1. **Purpose:**

   1.1 The purpose of the document is to establish a backup process in the event that National Blood and Cancer Center Health information system is unavailable and to anticipate and plan for these emergency situations before they arise, thus lessening their effects.

   1.2. This policy will:

   1.2.1. Outline procedures that users should follow to ensure continuance of patient/client care during downtime.

   1.2.2. Define an all-site downtime communication process for staff to ensure information is relayed in a timely, discrete, and secure manner.

   1.2.3. Define procedures to follow in the event of a planned, unplanned, intermittent or site- specific downtime

2. **Definitions:**
   2.1 Time during which National Blood and Cancer Center Health Information system is out of action or unavailable for use.

3. **Responsibilities:**
   3.1 All Staff.

4. **Policies:**
   - It is the policy of NBCC that a business continuity strategy is developed and maintained on an annual basis, to ensure that essential services and business can continue after a disaster.
   - The successful implementation of this policy cannot be achieved without the cooperation of all departments. It is vital, that all are aware of, and fully comply with the general requirements outlined in the Policy and those specific to respective unit function. This includes existing unit specific downtime policies and procedures.
   - The HIS contingency plan must be tested at least annually to ensure that it can be implemented in emergency situations and that the management and staff understand how it is to be executed.
   - All staff must be made aware of the HIS contingency plan and their own respective roles. It is each Unit Head's responsibility to make sure that staff knows about this policy.

5. **Procedures**

5.1 Types of Downtime:

   5.1.1 Planned Downtime:

   5.1.1.1. Planned downtimes are scheduled outages for the purposes of upgrades, maintenance, or other tasks. IT Department will inform organizations of the planned date, time, and expectations of all planned downtimes via official email.

5.1.1.2. The following standards are in place:

5.1.1.3. The hospital downtime contact (function, role, or committee) uses internal communications to announce the downtime to end users and initiates appropriate downtime activities.

5.1.1.4 In the case of planed down time test server will be available for all teams to get patient data and access all the historical patient files. Adding the reservations, orders and investigations will be manually until system recovered.

5.1.1.5 All the data created in the outage time will be transferred manually to the live system after recover.

5.1.1.6 If the downtime period exceeds the allocated time, the communications process for unplanned downtimes is initiated.

5.1.2 Unplanned Downtime:

5.1.2.1 Unplanned downtimes are unscheduled outages. It Department will inform the organization of the unplanned outage, and any updates, via announcing "Code-IT" and email to all NBCC staff. The following standards are in place:

5.1.2.2. The hospital downtime contact (function, role, or committee) uses internal communications to announce the downtime to end users and initiates appropriate downtime activities which has row cases as below:

5.1.2.3. Case One: (Live server down)

5.1.2.3.1. In the case of unplanned down time test server will be available for all teams to get patient data and access all the historical patient files. Adding the reservations, orders and investigations will be manually until system recovered.

5.1.2.3.2. All the data created in the outage time will be transferred manually to the live system after recover.

5.1.2.4. Case Two: (Data Center crisis all server down)

5.1.2.4.1 In the case of unplanned down time due to disaster staff should revert to

paper-based records and all patient data will be recorded in paper files. Invoices will be manual and all the reception will have paper price list, and do their responsibilities as mentioned in 5.2 Unit Level Actions

5.1.2.4.2. All the data created in the outage time will be transferred manually to the live system after recover.

5.2 Unit Level Actions:

A. Information technology

If IT systems failure happens, IT department will announce "CODE IT" and involve the chief medical officer or in his absence the chief operating officer, expressing the need to shift and perform the downtime procedures after the evaluation from IT department.

IT department is responsible for IT system recovery efforts. Once the system is back, the IT department will call the operator to announce "CODE-IT is clear" for users to move to online process.

B. Medical Record

All head nurses/supervisors will be responsible for storing all manual medical forms related to their department to be used during the IT system failure.

Laboratory and Radiology result forms and prescriptions form will be under the responsibility of who is in charge in those departments.

Medical Records Department is responsible for storing and scanning all used manual medical forms in patient files.

C. Reception and Finance department

Customer services supervisor will distribute the latest services cash price list to OPD, treatment unit supervisors in a closed envelope, finance department will provide bill receipt to all active receptions.

Once system is back, chief accountant will assign account staff to validate all financial related recovery entries done by various units in the system.

D. OPD Department:

OPD reception & clinic department will follow the following steps:

1. OPD Reception will use manual bill receipt to register patient.
2. For existing/new patient, receptionist collects all information required to search/open a new file using Patient Registration Form. IQAMA number & Saudi national ID will be temporarily considered as file number.
3. OPD reception will use pricelist to charge patient.
4. Manual bill receipt will be given to the patient to present to the clinic.
5. OPD Nurse will record details of the patient in the logbook.
6. Standard medical forms will be used by all to write the patient care.
7. Manual request will be made for other services like lab, radiology and others.
8. Patient can collect Lab results directly from Laboratory Department or radiology reports directly from Radiology Department.
9. Once system is back and data has been entered to the system, all the used medical forms sent to the medical records by the in-charge nurse with the logbook, and the manual receipt from OPD will be sent to billing department.

E. Laboratory department:

Laboratory department will follow the following steps:

1. Lab Reception will use manual bill receipt to charge service for the patient.

2. For Laboratory Service Price, Lab reception will refer to the pricelist.
3. Reception will give to patient manual service bill receipt to present to the Laboratory Technician.
4. For OPD patients, the patient will collect the result directly from Laboratory department.
5. Once system is back and data has been entered to the system, all the used medical forms sent to the medical records by the in-charge staff with the logbook and the manual receipt from will be sent to billing department.

F. Radiology department:
Radiology department will follow the following steps:

1. Radiology Reception will use manual bill receipt to charge service for the patient.
2. For Radiology Service Price, Radiology reception will refer to the pricelist.
3. Reception will give to patient manual service bill receipt to present to the Radiology Technician.
4. For OPD patients, the patient will collect the report directly from Radiology department.
5. Once system is back and data has been entered to the system, all the used medical forms sent to the medical records by the in-charge staff with the logbook and the manual receipt will be sent to billing department.

G. Pharmacy
OPD pharmacy will follow the following steps:

1. Pharmacists will receive manual prescriptions, fill the prescriptions accordingly and keep a copy of the prescription to be kept in patient medical record.
2. Receptionist will use manual bill receipt to charge patient.
3. For medication prices, Receptionist will refer to the price indicated in the medication box.
4. Manual bill receipt will be given to patient.
5. Dose instructions will be explained and written by Pharmacist on the label as prescribed by the physician.
6. Once system is back and data has been entered to the system, all the used prescription forms sent to the medical records by the in-charge pharmacists with the logbook and the manual receipt will be sent to billing department.

H. Treatment unit:
Treatment unit will align to the directions as follows in the event of an IT failure:

1. If any patients are taking/will take the treatment during an episode of IT failure, the required demographics will be entered manually by the reception. This data will be transcribed into a Logbook and an arrangement through phone will be done with the treatment unit nurse.
2. Doctor Order Sheet will be used to record doctor's order (i.e.: Laboratory and Radiology.) and submitted with the nurse with the sample.
3. Laboratory and Radiology Reports will be collected by the treatment unit Nurse directly from their collective departments after they receive a call of the result readiness.
4. Manual prescription will be filled by the doctor then the nurse will submit it to the pharmacy.
5. The pharmacists will call the nurse once the medication is ready.

INTERDEPARTMENTAL POLICY AND PROCEDURE (IDDP)

DEPARTMENT: MANAGEMENT OF INFORMATION				
Title: INFORMATION SYSTEM DOWNTIME		Code No: MOI.IPP.06.02		Page: Page 5 of 5
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6. Once the medication is administered, the nursing staff will record the medication administered into manual "medication administration record log/form".
7. Nurse will enter clinical records in Nurse Progress Notes.
8. Physician will enter clinical records in Physician Progress Notes.
9. If the Physician needs to access the history of the patient, can come to the IT with the required data to see the history from the backup.
10. When the IT failure has been resolved, treatment unit nurse will input all services such as laboratory or radiology service requests in the system. Laboratory or radiology staff will enter all results and reports and all the used medical forms sent to the medical records by the in-charge nurse with the logbook and the manual receipt will be sent to billing department.

6. Attachments:

Patient Registration Form	Physician order	Radiology request form
Lab request form	Treatment unit progress note	OPD progress note
Outpatient Prescription	Treatment unit Prescription	Radiology Progress Report
Nurse Progress Notes	Patients log	Receipt voucher

7. References:

7.1 Ontario (Toronto Central Local Health Integration Network) Downtime Policy.

7.2 ITIL ® V3 Foundation Complete Certification Kit 3rd edition

8. Approval:

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