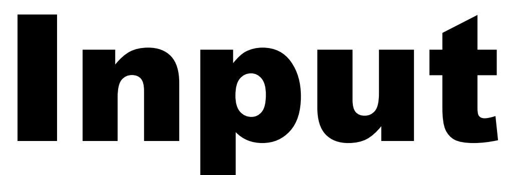
Step

What happens?

Who is responsible?

Procedures needed?

Pitfalls



Output

Outcome

Specimen

Personnel

Reagents

Equipment

Supplies

Infrastructure

Document & Record System

Information

Policies & Procedures

Improved Health for All

PRE-ANALYTICAL

ANALYTICAL

POST-ANALYTICAL

Beginning
“Step”
cards

Order placed

Patient presents to laboratory

Requisition completed & reviewed by laboratory staff

Specimen type determined for collection

Specimen collected

Specimen logged

Specimen accepted or rejected

Specimen assigned according to test request/s

Routine quality checks completed

Specimen analyzed

Test results analyzed

Test results recorded

Test results communicated/ reported

Documents and records maintained, filed & stored

Beginning
“What happens?”
cards

Clinician determines need

Laboratorian interacts with patient

Requisition reviewed for proper information

Note specific test requested and determine what type of sample is needed

Blood drawn from patient; Sputum, urine, stool, or other specimen is collected

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Appropriate information recorded in specimen log

Specimen accepted or rejected based on meeting acceptance criteria

Requests reviewed for

- **Testing priority – STAT versus routine**
- **If multiple tests to be done, sequential workstations versus aliquoting**
- **Centrifugation required**
- **Send out versus in-house testing**

Prior to testing, determine if proper routine QC, reagent validation, equipment maintenance and calibration completed

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Run analysis on specimen

Review test results for accuracy, legibility, & validity;
Cross-checking;
Assure proper quality monitoring

Transfer test results into logbook;
Record results accurately

Notify Clinician of results via written report; Verbal reporting if necessary; Critical Values reporting; Assure that referral specimens are properly tracked

File & store results in a retrievable fashion; Transfer files to long term storage; Dispose of files at an appropriate time

Beginning “Who is responsible?”

cards

Clinician

Patient / Laboratorian

Clinician, Clerk, or Laboratorian

Laboratorian

Blood: Clinician or Laboratorian

Non-blood specimens: Clinician or Patient

Laboratorian

Laboratorian

Laboratorian

Laboratorian

Laboratorian

Laboratorian, Supervisor

Laboratorian, Clerk

Laboratorian, Nurse

Laboratorian

Beginning “Procedures needed”

cards

Ordering protocols

Customer Service

Criteria for specimen acceptability

Specimen requirements for (venous) blood collection;

SOP for each analyte

Phlebotomy key competencies;

Phlebotomy training checklist

Specimen management

Specimen management;

Criteria for specimen acceptability

Guidelines for STAT testing;

Guidelines for multiple test from one sample;

Specific SOPs for each analyte;

SOP for send outs (specimens referred to other facilities for testing)

SOP for each analyte;

Guidelines for quality checks of all log/charts for each analyzer or test

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Specific SOP for each analyte

Specific SOP for each analyte

Test Reporting SOP;

Specimen Management

Specimen management;

Client satisfaction guidelines

SOP for document & record management

(Including Document & Record Retention)

Beginning “Pitfalls”

cards

- **Unauthorized person ordering**
- **Inappropriate order**

- **Lack of timely service**
- **Interaction not client friendly**

- **Incomplete patient data**
- **Incomplete clinical history**
- **Clerical errors**

- **Not checking or following specimen requirements**
- **Inadequate communication to patients regarding specimen self-collection**

- **Blood - Wrong tube, incorrect amount of blood,**
- **Injury**
- **Non-blood specimens – incorrect specimen or incorrect collection procedure; improper labeling**

- **Clerical errors**
- **Inadequate information**

- **Unsatisfactory specimen**
- **Specimens with hazardous handling conditions**
- **Inadequately labeled specimen**

- **Processing not performed in a timely fashion as ordered**
- **Missing some tests on a requisition with multiple tests requested**
- **Centrifuge not performed in a timely manner**
- **Send out tests not referred in a timely matter or transported inappropriately**

- **QC not done or out of control,**
- **Inadequate troubleshooting or follow up of QC**
- **Improper calibration**
- **Inadequate equipment maintenance**

- **Not following SOP**
- **Taking shortcuts**

- **Release of test results without validation or interpretation**
- **Inadequate cross-checking**

- **Clerical errors**
- **Analyte printout results listed in different order than logbook reporting columns**

- **Results not communicated in a timely fashion**
- **Results lost**
- **Critical values not reported Confidentiality breached**
- **Failure to track referral specimens or failure to follow-up on overdue specimens**

- **Unable to retrieve information when needed**
- **Lack of adherence to document retention schedule**
- **Water or moisture damage**