Core Data for BQC-19, a release document

This document covers :

- Inclusion Criteria : Cohort and timeframes
- Dictionaries : and terminologies
- Topics : Data sets + fields released as well as data sources used.
- Outputs : datasets produced

Release Date	20 May 2022
Demo Date	20 May 2022
Version	3.0
Demo URL	Z:\BQCM\Data Extraction from MR\ISSAM\Core_Data\

Inclusion Criteria:

The BQC-19 cohort is : 1710 consenting patients (mostly having or at least having been tested for Covid-19) for whom data around the topics mentioned below is collected and anonymized to be shared for analysis purposes.

The timeframe varies from topic to another : (labs, covid swabs, emergency visits, vital signs, drug prescriptions and drug administrations are collected starting from March 1st 2020, then other related information list past medical history and procedures are collected a couple years before that date)

All the datasets provided are up to date, meaning the date of last captured record is as close as possible to the mentioned date on the folder of the release, there is an exception of past Medical history which is 3 months behind due to the diagnosis revision process done by health professionals at the hospital that takes the same amount of time, so the date of the latest diagnosis should be around 3 months prior to the extract date.

Dictionaries and Terminologies:

In order to facilitate comprehension of the different coding systems used in the extract, as well as having an overview of the dictionaries of the different notions treated, the following dictionaries are also included in the extract:

• ***icd.9.10_codes_dictionary***: Complete List of Conditions/Diagnosis that are currently in the Medecho database, it can be subject to rare updates (Example adding Novel Coronavirus lately…), but it gives the broad name and code according to the ICD standard of the diagnosis instead (drop down menu instead of a text box to avoid human error)

• ***all_drug_with_ahfs*** : complete list of all the drugs in the Gesphar database used in prescriptions and intended to be prescribed to patients, the full formats and dosage availability is also documented. (Example: if ACEBUTOLOL is available in both 100mg and 200mg, then we have both on the list)

• ***phar_ahfs_dictionnary :*** dictionary of all ahfs codes used at the hospital with detailed corresponding descriptions

• ***all_labs_dictionary***: complete list of all the Lab identifiers specific to the JGH from SOftLab + description, units … etc

• ***phar_route_of_adm_dictionnary :*** complete list of the routes of administration + descriptions, this list has been used to map the corresponding routes to Snomed Terminology for the body site and body part

• ***medurge_diagnosis_symptom_dictionary*** (from Medurge): codes and descriptions of symptom/pseudo-diagnosis noticed at the emergency room

Topics:

in the extract, there are various notions captured from different moments around the patient's visit to the hospital, ranging from first contact at the emergency, different labs ordered, different diagnosis pronounced, all the way until planned procedures performed and eventually discharge from the hospital. This section gives detail about all the content provided, where it comes from and what each variable communicates.

a - Data Sources:

the datas sources used to provide this extract are :

- **Clinibase** : for encounters, admissions, intensive care unit episodes and admitting diagnosis.
- **MedUrge** : for encounters, emergency visits, consultations, vital signs and triage data.
- **MedEcho** : for encounters, past medical history and procedures.
- **SoftLab** : for laboratories and blood gas, Covid-19 swabs and microbiology.
- **Opera** : for in-patient procedures (meaning that these procedures happened while they were having an episode of care).
- **EndoVault**: for out-patient procedures, Oncology …etc.
- **GesPhar** : for drug prescriptions and administrations during encounters.
- **Radimage** : for radiology exams.

b - Data Dictionary:

the following tables are references to the datasets provided, here's by table, a brief description about the contained fields :

emergency_visits :

	Variable	Description	Type	Format	Unit	Possible values (when variable is categorical)
	study_id	given patient id for this particular study	Character			
	patient_came_from	indication as to where patient came from.	Character, Categorical, Nullable			• Home • Other • CLSC • Nursing home • Clinic • Reabilitation center • Hospital • CHSLD • Work • Homeless • JAIL • NA (f)
	patient_came_by	did the patient came walking, by ambulance, driven by a relative, any other service ?	Character, Categorical			▪ Ambulance ▪ Police ▪ Walking ▪ Other
	list_of_symptoms_and_diagnosis	list of the symptoms the consulting doctor assessed after meeting with the patient (n.b : this list is different than the actual complete and revised list of diagnosis : Past_Medical_history PMH that actually resulted from a diagnosis process)	Character			
	visit_reason	main complaint made by patient upon arrival at the emergency room related to his/her health	Character			
	triage_start	triage process starts at this moment	Numeric, Datetime	yyyy-mm-dd hh:mm:ss		
	systolic_blood_pressure	measured systolic blood pressure	Numeric, Continuous		millimeters of mercury (mmHg)	

	dyastolic_blood_pressure	measured dyastolic blood pressure	Numeric, Continuous		millimeters of mercury (mmHg)	
	heart_rate	measured heart rate	Numeric, Continuous		beats per minute (bpm)	
	respiration	measured respiration	Numeric, Continuous		breaths per minute (/min)	
	o2_sasturation	measured Oxygen saturation	Numeric, Continuous		percentage (%)	
	temperature	measured temperature	Numeric, Continuous		degree celsius (C)	
	triage_level	patients are evaluated by a nurse who assigns them a level based on the Canadian Triage and Acuity Scale. Patients are seen by a doctor in order of their priority on this scale.	Numeric, Categorical			• Level 1: Resuscitation – Conditions that are threats to life or limb • Level 2: Emergent – Conditions that are a potential threat to life, limb or function\ • Level 3: Urgent – Serious conditions that require emergency intervention • Level 4: Less urgent – Conditions that relate to patient distress or potential complications that would benefit from intervention • Level 5: Non-urgent – Conditions that are non-urgent or that may be part of a chronic problem
	encounter_start	timestamp as in when the encounter at the emergency started.	Numeric, Datetime	yyyy-mm-dd hh:mm:ss		
	encounter_end	timestamp as in when the encounter at the emergency ended.	Numeric, Datetime	yyyy-mm-dd hh:mm:ss		

admissions:

	Field	Description	Type	Format	Possible values
	study_id	given patient id for this particular study	Character		
	admission_date	datetime as to when was the patient admitted to a ward+bed at the hospital	Numeric, Datetime	yyyy-mm-dd hh:mm:ss	
	release_date	datetime as to when was the patient discharged	Numeric, Datetime	yyyy-mm-dd hh:mm:ss	
	service	service where patient got admitted, (Medecine interne, Orthopedie, Medecine familiale…)	Character, Categorical, Nullable		*can be found in the file : categorical_variable_dictionaries.xlsx under the sheet : admissions.service
	admission_type	type of the admission.	Character, Categorical, Nullable		- Urgent (Pts only from Emergency) - Semi-urgent (Card, med-card, Onc, other Hosp, + our clinics - Electif (Pts from home, but NOT Card, med-card and onco)

	diagnosis_or_procedure_code	reason for the admission, whether patient is admitted for Diagnosis X or needed to be admitted in order to undergo surgery afterwards. the code is in ICD-10.	Character, Categorical, Nullable		*can be found in the file : categorical_variable_dictionaries.xlsx under the sheet : admissions.diag_or_proc
	diagnosis_or_procedure_description	reason for the admission, whether patient is admitted for Diagnosis X or needed to be admitted in order to undergo surgery afterwards. this is the matching description for the ICD-10 code	Character, Categorical		*can be found in the file : categorical_variable_dictionaries.xlsx under the sheet : admissions.diag_or_proc

covid_swabs:

	Field	Description	Type	Format	Possible values
	study_id	given patient id for this particular study	Character		
	result	Covid result associated with the specific swab taken , when the result says "Undetermined", it means that the test was performed and for some reason it had to be done again or done at a different location, so it was re-ordered. when the result says "Unknown", it means that there was an order for the test but no the result in the microbiology application was blank or not intelligible	Character, Categorical,		▪ Negative ▪ Positive ▪ Undetermined ▪ Unknown
	collect_date	date at which the specimen was taken, enabling us to determine the covid status of the patient at said date	Numeric, Continuous, Time	yyyy-mm-dd	
	collect_time	time at which the specimen was taken, enabling us to determine the covid status of the patient at said time	Numeric, Continuous, Time	hh:mm	

laboratories:

	Field	Description	Type	Format	Possible value
	study_id	given patient id for this particular study	Character		
	lab_id	internal id used to reference a specific laboratory	Character, Categorical		*can be found in the file : : all_labs_dictionary.csv
	lab_name	lab_id signification = scientific lab name, gives more details about the lab : (example LAPLT = Large Platelets, ..)	Character, Categorical		*can be found in the file : : all_labs_dictionary.csv

	lab_result	result observed concerning the laboratory. this result can contain anything from a number, character (category) or text and this is due to the variety of laboratories entered into SoftLab.	Character		
	unit	unit of the result, all the observations have different units, and this field also differentiates results for the same lab sometimes (example : basophils in percentage versus count are not the same so we might notice multiple results for the same lab)	Character, Categorical		*can be found in the file : : all_labs_dictionary.csv
	lab_group_id	laboratories are grouped in order to classify laboratories into more logical groups, example : **Complete Blood Count (CBC)** is the most common blood test performed. It measures the types and numbers of cells in the blood, including red and white blood cells and platelets. This test is used to determine general health status, screen for disorders and evaluate nutritional status. It can help evaluate symptoms such as weakness, fatigue and bruising, and can help diagnose conditions such as anemia, leukemia, malaria and infection. this group contains multiple laboratories.	Character, Categorical		*can be found in the file : categorical_variable_dictionaries.xlsx under the sheet : laboratories.lab_groups
	lab_group_description	the description of the group id.	Character, Categorical		*can be found in the file : categorical_variable_dictionaries.xlsx under the sheet : laboratories.lab_groups
	lab_dt	datetime as in when was this laboratory performed	Numeric, Date	yyyy-mm-dd hh:mm:ss	

past_medical_history_icd:

	Field	Description	Type	Format	Possible values
	study_id	given patient id for this particular study	Character		
	diagnosis_code	ICD code of the condition/disease that the patient got diagnosed with, this code can be an ICD-9 or ICD-10 depending on whether the encounter_date was before or after April-2006	Character, Categorical		*can be found in the file : icd.9.10_codes_dictionary.xlsm
	diagnosis_description	description associated with the diagnosis code, and it's fairly detailed (example : Type 2 DM with polyneuropathy) so what may sound like the same condition, can have multiple ICD codes depending on the complications that may come with the diagnosis	Character, Categorical		*can be found in the file : icd_codes_dictionary.xlsm
	encounter_start	timestamp as in when did the encounter or admission during which this diagnosis occurred start.	Numeric, Datetime	yyyy-mm-dd hh:mm:ss	
	encounter_end	datetime as in when did the encounter or admission during which this diagnosis occureed end.	Numeric, Datetime	yyyy-mm-dd hh:mm:ss	

procedures_for_inpatients_pr

	Field	Description	Type	Format	Possible values
	study_id	given patient id for this particular study	Character		

	procedure_code	internal code uniquely identifying a procedure / intervention	Character, Categorical		*can be found in the file : categorical_variable_dictionaries.xlsx under the sheet : procedure_inpatient_pr.procs (primary procedures for inpatients)
	procedure_description	description as in the name of the procedure	Character, Categorical		*can be found in the file : categorical_variable_dictionaries.xlsx under the sheet : procedure_inpatient_pr.procs (primary procedures for inpatients)
	procedure_localisation	actual body site / part on which operation is performed, example: right eye, back, knee left, ... etc.	Character, Categorical, Nullable		*can be found in the file : categorical_variable_dictionaries.xlsx under the sheet : procedure_inpatient_pr.local (localisations for primary procedures for inpatients)
	speciality	speciality under which the procedure took place	Character, Categorical		*can be found in the file : categorical_variable_dictionaries.xlsx under the sheet : procedure_inpatient_pr.specialt
	sector	sector under which the procedure took place	Character, Categorical		*can be found in the file : categorical_variable_dictionaries.xlsx under the sheet : procedure_inpatient_pr.sector
	scheduled_date	date when the intervention is/was scheduled	Numeric, Date	yyyy-mm-dd	
	planned_duration_hrs	what a similar procedure usually takes in ideal circumstances	Numeric, Continuous		
	anesthesia_type	(General, Spinal, Local …..)	Character, Categorical		*can be found in the file : categorical_variable_dictionaries.xlsx under the sheet : procedure_inpatient_pr.an_type
	procedure_technique	the technique used, example : Laparoscopy, Hysteroscopy, ... etc.	Character, Categorical, Nullable		*can be found in the file : categorical_variable_dictionaries.xlsx under the sheet : procedure_inpatient_pr.proc_tec
	procedure_start	timestamp as in when the procedure started	Numeric, Datetime	yyyy-mm-dd hh:mm:ss	

	procedure_end	timestamp as in when the procedure ended	Numeric, Datetime	yyyy-mm-dd hh:mm:ss	
	duration_in_minutes	actual duration in minutes	Numeric, Continuous		
	pre_op_diagnosis	diagnosis prior to the intervention	Character, Categorical		*can be found in the file : categorical_variable_dictionaries.xlsx under the sheet : procedure_inpatient_pr.diags
	post_op_diagnosis	diagnosis after the intervention	Character, Categorical		*can be found in the file : categorical_variable_dictionaries.xlsx under the sheet : procedure_inpatient_pr.diags

procedures_for_inpatients_sec

	Field	Description	Type	Format	Possible values
	study_id	given patient id for this particular study	Character		
	procedure_description	description as in the name of the procedure	Character, Categorical		*can be found in the file : categorical_variable_dictionaries.xlsx under the sheet : procedure_inpatient_sec.proc
	procedure_localisation	actual body site / part on which operation is performed	Character, Categorical, Nullable		*can be found in the file : categorical_variable_dictionaries.xlsx under the sheet : procedure_inpatient_sec.local
	speciality	speciality under which the procedure took place	Character, Categorical		*can be found in the file : categorical_variable_dictionaries.xlsx under the sheet : procedure_inpatient_pr.specialt
	sector	sector under which the procedure took place	Character, Categorical		*can be found in the file : categorical_variable_dictionaries.xlsx under the sheet : procedure_inpatient_pr.sector
	scheduled_date	date when the intervention is/was scheduled	Numeric, Date	yyyy-mm-dd	

	anesthesia_type	(General, Spinal, Local …..)	Character, Categorical		*can be found in the file : categorical_variable_dictionaries.xlsx under the sheet : procedure_inpatient_pr.an_type
	procedure_technique	the technique used	Character, Categorical		*can be found in the file : categorical_variable_dictionaries.xlsx under the sheet : procedure_inpatient_pr.proc_tec
	procedure_start	timestamp as in when the procedure started	Numeric, Datetime	yyyy-mm-dd hh:mm:ss	
	procedure_end	timestamp as in when the procedure ended	Numeric, Datetime	yyyy-mm-dd hh:mm:ss	

procedures_for_outpatients:

	Field	Description	Type	Format	Possible values
	study_id	given patient id for this particular study	Character		
	procedure_name	name of the procedure	Character, Categorical		*can be found in the file : categorical_variable_dictionaries.xlsx under the sheet : procedure_outpatient.proc
	status	status of the intervention	Character, Categorical		▪ Scheduled ▪ Finished ▪ Cancelled ▪ Arrived ▪ Started ▪ No-Show
	procedure_type	type of the procedure	Character, Categorical, Nullable		▪ Blood test ▪ Chemo Treatment ▪ UNKNOWN ▪ Call ▪ General ▪ BP ▪ COLPOSCOPY ▪ Bronchoscopy ▪ Interventional
	speciality	speciality under which the procedure took place	Character, Categorical, Nullable		▪ Hematology Oncology ▪ Oncology ▪ Pulmonology ▪ PainManegem ▪ ENT Oncology ▪ OBGYN
	procedure_date	scheduled date of the procedure	Numeric, Date,	yyyy-mm-dd	
	procedure_time	scheduled time of the procedure	Character, Nullable	example : 15h23	

	patient_arrived_at	actual time the patient arrived at the hospital (if this variable is null, the procedure did not happen, check status)	Character, Nullable	example : 15h23	
	procedure_start	datetime as in when did the procedure actually start (if this variable is null, the procedure did not happen, check status)	Numeric, Datetime, Nullable	yyyy-mm-dd hh:mm:ss	
	procedure_end	datetime as in when did the procedure actually end (if this variable is null, the procedure did not happen, check status)	Numeric, Datetime, Nullable	yyyy-mm-dd hh:mm:ss	
	duration	actual duration (in minutes) of the intervention in minutes, sometimes it can be null even though the timestamps of start and end of procedure are there, this value is entered manually.	Numeric, Nullable		
	diagnosis_linked_to_proc	diagnosis linked to the intervention, usually the reason for which the patient is actually receiving treatment / going through procedure,example : "diffuse ulceration of the antr" or "esopkagitis and mild gastritis" Gastroscopy	Character, Nullable		
	notes	any notes related to the intervention	Character, Nullable		

radiology_tests:

	Field	Description	Type	Format	Possible values
	study_id	given patient id for this particular study	Character		
	exam_name	name of the scan, radio, exam name (it's an observation made about one particular aspect / body part of the patient)	Character, Categorical		*can be found in the file : categorical_variable_dictionaries.xlsx under the sheet : radiology.exam_names
	exam_scheduled	datetime as in when exactly was the exam scheduled to be performed	Numeric, Datetime	yyyy-mm-dd hh:mm:ss	
	exam_request_made	when was the request for this exam by the healthcare professional in charge of the patient made	Numeric, Datetime	yyyy-mm-dd hh:mm:ss	
	request_status	status of the request (Final Report means it was performed , Cancelled Requisition, No Show, ...etc means something prevented the patient or healthcare professional from performing exam)	Character, Categorical		▪ Final Report ▪ Cancelled Requisition ▪ Record Only ▪ No Show ▪ Future Appointment ▪ Waiting List ▪ Expected-Not Arrived ▪ To Dictate
	patient_came_from	can be Emergency, Private outside Office, Hosp JGH, OPD external Clinic, ...etc.	Character, Categorical		▪ Hosp. JGH ▪ Emergency ▪ OPD-Clinique Externe ▪ Private Outside Office (Enregistres) ▪ Other Hosp/Clin

	exam_start	datetime as in when and at what time the exam actually started , can be different from scheduled datetime	Numeric, Datetime	yyyy-mm-dd hh:mm:ss	
	exam_finished	datetime as in when and at what time the exam ended	Numeric, Datetime	yyyy-mm-dd hh:mm:ss	

distinct_drugs_per_patient:

	Field	Description	Type	Possible values
	study_id	given patient id for this particular study	Character	
	drug_name	full description of the drug (brand name + dose + format +route) these details are also separated into their own fields (Example: BECLOMETHASONE 50 mcg/spray NASAL)	Character, Categorical	*can be found in the file : all_drug_with_ahfs.xlsx
	drug_commercial_name	more general reference to the drug (Example: ACETAMINOPHEN 325mg/tab TYLENOL HYDROCORTISONE 10 mg/tab CORTEF)	Character, Categorical	*can be found in the file : all_drug_with_ahfs.xlsx
	ahfs_code	ahfs code given by Gesphar	Character, Categorical	*can be found in the file : phar_ahfs_dictionnary.xlsx
	ahfs_class	ahfs class associated with the given code	Character, Categorical	*can be found in the file : phar_ahfs_dictionnary.xlsx

drug_prescriptions:

	Field	Description	Type	Format	Possible values
	study_id	given patient id for this particular study	Character		
	ahfs_code	AHFS code given by Gesphar	Character, Categorical		
	ahfs_class	AHFS class associated with the given code	Character, Categorical		
	drug_name	full description of the drug (brand name + dose+format +route …) these details are also separated into their own fields (Example: BECLOMETHASONE 50 mcg/spray NASAL)	Character, Categorical		*can be found in the file : all_drug_with_ahfs.xlsx
	drug_commercial_name	more general reference to the drug (Example: ACETAMINOPHEN 325mg/tab TYLENOL HYDROCORTISONE 10 mg/tab CORTEF)	Character, Categorical		*can be found in the file : all_drug_with_ahfs.xlsx
	route_code	route of administration code	Character, Categorical		*can be found in the file : phar_route_of_adm_dictionnary.xlsx
	route_description	route of administration corresponding meaning (Example: PO/PT tab PO oral or per tube SC Subcutaneous)	Character, Categorical		*can be found in the file : phar_route_of_adm_dictionnary.xlsx
	dose	dose of the prescribed drug	Numeric		
	unit	unit of the dose of the prescribed drug	Character		
	format	format of the drug, Example: Tabs, SYRINGE 3mL, VIAL 2mL	Character, Categorical		

	local_class	GESPHAR categorizes the meds as Injectables, Tablets, Ophtalmics, Inhalers …etc	Character, Categorical		
	schedule_of_adm	mentions the preferred hours of administration if applicable, sometimes an indication if it's as needed or not.	Character, Free Text		
	prescription_start	datetime as in when does the prescription start	Numeric, Datetime	yyyy-mm-dd hh:mm:ss	
	prescription_end	datetime as in when does the prescription start. N.B : a considerable amount of prescriptions have an end date around year 2049, after discussing with the Pharmacy team, it seems that when prescriber forgets to specify end date or intentionally prescribes a drug that patient has to take for a long period of time until further notice, the default number of days set by Gesphar application is 9999 days, which gives the end date that far.	Numeric, Datetime	yyyy-mm-dd hh:mm:ss	
	prescription_modification	datetime as in, in case the prescription details are modified, we keep the datetime it was. this datetime then can be see as a new start (prescription_start) for a new prescription	Numeric, Datetime, Nullable	yyyy-mm-dd hh:mm:ss	
	duration	duration of the prescription measured in number of days	Numeric		
	posology	exhaustive description of how/how often a healthcare professional (Nurse in occurrence) may administer said medication Example: (- 500 MG = 1 tab PO or per tube 3 times a day x 2 days - 2.5 MG = 1 tab PO 3 times a week on MON, WED, FRI 30 min before dialysis **on dialysis days**)	Character, Free Text		

drug_administrations:

	Field	Description	Type	Format	Possible values
	study_id	given patient id for this particular study	Character		
	drug_name	full description of the drug (brand name + dose + format +route) these details are also separated into their own fields (Example: BECLOMETHASONE 50 mcg/spray NASAL)	Character, Categorical		*can be found in the file : all_drug_with_ahfs.xlsx
	drug_commercial_name	more general reference to the drug (Example: ACETAMINOPHEN 325mg/tab TYLENOL HYDROCORTISONE 10 mg/tab CORTEF)	Character, Categorical		*can be found in the file : all_drug_with_ahfs.xlsx
	dose	dose of the administered drug	Numeric		
	unit	unit of the administered drug	Character, Nullable		
	drug_administration_date	AHFS class associated with the given code	Numeric, Date	yyyy-mm-dd	
	drug_adm_scheduled_time	time as in when exactly was the patient supposed to have the drug administered	Numeric, Time	hh:mm:ss	
	drug_adm_real_time	time as in what time there was an actual administration	Numeric, Time	hh:mm:ss	

	posology	exhaustive description of how/how often a healthcare professional (Nurse in occurrence) may administer said medication Example: (- 500 MG = 1 tab PO or per tube 3 times a day x 2 days - 2.5 MG = 1 tab PO 3 times a week on MON, WED, FRI 30 min before dialysis **on dialysis days**)	Character, Free Text		

decease:

	Field	Description
	study_id	given patient id for this particular study
	decease_datetime	datetime as in what date and time was the decease of the mentioned patient pronounced at the hospital (yyyy-mm-dd hh:mm:ss)

Outputs:

The list of outputs is as follows: (all in csv format)

- ***1_emergency_visits*** : general information about emergency visits
- ***1_consultations***: consultations in the ER (that are part of each encounter) + notes and dates within those ED episodes
- ***2_vitals***: vital signs taken at the emergency room
- ***3_admissions***: admission data
- ***4_icu_admissions***: Intensive care unit information
- ***5_covid_swabs***: covid swab results for the cohort
- ***6_laboratories***: laboratories results
- ***7_bloog_gas***: blood gas lab results (subset of the laboratories where the grouping id is Arterial or Venous Blood Gas)
- ***8_microbiology_1***: Microbiology from landed SOFTMIC tables, results are in free text, general information about specific culture
- ***9_past_medical_history_icd9*** (icd9 / prior to 2005-Apr) : past medical history
- ***9_past_medical_history_icd10*** (icd10 / after 2005-Apr) : past medical history
- ***10_drug_administrations***: medication administration
- ***10_drug_prescriptions***: prescription events
- ***10_distinct_drugs_per_patient***: lists of meds prescribed for each patient
- ***11_procedures_for_outpatients***: from Endovault
- ***11_procedures_for_inpatients_pr***: primary inpatient procedures
- ***11_procedures_for_inpatients_sec***: secondary inpatient procedures
- ***12_radiology_tests*** : all the exams / radiology tests the patients underwent are documented here (names and dates only)
- ***13_decease*** : decease registry, documenting timestamp of decease as well as all the past medical history of the patient

Signature

The items listed above have been presented and are accessible. If any issues are found, they can be submitted through the IMS Ticket system (http://ticket.ladydavis.ca).

Date:	**Project Sponsor Name:**	**Project Sponsor Signature:**
_____	_____	_____