Referral for Specialty Services

Key Messages

- Adoption of common terms and frameworks for understanding referral processes is a necessary condition for effective coordination and oversight of referral management services in Alberta.
- Referral management is a complex, multi-stakeholder, process that benefits from standardization and can suffer from miscommunication at multiple steps in a referral management loop.
- Digitally-enabled referral management is inseparable from effective use of other clinical information system functions, including decision, documentation and inquiry supports.
- All referrals where both prescriber and consultant use Connect Care as the record of care will be managed using Connect Care tools and workflows.
- Adoption of closed loop referral management throughout AHS will simplify referral and consultation wherever Connect Care is in use.
- As Connect Care takes hold, defragmentation of referral processes will also help those working outside an AHS context by easing referral to and from AHS service providers.
- Referrals to consultants who use Connect Care, from prescribers not using Connect Care, can be accepted via facsimile, mail, telephone, Netcare eReferral or (preferably) the Connect Care Provider Portal.

Key Concepts

Referral

- Referral is a prescribing process in which one prescriber requests the services of another prescriber, inviting others into the patient's circle of care.
- For simplicity, the referring prescriber is shortened to "**prescriber**" and the responding prescriber to "**consultant**", even though referral requests may originate from non-health sources.
- **Prescribers** are health care providers[1] authorized to make requests for health care investigations or interventions. Referral is a type of prescribing activity, where investigation (e.g. diagnosis) and/or intervention (e.g., therapy) is requested of another health care provider. The majority of prescribers are licensed physicians. Pharmacists, nurse practitioners, midwives, dentists, podiatrists and other prescribers may also refer.[2]

Referral Loop

- Effective referral involves many actions, occurring in a looping sequence of referral **phases**:
    - **Assess** – a need for referral is recognized
    - **Select** – an appropriate service provider or organization is identified for probable fit to need, considering capability (match to need), capacity (acceptable availability) and patient and provider preference.
    - **Request** – a request for referral is directed to the selected consultant.
    - **Intake** – the request is received and accepted, rejected or re-directed.
    - **Triage** – needs are validated, attributes are assessed, and urgency is determined.
    - **Schedule** – one or more appointments are booked (including for any mandated pre-consultation tests, surveys or procedures).

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[1] See "Concept: Clinician, Physician, Prescriber"

[2] The following health care providers may refer: physicians, clinical assistants, physician assistants, physician trainees, dentists, podiatrists, midwives, nurse practitioners, optometrists, approved registered nurses, and pharmacists.

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- o **Prepare** – pre-assessment requirements are tracked, surveys are completed and patient communications are directed to assure appointment attendance and readiness.
  - o **Provide** – in person and/or virtual visits allow assessment or care to be provided.
  - o **Document** – all important clinical documentation is completed, then summarized to directly answer both prescriber and patient needs.
  - o **Respond** – succinct clinical guidance is communicated back to the prescriber, patient and possibly other stakeholders; including possibility of other referral requests.
  - o **Apply** – recommendations and any follow-up interventions are promoted to prescriber, patient, consultant and/or service.
  - o **Feedback** – to the prescriber and consultant respecting referral process and outcomes, including how to best address similar needs in future.

- **Closed loop referral** makes explicit and visible all referral actions and phases, with patient, prescriber and consultant aware of expectations and outcomes at each phase from need discovery through to need fulfillment.

Referral Risks

- Lack of **standards** can compromise referral success at any phase of the loop. Standards may relate to terminology (e.g., definition and interpretation of "urgent" request), performance measures (e.g., definition and quantification of wait times), documentation (e.g., standard format for consultation reports), decision supports (e.g., algorithm for prioritization of scheduling) or pathways (e.g., requirements for successful completion of any phase of a referral loop for a particular health problem).
- Process (e.g., failed incoming fax) or content (e.g., misallocation of patient problem to visit type) **error** can occur at any phase of the loop.
- **Communication** and multi-stakeholder **coordination** problems can compromise one or more phases of the referral loop.
- Overall referral performance within a zone, or the Alberta health care sector, further requires effective **governance** and performance **optimization** of multiple groups managing or coordinating diverse referral loops.

Referral Management

- **Referral management** relates to how accountability is assigned, standards are applied, error is minimized, communication is coordinated, and processes are tracked and evaluated at one or more referral phase.
- Referral management can be **informal**, usually based on tacit understandings and historical prescriber-consultant relationships. Referral management can also be **formal**, adhering to standardized processes with explicit declarations about how requests are handled, tracked, communicated and evaluated (e.g., Path-to-Care).

Referral Dependencies

- Information management dependencies
  - o Effective referral management cannot be isolated to just one or a few phases. Nor can referral processes be separated from **centralized intake**, clinical **decision support** (triage tools, risk measures, clinical prediction, care pathways, calculators, etc.), **scheduling** support, **patient portals** (scheduling, communication, data collection, etc.), **provider portals** (referral ordering, tracking, communication, alerts, reminders, etc.), documentation (surveys, templates, forms, standards), secure clinical **communications**, and **inquiry** supports (referral performance measures, wait time, etc.).
- Principles, policies, pathways, processes and people
  - o Effectively coordinated referral management within the health care sector cannot be isolated from the need for commonly understood and accepted principles, policies, care pathways and processes; all overseen and guided by effective multi-stakeholder

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governance with influence inside, outside and across AHS and non-AHS health record contexts.

Referral Scope

- A referral event should explicitly delineate the type and scope of service requested. **Consultation** is the most common scope, but it is also possible to refer for transfer of care, for a specific intervention (e.g., procedure or test) or other services. Referral events can also be limited to requests for **advice**, where no hand-off of care is anticipated. This backgrounder is limited to referral for consultation or advice.
- Consultation can be **patient**-anchored (question specific to an individual patient), **condition**-anchored (question about how to manage a particular condition, challenge or situation possibility relevant to a group of patients), or **process**-anchored (question about how to navigate referral or other health care management challenges). This backgrounder is limited to patient-anchored referrals.
- Patient-anchored referrals can be **synchronous** (where there is expectation of direct consultant-patient visit or contact) or **asynchronous** (where the consultant interacts indirectly or through the referring prescriber).
- Both synchronous and asynchronous referrals can be **in-person** or **virtual** (e-clinic, e-visit, e-advice).
- Referral can seek **inpatient**, **outpatient** or **community** care. This backgrounder limits consideration to outpatient (ambulatory) health services.

Referral Services

- Referral services facilitate management of one or more phases of referral. The service may be **focused** (e.g., consultant selection), or **comprehensive** (e.g., full closed loop referral management with health record integration).
- Referral services may be **prescriber-centric** (e.g., primary care network identifies a group of preferred consultants and facilitates prescriber access), **consultant-centric** (e.g., a group of consultants joins to offer centralized referral intake, scheduling, triage and feedback) or **system-centric** (e.g., facilitation of access, request and tracking through a provincial electronic health record).
- Referral services can facilitate **conventional** in-person prescriber-consultant and consultant-patient interactions; and/or **virtual** interactions conducted through e-consults, e-advice or e-visits.
- The existence of referral processes and services can be exposed through centralized **directories** of referral services, where the practices of different consultants are exposed and curated.

Referral Contexts

- Alberta prescribers request (order) referrals in one of two health record contexts: 1) where Alberta Health Services is responsible for the record of care (**AHS context**) and, 2) where AHS is not responsible for the record of care (**non-AHS context**). The Connect Care initiative integrates the AHS context that supports closed loop referral under a single clinical information system (CIS). Non-AHS contexts may involve referral requests initiated from a number of different Electronic Medical Records[3] (EMRs), paper records or referral facilitation services.
- Referral processes can be **contained** within a context (e.g., referral request through response all within AHS context) or **cross** contexts (e.g., request from prescriber in non-AHS context to consultant in AHS context).
- Most physicians seeing patients outside the AHS record context have a clearly defined practice location, single health record and established referral processes. Some physicians (up to 15% of providers in non-AHS contexts) serve in multiple non-AHS practice locations, each with different health records and possibly different referral processes.

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[3] See "Concept: EHR, EMR, CIS, PHR, PHP".

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Current State

Alberta referral processes, and support available through health information systems, is highly variable. Getting a patient to see the right provider at the right time often depends on luck and the competency of the staff managing referrals on both the sending and receiving side of the care transition. Referrals are submitted with variable quality through various systems including fax, mail, EMRs, Alberta Netcare eReferral and niche referral services. All incoming requests must be entered into AHS information systems manually. Communication back to the referring provider and patient is done through phone, fax, mail, EMRs and/or the Alberta Netcare eReferral service.

Standards

- The Path-to-Care program represents a policy-based effort to standardize processes for referral and access to ambulatory health care services in Alberta. It has helped to define phases and metrics for referral management, wait list management and health service access reporting. Its work constitutes best current Alberta referral management process. Compliance is not required.
- Referral management metrics have not been consistently reported by either prescribers or consultants and, to date, there is little ability to compare referral process performance across specialty or geography.
- System-centric referral services have done much to advance use of standardized referral requests, but the definitions of key referral attributes and the number of attributes requested still vary widely even within a specialty. Even when electronic intake processes exist, prescribers prefer the convenience of completing just a few fields and then attaching a referral request generated by their own EMR.

Referral Services

- Alberta Referral Directory
  Serving the "Assess", "Select" and "Ask" phases of referral management, the ARD lists specialist and referral services available within the AHS context (and some non-AHS contexts). It includes an inventory of providers and programs, referral guidelines, anticipated wait times, and referral request requirements. Uptake is increasing, as judged by weekly visits to the ARD website. Keeping content current is a challenge.
- RAAPID
  The AHS Referral, Access, Advice, Placement, Information and Destination (RAAPID) call centre helps prescribers get connected with AHS consultants and services. The emphasis is on inpatient services but some facilitation occurs for virtual advice or consultation which may, in turn, lead to a referral event through current (fragmented) processes.
- Netcare eReferral
  eReferral is an electronic referral facilitation service anchored to the Alberta Netcare Electronic Health Record. Some (currently limited to a few specialties) consultants can be searched for in an increasing number of outpatient specialist programs. Standardized requests can be submitted and tracked online and there is some facilitation of communication. However, other phases of closed loop referral management, including scheduling, occur in a variety of systems used by the consultant services. A growing strength of eReferral is advice request management.
- Specialist LINK
  This referral selection and requesting service is currently limited to the Calgary zone, with prominence of participating primary care networks and outpatient specialty consultation services. It has promoted referral pathways, provides online resources for prescribers and facilitates referral for both advice and consultation events.
- Connect MD
  This referral selection and requesting service is currently limited to the Edmonton zone and the Edmonton North Primary Care Network, with emphasis on access to specialist advice.
- Other
  Many outpatient specialist groups in Alberta offer and manage their own referral facilitation services, using a variety of paper, fax and online models and processes.

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AHS Context

- Referral processes for AHS prescribers accessing consultants working in an AHS context (where AHS is responsible for the record of care) are fragmented. Centralized intake is rare. Specialist groups either rely on historical (relationship-based) processes or adopt explicit processes that are not standardized. There exists major zone-to-zone and clinic-to-clinic variance. Some specialties (e.g. Surgery) rely more on implicit process while others (e.g. endoscopy services) have adopted and promoted explicit processes; with very few examples of provincially consistent approaches.
- There currently exists no single, standardized, AHS-wide referral intake or management process for outpatient care.

Non-AHS Context

- Referral processes for prescribers working outside the AHS record context who request consultation of providers working outside the AHS record context are fragmented.
- There currently exists no single, standardized, closed loop referral intake or management process outside of AHS. The closest approximation would be Netcare eReferral.
- Most referral processes remain informal and prescriber-centric.
- To the extent that referral services are openly available, they are not comprehensive; facilitating only one or a few phases of closed-loop referral.

Mixed Context

- Referral processes for prescribers working outside the AHS record context who request consultation of providers working inside the AHS record context are fragmented.
- There currently exists no single, standardized, cross-context closed-loop referral intake or management process. The closest approximation would be Netcare eReferral.
- Where system-centric referral services are offered (e.g., eReferral through the Netcare provincial electronic health record), they are geographically limited, do not include all consultants in a particular specialty and do not cover all referrals accepted by those consultants.

Future State

Standards

- The Connect Care Strategic Transformation Question and Clinical System Design activities have drawn upon Path-to-Care, eReferral and other local and provincial initiatives to derive provincial standards for referral requests, descriptors, metrics, reports and documentation. These are well understood and provincially adopted in the best version of a future state.
- A lean and pragmatic approach to referral initiation is adopted, decreasing the amount of information referring physicians need to enter to discrete data fields.
- The Connect Care initiative catalyzes establishment of centralized intake processes for most specialty services operating within the AHS health record context.
- Connect Care clinical system design has brought together specialists province-wide, presented them with referral process standardization work packages, and achieved remarkable consensus; consensus that also positively affects non-AHS referral initiatives like Netcare eReferral.

Referral Services

- Alberta Referral Directory
  This is expected to continue but to be interfaced to the Connect Care provider and service directory so that information is validated in multiple workflows.
- RAAPID
  Connect Care provides the informational supports for RAAPID, allowing for more seamless integration with other referral, consultation, advice and virtual health services. RAAPID can record advice or consultation outcomes to the patient's single integrated health record.

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- Netcare eReferral
It is uncertain how eReferral and Connect Care will relate. Connect Care supports the DIRECT messaging protocol. Should Netcare come to adopt and support standardized system-to-system messaging for its eReferral layer, initiating referral loops in Netcare, then electronically handing off to Connect Care for consultation fulfillment, then handing back referral metrics and results to eReferral… all becomes possible. Failing this, eReferral could replace mail, facsimile and telephone referral requests, with the remainder of the referral loop being managed within Connect Care for specialist services using the Connect Care health record.
- Specialist LINK, Connect MD, Other Services
It is uncertain whether independent (partial) referral services will adopt standards that could facilitate direct interaction with Connect Care. However, these services could get the consult request to the AHS "door", with Connect Care managing the fulfillment and communication of those parts of the referral loop occurring in an AHS record context. This remains a significant improvement because 3rd party referral services would need only one "door" to get to and could expect standardized responses thereafter.

AHS Context

- Referral processes for AHS prescribers accessing consultants working in an AHS context (where AHS is responsible for the record of care) are standardized.
- All referral management within the AHS record context is closed-loop. All referrals from AHS context prescribers to AHS consultants are initiated and fulfilled within Connect Care.

Non-AHS Context

- Referral processes for prescribers working outside the AHS record context who request consultation of providers working outside should be less fragmented.
- Wider use of provincially standardized services, like Netcare eReferral, should harmonize with standards adopted by Connect Care so that patient and provider experiences in the non-AHS record context are more consistent with those happening within the AHS context.

Mixed Context

- Referral processes for prescribers working outside the AHS record context who request consultation of providers working inside the AHS record context are standardized.
- If referring prescribers use an EMR that complies with the DIRECT standard and establishes a trust relationship with AHS, then referral requests (orders) can be routed to Connect Care using system-to-system (HL7) or application-to-application (FHIR) interfaces.
- Referring prescribers using non-interfaced systems can use eReferral, fax, paper or other services to get a request to Connect Care, after which the remainder of referral management occurs within Connect Care.

Interim States

Current methods for receiving referrals will persist for a period of time after Connect Care launch. These require manual entry into the Connect Care CIS, with potential points of failure, resource requirements and duplicate data entry. Once the referral is entered into the system, Connect Care users and Provider Portal users will be able to track progress and outputs.

All referrals originating and fulfilled within the Connect Care health record will be managed in Connect Care, enabling closed loop referral management. The same functionality is available when the Provider Portal is used to initiate a referral. Until community EMR parameter-based-launch of the Connect Care Provider Portal is enabled, external prescribers may object to the inconvenience of using the portal.

It will be common for departments to have some of their members on Connect Connect and others not. Care must be taken to ensure that:

- referral intake methods are not overly confusing or burdensome,

- referrals are not lost,
- transitions from one system to another, if required, are managed carefully.

While in the future there are several compelling reasons to expect that AHS will want to move away from legacy referral methods and toward electronic intake via Connect Care, the first priority is to maintain patient safety.

Dependencies

While it is technically possible to support standardized and better integrated referral services in Alberta (at least the AHS context will be consistent by virtue of Connect Care implementation), many people, process and political factors impact the overall coherence and safety of referral management.

- Governance
  - Some kind of multi-stakeholder, shared, oversight or governance of provincial referral initiatives and pathways is needed, with particular attention to referral coordination in non-AHS contexts and referral processes that cross health record contexts.
- Integration
  - Referral processes need to be intimately integrated with clinical and communication workflows that otherwise drive health care practice. Double data entry and information system swaps need to be minimized.
- Ease of Use
  - To the extent that the (lean) provincial standards developed or adopted by Connect Care can simplify referral requests, and the Connect Care Provider Portal satisfactorily meets and integrates a number of needs (clinical communication, patient tracking, care planning, EMR interfacing, etc.) for prescribers working with non-AHS records of care, then closed loop referral management may also be eased.
- Pathways
  - The development of effective referral management on a provincial scale will be enabled by co-development of evidence-informed referral pathways that are widely endorsed and adopted.

Priorities

Connect Care's first priority needs to be attainment of closed loop referral management wherever Connect Care is the record of care. This will increase AHS "receptor capacity" for a wide range of other referral initiatives. It will de-fragment AHS processes and simplify referral for prescribers both within and without the AHS context seeking AHS specialist access.

At the same time, Connect Care must carefully study and consider the needs of prescribers working with non AHS health records, seeking opportunities to promote coordination through improved referral oversight, intake, and fulfillment.

Change management interventions are urgently needed to help clinics and professionals understand and transition to Connect Care-enabled referral workflows. The need is most pressing for specialties using AHS records of care that, in current state, use Netcare eReferral or other digitally enabled referral services.

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eReferral and Connect Care Referral Workflows – Future State Use Case

Closed Loop Referral	Non-AHS Context Netcare eReferral	Non-AHS Context Connect Care Link	AHS Context
Assess	Open or EMR-launch Netcare at patient record.	Open or EMR-launch Connect Care Provider Portal at patient record.	Open Connect Care at patient record.
Select	Select eReferral and look for a referral type best fitting the patient need. Select a referral form. Confirm patient identity.	Navigate to order-entry tab and initiate referral order.	Select order-entry activity within patient chart and initiate referral order.
Request	Choose a Referral Destination for the request, specific to facility and consultant, mindful of approximate wait times, with confirmation of submitted request.	Choose referral specialty, indicate reason for referral, optionally indicate preferred department or consultant, indicate priority, provide any specialty-required data, enter question to be answered and receive confirmation of submitted request.	←
Intake	Consultant clinic receives notification of incoming eReferral when logging into Netcare (Netcare must be opened or re-opened; no independent alert, email or other notification). If a Connect Care service, need to initiate CIS session and re-enter consult request. Thereafter, workflow switches to →	Consultant or designated centralized intake person(s) receives InBasket message in Connect Care with request details and link to patient chart. On opening of request in Connect Care, prescriber receives notification via Link InBasket (which can be linked to email or SMS alert) that referral request is received.	Consultant or designated centralized intake person(s) receives InBasket message in Connect Care with request details and link to patient chart. On opening of request in Connect Care, prescriber receives notification via InBasket that referral request is received.
Triage	Consultant or clinic can request additional information of prescriber, but prescriber must log on to Netcare to access query. Non-digital processes for applying any triage rules to make decision to schedule. If referral requires redirecting to service where Connect Care is record of care, then need to manually alert new consultant or (preferably) use Link workflow → Prescriber is able to see "triage in process" in Netcare.	Consultant service has assigned triage team that uses in-system review and prioritization tools to assign consult to booking target, order pre-visit investigations and send any needed communications to prescriber (via InBasket and/or paper/fax). Triage may change reason for referral, priority or missing information. Can also upgrade an 'advice' request to a 'consult' request. Triage outcome plus any additional notes directed to scheduler(s).	←

Closed Loop Referral	Non-AHS Context Netcare eReferral	Non-AHS Context Connect Care Link	AHS Context
		Prescriber is updated via InBasket (with options for email or SMS alerts), including denied or redirected notifications and waitlist information. Waitlist information updated at regular intervals. Information about request status available via Connect Care.	
Schedule	If referral is accepted, priority and booking instructions are updated in eReferral. Actual scheduling occurs in consultant systems. eReferral has no scheduling, list management or other resource allocation functions. Requests for "advice" use Netcare to record answer to question and prescriber needs to log on to Netcare to receive and workflow finishes. Some prescriber EMRs are able to receive referral acceptance and booking information from eReferral.	Scheduling team receives prioritized request and allocates to the correct clinic, visit type, multi-disciplinary appointments and consulting provider. Scheduling in Connect Care takes advantage of advance waitlist management tools, including automated substitutions for cancellations, etc. Where MyAHS Connect in play, patient is notified and can participate in scheduling. When scheduled, patient removed from waitlist. Resource planning dashboards updated. Advice requests satisfied at this stage via InBasket. Prescriber notified of new status and actual appointment details; via InBasket and status updates in Connect Care.	←
Preparation	Various with functions dependent on consultant systems.	Appointment notification to patient and provider and includes relevant patient surveys, educational information, relevant investigations or preparation instructions. Orders placed for relevant clinical investigations or tests. Automated appointment reminder calls to patient.	←

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Closed Loop Referral	Non-AHS Context Netcare eReferral	Non-AHS Context Connect Care Link	AHS Context
Intervention	Various with functions dependent on consultant systems.	Consulting event (visit, e-visit, e-consult, e-advice, etc.) managed within Connect Care, including all new orders, care plans, etc. Appointment statuses updated by user interaction with system or end of day processing.	←
Documentation	Various with functions dependent on consultant systems. Some outpatient consultation reports make their way to Netcare through eDelivery and are highlighted in eReferral. Some outpatient consultation reports may be exposed through eDelivery and be importable to EMRs but rare currently. Most documentation will be received by prescriber via mail or fax.	All clinical documentation completed in Connect Care, directly or via dictation service. Notifications to prescribers, who can view current status of notes and documentation in Connect Care within 30 days of initial intervention. Communications back to prescribers through InBasket and system-generated letters (mailed, faxed or e-delivered to EMR depending on prescriber preference). After-visit summary to patients (paper and/or MyAHS Connect). Documents can also be released to patients through MyAHS Connect.	←
Apply	Various with functions dependent on consultant systems.	Follow-up visits, patient status questionnaires and results review occurs in Connect Care, with information visible to prescribers and periodically re-notified via follow-up communications. Provision for shared plans of care. Patient involvement in care plan and follow-up via MyAHS Connect.	←
Feedback	Performance metrics for request acceptance and waitlist available.	Dashboards and reports of performance at all steps of closed loop referral management.	←

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