



Clinical System Design Specialty Mappings

Clinical System Design and Specialty Areas

Clinical System Design (CSD) is the process for planning, selecting, designing and building clinical content in the Connect Care clinical information system (CIS) to support patient care. It is one of the major activities taking place during the design phase of the Alberta Health Services (AHS) Connect Care initiative, together with Groundwork, Direction-Setting, Adoption and Validation.

Clinicians, clinical and operations experts, leaders and patients contribute to prioritization, selection, adaptation and decision-making about Connect Care clinical content. “Clinical content” refers to the documentation, decision and inquiry support tools that are built into the CIS to support best possible practice.

Building a cross-generation, cross-geography, continuum-of-care CIS touches a massive amount of clinical content. The associated work must be allocated to appropriate decision-makers and sequenced so that core content decisions inform specialty content decisions.

For “core” content, such as the default format for progress notes applicable across all clinical areas, CSD decisions are mostly handled by Content & Standards, Clinical Decision Support, Clinical Documentation and Clinical Improvement Support committees. For “specialty” content, such as how a particular procedure report is formatted, CSD decisions are handled by Connect Care Area Councils (CCACs) which report to the Connect Care Council (CCC).

Although CCACs roughly correspond to recognized clinical specialties and subspecialties, they also reflect how Epic’s software is organized into modules and applications. Accordingly, AHS needs to ensure that all major specialties are mapped to an appropriate CCAC; and Epic needs to ensure that all major software modules have links to appropriate CCACs.

This document outlines a suggested process for allocating categories of clinical system design topics to Connect Care oversight groups for direction and decision-making. Where precise mappings are not possible, strategies for managing shared accountabilities are offered.

Core Mappings

Many CSD decisions will apply broadly, affecting many area councils. Most of these will be matters of core design. The Connect Care program, in collaboration with Epic, will allocate decisions to oversight entities, using the following broad guidelines.

- **Overarching Clinical Process, Policy or Professional Practice**
 - Topics:
 - Typically relate to things like permissions, roles, norms, expectations and overall design principles.
 - Examples:
 - Will AHS support the use of charting ‘scribes’ to facilitate clinical documentation and order entry for busy clinicians?
 - Within what time interval must charts be “closed” after a clinical encounter?



- Which professions are allowed to manage patient problem lists?
- Accountability:
 - Primary
 - Connect Care Council
 - Secondary
 - Connect Care Executive Committee
 - Connect Care Engagement & Adoption Committee
- **Shared Clinical Documentation**
 - Topics:
 - Documentation norms and forms applicable to most, often all, CIS users.
 - Examples:
 - General structure of Admission Records, Discharge Summaries and Transfer Summaries.
 - Nursing vitals, input/output, lines/devices/drains flowsheets common to generalist and specialist areas.
 - Accountability:
 - Primary
 - Connect Care Clinical Documentation Committee
 - Secondary
 - Connect Care Content & Standards Committee
 - Clinical Documentation Committee General Workgroup(s) struck to deal with groups of design questions, such as attending to common nursing or allied health documentation design needs.
- **Shared Decision Supports**
 - Topics:
 - Clinical Decision Support norms, styles, principles and processes applicable to all clinical areas.
 - Examples:
 - Which medication alerts (dose, drug-interaction, lab-interaction, disease-interaction, appropriateness) are displayed in what way in which circumstances.
 - Common layout and behaviors of all best practice advisories.
 - Deployment rules for reminders and alerts (false positive and false negative allowances).
 - Health maintenance reminders applicable across specialties.
 - Accountability:
 - Primary:
 - Connect Care Clinical Decision Support Committee
 - Secondary
 - Connect Care Council (where questions are at high risk of negative user reaction)
 - Connect Care Content & Standards Committee
- **Shared Inquiry Supports**
 - Topics:
 - General metrics, practice feedback dashboard elements, performance indicators and reports provided to all general and specialty areas.



- Examples:
 - Charting norm compliance feedback (e.g., dashboard element showing chart completion rate)
 - General clinic performance norms (e.g., no-shows, wait times, etc.)
- Accountability:
 - Primary:
 - Connect Care Clinical Improvement Support Committee
 - Secondary:
 - Connect Care Council
 - Connect Care Content & Standards Committee
- **Health Discipline Supports**
 - Topics:
 - Common documentation, decision support, inquiry support, foundation standards, professional regulation or practice norms that apply to the work of a health discipline that crosses many general or specialty areas.
 - Examples:
 - Disciplines
 - Physiotherapy, Occupational Therapy, Respiratory Therapy, Transition Coordination, Speech Pathology, Social Work, Nutrition & Food Service, Recreation Therapy, Spiritual Care, Psychology, etc.
 - Design Tasks
 - Flowsheet assessments (when specific to, for example, physiotherapy)
 - Summary reports (specific to drive discipline workflows and not co-managed with other disciplines)
 - Documentation Automations (tools taking input specific to a discipline and generating notes unique to the discipline).
 - Accountability:
 - Primary:
 - The first effort should be to seek one of the above core design pathways.
 - Discipline-specific workgroups may be formed where a case is made that these would be more efficient as a means of grouping discipline-specific documentation, decision support and inquiry support CSD activities. The workgroups must liaise, as appropriate, with CCACs but be accountable to the CCC.

Where an extraordinary volume of similar core CSD work is required (e.g. Nursing documentation), and a consistent group of subject matter experts are needed to address questions, one or more CSD workgroups can be created. These must be anchored to the Content & Standards Committee or to the CCC.

Specialty Mappings

Specialty CSD activities are allocated to CCACs.



The following table lists representative examples, recognizing that a number of very specific clinical areas may have been missed. The examples serve as guides to future decisions about where missed areas can be mapped. Unless obviously otherwise, Area Councils attend to specialty interests across the continuum of care and for all disciplines participating in the circle of care.

Area Councils	Specialties & Programs	Comments & Examples
Addiction & Mental Health	Mental Health, Addition, Psychiatric Emergency	Psychiatry-Emergency Liaison, Forensics, Electroconvulsive Therapy
AHS Primary Care	AHS Primary Care, Rural Medicine	Focus is primary care practices and networks where Connect Care serves as the legal record of care.
Anesthesiology	Anesthesia & Pain Services	Chronic Pain, Post-anesthesia care unit, Acute Pain Service
Cancer Control	Oncology – Adults, Oncology - Pediatrics	Medical, Surgical, Radiation; Bone Marrow and Stem Cell Transplantation; includes Hem-Onc
Capacity	Patient Access, Bed Allocation, Environmental Services, Portering, Inter-facility Transfers	
Cardiovascular Sciences	Cardiology, Coronary Care Unit, Cardiac Rehabilitation	Electrophysiology, Heart Function, Cardiac Implantable Electronic Devices, Congenital Cardiology
Child Health	Neonatology, Pediatrics, Adolescent Medicine	Nursery, Developmental Medicine, Child Life, Child Abuse Consultation
Continuing Care & Seniors	Geriatric Medicine, Long Term Care, Community Medicine, Palliative & Hospice Care	Geriatric-Emergency Liaison, Elder Friendly Care, Seniors Day Care Home Care, Community Case Management, Community Services, Volunteer Services
Critical Care	Critical Care, Neonatal ICU, Pediatric ICU, Neurological ICU, Cardiovascular ICU	Burns Unit or ICU
Dental Health	Dentistry	Orthodontics, Denturists, Pediatric Dentistry, Orthoprosthetics
Diagnostic Imaging	General Radiology, Fluoroscopy, Nuclear Medicine, Computed Tomography, Magnetic Resonance,	Image management includes point-of-care and non-radiologist diagnostic image studies.



	Ultrasound, Interventional Radiology, Breast Imaging	
Emergency Medicine & EMS	Emergency Medicine, Urgent Care	Trauma, Sexual Assault Response, EMS Integration
Finance & Case Costing	Finance, Case Costing, Billing	
Lab/Microbiology/Pathology	Autopsy, Blood Bank, Blood Gas, Bone Marrow, Chemistry, Coagulation, Conventional Microbiology, Cytogenetics, Cytology, Flow Cytometry, Hematology, Histopathology, Immunology/Serology, Molecular Diagnostics, Molecular Genetics, Point of Care, Toxicology, Urinalysis	Laboratories have many components and an established process for sub-specialty design activities.
Medicine	Medicine and medical subspecialties not elsewhere addressed, including: General Internal Medicine, Dermatology, Endocrinology, Gastroenterology, Rheumatology, Pulmonary, Immunology, Infectious Diseases, Occupational Medicine, Bariatric Medicine	Hospitalist, Podiatry, Transition Services, Sleep Medicine, Alternative Medicine, Day Medicine, Advanced Venous Access Service, Enterostomal Therapy, Parenteral Nutrition Services, Diabetic Nurse Education, Pulmonary Function Testing, Pulmonary Rehabilitation, Tuberculosis Care
Neurosciences	Neurology, Neurosurgery, Physiatry	MS Clinic, Stroke research, Brain Injury, Electromyography EMG, Electromyography EEG, Headache clinic, Stroke Service, Movement Disorders
Ophthalmology	Ophthalmology	
Pharmacy	Pharmacy – Adult, Pharmacy – Pediatrics	
Population & Public Health	Health Promotion/Disease Prevention/Outreach/Screening, Emergency/Disaster Management, Surveillance & Reporting, Immunizations, Perinatal and Infant & Child Health, Indigenous Health, Sexual & Reproductive Health, Sexual Assault & Domestic Violence, Inspections/Outbreak & Investigations (facility, non-person), Communicable	Medical Officer of Health, Population Surveillance, Sexual & Reproductive Health, Well Baby, Tobacco Cessation, Immunizations, School Nursing, Prison Medical Services



	Disease, Oral Health, Screening/Harm Reduction	
Rehabilitation	Rehabilitation Medicine	Physiotherapy, Occupational Therapy
Renal	Nephrology & Dialysis	
Surgery	General Surgery and subspecialties not otherwise accounted in other CCACs, including orthopedic, plastic, cardiothoracic, otolaryngology, trauma, urology, etc.	Day Surgery, Colorectal Surgery, Pediatric General Surgery, Bariatric Surgery, Burns, Hand Surgery, Head & Neck Surgery, Wound Care, Audiology
Transplant Care	Transplant Care & Surgery, Donation Management	
Women's Health	Gynecology, Obstetrics, Labor & Delivery, Fertility	Breast Clinic, Lactation Consultants

Specialty Matrices

Although a one-to-one mapping of specialty-area-council is implied, some design tasks will relate to two or more CCACs. In addition, some Area Councils (e.g., Finance & Capacity Management) have clinical system design interests that should inform the work of multiple CCACs.

Bridging can be accomplished through cross-over area council memberships, where one or more subject matter expert(s) focus on the shared interest while serving multiple CCACs. Bridging can also be accomplished by creating a specialty workgroup (see [Area Council Workgroup FAQ](#)) that reports to the interested CCACs. Perioperative care, for example, relates to the work of Surgery, Medicine, Child Health, Anesthesia, and Transplant areas. Common perioperative documentation, decision support and inquiry support decisions can be made by a (temporary) perioperative workgroup cross-membered from interested area councils.