Lessons Learned Cyberincident

Department	Area	What went well?	What could have gone better?	Recommendations/Improvements
Access	Interpretive Services	Interpretive Services downtime practices worked well		Downtime database form is needed
	Financial Counseling	1. Refocusing of resources to complete registrations that were not completed fully after patients being seen 2. Process for FA when folderview is down. All FC's send documentation to main campus and indicate "scanned" vs "not scanned" to identify what can be filed after processing (new process - went well after 2nd or 3rd day of downtime).	1. Availability of all downtime forms	1. Physical copy of all downtime forms needs to be available in the event that drives are down to include: *Financial Assessment - create downtime documentation *Prepay package listing *FA Module Tracker downtime form for tracker creatino - MCD, Disability, etc. *Items from forms folder *Emergency contact info (including cell phone) 2. Confirm if BCA reports can be created to pull WQ lists *pending MCD and Disability trackers *Portal FA's *Self pay patient WQ's - to call to see if insurance or need to apply for coverage *DAR's to contact self-pay patients prior to visit
	Operations	1. Overall teamwork and support from other areas for backload. 2. ED had a great process to keep things in chronological order by day. Need to duplicate this to all areas for better tracking of surgical and ancillary patients. 3. Process for packet creation and armbands - organized and well orchestrated. 4. Validating inpatient census by calling each unit to ensure proper patients in inpatient beds at time of catch up.	1. Not discharging patients cancelled their future appointments if after the discharge date 2. Some mix up of transfers between BMC and Main 3. Patient tracking for ADT events - Some ADT information was missing 4. The lack of pool beds by unit caused difficulty with patient placement post outage for ADT catch up 5. PPU downtime process (to include accomodation code and level of care capture). 6. Clinical documentation was sent to Access from clinics -Access only needs registration items (reg form, insurance cards, photo IDs) 7. L&D process and linking the baby to the mom was not smooth during catch up. Need to evaluate existing process for improvements.	1. Verify all computers being used have the required software and that the users coming in have the correct credentials to use the downtime software when catch up is okay'd 2. Have all downtime forms put in chronological order and make BMC a different color to ensure logged into proper context for account creation. 3. Registration downtime forms need updated and we may want to consider having them on carbon paper. Some areas (ED being one) requeted a copy of the forms during downtime to call patients back. 4. Improve the process for clinics to obtain packets and the process for getting them back to Access 5. Develop a process to do a routine census check during outage to capture gaps in ADT tracking. Potentially place a Revenue Cycle member in the PPU and do checks every 8 hours. 6. Evaluate possibility to have an MPI download/copy to BCS or other to provide method for looking up existing MRN's without SRO. 7. Identify method to replicate the ED track board so we know where patients are located. Also include arrival day, time discharge date, time. 8. Need to ensure accomodation code and level of care are captured for purposes of charge generation.
HIM	Operations	1. Ability for providers to utilize dictation during downtime 2. Provider support for chart completion/signatures 3. Notification to dictation vendor regarding downtime occurred very quickly. 4. MRN Merging Process went smoothly once beyond delay of waiting for CC sites. 5. Faxing medical records back to departments if there is a patient who came back in - example: OB/GYN visits 6. Release of Information team took messages and logged the requests to catch up later - let patients know to expect delay	1. Recovery of dictation server took longer than anticipated 2. MRN merging for Community Connect sites delayed NM merging process. 3. Early record batches were held but may have been able to be scanned.	1. Keep instructions for dictation up to date and ready to roll out for provider notification 2. Implement periodic testing with transcription vendor for downtime processes 3. Operations to initiate NM merging when ready - can skip Community Connect sites as needed. 4. Have imaging go to the floors to ensure floors have go-bags ready. 5. Have processing team take ownership for chart completion. 6. QA records first and then batch for scanning to expedite getting records into the system.
	PB Coding	1. Partnership with compliance and providers regarding downtime documentation process including dictation.	1. Availability of a text group for all employees (unable to access BCP so did not have complete listing of all employee phone numbers). 2. Use of historical provider caused a problem with the charges flowing to CAC. Other scenarios also not flowing to CAC.	1. Work on refining the charge sheets built during the current downtime
	HB Coding	1. Use of paper sheet to capture coding information during downtime and post downtime from paper charts 2. Manually adding deficiencies in OneChart for ED documentation needs	1. Engage ED early on for documentation. 2. Identification of ED patients	1. Redraft sheet for inpatient coding to ensure all needed elements are captured 2. Gather census list with attending provider from ED daily 3. Design downtime coding sheet so completed ED charts can be coded real time 4. Assess if other systems are available - example: 360 was up and running with existing documentation available. Could have gotten word out that the documents were accessible in case they were needed for patient care. 5. Place a coder in the ED to capture attestations and documentation for charge entry purposes. 6. Be sure to replicate processes at both campuses.
	CDI	1. Deployment of team to the floors to organize charts was hugely beneficial. 2. Utilizing CDI for chart QA purposes was hugely beneficial.	1. Identification of providers for signature purposes - post outage having difficulty identifying who the providers are based on the paper chart for signature purposes.	1. Ensure copy of MS22 is available in paper format for use during downtime. 2. Have pre-printed/laminated signs with instructions to place on the floor with elements for signature requirements, how to get user ID. (place in go-bags).

Revenue Integrity	**CDM**	1. Inpatient Pharmacy recovery charges were uploads and overall went well. Moving forward need to separate BMC and NM charges.	1. Core lab charge Entry 2. Radiology use of historical provider caused an issue with CAC. 3. Radiology charge entry was done for recovery date of appointment rather than service date. 4. Pharmacy charges should be MAR corection. Some departments were told to manually enter (Echo-Lumison). Have paper MAR scanne. Caused issue in charging. 5. There were a handful of incorrect CSN's causing charges to post to deceased patients or patients who had not been here in a very long time. 6. Charge recovery efforts included patient check-in but HAR was often not created causing missing HAR errors. 7. Many charge related issues were due to entry date being used in lieu of service date.	1. Improvement downtime requisitions for core lab for manual charge entry purposes. Include location/inpatient/outpatient/transplant, diagnosis, etc. 2. Radiology - Update downtime procedure to ensure date of service is used for charge entry purposes. 3. Uploaded charges need to separate Bellevue from Main Campus (Pharmacy).
	Revenue Integrity	1. Notifications to providers post outage for chart completion 2. Participation on clinical operations sub-teams. 3. Analyst work on floors to consolidate charts and organize for signatures, etc.	1. Consistency in charge entry processes and charge entry downtime forms. 2. Specificity around various revenue generating areas for charge capture purposes.	1. Deploy analysts to the floors to help CDI with chart QA 2. Consider sending different Rev Cycle SME's to the various recovery meetings and have them report out. Example: for the Ambulatory meeting - have 1 Access, 1 HIM, 1 Revenue Integrity person attend. For peri-op have the same areas represented but assign 3 different SME's. 3. Confirm department downtime charge entry processes are in place and up to date during annual HB/PB Revenue Integrity audit. 4. Solidfy and standardize charge entry data elements and forms to ensure all required information is captured. 5. Include process for doing downtime documentation when onboarding new providers and residents.
PFS	**Operations**	1. Staff support to inpatient units and other areas for running purposes, etc.	1. Need to ensure paper or other method for staff contact information.	1. Have text list for communication purposes for all team members.
	Support	1. Cash posting able to catch up on posting within 2 days 2. Timely notification to SSI for payment files	1. Files were not availble for cash posting due to SFTP 2. Files were lost and had to be recovered 3. Release of large volumes of charge entry (ie: PeriOp Logs) caused a huge volume to come into claim queues putting this behind.	1. Ensure key documents are stored in a place that can be accessed even if shared drive system is not available.
	Insurance Services	1. Notifications to payers went well - able to be excepted from auth requirements for several contracted payers.	1. For appointments that were scheduled prior to cyber event - were unsure if they cancelled or rescheduled causing uncertainty with authorization process 2. Difficulty with account class, admit/discharge dates, diagnosis on bedded patients (IP, Observation, Ambulatory) 3. Difficulty identifying if maternity patients delivered or were treated and released for medical observation. 4. Need for diagnosis code caused delays when unavailable.	1. Identify way to capture diagnosis information for patients during downtime. 2. Place authorization team member in the PPU to do real-time authorizations and notifications - diagnosis would be available and paper processing could take place real-time.
	Customer Service/Collections	1. Several team members went to inpatient units to provider support. 2. On site weekend staff when system came up to clear out PFS questions emails from patients.	1. Phone system outage inability to provide automated voice message	1. Implement automatic e-mail response for PFS questions stating that the office is closed due to system issues. 2. Work with telelcom to have 3 generic messages to play to eliminate delays and have ability to activate independently without need for telecom.
Rev Cycle Admin		1. Training team did a great job finding training material in locations not on shared drives 2. Training team came up with innovative solutions to keep training moving during downtime.	1. Length of time to get dictation server back up - 2. Notifications to vendors regarding incident	1. Review all system documentation on a routine schedule of every six months. 2. Dictation server has been moved to a virtual server
Finance		1. Strata stayed up during the outage and was a blessing to have *HB NEW data came in quickly * PB NEW data took longer to get in the system 2. Workday was up during the outage which was helpful	1. Information for cash reconciliation was not avaialable 2. Month end reports were not available - used Epic aging off of Epic for AR (identified that guts of information were needed). Allocations from prior month did not work well - had to wait until clarity was back up.	1. In general, had to wait for several things and other systems to come back up to get reports for month end processes
Miscellaneous	1. With implementation of registration system for Contact Center that is outside of Epic - could that be used in the future to look up MRN's and/or to register patients during downtime? 2. Need to determine the amount of time that will trigger extened downtime procedures 3. Assess potential for user ID to be required Epic log on vs. our first initial/last name 4. Scripting from Marketing was very helpful for all areas.			