Hamilton Health Sciences	**Critical Care Information System–Privacy**
Title: P5-List of Data Holdings and P7-Statements of Purpose for Data Holdings Containing Personal Health Information	
Posting Date: July 7, 2014	
Approved By: Legal Counsel and Chief Privacy Officer, HHS; Isabel Hayward, Executive Director, CritiCall Ontario	
Date of Initial Approval: June 24, 2014	**Date of Last Review: June 22, 2023**
Date of Next Review: June 2024	

Version History			
Version No.	**Date**	**Summary of Change**	**Changed By**
1.1	July 10, 2015	Updated data element list	Christine Moon, CritiCall Privacy Lead
1.2	Dec. 21, 2015	Updated data element list	Christine Moon, CritiCall Privacy Lead
1.3	September 28, 2016	None	Mary Wall, Director Privacy and FOI HHS
1.4	November 23, 2016	Added "Applies to" section and footnote with definition of agent	Amanda M. Cramm, Privacy Specialist
1.5	June 20, 2017	Data Element List updated	Christine Moon, CritiCall Privacy Lead
1.6	September 14, 2021	Updated the CCIS Data Elements List	Lori Sutherland, CritiCall Privacy Lead
1.7	Feb 17, 2022	Updated the CCIS Data Elements List (COVID Primary and Incidental)	Lori Sutherland, CritiCall Privacy Lead
1.8	October 10, 2023	Updated Approver (CPO) and added NICU LSI, Pandemic and CCIS 2.0 data elements	Stephanie Piper, CritiCall Privacy Lead

Applies To:

This policy and procedure applies to all Hamilton Health Sciences (HHS)/CritiCall Ontario (CritiCall)

employees and any other agents of HHS/CritiCall[1] who have Critical Care Information System (CCIS) job-related duties that require them to review, develop, or manage the list of Data Holdings and the Statements of Purpose for Data Holdings which contain personal health information (PHI).

Critical Care Information System Data Holding and Statement of Purpose for the Data Holding

The Critical Care Information System (CCIS) data holding is comprised of standard critical care data elements entered into the CCIS by authorized individuals employed by critical care units in participating Ontario hospitals. The purpose of the CCIS data holding is to enable analysis and statistical reporting of resource requirements, utilization and capacity in relation to patient acuity to enable evidenced based decision making to support system-wide capacity planning and targeted performance improvement initiatives. Data collected within the CCIS is limited to that which is necessary to fulfill the above purpose. The following is a list of the data elements contained within the data holding in respect of the CCIS as well as corresponding statements of purpose for each data element group within the data holding.

The Statements of Purpose sets out the need for the PHI in relation to the purpose.

Statements of Purpose for CCIS Data Elements		
CCIS Data Element Group	**Data Elements (Current)**	**Purpose**
Patient Demographic Information	• Medical Record Number (MRN) • Name (first, middle, last) • Year, month of birth and date of birth • Sex • Health card number • Health card type • Health Card version Code • Age • Address • Phone Number	To ensure that the correct patient is selected when admitting a critical care patient into the system and when updating other CCIS data fields. To enable several decision support benefits, such as assessing the effectiveness, efficacy, and utilization of interventions on health outcomes for patients or assisting with

[1]Agents may be employees, consultants, contracted workers, vendors or any other person who acts on behalf of HHS/CritiCall in respect of personal health information for the purposes of HHS/CritiCall and not the agent's own purposes, whether or not the agent has the authority to bind HHS/CritiCall and whether or not the agent is employed by the HHS/CritiCall and whether or not the agent is being remunerated.

		individualized patient triage, transfer and discharge planning.
Hospital Information	• LHIN Code • LHIN Name • Corporation Code • Corporation Name • Site Code • Site Name • ICU Code • ICU Name • ICU Type • ICU Level • Patient De-Identity ID	To provide LHIN/Region, hospital and unit level information related to critical care admissions.
Admission/Discharge Data	• Hospital Admission Date Time • ICU Admission Date Time • ICU Discharge Date Time • Discharge Destination • ICU Admission Source • Transferred From (If the Patient's Admission source is not within the hospital) • ICU Admission Diagnosis • Admitted to CCIS as a result of CCRT/PCCRT Assessment • Admitted to the unit with an existing Central Venous Line • Admitted to the unit with an existing Central Line Infection • Patient Category • Referring Physician Service • Scheduled Surgery • ICU Admission Scheduled (If Surgery is scheduled) • Influenza Like Illness - Admitted to the unit with • Influenza Like Illness - Lab Confirmed Result	To provide information about hospital length of stay, critical care unit length of stay.

	• Influenza Like Illness - Date of Lab Result • Influenza Like Illness - Documentation Not Found • Influenza Like Illness – Suspected Influenza case - Lab Confirmed Result • Influenza Like Illness - Suspected Influenza case - Date of Lab Result • Influenza Like Illness - - Suspected Influenza case Documentation Not Found • Respiratory Syncytial Virus - Admitted to the unit with • Respiratory Syncytial Virus - Lab Confirmed Result • Respiratory Syncytial Virus - Date of Lab Result • Respiratory Syncytial Virus - Documentation Not Found • Respiratory Syncytial Virus – Suspected RSV case - Lab Confirmed Result • Respiratory Syncytial Virus – Suspected RSV case - Date of Lab Result • Respiratory Syncytial Virus - - Suspected RSV case Documentation Not Found • Pandemic Information – COVID-19 • Pandemic Information - Admitted to the unit with • Pandemic Information - Lab Confirmed Result (Primary) • Pandemic Information - Lab Confirmed Result (Incidental) • Pandemic Information - Lab Confirmed Result	

	• Pandemic Information - Date of Lab Result • Pandemic Information - Documentation Not Found • Pandemic Information – Suspected case - Lab Confirmed Result • Pandemic Information - Suspected case - Date of Lab Result • Pandemic Information - Suspected case Documentation Not Found • Transferred to (if Discharged to another hospital) • CCRT/PCCRT to follow-up • Reason why CCRT/PCCRT Follow-up not required • Reason for Reverse Discharge • Location of Reserved Patient • Reservation Cancellation Date & Time • Reservation Date & Time • Reservation Cancellation Reason	
Clinical Data **(LSI/NEMS)**	• Basic Monitoring • Ventilation Historical • Ventilation: Mechanical Invasive Ventilation, Mechanical Non-Invasive Ventilation (High Flow Nasal Cannula, BiPAP, CPAP), Supplementary Ventilatory Care, No Ventilation • Proning • Central Venous Line • Arterial Line • CVL or Arterial Line Historical	To provide information about the various clinical supports and interventions required by each critical care patient; data is used to calculate nursing workload (the Nine Equivalents of Nursing Manpower).

	• Intravenous Inotropic/Vasoactive Medication • Inotropic Vasoactive Historical • Other Intervenous Medication • Intracranial Pressure Monitor • Dialysis • Dialysis Type: Intermittent Dialysis/Continuous Renal Replacement Therapy • Extracorporeal Membrane Oxygenation • ECMO Type: Veno-Venous/Veno-Arterial • Intra Aortic Balloon Pump • Other Interventions Within this Unit • Interventions Outside this Unit • NEMS	
AMS	• Number of Different Antibacterial Therapies • Number of Different Antifungal Therapies • Incident of Positive C.Diff Result Collected On	To provide information about the utilization of antibacterial and antimicrobial therapies in critical care units.
Awaiting Transfer	• Awaiting Transfer Discharge Start Date Time • Awaiting Transfer Discharge Cancel Date Time • (Note: Awaiting Transfer Discharge Cancel Date Time is only populated if the awaiting transfer is cancelled.) • Awaiting Transfer Reason • Awaiting Transfer Discharge Cancellation	To provide information about the discharge process including the time from readiness for discharge to actual discharge; related reasons.

MODS	• Date Of MODS • MODS Submission Date Time • MODS Haematologic • MODS Hepatic • MODS Renal • MODS Pressure Adjusted Heart Rate • MODS Central Venous Pressure* • MODS Mean Arterial Pressure* • MODS Heart Rate* • MODS Glasgow Coma Score • MODS GCS Eyes* • MODS GCS Verbal* • MODS GCS Motor* • MODS Respiratory Ratio • MODSPO2 • MODSFiO2 • MOD Score	To provide measurement of the severity of the multiple organ dysfunction syndrome as an outcome of critical illness (tracking measurements of six major systems in the body – Hematological, Hepatic, Renal, Cardiovascular, Neurological).
PIM2/PELOD	• Date Of PIM2 • PIM2 Submission Date time • PIM2 Elective Admission • PIM2 Recovery Post Procedure • PIM2 Cardiac Bypass • PIM2 Diagnosis • PIM2 Pupils Response to Bright Light • PIM2 Mechanical Ventilation • PIM2 Systolic Blood Pressure • PIM2 Base Excess • PIM2FiO2 • PIM2PaO2 • PIM2 Score • Date Of PELOD • PELOD Submission Date time • PELOD Glasgow Coma Score • PELOD GCS Eyes* • PELOD GCS Verbal* • PELOD GCS Motor*	Paediatric Logistic Organ Dysfunction Score is collected to provide a description of acuity for all patients admitted to a paediatric critical care unit; Paediatric Index of Mortality Score (PIM 2) is a predictor of mortality for all patients admitted to a paediatric critical care unit.

	• PELOD Pupillary Reaction • PELOD Heart Rate • PELOD Systolic Blood Pressure • PELOD Renal Creatinine • PELOD Respiratory Ratio • PELOD PaO2 • PELOD FiO2 • PELOD PaCO2 • PELOD Mechanical Ventilation • PELOD Haematological White Blood Cell Count • PELOD Haematological Platelets • PELOD Hepatic Aspartate Transaminase • PELOD Hepatic International Normalized Ratio • PELOD Score	
NICU LSI	• Date of Intervention Report • Monitoring (No continuous monitoring, Continuous monitoring, NAS scoring and management) • Cardio-Respiratory Events • Feeding (NPO, Uncomplicated oral and/or tube feeding, Complex feeding or ostomy) • Management of Hypoglycaemia • Management of Hyperbilirubinemia (None, Phototherapy lights, IVIG for hyperbilirubinemia, Exchange Transfusion) • Peripheral Intravenous Line • Central Line	The Neonatal Intensive Care Unit Life Support Intervention (NICU LSI) data reflects neonatal patient acuity and the associated nursing workload.

	• Arterial Line • Administration of Parental Nutrition • Intravenous Medications • Respiratory Support (No respiratory support, Oxygen and or supplementary support, non-invasive respiratory support, invasive mechanical ventilation) • Blood Products (excluding IVIG and exchange transfusion) • Interventions within the Unit (None, Palliative care, Intensive Parent/Family Education/Support, Single chest drain, >= 2 chest drains, Seizures, Intensive neurological management, Intensive pre/post operative management, Isolation, Dialysis) • Interventions Outside of the Unit (None, Radiological (CT or MRI), Procedures outside NICU, Transfer accompanied by unit staff)	
Bed Availability	• Available Beds • Occupied Beds renamed to CCIS Patients • Not Occupied Beds • Occupancy Rate (%) • Not Available Beds • Not Staffed • Outpatients • Reserved • Infection Control • Shortage of Equipment • Environment	To provide information about bed information including availability, demand, occupied status, funded beds, etc.

	• Last Updated • MOHLTC Bed Count renamed to CC Bed Inentory • MOHLTC Vented Bed Count renamed to Vented Bed Inventory	
Critical Care Response Team	• Seen By CCRT • Seen By MD • Seen By RN • Seen By RT • Notified By • Primary Reason • Admitting Service • ABC Triage • CCRT Calling Criteria Met Historical (Prior to November 11, 2008) • CCRT Calling Criteria Met Timeliness Historical (Prior to November 11, 2008) • Date Time Patient Met CCRT Calling Criteria (New Consult) • CCRT Notified Date Time (New Consult) • Code Blue Yes No (New Consult) • Primary Event (NewConsult) Historical • Consult Type • Patient Reassessed • CCRT MD Notified • CCRT MD Notified Time • Time Last Team Member Left • CCRT Call Outcomes • End Of Life Discussion Initiated Yes No • EndOfLifeDiscussionInitiated • ICU Request Date Time	Provides data related to patients not located in the critical care unit but who are seen by the Critical Care Response Team (CCRT).

	• No Consult Audit Date Historical (Prior to November 11, 2008) • Time Period Of Primary Event Historical (Prior to November 11, 2008) • Code Blue Yes No (No Consult Audit) • Primary Event (No Consult Audit) • Date Time Patient Met CCRT Calling Criteria (No Consult Audit) • Date Time Of Primary Event • No Consult Audit Submission Date Time • Unplanned ICU Admission • Time With Patient After ICU Admission Hours • Time With Patient After ICU Admission Minutes • CCRT Reverse Discharge Date & Time • CCRT Reason of Reverse Discharge • CCRT Discharge Date & Time • Patient is in an intensivist covered Critical Care Unit	
Outcomes	• VAP Incident Date • VAP Submission Date Time • VAP Incident Entered In Error Date Time • VAP Counter • CLI Incident Date • CLI Submission Date Time • CLI Incident Entered In Error Date Time • CLI Counter	Provides data about outcomes of critical care including infection rates and other incidents.

	• Unplanned Extubation Occurred Date • Unplanned Extubation Submission Date Time • Unplanned Extubation Incident Entered In Error Date Time • Unplanned Extubation Counter	
Paediatric Critical Care Response Team	• Type of Consult • PICU Discharge Date & Time • Unplanned • Date & Time PCCRT Notified • Notified By • Primary Reason for Call • Most Responsible Service • Ward • PCCRT Calling Criteria first met: Airway Threat • PCCRT Calling Criteria first met: Altered Perfusion • PCCRT Calling Criteria first met: Apnoea • PCCRT Calling Criteria first met: Bradycardia • PCCRT Calling Criteria first met: Cyanosis • PCCRT Calling Criteria first met: • Dec LoC • PCCRT Calling Criteria first met: Desaturation • PCCRT Calling Criteria first met: Hypotension • PCCRT Calling Criteria first met: Resp Distress • PCCRT Calling Criteria first met: Seizures	Provides data related to patients not located in the critical care unit but who are seen by the Paediatric Critical Care Response Team (CCRT).

	• PCCRT Calling Criteria first met: Tachycardia • CCRT Calling Criteria first met: Tachypnoea • CCRT Calling Criteria first met: Concern Not Identified Above • Patient Seen by PCCRT :MD • Patient Seen by PCCRT :RN • Patient Seen by PCCRT :RT • PCCRT MD Notified • PCCRT MD Notified Date & Time • Time last team member left Date & Time • Time with Patient after PICU Admission • N/PICU Request • N/PICU Admit • Interventions • Limitations to Treatment • PCCRT Call Outcomes • Code Blue Called • Time Spent Debriefing/Education • Planned Review • Area Covered By PCCRT • When did the patient first show signs of deterioration?(PCCRT Calling Criteria first met) • Event With No Prior Indication • Documentation Not Found • Primary Event • Date and Time of Primary Event • Most Responsible Service • Outcome	

	• PCCRT Reverse Discharge Date & Time • PCCRT Reason of Reverse Discharge • PCCRT Discharge Date & Time • Patient is in an intensivist covered Critical Care Unit	

GLOSSARY	
Terms Used in this Document	**Description**
Data Element	A category used to identify a data field.
Data Holding	A full collection of data, comprised of Data Elements, relied upon to support specific business purposes.
Data Source	The person/organization from whom a data holding is collected.
Participating Hospital	A hospital that currently collects data and enters it into CCIS.

Summary:	The Statement of Purpose of the CCIS data holding describes the purpose of the data holding, the PHI it contains, the sources of the PHI, and the need for the PHI in relation to the identified purpose.
Reference Documents:	Manual For The Review and Approval of Prescribed Persons and Prescribed and Entities, Information Privacy Commissioner of Ontario.
Keyword Assignment:	Data Element, Data Set, database, purpose, statement
Policy Developed By:	Lori Sutherland, CritiCall Privacy Manager
In Consultation With:	Executive Director, CritiCall; Legal Counsel and Chief Privacy Officer, HHS; and CCIS Product Manager, CritiCall