30- Laboratory Information System (LIS) Downtime

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ANNUAL REVIEW:

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SUPERSEDES: Procedure titled _____

Purpose:

This policy to address Steps to Consider During Laboratory Information System (LIS) Downtime or Connectivity Loss

Definitions:

LIS-Laboratory Information System

Policy:

A robust contingency plan is essential for laboratories to maintain operations during LIS downtime or connectivity issues.

Procedure:

A. **LIS Data Backup and Recovery:**

1. Regular backups: The lab have plan for frequent and complete backups of the LIS database to minimize data loss.
2. Disaster recovery plan: The lab has comprehensive plan for restoring LIS functionality after a system failure.
3. Data redundancy: The lab has a cloud-based storage for critical data.

B. **Manual Systems and Procedures:**

1. Paper-based forms: The lab will use pre-printed forms ready for patient information, test orders, and results.
2. Manual result recording: The instrument print out will be recorder and results enter manually including format and verification procedures.
3. Cross-referencing systems: The lab will manually cross-reference patient information and test results.

C. **Staff Training and Communication:**

1. Emergency procedures: The lab will conduct regular training on LIS downtime procedures for all staff.
2. Clear communication channels: Establish effective communication channels for updating staff on the downtime status and alternative procedures.
3. Role assignment: The lab Manager/supervisor will be the one responsible for effective operation and results transmission during downtime to ensure efficient operations.

D. **Patient Management:**

1. Prioritization: Determine which tests are critical and prioritize them during downtime.
2. Patient notification: Inform patients and healthcare providers about the LIS downtime and any potential delays in results.
3. Alternative testing sites: Consider referring patients to alternative testing facilities if necessary.

E. **Quality Control and Assurance:**

1. Manual QC: Implement manual quality control procedures to maintain test accuracy.
2. Documentation: Carefully document all manual procedures and results.
3. Post-downtime review: Conduct a thorough review of the downtime event to identify areas for improvement.

F. **Data Reconciliation:**

1. Data entry: Accurately transfer manual data into the LIS once it is restored.

2. Data verification: Implement rigorous verification processes to ensure data integrity.
3. Data reconciliation: Compare manual and electronic data to identify discrepancies.

G. **Additional Considerations:**

1. Regular testing: Lab manager/Supervisor should conduct simulated downtime drills to assess preparedness.
2. Redundant equipment: Consider having backup equipment for critical laboratory functions.
3. Off-site data storage: Store critical data off-site to protect against data loss.
4. Risk assessment: Identify potential risks associated with LIS downtime and develop mitigation strategies.

H. **Patient Communication During LIS Downtime**

Patient communication is crucial during LIS downtime to maintain trust and ensure patient safety. Here are some key considerations:

Clear and Timely Communication:

1. Inform End user/clients/patients about the issue: Clearly communicate the LIS downtime to patients, explaining the impact on test results and turnaround times.
2. Provide alternative contact information: Offer alternative ways for patients to contact the laboratory or healthcare provider for updates.
3. Set expectations: Clearly communicate estimated downtime and when results will be available.

I. **Managing Patient Expectations:**

1. Prioritize urgent tests: Inform patients about which tests are considered urgent and will be prioritized.
2. Offer alternative testing sites: If applicable, provide patients with information about alternative testing locations.
3. Emphasize patient safety: Reassure patients about the laboratory's commitment to patient safety and quality care.

J. **Effective Communication Channels:**

1. Multiple channels: Utilize various communication channels such as phone, email, and patient portal.
2. Dedicated hotline: Consider setting up a dedicated hotline for patient inquiries during downtime.
3. Automated messages: Use automated messages to provide updates on the LIS status.

K. **Documentation:**

1. Document all communication: Maintain detailed records of all patient interactions and communications.
2. Update patient records: Ensure patient records are updated with information about the LIS downtime and any alternative arrangements.

L. **Additional steps:**

1. Train staff: Provide staff with communication training to ensure consistent and effective messaging.
2. Crisis communication plan: Develop a crisis communication plan to address potential media inquiries or public concerns.