems Encountered and Resources Required: It was indeed a challenging task to co-ordinate various specialists and plan a consensual treatment and get the approval of patient for treatment adherence and effective follow up.



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Cardiothoracic Surgery

Best Practices

Title of the Practice

To compare sheathed and unsheathed technique of Intra-Aortic Balloon Pump insertion.

Objectives of the Practice: Objective is to find out which of the technique for IABP insertion is superior to others in terms of ease of procedure and incidence of complications like acute limb ischemia.

The Context: Both techniques were routinely practiced in the cardiothoracic unit. We wanted to study which among the two had lesser incidence of intraoperative complications. The choice of procedure generally varied from patient-to-patient basis, decided by the operating surgeon on table generally.

The Practice: The review and analysis of inpatient records showed that unsheathed/sheath less technique had some advantage over sheathed technique in that the incidence of acute limb ischemia is lesser with unsheathed technique.

Evidence of Success: Subsequently, post this assessment, sheathed technique was preferred for IABP insertion and none of the patients had acute limb ischemia intraoperatively.

Problems Encountered and Resources Required: Based on the advantages observed with unsheathed IABP insertion technique, all operating cardiothoracic surgeons and cardiac anesthetists had to be convinced for practice unsheathed technique for better outcome.



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Department of Neurology

Best Practices

Title of the Practice

To assess the quality of rehabilitative care given to stroke patients.

Objectives of the Practice: Objective is to improve the neuro rehabilitative care given to stroke patients which significantly improves early recovery and mobilization.

The Context: Stroke patients generally have a prolonged or slow recovery, where patient mobility is affected. An effective rehabilitative care plan improves the patient recovery and prevents complications of long period of immobility like bed sores.

The Practice: Stroke patients who present early are thrombosed at the earliest if it's an infarct. These patients have early recovery. But many patients present late and have a prolonged recovery course. These patients, if given timely and effective rehabilitative care by physiotherapist, speech therapist and dietician, can recover early.

Evidence of Success: Four patients were studied, who were presented with stroke, and who when given appropriate care, showed signs of early recovery.

Problems Encountered and Resources Required: Rehabilitative care is always a team effort. The biggest challenge faced was timely co-ordination and integration of all these care givers.



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Department of Urology

Best Practices

Title of the Practice

To identify the incidence of post operative UTI in patients undergoing urological procedures

Objectives of the Practice: All postoperative patients should receive standard post-surgical care to prevent complications like UTI, drainage site infections and blood clots and ensure normal urinary flow.

The Context: The prevention of these post operative care needs meticulous care in the post operative ward by staff nurses, interns, housekeeping staffs. It requires frequent training and assessment of standard care practices.

The Practice: The standard practice includes meticulous assessment of care of surgical wound by staff daily and care of urinary catheters. Ideally no patient should develop UTI, post procedure.

Evidence of Success: There were 4 patients who developed UTI among the cases operated on over a month. After proper education to staff and interns regarding wound care and management, the incidence reduced to nil the next month.

Problems Encountered and Resources Required: The interns and staffs in the post operative care area working in rotation duties had to be educated repeatedly and their knowledge, attitude and practices had to be assessed at regular intervals.



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Department of Vascular Surgery

Best Practices

Title of the Practice

To assess ulcer care given to patients with vascular problems

Objectives of the Practice: Objective was to assess adherence to standard wound care policies and decrease the incidence of chronic ulcers.

The Context: The wound care of ward inpatients is usually done by interns who are posted in the department in rotation. So, a training session is needed every month and requires auditing of correct practice as well. Again, wound care in a patient with vascular diseases is usually different from other wound care plans.

The Practice: All patients with chronic vascular ulcer should be provided with appropriate support, timely repositioning, ulcer debridement, appropriate dressing, and correction of underlying disease.

Evidence of Success: 5 patients with chronic vascular ulcers identified, when treated as per the standard practice guidelines, showed better wound healing and outcome.

Problems Encountered and Resources Required: Repeated wound care training had to be given for every batch intern during their posting. Frequent auditing of the process was also required for better outcomes.



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E Room

Best Practices

Title of the Practice

To assess the average duration of Emergency room stay

Objectives of the Practice: Objective is to find out the average duration of patients stay in Emergency room. Also find out the reasons for probable delay and ensure that waiting time is reduced.

The Context: A patient in ER can have a prolonged stay due to various reasons. A prolonged stay can be stressful for the patients and attendants as well. the ER stay shouldn't be prolonged.

The Practice: The assessments of ER stay of patients for a time period was assessed by reviewing old records and was found that the average duration of stay was around 3 hours. The major reasons for the delay were identified as delay in billing, investigations, and counselling.

Evidence of Success: After identifying the reasons for the delay, the concerned department staffs were oriented towards the need for faster actions to avoid prolonged stay at ER. The very next month, the assessment revealed a decrease in waiting time by 1 hour.

Problems Encountered and Resources Required: The reasons for the delay involved various supporting ancillary departments like Front desk, billing, ER staffs, Lab, PRO and radiology. So, all staffs in these departments had to be trained for quick and efficient care to avoid the delay.



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Department of Gastroenterology

Best Practices

Title of the Practice

To assess the quality of Pre-procedural care for endoscopy

Objectives of the Practice: The objective is to assess whether all patients posted for endoscopy receive good quality preprocedural care like adequate duration of nil per oral before procedure.

The Context: All the staff nurses, interns on rotational shifts had to be regularly trained regarding the preprocedural care. Their knowledge and application had to be assessed as well, so that the patient receives a quality care.

The Practice: Two of the patients who underwent endoscopy in the study period developed aspiration post procedure due to inadequate fasting, which was due to inadequate knowledge and communication between staffs.

Evidence of Success: All the staff nurses and interns on rotational shifts were then regularly trained regarding the preprocedural care and the same was ensured by the consultant as well. The subsequent month none of the patient developed aspiration or other complications.

Problems Encountered and Resources Required: Staffs and interns in the ward were shunted to other allied departments which again made the training and execution of quality care as challenging.



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Department of Oncology

Best Practices

Title of the Practice

To assess the correct prescription and administration of chemotherapeutic drugs for oncology patients

Objectives of the Practice: Objective is to check whether correct dose, frequency, route, and administration of chemotherapeutic drugs is followed in oncology patients for better outcome.

The Context: Oncology patients in ward had varied diagnoses and their treatment regime was different for each of them. The drugs also differed in storage, reconstitution, frequency, and administration. All these drugs also had potential side effects and so the staffs involved in their administration had to be very careful.

The Practice: All patients receiving chemotherapeutic drugs are properly assessed for drug allergies. Their blood counts, liver and renal functions are also assessed before initiation of treatment. Care is taken to ensure correct dosage, administration and prevent infections and adverse drug reactions.

Evidence of Success: 8% of case files accessed didn't have proper entry of medications in drug chart. After which, an orientation to drug prescription administration was taken for all staffs and junior residents and double checking of orders was planned before drug administration to avoid mistakes in future. The very next month all case sheets had no similar issues.

Problems Encountered and Resources Required: Every oncology disease had a different regime of treatment. Many of these drugs were high risk medications requiring proper storage and correct administration. So, all staffs in the care area and interns in rotational posting must be trained at regular intervals and assessed for compliance to standard care practice.



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Department of Respiratory Medicine

Best Practices

Title of the Practice

Adherence to NTEP for TB treatment

Objectives of the Practice: To ensure all the newly diagnosed tuberculosis patients are treated as per the NTEP program.

The Context: All the clinicians and residents are required to know the latest NTEP guidelines for correct diagnosis and treatment. This will be possible only through regular CME updates. Few cases may miss diagnosis because of suspicion of similar medical illnesses or other cross referrals in a multispecialty hospital like ours.

The Practice: Awareness and strict adherence to NTEP.

Evidence of Success: There were few cases who were either not completely investigated for TB or lost to follow up which made adherence to NTEP a challenge. After NTEP orientation to all concerned health professional and appropriate follow up, the adherence improved significantly.

Problems Encountered and Resources Required: As tuberculosis is a disease with varied spectrum of symptoms, these patients can be under care of various specialists and hence a large number of staffs had to be trained and knowledge assessed and regular intervals which is was challenging.



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Speciality Intensive Care Unit

VELAMMAL MEDICAL COLLEGE & RESEARCH INSTITUTE MADURAI

SPECIALTY INTENSIVE CARE UNIT

SPECIALTY : SPL ICU
DATE OF AUDIT : 10/01/2022
SOURCE : IP FILES
AUDIT DONE BY : DR.P.SELVAKUMAR
DR. INOL VISAGAN
DR. SAI
DR. PRITHVI
ASSISTED BY : DR. SHOBAN, DR. MARIAPPAN

PURPOSE & SUMMARY OF CLINICAL AUDIT

This clinical audit is used for assessing quality improvement in our ICU. Purpose is to support practice in following effective handover between the shifts by the residents in ICU.

STANDARDS

Handover is a process of transferring clinical data between health care professionals. Interruption to continuity of care can take place during handover and result in miscommunications between consultants may lead to poor patient outcome.

TARGET

The aim of this audit was to find out whether handover practice between shifts among residents in ICU is safe and effective.

METHODOLOGY

The aim of this audit was to find out whether handover practice between shifts among residents in ICU is safely and effectively. The objective was to assess the level of adherence to standard hand over guidelines by residents in ICU

FINDINGS

All handovers took place at bedside and all residents did face to face verbal handover while few residents did both verbal and documented handovers. The average duration of handover lasted between 40-60 mins.

OBSERVATIONS

- No documented handover was done for very critically ill patients.
- Multiple distractions by the nursing staff and patient side during handovers.



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SUGGESTIONS

- To follow a proper guidelines or protocol for handover.
- All handover must be bedside face to face/written/electronic mode.
- To minimize the distractions during handover.

REGARDING TRAINING OF RESIDENTS

- To implement in following a documented mode of handover preferably.
- Introducing structured and standardized handover technique and conducting practice based handover training to residents
- Training should be provided by the senior residents in following the ICU protocol for handover.

WHAT IS NOT TO BE DONE

- Avoid handover in other areas.
- Avoid vague and excused handover.

SIGNATURE OF MEMBERS INVOLVED IN AUDIT

1. _____

2. _____

3. _____

4. _____



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VELAMMAL MEDICAL COLLEGE & RESEARCH INSTITUTE **MADURAI**

SPECIALTY INTENSIVE CARE UNIT

SPECIALTY: SPL ICU

DATE OF AUDIT: 03/03/2022

SOURCE: IP FILES

AUDIT DONE BY: DR.P.SELVAKUMAR

DR. INSOL VISAGAN

DR. SAI

DR. MARIAPPAN

ASSISTED BY : DR. SHOBAN, DR. PRITHVI

PURPOSE & SUMMARY OF CLINICAL AUDIT

This clinical audit is used for assessing quality improvement in our ICU. Purpose is to support practice in following scoring systems, principles in documenting clinical events and implementing those (APACHE II scoring and FASTHUGBID principle) in day to day routine ICU practice.

STANDARDS

APACHE II score can be used to describe the morbidity of a patient when comparing the outcome with other patients

FASTHUGBID is a principle used as checklist strategy for identifying and checking the significant aspect in care of ICU patients.

TARGET

To implement scoring system in daily routine practice of ICU patients using APACHE II and FASTHUGBID principle by the residents.

METHODOLOGY

Inpatient file records of all SPLTY ICU patients with ventilator support from 01.02.2022 – 28.02.2022 were audited for purpose of improvement in quality care.

FINDINGS

Inpatient file records of all ICU patients with ventilator support from 01.02.2022 – 28.02.2022 were audited, Out of those 27 patients were on ventilator support & critically ill. Those files were thoroughly checked and it was found that in 6 files there was no APACHE II score/ FASTHUG BID principle applied.



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OBSERVATIONS

- It was found that in some cases they reached our hospital with poor prognosis.
- Inadequate documentation in few files.

OBSERVATIONS REGARDING NURSING RECORD

- In 4% Of Files, ventilator changes was not documented properly & all investigations were not attached.
- Change of any dosages and duration not mentioned.
- Blood sugar charting was not done properly.
- Files not attached in chronological order.

SUGGESTIONS

- To assess patient daily and fill scoring systems.
- Calculate the score and explain the morbidity and outcome of each patient.
- Implement FASTHUG BID principle on routine daily basis.

REGARDING TRAINING OF RESIDENTS

- To implement scoring systems in daily routine ICU practice
- Knowledge of scoring systems and its utilization in clinical practice
- Training should be provided with either placards or mobile app which can be easily applied as an bedside tool.

WHAT IS NOT TO BE DONE

Lab parameter values of previous hospital admission/discharge must not be used in evaluating the scores.

SIGNATURE OF MEMBERS INVOLVED IN AUDIT

1. _____

2. _____

3. _____

4. _____



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Intensive Care Unit Best Practices

Title of the Practice

To assess adherence to APACHE II/FASTHUGBID scoring in ICU for disease severity assessment.

Objectives of the Practice: The objective was to assess whether all patients admitted in ICU are assessed for severity of their illness, which may prioritize the care given to them.

The Context: All the patients entering the ICU should be scored within 24 hours of admission to predict the severity and risk of mortality. But sometimes it's not possible to do it because of manpower issues in ICU where all patients will be requiring frequent assessments. The interns and residents who are in rotational posting also need to be trained frequently for using these scoring systems.

The Practice: Ideally all patients admitted in ICU should be scored within 24 hours. The retrospective case sheet assessments showed that nearly 25 % didn't get the assessment done at admission which was due to lack of knowledge and manpower issues in ICU.

Evidence of Success: After a couple of training sessions for interns, residents and staffs, the subsequent month all patients got the assessment and predictions done on time.

Problems Encountered and Resources Required: The interns and residents who are in rotational posting need to be trained frequently for using these scoring systems. Their knowledge and application of scoring also need to be assessed at regular intervals.