Connect Care Prescriber Compliance

Context

The Alberta Health Services (AHS) Connect Care clinical information system (CIS) can facilitate rapid access to information about health and health interventions across the continuum of care. However, the CIS cannot serve its purpose if it is not used consistently and effectively by all who share in care. Indeed, the integrity of the legal record of care is vulnerable to inconsistent or ineffective CIS use.

This backgrounder anticipates patterns of CIS use by prescribers (including physicians) while offering a framework for assessing and assuring compliance with minimum use norms.

Engagement Phenotypes

Anticipated prescriber CIS-use behaviors include five patterns:

Resister

A few clinicians will oppose CIS adoption and actively resist adoption, seeking little or no direct interaction with a digital health record. They may object to physician order entry or electronic documentation. Whether justified by principle, concern about service disruption, or lack of capacity, resister effects on adopters are similar. They avoid CIS access, arrange for others to enter orders, attach independently prepared letters, and remain outside reach of communication, collaboration, decision support and care planning tools.

Minimalist

Many clinicians will seek to minimize their CIS use, doing only those activities absolutely required to close encounters. Their notes may consist of a few words referring to some independently prepared documentation attached to the chart. Encounter diagnoses and health conditions may be checked by a proxy. Problem and medication lists are not maintained. Delegated (e.g. trainees, scribes) medication and test ordering is maximized.

Partialist

The majority of physicians' CIS skills may not progress beyond basic training. Partialists use essential CIS features but do not benefit from personalization workshops. They may record observations in progress notes, but miss opportunities offered by shared notes, text automation, structured data and documentation-by-exception. They may review allergies, problems and medications but not attend to corrections or updates. They may order in-system but not use evidence-informed order sets, SmartSets or best practice advisories. They may check in-basket results but not use the CIS for clinical secure messaging.

Partner

Safe and collaborative CIS users consistently review allergies, adverse reactions, clinical problems, current medications and clinical messages. They record encounter reasons that link to problems, encounter diagnoses and orders. They document full in progress notes. All orders are placed in the CIS and relevant professional billings are managed. They communicate with the circle of care through the CIS and actively facilitate care coordination. Personalizations developed and shared by others are used to advantage.

Exemplar

Progressive clinicians will use the CIS to solve shared problems, such as referral triage processes, chronic disease management, or other types of "meaningful use". They find ways to improve the efficiency of CIS workflows and reduce total informational burdens. These users create personalizations and automations both for their own use and to share with colleagues. Their clinical effectiveness and efficiency are improved through CIS use.

Competence

Having competence to use a CIS is a necessary but not sufficient condition for acceptable CIS use. CIS users must be adequately trained. This training must confer the knowledge, attitudes and skills essential for CIS-enabled clinical workflows.

Engagement phenotypes will surface before and during training. Resisters will be hard to get to training. Minimalists will be hard to engage during training. Partialists will not take full advantage of self-directed training opportunities. Partners and Exemplars may be frustrated by training tuned to less engaged phenotypes.

A definable subset of skills can be framed as minimum acceptable CIS competency. Attainment of this competency can be screened for using competency assessment tools. A threshold performance can be set as a requirement for gaining access to the CIS, and for regaining access after any absence long enough to degrade CIS skills. In sum, competency can be (imperfectly) assessed and coupled with on-boarding as a matter of policy.

AHS executive, clinical and informatics leaders have affirmed that a minimum CIS competency must be attained in order to gain access to Connect Care. Proof of competency, appropriate to the clinical role and workflows of the user, must be demonstrated and documented. Anticipated policy, to be ratified by zone medical leadership, includes the follow competency requirements:

- Prospective CIS users must attend and complete their base training track AND attain at least 80% on a role-appropriate proficiency assessment.
- Sub-performing prospective users have 3 opportunities to pass the required assessment.
- Failure to attain 80% on a third try triggers a mandatory session with a trainer to review, discuss and remediate; leading to 2 more opportunities to pass. Continued inability to attain a minimum acceptable competency will lead to escalation through medical affairs as a clinical performance issue, possibly subject to additional measures.
- Alternate routes to competency and competency affirmation can be considered.
- CIS use competency must be re-validated after 12 months absence (no CIS logons).
- All CIS users must complete privacy awareness training, using AHS online tools that affirm satisfactory completion, as a condition of access.
- Privacy awareness competence must be re-affirmed every 3 years.

Compliance

After competent clinicians gain access to the CIS, additional factors intersect with engagement phenotypes to shape how the CIS is used, and how CIS use affects the CIS community.

The practices of resisters and minimalists can be unsafe. They can also unfairly distribute information burdens. When essential CIS activities are shirked by one provider, information management shifts to other providers. When a provider uses a CIS tool (such as a problem list) improperly, information curation shifts to other providers. Cross-coverage is difficult when documentation is incomplete. Partners and Exemplars may worry about threats to their program's ability to provide a high standard of care.

Clinical support staff and non-physicians have difficulty working with resisters, minimalists and partialists. Work-around workflows are complex and idiosyncratic. Colleagues and support staff find themselves doing double-data entry (e.g., paper and digital), and they are put in a position where they use work-arounds to complete mandated CIS tasks (e.g. ordering, encounter closure) that are not role-appropriate.

Assuring universal compliance with minimally acceptable CIS use is the interest of all responsible CIS users. Accordingly, expression of competence through compliance may be more a matter of community norms than organizational policy.

Minimum Use Norms

AHS has considerable digital health record experience, having implemented physician order entry and clinical documentation in pre-Connect Care CISs. Strong and consistent concerns about disruptive CIS behaviors have emerged. Internal and external experience teaches that minimum-use norms need to be articulated early and endorsed by clinicians as a matter of etiquette, professionalism and social responsibility.

Non-compliant users complain that CISs are difficult to use, and that charting expectations are too onerous. Whatever difficulties may exist, it is also clear that Partner and Exemplar users have found many paths to efficient charting; and so safe use is manifestly possible. It may be difficult to learn new skills. However, avoidance of CIS competence and compliance only delays an unequivocal need to mature into the digital workplaces of our time.

Minimum Use Compliance

Connect Care CIS Minimum Use Norms have been derived from past AHS experience and presented to the Connect Care Council for ratification. These should be followed by all clinicians seeing patients in any context where Connect Care is the record of care. Health care providers may directly comply with norms or ensure compliance with the help of other members of the health care team.

Each clinical program will optimize CIS training, communication, and surveillance to promote adherence to minimum expectations of Connect Care clinicians. “Minimum use” tasks constitute a subset of practices essential to safe patient care and effective care coordination. Other CIS practices may be necessary for chronic disease management, integrated care planning and patient-centered service. Other Connect Care norms may pertain for specific applications, research modules, disease registries, portals and in-system analytics.

Some CIS tools can be used to affirm compliance with some norms (e.g., review of allergies, medications and problems). Other tools condense multiple affirmations to a single click. These and other information behavior markers can be used to support generation of reports, metrics and clinician feedback dashboards that can motivate individual and group minimum use assurance strategies.

AHS clinical leadership continues to explore how persistent or serious mis-use or insufficient use should be exposed and managed. To the extent that peer-pressure and local (e.g., clinical division and department) pressures can be brought to bear, remediation and compliance is more likely.

Minimum use compliance will have significant implications for Zone and Provincial Medical Affairs. These implications include, but are not limited to, monitoring of assessment results, developing and managing a process to grant access for individuals, remediation including possible Medical Staff Bylaws processes for physicians unsuccessful in assessment or unwilling to participate in assessment process, supporting minimum use guidelines, and developing constructive interventions for physicians that are not meeting the minimum use expectations.