CIS Clinical Improvement Guide – Minimum Use by Clinicians

Subject Minimum acceptable use of CIS charting functions by authorized clinicians using eCLINICIAN
Source Medicine User Group (MUG), Medicine Administration User Group (MAUG), Professional Practice Informatics Council (PPIC)
Validation Professional Practice Informatics Council
Audience All clinicians using an AHS Clinical Information System
Accountability Practitioners, Clinicians, Trainees, Clinical Clerks, Documentation Staff
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Contact cmio@ahs.ca
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Bottom Line

Each Clinical Information System (CIS) program should optimize training, communication, and surveillance to promote adherence to the following charting expectations where an Alberta Health Services (AHS) CIS is the record of care:

1. **Allergies**
   Allergies and adverse reactions should be reviewed at every first encounter and yearly:
   - Validate recorded reactions and add those not previously recorded
   - Ask if there are any new allergies at every medication change

2. **Problem list**
   The problem list should be reviewed at every first encounter and yearly:
   - Enter missing or review existing continuing medical problems (health conditions for which ongoing treatment or monitoring is in play) and retire problems no longer active
   - Ask if there are new problems at all in-person encounters

3. **Medication list**
   The current medication list should be reviewed at every first encounter and yearly:
   - Enter or confirm (mark as taking) all current medications, mark medications not used, or expire medications no longer prescribed
   - Ask if there are new/changed medications at all in-person encounters

4. **Visit diagnosis**
   At least one visit diagnosis must be selected for every clinical encounter.

5. **Ordering**
   All tests, interventions and medications that can be ordered in the CIS should be ordered in the CIS.

6. **Documentation**
   Documentation of ambulatory visits should be placed within the CIS, irrespective of how recorded (keyboard, speech recognition, dictation, transcription). Best consultation practice is to document in a progress note and then pull the note into a communication sent to the circle of care.

7. **Physician Billing**
   All billable services, including telephone advice and prescription refills should be entered as orders in the CIS.

8. **Close Encounters**
   All encounters should be closed in a timely fashion and, in any case, no longer than 3 weeks after provision of service.

Priority will be given to the first 5 minimum use guides (related to Allergies, Problems, Medications, Diagnosis and Ordering). Technical and process issues will be addressed before the last three guides (Documentation, Billing, Closing) are monitored.
Objectives

- Improve the clinical utility of AHS Clinical Information Systems (CIS)
- Improve ability of CIS users to find important clinical information in consistent locations
- Enable use of CIS global searching features for finding specific encounters
- Facilitate clinical quality improvement, patient safety, clinical research, chronic disease management and health service planning.
- Minimize risks to patients arising from missing information, misplaced information or miscommunicated information.
- Enable effective cross-covering of clinic patients (after hours, holidays, emergent, etc.).
- Share the work of clinical documentation among all users to increase the efficiency of CIS use.
- Comply with Alberta Health Services, College of Physicians and Surgeons of Alberta (CPSA) and health facility accreditation regulations about maintenance of the medical record.

Background

A Clinical Information System (CIS) can facilitate rapid access to information about health and health interventions. The eCLINICIAN shared CIS, deployed throughout the Edmonton Zone, already provides a common reference for patient problems, medications, allergies, test results and encounters. Other AHS CISs (Sunrise Clinical Manager, MEDITECH, eCRITICAL) are expanding use of clinical documentation.

An AHS CIS with clinical documentation is the record of care, a critical enabler of shared care, a key to clinical improvement, and the definitive record of care for participating clinical departments and programs. However, use of the CIS is not consistent among or within the groups committed to its use.

Clinical informatics leads and clinical support staff leads were interviewed regarding CIS use between June 2015 and August 2015. A prototype minimum use guide was developed and put to survey for feedback (http://eclinician.link/cisminusesurvey).

A recent AHS survey of CIS patterns of use disclosed diverse charting behaviors, with the most consistent user concern relating to the quality of clinical documentation. Reported clinician behaviors fall into five categories:

**Non-user**

A few clinicians still have little or no interaction with their CIS for clinical documentation. They rarely if ever log on and rely entirely on support staff to scan and attach independently dictated letters. These physicians are outside the reach of CIS communication, collaboration, decision support and care planning. Some justify non-engagement by imminent retirement and others note that they are locum or fee-for-service arrangements and have different expectations when seeing patients in AHS facilities.

**Minimalist**

A significant number of CIS users seek to minimize their use of the CIS, doing only those activities absolutely required to close a CIS encounter. Their notes typically consist of a few
words (even just a single character) referring the reader to a letter or chart attachment. Visit diagnoses and health conditions may be entered (possibly by a proxy). Problem and medication lists are not maintained and prescribing and/or test ordering occurs on paper.

Partialist
The majority of current CIS users appear to be “partialists”. They are more likely to record observations in progress notes, later pulling those into a letter or using them as the basis of a dictation. They may review allergies, problems and medications but without consistently attending to revisions or data quality. They bill electronically but do not always complete test orders in the CIS. They may check the CIS messaging but do not rely on it for clinical secure messaging.

Safe
These users consistently review allergies, adverse reactions, clinical problems, current medications and clinical messages. They record a reason-for-visit and link that to problems, encounter diagnosis and orders. They document in progress notes and/or chart communications. All orders are placed in the CIS and relevant encounters are e-billed. They communicate with support staff through the CIS and ensure timely communications with the patient’s circle of care. The CIS is used for chart review when preparing for patient encounters.

Exemplary
Most clinical programs can cite a few exemplary users. These 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 may create CIS-based tools for their own use but may not consistently share these with colleagues.

Strong and consistent expressions of concern about charting quality are common to all programs that use AHS CISs. The practices of non-users and minimalist users are considered unsafe by clinical colleagues. Cross-cover for these individuals is difficult as documentation is incomplete. Colleagues worry about threats to their program’s reputation for providing a high standard of care.

Also frustrated are clinical support staff and non-physician clinicians obliged to work with non-users, minimalists and partialists. Their paper-based or hybrid workflows are complex and idiosyncratic, they find themselves doing double-data entry, and they are put in a position where they must try to complete CIS tasks (e.g. ordering) that are not role-appropriate. It is difficult for them to hand-off to other support staff.

Non-compliant users complain that CISs are difficult to use, and that charting expectations are too onerous. Whatever difficulties exist, it is also clear that safe and exemplary users have found a path to efficient charting; it is possible. It may be difficult to learn new skills. However, avoidance of full CIS engagement only delays an unequivocal need to learn how to practice and collaborate in the digital workplace of our time.

Given that improper use of a CIS can compromise the clinical mission (and deliverables) of programs, CIS users and their leaders have requested that CIS minimum use guides be developed, reviewed, revised and deployed. Appropriate compliance measures are requested together with reports to facilitate user and program-level anonymized compliance comparators.
Applicability

- This guide should be followed by all clinicians who see patients in facilities where an AHS CIS with clinical documentation is deployed. Health care providers may directly comply with CIS minimum use guides; or ensure compliance with the help of other members of the health care team.

- Adherence to this guide should be supported by all authorized clinical administrators, managers, support staff, billing clerks, scheduling clerks and transcription staff who assist clinicians subject to the guide.

Guides

Each clinical program will optimize training, communication, and surveillance services to promote adherence to the following expectations of AHS CIS clinical documentation users. The “minimum use” CIS tasks constitute a subset of clinical documentation practices essential for safe patient care and care coordination.

Other CIS practices may be necessary for effective chronic disease management, integrated care planning and patient-centered services. Other charting guides will emerge after more experience is gained with the CIS extensions, such as research modules, disease registries, referring physician portals, patient portals and clinician metric dashboards.

All of the following guides emphasize best practices, which should be followed in the spirit of assuring safe, high quality care that does not unfairly increase documentation burdens for other clinicians caring for the same patient in a shared digital health record.

Some AHS CISs offer workflow-embedded tools that can be used to explicitly validate compliance with some of the guides. These may take the form of a “Mark as Reviewed” button. There are also tools that can condense multiple “Mark as Reviewed” events to a single click. In many cases, quality assurance reports work best if the explicit compliance markers are used. The priority, however, is for clinicians to get in the habit of performing, or otherwise assuring the performance of, the following clinical documentation tasks.

1. Allergies and adverse reactions

   Allergies and adverse reactions should be reviewed by the responsible clinician or designate at every first encounter, yearly thereafter (if patients are seen that frequently), and every time a new medication is prescribed:

   - Ask about allergies and adverse reactions at the first encounter with a patient.
   - Ask whether allergies or reactions have changed at subsequent visits.
   - Validate recorded reactions and edit as necessary
   - Enter all new adverse reactions not previously recorded
   - Validate (mark as reviewed) yearly if patient seen that frequently.
   - If no allergies or reactions are reported, or unable to assess, use the indicated checkbox.

Compliance:
- Either the “Mark as Reviewed” or the “Unable to Assess” button can be used to demonstrate compliance with the first visit and yearly review recommendations of this guide.

**Regulation:**

- This guide complies with CPSA charting standards, AHS policies and health facility accreditation requirements.

**Dependencies:**

- Allergy/reaction lists are automatically checked during medication and immunization ordering, and have many clinical decision support dependencies.
- Allergy/reaction lists are commonly pulled into progress note and communication templates.
- Allergy/reaction lists automatically appear in after-visit summaries for patients.
- Allergy/reaction lists are exposed in patient and physician portals.
- Allergy/reaction lists are part of a standard CIS minimum data set that could be exported to the Provincial Electronic Health Record (Netcare).

**Significance:**

- Failure to comply is a safety deficiency that puts patients at risk.
- Failure to comply has cascading impacts on other parts of the CIS and decision supports.

**Surveillance:**

- Responsible physicians will be provided with an CIS dashboard component and a reporting workbench report showing the percentage of all patients cared for by the physician in the last year where the allergies/reactions have been marked as reviewed within the last year. Comparative measures for the physician’s CIS program and for the entire CIS patient population will be provided.
- CIS programs will be provided with anonymized reports showing the percentage of patients cared for by physicians in the program where the allergies/reactions have been marked as reviewed within the last year. Comparative measures for other related CIS programs (e.g. in Medicine) will be provided monthly.

### 2. Problem list

The list of active and ongoing problems should be reviewed at every first encounter and yearly (if seen that frequently):

- Enter or validate all new and active medical problems (all current health conditions for which treatment or monitoring is in play) at a first in-person encounter and ask if any new problems have arisen at all subsequent encounters.
- Ensure that all chronic diseases affecting the patient are recorded.
- Resolve problems that are no longer active, if relevant to the encounter specialty.
- One or more problems can be selected as visit diagnoses, easing
subsequent work.

- Health conditions can be promoted to the problem list from the past medical history, reason for visit, or plan of care notes.

**Compliance:**
- Any “Mark as Reviewed” button can be used to confirm compliance with the guide.

**Regulation:**
- This guide complies with CPSA charting standards.

**Dependencies:**
- Problem lists are key to the effective chronic disease registries.
- Problem lists are pulled into almost all progress note and communication templates.
- Problem lists automatically appear in after-visit summaries for patients.
- Problem lists are exposed in both patient and physician portals.
- Problem lists are part of a standard CIS minimum data set that could be exchanged with the Provincial Electronic Health Record and to other CISs.
- Problem lists are checked by and affect the performance of health maintenance reminders.
- Problem lists are used to check patient eligibility for registered clinical research programs.
- Problem lists are important to the reliable performance of smart sets, order sets, best practice advisories and a wide range of quality improvement tools.
- Problem lists are central to integrated care planning.

**Significance:**
- Chronic disease management, documentation of patient goals and integrated plans of care are all anchored to problems; and problem list data is key to the effective use of reporting workbench and other quality improvement, risk surveillance and patient recall activities.
- Consistent completion of problem lists eases the work of clinical documentation for future visits and for colleagues.
- Failure to comply compromises chronic disease management, care coordination, and efficient clinical documentation.
- Failure to comply has cascading impacts on other parts of the CIS and decision supports.

**Surveillance:**
- Responsible physicians will be provided with an CIS dashboard component and a report showing the percentage of all patients cared for by the physician in the last year where the problem list has been marked as reviewed within the last year. Comparative measures for the physician’s CIS program and for the entire CIS patient population will be provided.
- Clinical programs will be provided with anonymized reports showing the percentage of patients cared for by physicians in the program where the problem list has been marked as reviewed
within the last year. Comparative measures for other related programs (e.g. in Medicine) will be provided monthly.

3. Medication list

The current medication list should be reviewed at the first in-person encounter, yearly thereafter (if seen that frequently), and every time a new medication is prescribed. It is important that this happen at the time of a major encounter or consultation. A “best possible medication history”, including review of over-the-counter and alternative medications, should be obtained at a first encounter. Thereafter the work of medication review is simplified by recording changes. Even brief follow-up visits should include a quick ask whether any medication has been added, changed or discontinued.

- Enter or validate (mark as taking) all current medications.
- Mark medications not used or expire medications no longer active.
- Annotate (using the provided note/comment button) any medication that is not being taken as expected.

Compliance:
- Any “Mark as Reviewed” button can be used to demonstrate compliance with the guide that medications be reviewed at first encounter and yearly.

Regulation:
- This guide complies with CPSA charting standards, AHS charting policies, CMPA guides and health facility accreditation standards.

Dependencies:
- Medication lists are pulled into almost all progress note and communication templates.
- Medication lists automatically appear in after-visit summaries for patients.
- Medication lists are exposed in both patient and physician portals.
- Medication lists are checked for possible interactions or contraindications every time a new medication order is placed.
- Medication lists are important to the reliable performance of best practice advisories and medication recall alerts.

Significance:
- All areas of primary and specialist outpatient care involve assessments or interventions that can be affected by the medications a patient takes.
- Consistent attention to medication lists eases the work of clinical documentation for future visits and for colleagues.
- Failure to comply is an eSafety issue, with direct effects on decision supports affecting medication safety.

Surveillance:
- Responsible physicians will be provided with an CIS dashboard component and a report showing the percentage of all patients cared for by the physician in the last year where the medication list has been marked as reviewed within the last year. Comparative measures for the physician’s CIS program and for the entire CIS patient population will be provided.

- CIS programs will be provided with anonymized reports showing the percentage of patients cared for by physicians in the program where the medication list has been marked as reviewed within the last year. Comparative measures for other related CIS programs (e.g. in Medicine) will be provided monthly.

4. Visit diagnosis  
   At least one visit diagnosis must be selected for every encounter.
   
   - If multiple problems were addressed, all should be listed.
   
   - A diagnosis can be promoted from a problem list.

Compliance:

- The visit diagnosis must be non-null to demonstrate compliance with this guide.

Regulation:

- This guide complies with Alberta Health Care Insurance billing requirements, workman’s compensation, private insurance service approvals and CIHI reporting requirements.

- Both fee-for-service and alternate payment relationship clinicians are required to record a visit diagnosis for all scheduled health encounters with patients.

Dependencies:

- Visit diagnoses are used during checks for patient eligibility for research studies, chronic disease registries, and special health maintenance needs.

- Visit diagnoses are important to the reliable performance of some practice advisories.

Significance:

- The viability of alternate payment relationships can depend on outcome tracking by visit diagnoses.

- The likelihood that fee-for-service clinicians will be compensated for services performed is affected upon completed visit diagnoses.

Surveillance:

- Responsible physicians will be provided with an CIS dashboard component and a report showing the percentage of all patient encounters associated with the physician in the last year where the visit diagnosis has been recorded for the encounter. Comparative measures for the physician’s CIS program and for the entire CIS patient population will be provided.

- CIS programs will be provided with anonymized reports showing the percentage of patient encounters associated with the program in the last year where a visit diagnosis has been associated with the encounter. Comparative measures for other related CIS programs (e.g. in Medicine) will be provided monthly.
5. Ordering

All tests, procedures and interventions that can be ordered in the CIS should be ordered in the CIS using appropriate electronic requisitions, irrespective of whether this results or does not result in the generation of a printed order list.

- Medications should not be ordered using paper prescription pads.
- Medication refills also should be ordered in the CIS.
- Tests (available in CIS) should not be ordered using paper test requisition forms.
- Completion of the problem list prior to ordering allows orders to be associated with problems.

Compliance:

- Orders may be CIS-recorded as discrete medication, test or procedure orders.
- Orders may also be recorded as parts of smart sets and order sets.

Regulation:

- This guide complies with CPSA charting standards, CMPA guides and AHS policies where the CIS is the record of care.

Dependencies:

- Order lists are checked by and affect the performance of health maintenance reminders, best practice advisories, medication interaction checks, allergy alerts and clinical research protocols.
- Orders are essential to the linkage of test results to physician in-basket messages and chart review features that highlight outcomes of clinician orders.

Significance:

- Present and future clinical decision supports and quality improvement checks are heavily reliant on properly charted orders.
- It is difficult to monitor compliance with clinical practice guidelines, or to facilitate compliance, if health care interventions (diagnostic and therapeutic) are not recorded.

Surveillance:

- Order compliance feedback may not be immediately available.
- Reports will be developed to reflect the proportion of all test results that are linked to a unique patient-physician-encounter combination where there is no corresponding order in the CIS. The associated metric will be provided for individual and for anonymized program feedback.

6. Documentation

Documentation of all ambulatory care visits must be placed WITHIN the CIS, irrespective of how recorded (keyboard, speech recognition, dictation, transcription).

- The encounter findings, assessment and plan should be documented in an encounter note (progress note).
- Consultants should pull progress note information into an CIS
communication (letter) sent to the patient's circle of care, as appropriate.

- The practice of entering “see letter” in a progress note defeats the purpose of within-CIS clinical documentation.

Compliance:

- This guide is satisfied if a different clinician can review an encounter progress note and discern the assessment performed, conclusions reached and plans formed by the responsible clinician.
- Chronic disease management notes, attached to pertinent problems, are also compliant.

Regulation:

- This guide complies with CPSA charting standards and CMPA recommendations.

Dependencies:

- A powerful feature of a CIS is its ability to conduct a search of all clinical documentation in order to find material of interest to a particular clinician. Progress note text is included in these searches but letters (communications) and media tab contents (attached transcribed letters) are not.
- Many CIS-based clinical documentation tools and automations – which can significantly decrease clinician informational burdens – are progress-note dependent.

Significance:

- Consistent placement of clinically important observations in encounter progress notes decreases the chance that information will be missed at future encounters.

Surveillance:

- Progress note compliance feedback may not be immediately available.
- Reports will be developed to reflect the proportion of all patient encounters associated with a clinician where the progress note contains less than 50 characters in the last year, 6 months and 3 months The associated metric will be provided for individual and for anonymized program feedback.

7. Physician Billing

All ambulatory and consultative care services, including telephone advice, telehealth consultations and prescription refills must be documented and billed in the CIS. This guide applies to all clinicians who bill for services or are required to bill as a record of services provided (e.g. alternate payment relationships).

Compliance:

- A billing order should be associated with a patient encounter to demonstrate compliance with this guide.

Regulation:

- Both fee-for-service and alternate payment relationship clinicians are required to record at least one billing code for scheduled encounters with patients.
Dependencies:
- Billing orders are required for clinician or program compensation for services rendered.
- Order sets may have automated billing orders that need to be confirmed by clinicians.
- Successful billing depends upon the selection of a visit diagnosis and the maintenance of problem lists (for complex care codes).

Significance:
- The viability of alternate payment relationships can depend upon consistent and timely billing.

Surveillance:
- Billing order compliance feedback may not be immediately available.
- Reports will be developed to reflect the proportion of all patient encounters associated with a clinician where a billing order is not associated with the encounter; in the last year, 6 months and 3 months. The associated metric will be provided for individual and for anonymized program feedback.

8. Close Encounters
All encounters must be closed in a timely fashion and, in any case, no longer than 3 weeks after provision of a service.
- Encounters can and should be closed when a clinician’s work is complete.
- Subsequent incomplete tasks, such as letter editing and distribution, can occur after an encounter is closed.

Compliance:
- An encounter must be explicitly closed using the “close encounter” button present in many parts of CIS visit navigators.

Regulation:
- This guide complies with CIS charting norms acknowledged by all CIS users at the time of their original enrollment and training.
- Closing encounters is emphasized in charting norms and professionalism guides.

Dependencies:
- An open encounter signals to the rest of the health care team that the clinician has not completed assessment, planning and/or communication.
- An open encounter can prevent other health care providers from benefiting from the physician’s work or contributing their own work.
- Some dynamic clinical documentation content (e.g. progress note data tokens) is not “locked in” until an encounter is closed.

Significance:
- Embedded links or meta-data could be changed or updated in past encounters that remain open and so not reflect the true status of the variables at the time of the encounter.
• Unresolved encounters constitute a patient safety threat and are audited and used as a marker of incomplete care.

**Surveillance:**

• The proportion of clinician encounters remaining open is already provided to all CIS physicians, including group comparators, as part of their “pulse” quality improvement dashboard.

• Enhancements will be considered to bring compliance measures into an integrated CIS-use dashboard.
## Issues

This guide is reviewed by clinician and administrator user groups. It is also distributed to CIS stakeholders for review and feedback. Technical and operational problems are listed here together with indication of further action through problem reports or change requests.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Type</th>
<th>Description</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Surveillance</td>
<td>Technical</td>
<td>Divisions wish to have regular reports about clinician compliance with minimum use CIS charting guides. However, they currently do not receive any chart use data, metrics or reports. An anonymized report is desired that will track the percentage of in-person ambulatory care encounters where each of the above expectations is met. The DoM asks that merged divisional reports be forwarded to its Strategic Clinical Improvement Committee for review at monthly meetings.</td>
<td>Enhancement request</td>
</tr>
<tr>
<td>Individual Surveillance</td>
<td>Technical</td>
<td>Individual clinicians would benefit from the ability to track their own compliance with the CIS charting guidelines, while being able to compare their rates to the means for their CIS program (which may map to an eCLINICIAN “department”).</td>
<td>Enhancement request</td>
</tr>
<tr>
<td>Clinic Exceptions</td>
<td>Process</td>
<td>Some clinics provide very limited or highly focused outpatient services (e.g. review of a Workman Compensation Board claim or assessment of an occupational risk) and maintain that some of the above standards are inappropriate for their context.</td>
<td>Ongoing review and revision.</td>
</tr>
<tr>
<td>Policy harmonization</td>
<td>Process</td>
<td>Some clinics continue to run on a hybrid business model where DoM employed staff provide some clinical administrative services and AHS clinic staff have other or overlapping responsibilities. DoM clinicians may have difficulty securing consistent quality capture of things like allergies and medications that this policy holds them accountable for.</td>
<td>Review and action by clinical and AHS leadership.</td>
</tr>
<tr>
<td>Scope of accountability</td>
<td>Process</td>
<td>Specialist clinicians are reluctant to document or change medications initiated by primary care or other specialists (even if the patient is not taking) for fear of becoming accountable for medications outside the specialist’s scope of practice. Similarly, there is a perception that documenting a review of a patient’s</td>
<td>Review and recommendation by Professional Practice Informatics Council</td>
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### Issue

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<tr>
<td>Practice variation</td>
<td>Process</td>
<td>Different specialties and domains appear to have different perspectives on what a clinical problem is, when it should be made inactive, and how it should be used (e.g. integrated plan of care). There is variance within divisions and major variance between disciplines.</td>
<td>Ongoing discovery, socialization and standardization of charting norms, with periodic review by Professional Practice Informatics Council.</td>
</tr>
<tr>
<td>Lack of training</td>
<td>Process</td>
<td>Some CIS users prefer to document problems, for example, in the past medical history section of the chart since they find it easier to use. They may fail to “promote” the past issues to an ongoing clinical problem.</td>
<td>Review by CIS Training Working Group and emphasis of the importance of problem lists in CIS onboarding and optimization change management.</td>
</tr>
<tr>
<td>Lack of speech recognition and dictation integration</td>
<td>Technical</td>
<td>Clinical documentation is commonly done by dictation, leaving clinical support staff to add the dictated encounter letter to the CIS. There are variable practices. If within-CIS dictation were available, clinicians would have a way to embed dictated content in appropriate parts of the chart (e.g., medications, problem lists, progress notes)</td>
<td>Review by OOWG for prioritization of digital dictation services.</td>
</tr>
<tr>
<td>Lack of integration</td>
<td>Technical</td>
<td>eCLINICIAN still lacks integration with the Pharmacy Information Network, with Alberta pharmacies and with most laboratories and imaging services. Consequently, orders entered in the CIS end up being printed anyway (sometimes inefficiently or to the wrong printer) so users feel compelled to use printed forms; or are not convinced that order-entry has been a priority for the CIS initiative.</td>
<td>Review by OOWG for prioritization of laboratory, imaging and pharmacy integration.</td>
</tr>
</tbody>
</table>

### Implementation

In view of the types of issues raised, it is recommended that the first 5 minimum use recommendations receive initial attention. These pertain to 1) allergy review, 2) medication review, 3) problem review, 4) visit diagnoses and, 5) ordering. Any associated technical or process issues can be worked through within the first 6 months of guide implementation.

Each minimum use guide will be supported by online e-learning modules, additional post-implementation user training and support, and both group (anonymized and sent to clinic directors, divisional directors and clinical departmental Strategic Clinical Improvement Committee members) and
individual (provided via within-CIS self-monitoring) reports. Initially (e.g., first 6 months), programs will be encouraged to review compliance, identify and address issues interfering with compliance, and report back about ongoing barriers to compliance.

Clinical departments or programs requesting new chronic disease registries, clinical decision supports, custom reports, research supports and other services of the Clinical Inquiry Support Unit (CISU) will be asked to review their CIS minimum use compliance metrics. Programs non-compliant to the point that research, quality improvement and productivity measures would be unreliable, will be encouraged to raise compliance levels. Those programs with the greatest likelihood of reliable CIS clinical content will be given higher priority in the allocation of CISU resources.

Clinical programs will be provided with monthly reports of CIS minimum use compliance, together with comparison anonymized data from other programs and from the entire CIS population. These comparisons will be used initially to stimulate a deeper look at outlier groups in order to discover impediments to minimum use and recommend interventions to improve use. Stronger incentives for compliance could be considered after remedial efforts have completed.

### Definitions

(see [http://ahs-cis.ca/glossary](http://ahs-cis.ca/glossary))

- **Clinician**
  Any person who provides health care goods or services directly to patients, inclusive of all health care workers (physician, nurse, allied health, etc.); as opposed to being engaged in health care for other purposes, such as research or administration. Clinician is a generic term that should not connote any particular profession, provider or competency level.

- **Digital Health Record**
  Alberta Health or Alberta Health Services legal record of the patient's diagnostic, treatment and care information as may be managed in any of the following types of health information system:

  - **Electronic Health Record**
    Longitudinal collection of personal health information supporting multiple health service providers across the continuum of care with appropriate information securely delivered to authorized individuals.

  - **Electronic Medical Record**
    Record of health services and related information maintained by health care providers in an electronic system for access and use by the providers.

  - **Clinical Information System**
    Integrated information management platform supporting the collection, access, use and sharing of information supporting the delivery of health services to persons and populations in multiple settings across the continuum of care.

  - **Personal Health Record**
    Individually curated record of personal health history and ongoing health events which may be shared with health service providers.

- **Encounter**
  Contact between a patient and a practitioner who has primary responsibility for assessing and treating the patient at a given contact, and exercising independent judgment.
- **Health Care Provider**
  Any person who provides goods or services to a patient, inclusive of health care professionals, staff, students, volunteers and other persons acting on behalf of, in affiliation with, or in conjunction with Alberta Health Services.

- **Health Information**
  *Confidential health information* is, for the purposes of this guide, identifies an individual and is stored in any format that relates to the provision of health services, including diagnosis, treatment and care; or registration (e.g., demographics, residency, health services eligibility, or billing).
  *Personal identifiable health information* is, for the purposes of this guide, the same as confidential health information.

- **Health Record**
  For the purposes of this guide, the health record is any AHS medical record of health services (diagnostic, treatment, care, etc.) provided to a patient by any health care provider or provider team.

- **Patient**
  All persons who receive or who request health care or services from or in conjunction with AHS and its health care providers or affiliates, irrespective of the context (inpatient, outpatient, community, etc.) where services are provided.

### Resources

- eCLINICIAN Charting Principles
- eCLINICIAN Clinical Responsibilities
- CPSA Charting Standards
- Clinical Inquiry Support Unit

### Review History

<table>
<thead>
<tr>
<th>Date</th>
<th>Observer</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015-10-15</td>
<td>First draft based on prior cardiology and AHS documents</td>
<td></td>
</tr>
<tr>
<td>2015-10-29</td>
<td>Reviewed by Medicine Administration User Group</td>
<td>Suggestions for change acted upon</td>
</tr>
<tr>
<td>2015-10-30</td>
<td>Circulation to Medicine User Group with survey for feedback</td>
<td>Suggestions for change acted upon</td>
</tr>
<tr>
<td>2015-11,12</td>
<td>Submission or presentation to variety of eCLINICIAN groups including</td>
<td>General endorsement, no suggestions for change</td>
</tr>
<tr>
<td></td>
<td>Clinical Design Team, Operations and Optimization Working Group, Clinical Decision Support Working Group, Reporting Working Group, Medication</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
<td>Details</td>
</tr>
<tr>
<td>------------</td>
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<td>------------------------------------------------------------------------</td>
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<tr>
<td>2016-01-12</td>
<td>Presentation to Medicine Steering Committee</td>
<td>General endorsement, request for first production version to be tabled at Feb meeting</td>
</tr>
<tr>
<td>2016-01-21</td>
<td>Presentation to Medicine Strategic Clinical Improvement Committee</td>
<td>Request for revisions and final review at Feb meeting.</td>
</tr>
<tr>
<td>2016-02-03</td>
<td>Presentation to CDS&amp;O Working Group</td>
<td>Minor revisions</td>
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<tr>
<td>2016-02-25</td>
<td>Review by Medicine divisional directors, eCLINICIAN Team, all zone user groups.</td>
<td>Added details about dependencies and how compliance would be measured. Reviewed results of 2 month chart review of allergy and medication review compliance. Added time period fenceposts. Changed to guide, rather than policy, language.</td>
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<tr>
<td>2016-03-02</td>
<td>Draft analytics and compliance reports review by CDS&amp;O WG</td>
<td>Revised denominator and numerator definitions.</td>
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<tr>
<td>2016-03-08</td>
<td>Review by EZ Professional Practice Informatics Council</td>
<td>Revised to clarify multidisciplinary contribution to guide compliance and to emphasize primary importance of good charting practices and secondary value of “Mark as Reviewed” buttons for validating compliance. Variety of other minor changes.</td>
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<tr>
<td>2016-04-05,06</td>
<td>Review by multiple stakeholder groups.</td>
<td>Further revised to apply to a broader range of clinicians.</td>
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<tr>
<td>2016-07-15</td>
<td>Incorporation into AHS Provincial CIS Strategic Transformation Questions process.</td>
<td>Generalized to apply to any AHS CIS where clinical documentation is in play.</td>
</tr>
</tbody>
</table>
Appendix A: eCLINICIAN Visual Guide

1. Allergies and adverse reactions
   Allergies and adverse reactions should be reviewed by the responsible clinician or designate at every first encounter, yearly thereafter (if patients are seen that frequently), and every time a new medication is prescribed.

2. Problem list
   The list of active and ongoing problems should be reviewed at every first encounter and yearly (if seen that frequently).

3. Medication list
   The current medication list should be reviewed at the first in-person encounter, yearly thereafter (if seen that frequently), and every time a new medication is prescribed.
4. Visit diagnosis  
At least one visit diagnosis must be selected for every encounter.

5. Ordering  
All tests, procedures and interventions that can be ordered in the CIS should be ordered in the CIS using appropriate electronic requisitions, irrespective of whether this results or does not result in the generation of a printed order list.

6. Documentation  
Documentation of all ambulatory care visits must be placed WITHIN the CIS, irrespective of how recorded (keyboard, speech recognition, dictation, transcription).