



Result Routing for Mixed-Context Prescribers

What is Result Routing?

Prescribers (including physicians, medical trainees, nurse practitioners, clinical assistants and other health care professionals) order laboratory tests, diagnostic imaging, physiologic measures, functional tests and other diagnostic interventions in the course of health care. Results or reports related to these interventions are returned to the prescriber for consideration.

This document addresses how laboratory test results and diagnostic imaging reports (“Results”) are delivered (“routed”) to prescribers who use Connect Care as the record of care for any portion of their clinical practice.

How does Connect Care affect Result Routing?

The Connect Care **clinical information system** (CIS) includes a digital health record as well as laboratory information services and other support functions. By the end of 2023, Connect Care will serve as the record of care for all Alberta Health Services (AHS) facilities, as well as all provincial laboratories, partner organizations, clinics and providers entering agreements to use Connect Care. Until then, Results routing challenges will reflect the complexity of having diverse legacy and external systems sharing information with Connect Care.

How do Health Information Systems affect Result Routing?

Alberta patients see health care prescribers in one or more of two contexts affecting how interventions are ordered and Results are routed:

- **Context 1: Connect Care is the record of care (“Internal”).**
Internal context includes all AHS facilities (by the end of 2023) and all other entities adopting Connect Care.
- **Context 2: Connect Care is not the record of care (“External”).**
External context includes a variety of **Electronic Medical Records** (EMRs) and some paper records.

Within either context, orders can be initiated in **emergency**, **inpatient**, or **outpatient** clinical contexts and Results for these orders can be routed in different ways. For simplicity, this document considers emergency and inpatient contexts together.

How do Prescribers relate to Result Contexts?

An Alberta prescriber can relate to Result contexts in one of three ways:

1. **Context 1 Only – Internal**
All clinical practice occurs where Connect Care is the record of care.
2. **Context 2 Only – External**
No clinical practice occurs where Connect Care is the record of care.
3. **Context 1 and Context 2 – Mixed**
Prescriber does some work in a Connect Care setting while also providing services in one or more settings where independent EMRs or paper records are in play.

This document focuses on the experience of prescribers in group 3, where Results could relate to internal and one or more external systems. These are “mixed-context prescribers.”

Where can Results be Routed?

The general rule is that Results are routed to the context in which they were ordered. Results for interventions ordered in Connect Care are resultated internally. Results for interventions ordered in external



contexts always route to the system where order was placed. In addition, they are visible in the Connect Care chart.

Results routed to Connect Care are made available to prescribers through:

- 1. Chart Review**
of one or more parts of the digital record such as flowsheets, graphs, and lists where Results are displayed, and/or
- 2. In Basket**
messages containing the Result and links to related parts of the patient chart.

Chart Review and In Basket functions are activated as soon as a prescriber's practice fits an Internal or Mixed Context. As soon as a prescriber's In Basket is activated, the Connect Care prescriber receives Results there and is responsible for monitoring and managing In Basket content. Messages can be checked directly, or indirectly through a delegate (e.g., while the prescriber is on vacation, off-service), email alerts, or Medical Office Assistant workflows.

Results routed to external contexts can be delivered via:

- 1. Facsimile (fax)**
- 2. Mail**
- 3. eDelivery**
an Alberta-specific interface that allows system (Connect Care) to system (EMR) one-way delivery of digital Results.

Mixed context prescribers indicate a preferred delivery method from the above options. Only one method is supported for routing to an external system. If eDelivery is configured for the delivery location, then routing must use eDelivery.

Which delivery methods (Chart Review, In Basket, Mail, Fax, and/or eDelivery) are used to route Results depend upon a mix of context, location configuration, and system capabilities. This document addresses the most common considerations.

How are Internal Inpatient Results Routed?

There are two classes of inpatient Results:

- 1. Encounter Inpatient Results**
reported during the emergency or inpatient encounter and so available to responsible providers before the patient is discharged or transferred.
- 2. Post-Encounter Inpatient Results**
ordered during an emergency or inpatient encounter but not reported and routed until after the patient is discharged or transferred.

Encounter results stay in-system, available to inpatient prescribers through Chart Review and other Connect Care tools.

Post-encounter Results are also available within the patient's chart. In addition, they are routed to the In Basket of the prescriber who was the attending prescriber (most responsible healthcare provider) at the time of discharge.

Mixed-context prescribers will additionally receive a post-encounter inpatient Result via eDelivery if they "copy" themselves when ordering the intervention and their EMR is configured for eDelivery.

Emergency Departments can arrange to have post-encounter Results route to an In Basket messaging pool that is monitored in a way the department agrees to.

How are Internal Outpatient Results Routed?

Results for outpatient interventions ordered within Connect Care always route to the In Basket of the ordering prescriber. There is no option for automated routing via fax or mail.



Mixed-context ordering prescribers will additionally receive an internal outpatient Result via eDelivery if they “copy” themselves when ordering the intervention and their EMR is configured for eDelivery.

How are External Outpatient Results Routed?

Results for interventions ordered from outside Connect Care always route to the context where the order was placed. In addition, they are visible in Connect Care via chart review.

Prescribers and clinics use “Provider IDs,” “Submitter IDs” and “Department IDs” to unequivocally identify the prescriber and location where an intervention order occurs. Results routing preferentially uses the coordinates identified on the requisition.

The method of external delivery (fax, mail, eDelivery) is determined from the external location “Submitter” or “Department” configuration and information system.

If the resulting laboratory or facility is not yet on Connect Care, an externally-ordered outpatient Result will also route to the Connect Care In Basket of a mixed-context prescriber. This duplication of Result delivery relates to limitations of interim states and will not occur once the resulting laboratory or facility is on Connect Care.

How are Results Copied to Additional Prescribers?

Other factors can affect Results routing. Ordering prescribers can copy (cc) another prescriber at the time of ordering to ensure that the copied provider also receives the result.

- **Context 1 (internal)** prescribers always receive copied results to their In Basket.
- **Context 2 (external)** prescribers can have only one location at which they receive results that are copied to them from a Connect Care order. This single location is set in their communications preferences, with options for mail, fax or In Basket. If the clinic is configured for eDelivery then that will be the method used and fax and mail are not available for routing. eDelivery for copied Results can only go to one (preference) eDelivery location.
- **Context 3 (mixed)** prescribers always receive copied results to their In Basket. If they are set up for eDelivery to an EMR, then copied results will route that way as well.

It is also possible for prescribers who order in Connect Care to explicitly add their own name to the cc (copy) list. The above behaviors will still apply such that this cc method can be used by a mixed-context prescriber ordering within Connect Care to get a copy of the test result routed to their eDelivery-configured external EMR. Prescribers working at multiple external sites with multiple eDelivery-capable EMRs must designate a primary EMR for eDelivery routing of copied results.

What happens with Critical Results?

Protocols for calling critical results to responsible providers are unchanged before, after and during Connect Care transitions. The ordering provider, or delegate, is contacted directly. All prescribers must arrange clear and maintained critical result reporting pathways.

For More Information

- [Manual: Results and Reports Routing](#)