EMERGENCY LAB - ISSUES & TROUBLESHOOTING

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Emergency lab: Most *crucial but* often *underestimated* area of the diagnostic services.

Stakeholders:

Doctors/ Patients

Laboratory Management

Technologists

Doctors/Patients

Expectations

Quality reports

Timely reports

Tests/ Reports on demand

- over-ordering of tests

Laboratory Management

- Responsibility

To maintain
QUALITY of testing & reports
FINANCIAL VIABILITY of testing

- Expectations

TECHNOLOGIST to do it

Laboratory Management

Issues faced

Adequate resources

Handle emergencies (Manpower/Equipment/ stock)

Financial Viability

To train and retain Manpower

Technologists

Adequate Training

Processes:
- Written documents

Equipment:
- operational, breakdowns

Multi tasking

Reporting
- (abnormal results, telephonic reporting)

Working odd hours
- (mental & physical health repercussions)

HOW TO PRIORITISE?

How to resolve....

- <u>Training</u>

Equipment operations, maintenance, processes of the laboratory

- <u>Documentation</u>

Standard operating procedures, Flow charts, displays

Preanalytical...

- Sample rejection/acceptance policy

- Communication with doctor/patient

- Define turn-around-time (TAT)

- Printed material/ displays

Preanalytical…

- Incorrect / Incomplete Requisition
- Hemolysis
- Lipemia
- Quantity Not Sufficient (QNS)
- Clotted samples

Lipemic Sample:

Ultracentrifugation: centrifugation at speed of 20,000rpm

Preanalytical…

- Which sample to process first?

Prioritise sample on
- Criticality of the test
- Criticality of sample
- Availability of resources

Analytical...

Equipment training...

- Regular maintenance, training of emergency staff in troubleshooting, understanding flags

- Regular quality control checks

Inventory

- Materials management system

Process training...

SOP , Flow Charts, Cards

Post-analytical...

- REPORTING OF RESULTS

- ABNORMAL RESULTS:

  - CRITICAL RESULT
  - ERRONEOUS RESULT

Post-analytical...

- **REPORTING OF RESULTS..**

Delta Check

A comparison of two sets of results from the same patient, based on specified criteria, as a quality improvement effort by the laboratory

The delta check limits are based on a 3 day interval

Guidelines for telephonic reporting:

Log to maintain telephonic reporting:

- Date

- Time of reporting

- Parameter and value

- Name of person reporting and receiving the telephonic report

- Whether report was read back

Some general emergencies…

- Fire

Fire fighting equipments and training

- Medical

Emergency medicine box

- Physical assault

Emergency phone number

THANK YOU..!!