Callback and Referral Operations Workbook

A working agreement for the people who send, receive, recover, and review patient-access requests. Use one copy per receiving process. Complete it together with the sending team, receiving team, and operational reviewer. Bring the actual queue labels, routing configuration, staffing calendar, and a small authorized sample of request histories.

This workbook proposes local operating definitions and measurement rules. It is not a mandated status model, a clinical triage protocol, or a validated scoring instrument. Clinical urgency and contact policies belong to the organization’s approved procedures. All worked records below are fictional.

How to use the pack

1. Define the outcome you are tracking: a callback, a scheduled appointment, or the entire referral loop. Record separate milestones when the scope spans several teams.
2. Map the existing statuses. Keep useful local labels; make their meanings and evidence explicit.
3. Agree when responsibility transfers, including automatic assignment where that is how the operation works.
4. Specify closure reasons and the owner of anything still outstanding.
5. Apply a fixed review cutoff, reconcile logical requests against attempts, and assign corrections.

The editable Markdown and CSV templates can be completed in an organization-approved local workspace. The printable version has space for decisions. The CSV pack contains templates and a fictional arithmetic example; it does not calculate operational results automatically. Use reference IDs rather than copying patient details into review materials.

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1. Process scope

Decision	Local entry
Process name, site, sending and receiving services	_____
Included request types and channels	_____
Excluded work and its alternate route	_____
Logical request definition and ID source	_____
Outcome boundary: what must be true to call this request resolved?	_____
Separate milestones, such as contact, scheduling, visit, report, follow-up	_____
Agreement owner, version, effective date, next review	_____
Sending lead, receiving lead, reviewer and decision date	_____

A callback to arrange an appointment can be complete while a referral remains open. Record the callback as a child task and retain the referral's ID. A patient can have several distinct requests; a patient ID alone is not a request ID. Conversely, repeated calls about the same unfinished need should remain linked to the original request.

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2. State dictionary

Use this proposed vocabulary to explain local states, not to prescribe a sequence of screens. A record may legitimately pass straight into owned work. Some systems keep technical delivery, work status, ownership, and closure reason in different fields; retain that separation.

FHIR distinguishes received, accepted, and completed work. Its `ready` status also supports workflows where assignment and acceptance are already established. The R4 and R5 definitions both include that option. These are versioned technical definitions, not proof that a local queue is staffed or functioning. (HL7 R4, HL7 R5)

Proposed operational state	Means here	Does not establish	Evidence and next responsibility
Prepared	Request exists but release has not occurred.	Delivery or acceptance.	Creation record; sending owner releases or corrects it.
Sent	Sending system attempted dispatch.	Destination receipt, ownership, or patient contact.	Dispatch event and request ID; sending process checks delivery.
Received / awaiting decision	Receiving work item exists and awaits the applicable acceptance decision.	Agreement to execute. A transport receipt alone is weaker evidence.	Destination item and receipt time; named interim owner monitors acceptance.
Accepted / assigned	Responsibility has attached under the receiving agreement.	Work started, sufficient current capacity, or resolution.	Acknowledgment event or qualifying automatic-assignment event; receiving team and deadline.
In progress	Work has started on the agreed scope.	Patient reached or requested outcome achieved.	Activity record; owner retains follow-up.
Waiting / on hold	A specified dependency prevents the next action.	Permission to stop the clock or abandon monitoring.	Dependency, owner, review time, approved pause rule if any.
Escalated	A recovery or priority-review path has been invoked.	A new owner has accepted, or the original deadline has reset.	Trigger, recipient, response deadline; existing owner follows through.
Closed	This work item has reached an authorized terminal disposition.	The logical request is resolved or the patient was informed.	Reason, evidence, actor, time, outstanding-work owner.
Reopened	Work resumed after a prior closure was reversed or found insufficient.	A new patient demand or erasure of the prior closure.	Linked history, reason, current owner, retained original and revised deadlines.

The operational label "received" above is a local proposal. FHIR `received` specifically includes a potential performer claiming the task to evaluate it; do not map an interface delivery receipt to that code without checking the semantics. Escalation and reopening may be events or flags rather than exclusive states.

Local mapping sheet

Complete one row for each label in use, including ambiguous labels such as “done,” “processed,” “forwarded,” and “complete.” Add rows as needed.

Local label / system	Operational meaning and scope	What it does not mean	Entry evidence / timestamp	Owner and permitted next step
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Mapping review: Which label could lead a reviewer to overstate completion? _____. Who will correct the definition, display, or export, and by when? _____.

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3. Receiving-process agreement

IHI/NPSF recommends shared referral agreements, explicit responsibilities, tracking, backup plans, and minimizing administrative burden. Its 2017 guidance concerns ambulatory referrals and informs the questions here; this workbook’s fields and rules are proposed adaptations for local operations. (Closing the Loop, pp. 15–19)

Agreement field	Decision to document	Local entry / evidence reference
Responsible team	Team accountable for this scope; accountable lead; covering team; operational queue.	_____
Before acceptance	Who monitors dispatch, missing receipt, and pending acceptance? When does responsibility transfer?	_____
Required intake	Minimum information; duplicate check; route for incomplete or misdirected requests.	_____
Acceptance mechanism	Explicit acknowledgment, defined automatic assignment, or conditional combination; qualifying event and exclusions.	_____
Operating hours	Time zone, staffed days/hours, holidays, daylight-saving rule, after-hours intake and coverage.	_____
Capacity assumptions	Expected requests per staffed interval, work mix, available staff time, existing backlog, reserve for recovery, review frequency.	_____

Agreement field	Decision to document	Local entry / evidence reference
Capacity breach	Observable trigger, overflow owner, alternate route, and changes to patient promises when capacity is exceeded.	_____
Acceptance deadline	Clock start, allowed interval by category, and owner of acceptance overdue work.	_____
Action / resolution deadlines	Separate first-action and resolution targets; clock start and elapsed-time or staffed-time calendar.	_____
Pauses and changes	Permitted reasons, approving role, start/end evidence, original due time, revised due time, and pause-review deadline.	_____
Escalation	Trigger, monitoring owner, recipient, channel, response deadline, backup when escalation receives no response.	_____
Contact and communication	Approved contact policy, attempt spacing/channels, language/access needs, who updates patient and sender.	_____
Closure	Required reason and evidence, authorized closing role, outstanding communication and follow-up requirements.	_____
Redirect / decline	Who retains responsibility until another team accepts? What happens when no destination can accept?	_____
Downtime	How pending work is recorded, reconciled, deduplicated, and restored after service recovery.	_____
Review and change control	Agreement approvers, evidence sample, review cadence, version and correction owner.	_____

Acceptance route A: explicit acknowledgment

Document the action that records agreement to perform the work, the accepting person or team, and its timestamp. Name the person or process responsible for pending work before that event. Decide how a rejection is communicated and recovered. A read receipt or message-open event counts only if the agreed workflow actually gives it the meaning of acceptance.

Local acknowledgment event / evidence: _____. Interim owner: _____. No response by due time: _____.

Acceptance route B: defined automatic assignment

Document the rule that makes the receiving team responsible when an eligible work item is created or assigned. Record its version, eligible request types, effective hours, destination, assignment timestamp, and exception path. Check that the team can see the item and that coverage and backlog monitoring match the agreement. Evidence can be the configured rule plus its observed assignment record; an additional confirmation click is unnecessary when it adds no operational decision.

A routing label by itself is insufficient evidence. If the destination is disabled, the item cannot be created, or the request falls outside the rule's eligibility, record the exception and the recovery owner. If assignment remains valid outside staffed hours, record immediate ownership separately from the later staffed-time action deadline.

Rule / version: _____. **Assignment event and owner field: _____**. **Eligibility / exception route: _____**. **Observed evidence reference: _____**.

Conditional combination

For example, routine scheduling callbacks may be assigned automatically while incomplete referrals require receiving-team review. Document the dividing condition, the owner while review is pending, and the evidence for each route. Report the two routes separately when comparing acceptance performance. Do not add sequential acknowledgments simply to make every request follow the same diagram.

Capacity and due-time example

Fictional operation: two coordinators each have 90 minutes available for callbacks in an interval. At an assumed six minutes of direct work per request, that is a theoretical capacity of 30 requests before recovery, meetings, or variation. Reserving 36 minutes for recovery leaves 144 minutes, or 24 requests under the same assumption. With 28 incoming requests and four already waiting, there are 32 requests against that assumed capacity of 24: an eight-request gap requiring an operating decision. This is planning arithmetic, not a staffing benchmark; replace every assumption with local observations.

For a separate fictional due-time example, a team works Monday–Friday, 09:00–17:00 local time, with no holiday on the following Monday. A request arriving Friday at 16:30 with two staffed hours allowed is due Monday at 10:30. A two-elapsed-hour rule would instead make it due Friday at 18:30. Record the actual date, named time zone and applicable calendar. "Within two hours" alone does not settle the promise.

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4. Closure taxonomy

Choose a primary reason for each work-item closure and preserve secondary detail. Record who closed it, when, what evidence supports the disposition, what was communicated, and whether the original need remains open. These are proposed local categories, not FHIR codes or billing definitions.

Closure reason	Required basis	Treatment of the logical request
Resolved	The agreed outcome boundary is met, supporting evidence exists, and required communication is recorded.	Count once as resolved within that documented scope. A scheduling outcome does not prove a visit or subsequent clinical outcome.
Duplicate	A verified duplicate of an identified surviving request; record the surviving ID and reconcile any differing information.	Merge demand accounting under the survivor. Closing the duplicate does not resolve the survivor.
Redirected	Destination, linked successor item, reason, and responsibility during the transfer are recorded.	Keep the original need visible until the successor outcome is known. A transfer closure is not resolution.
Declined	Record who declined: patient, receiving service, or another authorized party; why; date; communication and required review.	Record a non-resolution disposition or retain open follow-up according to scope. Service rejection and patient choice need separate subcategories.
Unsuccessful contact	Document attempts under the locally approved policy, barriers encountered, authorized review, and remaining follow-up decision.	Do not infer refusal or resolution from no answer. Close the item only under the agreed policy; preserve any outstanding need and owner.
Administratively closed	Specific administrative reason, authorizing role, reconciliation evidence, and survivor/follow-up reference where applicable.	Report separately. Queue cleanup, migration, or aging alone is not evidence that the requested outcome occurred.

Closure decision record

Field	Local entry
Work-item ID and logical request ID	_____
Primary reason / subtype / actor / timestamp	_____
Outcome boundary and supporting evidence	_____
Patient and sending-team communication status / evidence	_____
Surviving or successor ID, if relevant	_____
Remaining need: resolved, open, closed without resolution, or unknown	_____
Remaining-work owner / next action / due time	_____
Reviewer / decision / date	_____

Two common traps: A referral scheduling item may close as redirected while the successor is still waiting for acceptance. A callback item may close as unsuccessful contact while the referring team still needs to decide what happens next. Neither event is a resolved logical request.

CMS50v14 for the 2026 performance period measures receipt of a specialist report and uses a patient-based denominator. The request-based operating measures below are different. Do not label them CMS50 performance or infer that a closed queue item meets that measure. (CMS50v14 specification)

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5. Measurement worksheet

Fix the population before calculating

Reporting decision	Local entry
Arrival cohort start and end; inclusive/exclusive boundaries	_____
Snapshot cutoff C, time zone, extract time and reporting lag	_____
Included process, outcome boundary and priority groups	_____
Source systems and reconciliation owner	_____
Request identity / deduplication rule / linked successor rule	_____
Due-time policy and version; handling of approved pauses	_____
Missing owner, missing due time, unknown outcome treatment	_____
Recovery-time observation window, sample and coverage	_____

Use one row per logical request in the request sheet and one row per attempt in the attempts sheet. Keep one row per receiving work item in the work-items sheet to preserve redirects and multiple queues. Repeat contacts, retries and successor tasks retain the same logical request ID unless there is a genuinely new need under the agreed definition. Store delivery attempts separately from patient-contact attempts.

Count statuses **as of C**, not as of the date the extract was downloaded. Exclude events after C from that snapshot. Preserve closure and reopening events so an earlier snapshot can be reconstructed. An open request includes waiting, paused, escalated, redirected work with an unresolved successor, and reopened work.

Population reconciliation

Assign each logical request to exactly one snapshot bucket:

- **Resolved:** the documented outcome was met by C and was not reopened by C.
- **Closed without resolution:** an authorized final disposition ended tracking of that need without the outcome being achieved. Keep the closure-reason mix visible.
- **Open:** further action remains; subdivide by the next unresolved milestone's effective due time.
- **Unknown outcome:** evidence cannot establish one of the above. Missing closure evidence must not become a success.

For open work, **overdue** means effective due time is at or before C; **not yet due** means it is after C; **missing due time** is a separate data-quality bucket. This workbook uses an inclusive deadline boundary. If the organization chooses a different convention, record and apply it consistently. A pause does not remove work from the population. Preserve raw age since creation and the next pause-review date as well as any approved adjusted deadline.

Measures and denominators

Measure	Calculation / denominator	Interpretation
Ownership established by cutoff	Eligible handoffs with evidenced acceptance by C / all eligible handoffs created by C in the cohort.	Includes automatic assignment under the agreement. Report pending not-yet-due and acceptance-overdue counts alongside it.
Acceptance overdue	Eligible handoffs not accepted by C whose acceptance due time is at or before C.	An operational count; show missing acceptance due times separately.
On-time acceptance	Handoffs accepted no later than their acceptance due time / eligible handoffs with acceptance due time at or before C.	Separate late acceptance from no acceptance. A zero denominator is N/A.
Due-cohort unresolved share	Logical requests with outcome due at or before C that were not resolved by C / all logical requests with outcome due at or before C.	Includes closed-without-resolution and unknown outcomes, disclosed separately. Missing outcome due times are reported outside this denominator.
Open overdue workload	Open logical requests with next-action due at or before C.	Count work needing action now. Show open not-yet-due and missing next-action due alongside it. This differs from outcome-due performance.
Closure mix	Work-item closures by the six reasons / all work-item closures during the observation window.	Keep this item-based measure separate from request outcomes; identify repeated closures after reopenings.
Contact effort	Patient-contact attempts in the fixed window; distinct linked requests; attempts per distinct request with a contact attempt.	Technical retries belong to a separate attempt type. Untouched requests are not in this ratio; report them separately.
Recovery burden	Sum observed hands-on recovery minutes; divide by distinct requests with measured recovery time if reporting a mean.	Report sample size, missing time entries and coverage. Elapsed wait is not labor; blank time is not zero.

Use separate acceptance, next-action and outcome deadlines where they represent different obligations. Do not make an unresolved referral look timely by repeatedly moving a callback deadline. Retain original and effective deadlines, change reasons, approvals, and the deadline history used at C. When an outcome is unknown, show that uncertainty rather than claiming a confirmed failure or success.

Fictional worked snapshot

Cutoff: 15 September 2026, 17:00 UTC. The cohort contains six distinct logical requests and seven receiving work items; one duplicate work item belongs to R1. For simplicity only in this example, next-action and outcome due times are identical for each open request. All six handoffs have evidenced ownership by the cutoff. There are no missing due times or unknown outcomes.

Request	Effective outcome due (UTC)	Outcome at cutoff	Contact attempts in window	Observed recovery minutes
R1	15 Sep 12:00	Resolved at 11:00; duplicate item linked to R1	2	4
R2	15 Sep 15:00	Open; waiting for callback	3	12
R3	16 Sep 12:00	Open; not yet due	1	0
R4	15 Sep 16:00	Closed without resolution: unsuccessful contact	3	9
R5	16 Sep 10:00	Resolved at 14:00 on 15 Sep	1	0
R6	15 Sep 17:00	Open; due exactly at cutoff	2	5

Reconciliation: **6 = 2 resolved + 1 closed without resolution + 3 open + 0 unknown**. Open work splits into **2 overdue + 1 not yet due + 0 missing due time**. The duplicate item adds neither a seventh logical request nor a resolved outcome.

Four requests have outcome deadlines at or before C: R1, R2, R4 and R6. Three are not resolved, so the due-cohort unresolved share is **3 / 4 = 75%**; its components are two open and one closed without resolution. Open overdue workload is **2**, not three. Early resolution of R5 does not put it into the due cohort yet.

The **12 contact attempts** belong to **6 requests**, giving **2 attempts per contacted request**. There are **30 observed recovery minutes**, all six requests have time observations, and four have positive recovery time. Mean recovery time across requests with positive recovery is **30 / 4 = 7.5 minutes**; the mean across all six observed requests is **5 minutes**. Name the denominator. None of these numbers describes a real service.

Blank readout

Result	Count / numerator	Denominator / coverage	Interpretation and action
Eligible logical requests / receiving work items	_____	_____	_____
Resolved / closed without resolution / open / unknown	_____	_____	_____
Open overdue / not yet due / missing due time	_____	_____	_____
Ownership established / acceptance overdue	_____	_____	_____
On-time acceptance	_____	_____	_____
Due-cohort unresolved, split by outcome	_____	_____	_____
Closure reasons, including repeat closures	_____	_____	_____
Contact attempts / technical retries / untouched requests	_____	_____	_____
Recovery minutes / observed requests / missing observations	_____	_____	_____

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6. Operational review and recovery

Repeated unsuccessful return calls created extra staff work in the historical DirectConnect service-improvement study. That local experience motivates observing recovery effort; it does not establish savings for an AI service or another institution. (Bowman and Smith, 2010)

Review a small, authorized set of traces spanning normal assignment, after-hours arrival, capacity breach, missing information, redirect, unsuccessful contact, duplicate and reopening. These are proposed review scenarios, not executed findings. For each trace, identify the responsible process before acceptance, after acceptance, at escalation, and after closure. Follow one item beyond the first queue when another team must act.

Review scenario	Expected evidence	Observed reference / correction owner / due
Normal explicit or automatic acceptance	Qualifying event, actual owner, deadline and visible work item.	_____
After-hours or absent team	Coverage rule, clock calculation, interim owner and truthful patient expectation.	_____
Capacity threshold exceeded	Detection, escalation recipient, response and tracked overflow.	_____
Redirect or decline	Reason, successor/interim owner, original request still traceable.	_____
Contact unsuccessful	Attempt history, approved disposition, outstanding-work decision and communication.	_____
Duplicate or reopened request	Survivor link, preserved history, corrected counts and current deadline.	_____
Due exactly at cutoff / missing due time	Consistent boundary classification; missing data visible.	_____

A historical malpractice-claims review identified documentation and triage problems in selected telephone-related cases. Its selection cannot estimate everyday callback failure rates. Use it as context for careful records, not as a prevalence benchmark. (Katz et al., 2008)

Review decision: ready for the defined scope / correction required / evidence insufficient: _____. **Reason and evidence:** _____. **Correction, owner, deadline and recheck:** _____. **Sending and receiving leads' agreement:** _____.

Sources and limits

1. **HL7 International.** Task status vocabulary, FHIR R4 v4.0.1 (https://hl7.org/fhir/R4/codesystem-task-status.html). 2019. Definitions of received, accepted, ready and terminal states; R4 is a version-specific reference.
2. **HL7 International.** Task status vocabulary, FHIR R5 v5.0.0 (https://hl7.org/fhir/R5/codesystem-task-status.html). 2023. Confirms the assignment-and-acceptance option in `ready`. Neither vocabulary requires extra interface clicks.
3. **Institute for Healthcare Improvement / National Patient Safety Foundation.** Closing the Loop: A Guide to Safer Ambulatory Referrals in the EHR Era (https://www.ihi.org/sites/default/files/IHI_NPSF_Closing_the_Loop_Referral_Management_in_EHR.pdf). 2017, pp. 15–19 and 25–33. Expert guidance on agreements, responsibility, tracking and communication; not an evaluation of this workbook or an AI product.
4. **Centers for Medicare & Medicaid Services.** Closing the Referral Loop: Receipt of Specialist Report, CMS50v14, version 14.0.000 (https://ecqi.healthit.gov/sites/default/files/ecqm/measures/CMS50-v14.0.000-QDM.html). 2026 measurement period. Cited to distinguish a specified patient-based quality measure from local request-based operations. Later-period versions must not be substituted for the applicable reporting period.
5. **Brent Bowman and Scott Smith.** Primary Care DirectConnect: How the Marriage of Call Center Technology and the EMR Brought Dramatic Results—A Service Quality Improvement Study (https://pmc.ncbi.nlm.nih.gov/articles/PMC2912077/). The Permanente Journal, 2010;14(2):18–24. Historical local improvement study; no AI effectiveness claim or projected savings used here.
6. **Harvey P. Katz, Dawn Kaltsounis, Liz Halloran and Maureen Mondor.** Patient Safety and Telephone Medicine: Some Lessons from Closed Claim Case Review (https://pubmed.ncbi.nlm.nih.gov/18228110/). Journal of General Internal Medicine, 2008;23(5):517–522. Selected retrospective malpractice claims; not a service-wide failure denominator.

Sources checked 15 September 2026. The operating fields, six-reason taxonomy, calculation conventions, and fictional examples are Access Red Team proposals. Local definitions, clinical policies, operating hours, thresholds and performance need organization-specific evidence. No universal response time, required number of contact attempts, prevalence estimate, or compliance certification is asserted.