AMBULATORY DOWNTIME PROCEDURE

Summary of Changes

	NEW	Previous
BC Cancer	CERNER SURGICAL ONCOLOGY DOWNTIME PROCURES	CAIS DOWNTIME PROCEDURE

1. Introduction

1.1. Focus

To provide instructions and delineate roles and responsibilities for program required documentation in the event of downtime, including data recovery procedures when uptime resumes.

1.2. Health Organization Site Applicability

BC Cancer Center Surgical Oncology Department

1.3. Practice Level

- Surgical Oncology, VCC

1.4. Definitions

Planned Downtime
- Occurs at a scheduled time to minimize impact to patient care.
- Scheduled to complete system maintenance or upgrades
- **Unplanned Downtime**
- Occurs unexpectedly.
- Length is unknown and dependent on the time required to identify and remediate the cause.
- Results from hardware failure, power outage, or network outage

1.5. Need to Know

- **BC Cancer VCC Surgical Oncology will revert to pre-Cerner on paper practices for procedures, weighing heavily on clinical discretion.**
- This document can be used in supplement with other clinic specific downtime procedures/forms that have been determined.
- A Visio guide is also available in you downtime guides
- Downtime procedures are available on SHOP
  - http://shop.healthcarebc.ca/_layouts/15/DocIdRedir.aspx?ID=SHOP-1273641220-966
- Downtime forms are available on SHOP
  - http://shop.healthcarebc.ca/_layouts/15/DocIdRedir.aspx?ID=SHOP-1273641220-967
- Chemo PPO's available on BC Cancer Website or H/Drive
  - http://www.bccancer.bc.ca/health-professionals/clinical-resources/chemotherapy-protocols
  - H:\EVERYONE\SYSTEMIC\Chemo\Orders
- PPO's available from CST share-point or in paper form in your downtime guides
- Clinic discretion has been determined as paramount in a downtime, procedures and determined roles are to serve as guidelines. Clinical judgement that prioritizes patient care and safety should be prioritized in the event of a downtime.
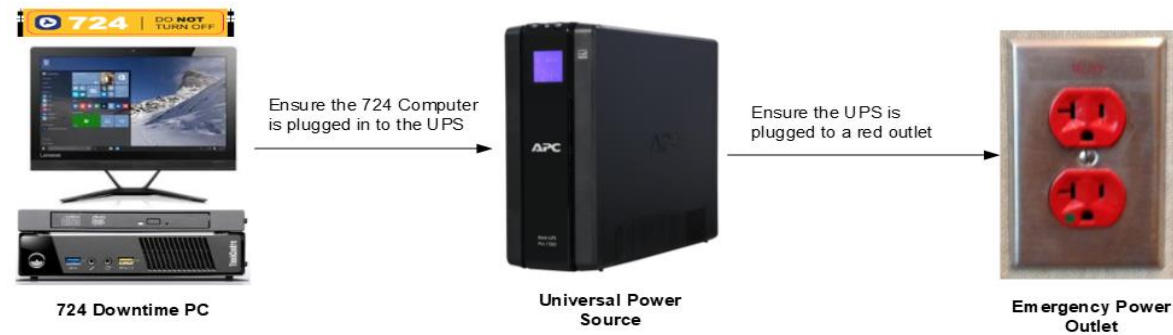
1.6. Equipment and Supplies

- Downtime Guides
- Downtime Tool-Kits
- Downtime Forms
- 7/24 downtime viewers

724Access® Downtime Viewer and 724 Computers

To ensure that the 724 computer is fully functional and usable during a downtime, complete the checklist of activities below before a planned downtime:

- Ensure the 724 downtime computer is always powered on and is connected to the network.
- Do not hold down the power button to shut down the computer unless instructed by IMITS or Service Desk for troubleshooting purposes. Pressing the power button to turn off the computer prevents it from shutting down properly, and could potentially corrupt the patient downtime data that is locally installed on it.
- Check that the 724 computer is connected to the Universal Power Source (UPS). The UPS is connected to a red plug that allows the computer to run on emergency power during a power outage. See the diagram below for reference. This step is not applicable to those sites without emergency power.

724 Downtime PC   Ensure the 724 Computer is plugged in to the UPS   Universal Power Source   Ensure the UPS is plugged to a red outlet   Emergency Power Outlet

- If a printer is connected to the 724 computer, check that the printer is also plugged into the Emergency Power Outlet. This step is not applicable to those sites without emergency power.

2. Procedure

2.1. Steps and Rationale

Planned vs Unplanned?
Site informed through the IMITS process.
- If downtime is planned, date and time is provided.

- If downtime is unplanned, continuous updates and delay estimates will be relayed

If Planned
- Alert staff/clinical leads of date and time

- Print required patient information

- Distribute/locate paper forms as needed

- Print Clinic Schedule if not already printe

If Unplanned
- Assess the type of downtime – Network? Power?

- Utilize 7/24 viewers

- Locate paper forms/procedures in downtime guides/tool-kit

- Leverage other clinical applications in your clinic (e.g., CareConnect, ARIA, ClearDent, etc.

*** Site policy and discretion to be used when determining Downtime process for each area***

Preparation for Downtime

- Access downtime bin
- Create extra patient chartlets in the event there are emergency surgeries
- Find paper registration forms, clinical documentation forms, assessments, downtime requisitions, registration and patient trackers in the downtime bin
- Login to 724Access Viewer and print patient chart, Orders, MAR summary (and any other part of the chart as needed)
- Print labels (including external labels) and affix to forms that are expected for downtime usage
- Prior to planned downtime, if a case is going to continue over the downtime, Suspend any open SA Anesthesia records, and click Next to save any Perioperative Document segments that you are working on and log out
- Prior to planned downtime, save all documentation and log out
- Visit CISHelp for the most updated 724Access Viewer guides (*cishelp.healthcarebc.ca*)
- *Refer to materials in Downtime Bin/ Toolkit or* CST Cerner Downtime Procedure *for additional detail (available at: http://shop.healthcarebc.ca/ CST_Documents/DowntimeProcedure.pdf*

Cerner Downtime
Interface Downtime

Announcement: Cerner and interfaces are in downtime

Cerner Down:
- **All Registration:** Performed on paper
- **All Documentation:** Performed on paper
- *If possible, Providers should hold off on documenting on paper, as scanned documents will not be auto-distributed through Excelleris*

Orders:
- All **Routine Orders**: Use paper
- **Medication Administration**: Completed on paper
- STAT **Diet** Orders: Call and fax paper order sheet to kitchen
- STAT **Cardiology** Orders: Call and fax generic paper downtime requisition to the Cardiac Lab
- STAT **Transfusion** Orders: Call and fax paper blood product requisition to Blood Bank
- STAT **Laboratory** Orders: Call and fax paper lab requisition to Lab
- STAT **Medical Imaging** Orders: Call and fax generic paper downtime requisition to Radiology
- **All Room & Bed Cleaning:** Call housekeeping

Cerner Uptime
Interface Downtime

Announcement: Cerner is UP but interfaces are in downtime

- All Cerner applications can be utilized (PowerChart, SchapptBook, SAAnesthesia)

Interface Down:
- All **Routine Orders**: Use paper
- STAT **Diet** Orders: Call and fax paper order sheet to kitchen
- STAT **Cardiology** Orders: Call and fax generic paper downtime requisition to the Cardiac Lab
- STAT **Transfusion** Orders: Call and fax paper blood product requisition to Blood Bank
- STAT **Laboratory** Orders: Call and fax paper lab requisition to Lab
- STAT **Medical Imaging** Orders: Call and fax generic paper downtime requisition to Radiology
- **All Room & Bed Cleaning**: Call housekeeping
- No updated Interfaced Results Available (Lab, MI)

Cerner Uptime
Interface Uptime

Once systems are back up, registration to be completed first before clinical documentation can be entered.

Registration
- All **Registration**: Performed by Registration Clerk
  - New patients to be created without generation of PHN
  - Notify units once back entry is complete

Surgery
- Once registration is complete the following can be completed
- All **OR Scheduling** : Performed by OR Clerk/RN
  - Schedule all emergency surgical procedures that were completed during Downtime
- All **Non-Provider Documentation**: Performed by Clinician
  - If documentation is started on paper during a downtime, the associated phase (e.g. PreOp, IntraOp, PostOp) needs to be completed on paper
  - Re-associate any BMDI Devices
  - Back-Enter any critical assessments. data that your site policy has outlined(e.g. last set of vital signs, I/O totals). (*See Recommendations in 'Recovery: Uptime Process'*)
- All **Provider Documentation**: Performed by Provider – Documentation will only auto-distribute if back-entered (*See Recommendation in 'Recovery: Uptime Process'*)
- All **Routine Orders & Powerplans** required for ongoing patient care to be back-entered by appropriate clinician
- **Med Administration:** regular scheduled medications to be back-entered by nurse. (add Reason as "Other" and free text "Downtime".
- Do not back-enter STAT and one-time medications already administered during down-time.
Note: Refer to both paper MAR and Cerner MAR until Pharmacy has completed back entry.
- All **STAT Orders**: Back-entered by addressing department (e.g. Medical Imaging, Laboratory)
- **All Cases Started Prior to Downtime and not Finalized:**
  - All **Clinical Documentation** that was started before a downtime, user must return to complete mandatory fields and finalize documentation during Uptime
  - If electronic documentation has not been initiated before a downtime, attach paper documents to chartlet and refer to 'Recovery: Uptime Process' to identify what data is required to be back-entered

BMDI Devices:
- Nurses may have to re-associate devices

Scanning Note:
- After completing appropriate back-entry, all paper clinical documentation, order sheets, etc. will remain in the patient's chartlet. HIM will scan these documents into the patient's electronic health record upon discharge.

Surgery & Anesthesia

Recovery: Uptime Process – Cerner Documentation

*** Site policy & discretion to be used when determining Uptime process for each clinical area***

CLINICAL + SYSTEMS TRANSFORMATION — Our path to smarter, seamless care

Cerner Documentation (vertical label)

Scheduling

During downtime:

- All elective scheduling is on **HOLD**

- All rapid/emergency cases can be booked on paper (**Note**: All Emergency OR patients coming from ED are already assigned a Downtime MRN/Encounter number by the ED Clerk – OR Clerk to use these numbers for scheduling)

- All registration times should be captured. Refer to **CST Downtime Patient Label and Facesheet Generator** document to complete recommended fields by CST Registration.

For Uptime:

- If patient check-in already occurred, back-enter arrival and registration time

- If surgical case was completed and patient was discharged, back-enter discharge date/time

- If an Emergency Case is performed, case must be scheduled to ensure an SAAnesthesia Record can be associated and Periop Doc can be utilized.

PAC

During Downtime:

- No screening is done during a short downtime, unless screening is required for an urgent case (e.g. first case next morning)

- Screening to be documented on paper if down time is suspected to be long-term.

- Screening decision must be back-entered into Pre-Anesthesia Screening m-page (affects PAC Screening Request List)

For Uptime:

- Back-enter orders that have **not** been acted upon yet (e.g.: diagnostics, imaging, bloodwork). If you have already sent a paper requisition or a specimen, an order does not have to be placed, result will be processed by the receiving department.

- Back-enter patient arrival/check-in time if PAC appointment occurred

- Back-enter any necessary icons on the Perioperative Tracking Board (e.g. Violence & Aggression, Latex Allergy, Isolation)

- Document home medications (as this will impact Medication Reconciliation)

- If applicable, document Problems and Active Issues

Pre-operative

For Uptime:

- Back-enter orders that have **not** been acted upon yet (e.g.: diagnostics, imaging, bloodwork). If you have already sent a paper requisition or a specimen, an order does not have to be placed, result will be processed by the receiving department.

- Back-enter one set of vitals

- If patient in Pre-Op phase, ensure Pre-Op PowerPlan(s) activated and deselect orders that have already resulted in Cerner.

- Back-enter any necessary icons on the Perioperative Tracking Board (e.g. Violence & Aggression, Latex Allergy, Isolation)

- Complete all mandatory fields on Surgical Assessment Powerform: Advance Care Planning, ID Risk Screen, Violence and Aggression Screening

- Ensure there is a Weight Measured/ Dosing Weight (if the dosing weight was documented from a previous visit only back-enter the weight measured, verify with anesthesia re: dosing weight)

Intra-operative

For Uptime:

- Complete Surgical Case Check-in via Periop Doc

- **Peirop Doc:** Complete four mandatory segments (Case Attendees, Case Times, General Case Data, Surgical Procedures) & Implant segment

- If an Emergency Case is performed after hours, case must be scheduled to ensure SAAnesthesia Record can be associated and Periop Doc can be utilized

- **For Lab:** Specimens- if completed/sent during downtime via paper requisition and order doesn't need to be placed for results to show in Cerner/CoPath is used as tracking for specimens

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Post-operative

For Uptime:

- Back-enter Phase I and II Case times if applicable

- If patient is in PACU, activate **Surgeon Immediate Post-operative** phase of **SURG PowerPlan** and deselect orders that have already processed in Cerner.

- Back-enter orders that have **not** been acted upon yet (e.g.: diagnostics, imaging, bloodwork). If you have already sent a paper requisition or a specimen, an order does not have to be placed, result will be processed by the receiving department.

- Back-enter any necessary icons on the Perioperative Tracking Board (e.g. Violence & Aggression, Latex Allergy, Isolation)

- Back-enter relevant vitals, especially ones that required nursing interventions (e.g. hypertension, hypotension, respiratory depression)

- Back-enter necessary POCT results (e.g. CBG)

- Document one timestamp entry of the cumulative amount for in and outs, blood products administered

- Document Surgical Tubes, Drains, Catheters, Dressings

- Document PCA, epidurals, IV infusions

Provider

For Uptime:

Provider (Surgeon)

- Back-enter all powerplans and orders that are required for ongoing patient care

- Anesthesia/Surgeon to confirm and/ or back-enter dosing weight as needed

- Back-enter any new Problems, Active Issues, and Diagnoses

- Back-enter required medication reconciliations

Note: This will be required if a discharge medication reconciliation is to be completed in Cerner

- Back-enter any required dynamic documentation (e.g. Operative Report, Anesthesia Consult)

Note: Documentation that was completed on paper and scanned back into Cerner will not auto-distribute through Excelleris to Primary Care Providers. However, a generic discharge summary/operative report will be created and distributed instead by HIM.

Provider (Anesthesia)

- Anesthesia Record is not auto-distributed, this can be scanned back into the patient's chart.

General Guidelines for All Clinicians:

- Review and back-enter any new Allergies, Isolation, Process Alerts (e.g. Communication Barrier, Falls Risk, Difficult Intubation/Airway, Cytotoxic, Seizure Precautions, Violence Risk)

Note: Disease alerts will be added by an Infection Control Practitioner if results are positive (e.g. COVID, TB)

- **All Cases Started Prior to Downtime and not Finalized:**

  - All **Clinical Documentation** that was started before a downtime, user must return to complete mandatory fields and finalize documentation during Uptime

If electronic documentation has not been initiated before a downtime, attach paper documents to charlet and refer to 'Recovery: Uptime Process' to identify what data is required to be back-entered

Medication Administration

- **Med Administration:** regular scheduled medications to be back-entered as 'Complete' by nurse. (add Reason as "Other" and free text "Downtime").

- Do not back-enter STAT and one-time medications already administered during down-time, this will only be documented on the paper MAR.

Note: Refer to both paper MAR and Cerner MAR until Pharmacy has completed back entry.

Agnostic Downtime Procedures

Clerks or designated HCP role:

#	Workflow Step	Downtime Action	Role Responsible
1.	Pre-downtime	• Print patient schedule from 7/24, or utilise a pre-printed copy. Distribute copies as needed to staff.	Clerk or HCP with 7/24 access
2.	Registration	• If registering new patients, follow downtime registration procedures available in downtime guides.	Clerk or HCP with Downtime Registration Training
3.	Check-in	• If arrival is noted in Cerner, note patient arrival on day sheet and alert provider/staff of patient arrival. • Depending on clinic, alert staff of patient arrival via verbal indication or by phone.	Clerk or designated HCP
4.	If downtime MRN was assigned to patient	• Add client to Cerner using the Downtime Add Person Conversation. Manually enter the downtime MRN.	Clerk or designated HCP
5.	If Downtime Encounter Number was assigned to patient	• Enter encounter into the system using the Downtime Add Encounter conversation. Manually enter the downtime encounter number. Back date/time the registration date/time as captured on the Downtime Registration/ADT Activity Log. ** If a **Downtime Encounter Number** is used, but a pre-registration for the same visit is noticed. The pre-registration must be discharged/cancelled as appropriate.	Clerk or designated HCP
6.	If there is an existing encounter, update Encounter - SchApptBook	• Refer to paper logs (Downtime Activity Log, Printed Clinic Schedule, etc...) to update the patient appointment status. • Use the Patient Forms to complete patient and encounter information. Backdate registration date/time to the actual date/time of the patient arrival. • Use the Cancel Encounter or Discharge Encounter conversations as appropriate for patients who did not arrive or at the end of treatment (i.e. recurring encounters).	Clerk or designated HCP
7.	Future visits	• Refer to paper documentation (for example, referral paperwork, clinic notes) for an indication that a pre-registered encounter is required for a future visit.	Clerk or designated HCP
8.	If Scheduling Add-ons are required	• Back enter the appointment to the time slot as indicated verbally or on paper. If downtime registration is required, registration data recovery MUST be completed in PM Office before any updates to the schedule are entered.	Clerk or designated HCP
9.	Confirm Booking – Add Ons	• Confirm and set encounter to the downtime encounter. Do NOT Add Encounter.	
10.	Appointment types with Orders	• For appointment types with orders, users must back enter these orders to complete the appointment attributes. • For appointment types with orders, users must back enter these orders to complete the appointment attributes. • If downtime orders were documented on paper, the appointment order may be required prior to matching up orders in downstream systems (e.g. MUSE). • If the appointment order is a duplicate order, please cancel as required.	

Providers/Nurses/Allied Health Clinicians/Radiation Therapist/Nutritionist/Other designated HCP:

#	Workflow Step	Downtime Action	Role Responsible
1	Downtime Schedule	• Refer to printed clinic schedule for appointments	Clinic specific HCP (see above):

2	View patient information	• Review patient information in 724:
		  o Patient list
		  o Scheduled appointments
		  o Search Appointments
		  o Patient Information
		  o Allergies
		  o Lab Results
		  o Vital Signs
		  o Orders Profile
		  o Documents
		  o Orders
		  o PowerPlans (some)
		  o MAR
		  o Intake / Output
		  o Pharmacy Fill List
		  o Lab collection search
		• Or utilize Care Connect, ARIA, ClearDent or other clinical applications that are still available.
			Clinic specific HCP (see above):

3	PowerPlans	• Chemo Powerplans available on BC Cancer Website and H/Drive • PowerPlans available on 7/24 viewer • Access paper forms required from SHOP, downtime tool-kit or any other avenue available in clinic.	Clinic Specific HCP
4	Clinic Appt	• Complete patient assessment and document on paper	Clinic specific HCP (see above):
5	Verbal orders from Provider?	• Refer to paper orders for changes to current treatment, if applicable Communicate with Pharmacy and TML that patient is ready and reprint requisition from 724 as needed	Clinic specific HCP (see above):
6	Assessment	• Call provider to address change in patient status (e.g. adverse reaction) - may receive verbal orders as necessary	Clinic specific HCP (see above):
7	Documentation	• Document assessment, treatment, and patient status on paper – Grading of the reaction; Transfusion Reaction form; Treatment complete, etc…	Clinic specific HCP (see above):
8	Retain the chartlet	• Keep a record of patients and orders for remediation during Uptime	Clinic specific HCP (see above):

2.2. Site Specific Practices

• Currently only validated for Vancouver Cancer Center

2.3. Documentation

Nurses/Allied Health Clinicians/Radiation Therapist/Nutritionist/Other designated HCP:

All documentation completed on paper during the downtime becomes a part of the patient health record. For clinics, scanning is completed when uptime resumes. However, if the document cannot be scanned to the correct section of the CST electronic health record, the document should then be retained in a secure area as per Standard Operating Procedure, until such time as the document can be successfully indexed to the electronic health record.

Once Cerner is re-established and the downtime has ended some information will need to be entered into the patient's health record to aid continuing electronic documentation and seamless patient care.

Consider before back entry:
• Error potential when transcribing information

- College requirements for documentation and documentation of care provided by others
- The recording clinician may want to add a note in the encounter to indicate when the downtime period occurred and that there is additional documentation on the patient in the clinical documents section of the electronic record.

Review and back enter to the CST electronic health record:
1. Height and weight if measured during downtime. This is necessary for medication orders.
2. Allergy Intolerance status – new or changes.
3. Any new process alerts (falls, violence, infection control, DNAR etc.).
4. Last set of vital signs (VS) taken during the downtime (use clinical judgement to determine if more than one set of VS should be entered).
5. If fluid balance is being monitored, add total in and out measured during downtime.
6. If applicable, depending on the reason for the visit, or prescribing medication, complete a Best Possible Medication History (BPMH).
7. Update eMAR from the form 1295-Medication Administration Record:
   a. For all medications administered during downtime, click "given" and in the comment field enter "Downtime from [start] hours to [end] hours, see paper MAR (as above) and/or add relevant time as administered (e.g. PRN medications)
   b. For all active medications NOT administered during downtime, click "not given" and in the comment field enter "Downtime from [start] hours to [end] hours, see paper MAR (as above) and a reason why not administered.
8. Orders

Order Type	Recovery Process	Role Responsible
PATIENT CARE Orders (separate from medication orders)	• Back enter all current / future orders (orders that affect future care) that are on-going after downtime, except those that have been faxed to a receiving department (e.g. consults). • Do not back enter any orders that have been completed in their entirety during downtime. Those orders will be documented on the relevant downtime form and these will be scanned to the patient chart once CST uptime resumes.	NP, MD
Diagnostic Test Orders – LAB	• Enter into Cerner any lab orders for ongoing laboratory tests only if the requisition was not sent to the lab. • Do not enter orders for lab tests for which the requisition has been sent. They will be managed by the lab (Sunquest facility) or by private labs such as Excelleris.	NP, MD
Diagnostic Test Orders –MEDICAL IMAGING	• Enter into Cerner diagnostic imaging orders that have not been sent to a Medical Imaging department via paper requisition that has been faxed. • Do not back enter medical imaging orders for which the requisition has been sent. They will be managed by the department that processes the orders.	NP, MD

3.   Related Documents and References

3.1.   Related Documents

- None to date

3.2.   References

4.   Appendices

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