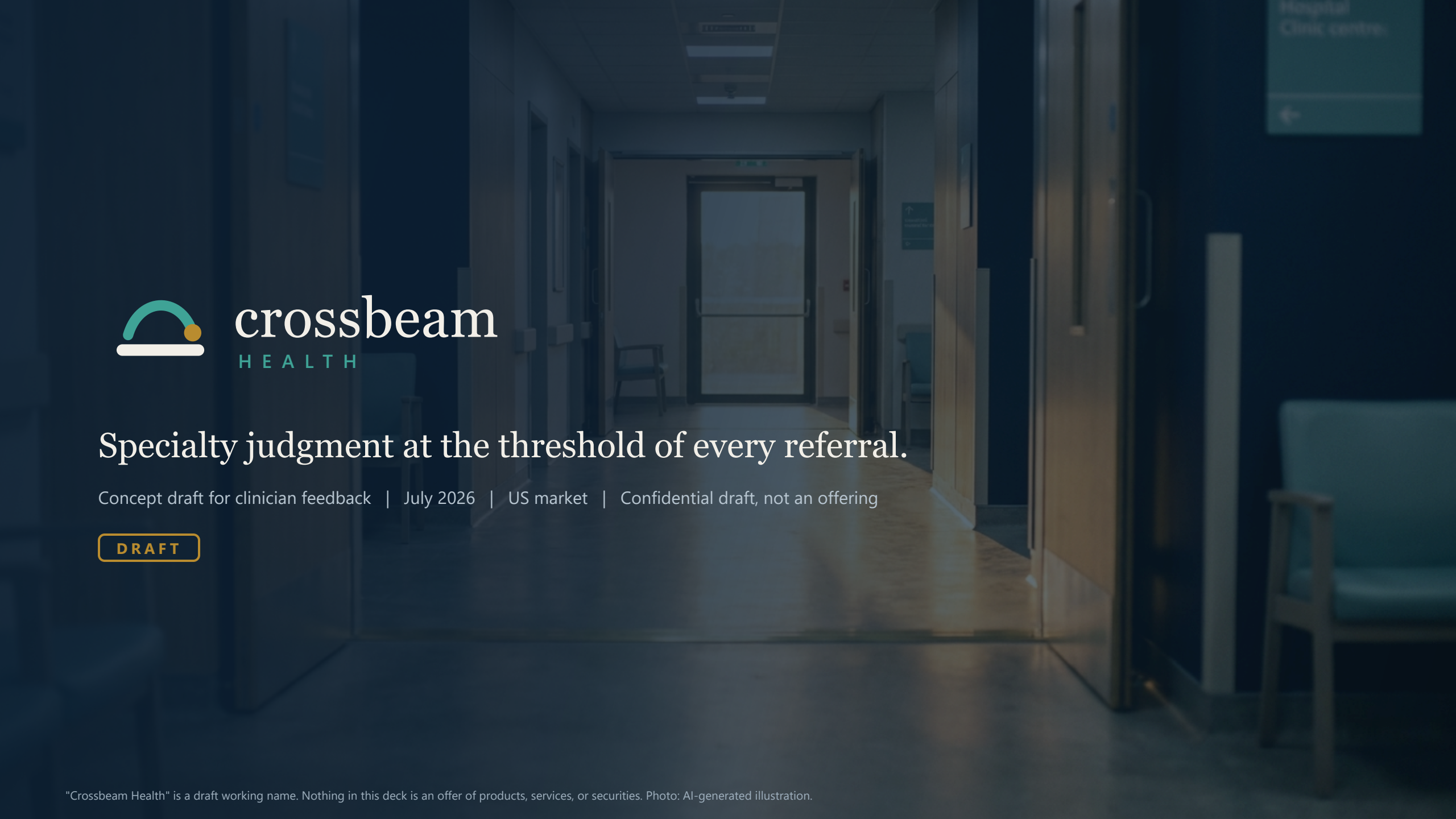


crossbeam
HEALTH

Specialty judgment at the threshold of every referral.

Concept draft for clinician feedback | July 2026 | US market | Confidential draft, not an offering

DRAFT

THE PROBLEM

The referral decision is made alone, and the patient pays for it.

A PCP decides "this needs a specialist" with no specialist input, no protocol, and no feedback. The patient is referred, waits weeks, arrives without the right workup, or never arrives at all.

100M+

specialty referrals a year in US ambulatory care; only about half are ever completed[1]

31 days

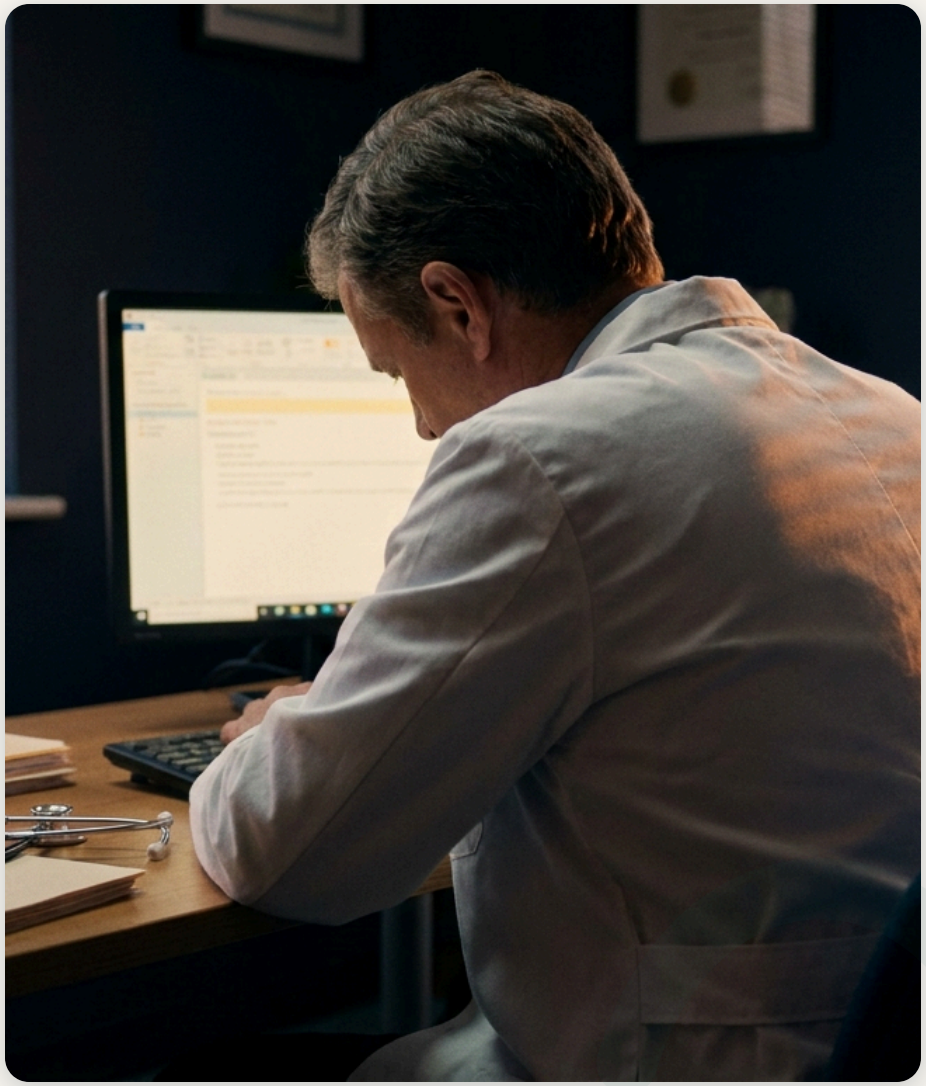
average new-patient wait across 15 major metros (2025); gastroenterology 40 days, Boston up to 65[2]

40 to 70%

of referrals leak out of network;[3] about half never complete at all[1]

206M

Epic In Basket system messages in 2024, up from 58M in 2017; the follow-up lands on primary care[4]



Nothing about the episode, whether the referral was needed or what happened to the patient, ever feeds back into the next referral decision.

Sources 1 MedCity News, 2025 · 2 AMN Healthcare, 2025 · 3 Advisory Board, 2024 · 4 Journal of Arthroplasty, 2025 · Full citations: slide 14. Photo: AI-generated illustration.

THE PROBLEM

Six steps, and it fails at every one.

STEP 1 · THE DECISION

PCP decides alone

Mid-visit or in the In Basket, with no specialist input and no protocol at the moment it matters.

The intervention point everyone skips

STEP 2 · THE ORDER

Order plus free text

The referral goes out info-poor, with no standard workup attached and the question unstated.

Specialists start over on arrival

STEP 3 · THE QUEUE

Scheduling and auth

The pile is sorted by scheduling and prior authorization, not clinical need.

31-day average wait; GI 40; Boston 65[2]

STEP 4 · THE PATIENT

Navigates, or does not

Calls, portals, travel, cost. Many quietly give up along the way.

~50% never complete;[1] 40 to 70% leak[3]

STEP 5 · THE VISIT

Starts from scratch

Low-acuity cases crowd out urgent ones; the visit is spent re-ordering the missing workup.

Wasted slots on both sides

STEP 6 · THE REPORT BACK

Maybe a letter returns

The loop rarely closes. The next referral starts exactly as blind as the last one.

Nothing is learned, ever

The queue is still growing: the average new-patient wait rose 19 percent just since 2022 (26 to 31 days) and 48 percent since 2004.[5] The queue is structural, not cyclical, and every current fix starts AFTER step 1.

Sources 1 MedCity News, 2025 · 2, 5 AMN Healthcare, 2025 · 3 Advisory Board, 2024 · Full citations: slide 14.

THE PROBLEM

The hidden work, and why today's fixes stay bolt-ons.

THE PROBLEM · THE HIDDEN WORK

58M → 206M

Epic In Basket system messages, 2017 to 2024. The referral system's dropped work lands here.[4]

15.2 hrs/wk

of off-hours EHR time for high-volume PCPs; portal message load never returned to pre-pandemic levels.[6]

50 to 98%

of interruptive decision-support alerts are overridden. Interruptive fixes fail.[7]

TODAY'S FIX · AND WHY IT FALLS SHORT

The workaround: the eConsult

Ask a specialist before referring. It works clinically, in the US, UK, and Canada. But every US version is bolted on OUTSIDE the decision moment, with questions hand-drafted every time.

The clinical idea is right; the delivery is wrong.

What it costs today

- Vendor networks: $150 per consult[8] or $250 to $350 per provider per month[9]
- The billing rail is thin: CPT 99446 to 99452 pays $19 to $76, chronically under-billed[10]

Why bolt-ons underperform

- They start after the decision; the avoidable referral already exists.
- They add a new destination for the busiest person in the building.[4]
- They measure activity, not patient outcomes.

The gap is not another queue. It is judgment, at the decision moment, inside the tool already open.

Sources 4 Journal of Arthroplasty, 2025 · 6 JAMA Internal Medicine, 2025 · 7 PMC systematic review, 2023 · 8 AristaMD · 9 RubiconMD · 10 CodingIntel · Full citations: slide 14.

THE SOLUTION

Crossbeam: the specialist's judgment, at the decision moment, in Epic.

THE REFERRAL DECISION MOMENT. The PCP opens the panel by choice, inside Epic. No pop-ups, no hard stops, ever.

1 OPEN

Mid-visit doubt: "does this need GI?" The PCP opens the Crossbeam panel by choice. Uninvited support gets overridden;[7] invited support gets used.

2 SEE

The matched protocol (P1): this system's own pathway, version-stamped, authors named. The chart context it used (P2), listed item by item.

3 CHOOSE

Three real doors, below. The clinician picks; suggested orders are only ever pended for signature. The plain referral stays one click away.

4 LEARN

What was chosen and what happened over 6 to 12 months, from claims and chart data (P4), feeds the next protocol version.

STEP 3, EXPANDED · THE THREE DOORS

1 · MANAGE IN PRIMARY CARE

protocol says safe to treat or watch here; suggested orders pended for the PCP's signature

2 · SEND eCONSULT

one click; question and context pre-assembled, routed on Epic In Basket rails to the specialist rota

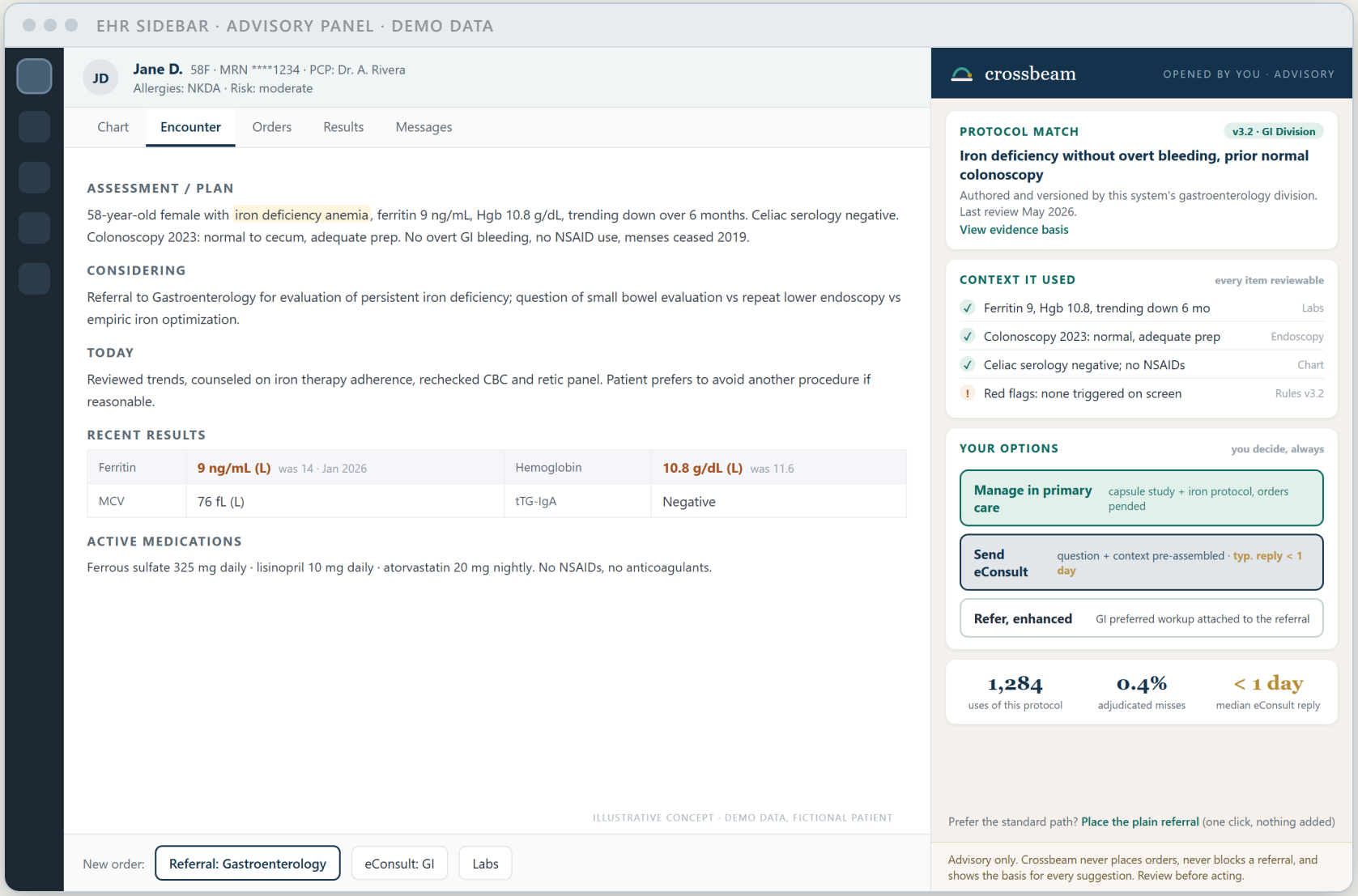
3 · REFER, ENHANCED

the specialty's preferred workup attached; a complete referral, the right queue, kept in network

Advisory only. The basis is always visible, the clinician always decides, and the full referral is always one click away.[11]

Sources 7 PMC systematic review, 2023 · 11 FDA, Clinical Decision Support Software guidance, 2022 · 25 Crossbeam venture record (product workflow), 2026 · Full citations: slide 14.

The panel at the decision moment.



1 Opened by choice

Never interruptive. Decision support that fires uninvited gets overridden 50 to 98 percent of the time.[7]

2 Shows its work

Protocol version, authors, and every data point used are on screen before anything is signed.

3 Three real options

Manage, eConsult, or refer enhanced. The plain referral stays one click away, always.

4 Defensible for the PCP

Following your own institution's versioned protocol is a documented act, not a leap of faith.

Illustrative concept design with demo data and a fictional patient; not a screenshot of any EHR product. **Sources** 7 PMC systematic review, 2023 · Full citations: slide 14.

PRODUCT WALK-THROUGH · 2 OF 3 · ILLUSTRATIVE CONCEPT DESIGN

The eConsult, pre-assembled; answered in minutes, not months.

1 Drafted, not dictated

Question and attachments assembled by software from the pathway and the chart; the PCP edits and sends.

2 Complete on arrival

The specialist answers a real question fast: Ontario's (Canada) provincial service runs a median 0.9-day reply across 100,000+ cases.[12]

3 Nothing lost

Reply, disposition, and protocol version are written back to the referral record and tracked against claims (P4).

eCONSULT COMPOSER · DEMO DATA

crossbeam eCONSULT — ROUTED ON THE EHR's OWN IN BASKET RAILS

Your eConsult, pre-assembled — PCP view · ready to send

QUESTION, DRAFTED FOR YOU — editable

58F with persistent iron deficiency (ferritin 9, Hgb 10.8 trending down), colonoscopy 2023 normal, celiac serology negative, no overt bleeding. Per pathway v3.2: capsule endoscopy first vs repeat lower endoscopy vs iron optimization and recheck?

ATTACHED AUTOMATICALLY

- ✓ Ferritin and Hgb trend, 24 months — Labs
- ✓ Colonoscopy report, 2023 — Endoscopy
- ✓ Active meds and celiac serology — Chart
- ✓ Protocol reference: Iron deficiency pathway v3.2 — Crossbeam

ROUTING

GI eConsult rota, on-service specialist. Reply lands in your In Basket with the patient linked; if the specialist recommends a visit, the enhanced referral is one click from their reply.

WHY THIS QUESTION — basis shown

Drafted from pathway v3.2, branch 4 (persistent iron deficiency, negative first-line workup). The pathway, its authors, and the data used are linked above; edit or discard freely.

Review and send | Edit question | Nothing sends without you.

What the specialist receives — GI view · complete on arrival

< 1 day	4 min	99451
median reply at scale (Ontario benchmark, 0.9 days)	this reply, no chart digging needed	billing scaffold pre-filled

SPECIALIST REPLY

Agree with pathway: capsule endoscopy first; repeat colonoscopy only if capsule positive or new alarm features. Continue IV iron per protocol while awaiting study. Happy to see her if capsule is positive.

Dr. S. Okafor · Gastroenterology — Replied in 4 min of review time

Written back to the referral record: disposition, reply, and protocol version are saved with the encounter and tracked against claims over the next 6 to 12 months (pillar P4). Nothing is lost in a side channel.

AUDIT TRAIL

- ✓ Sent by Dr. Rivera, reviewed and edited — Tue 9:14 AM
- ✓ Opened by GI rota — Tue 3:47 PM
- ✓ Reply returned to PCP In Basket — Tue 3:51 PM
- ✓ Disposition logged for outcome tracking (P4) — Automatic

Advisory only. The clinician reviews, edits, and sends; the full referral stays one click away.

ILLUSTRATIVE CONCEPT · DEMO DATA, FICTIONAL PATIENT AND CLINICIANS

Illustrative concept design with demo data; fictional patient and clinicians. **Sources** 10 CodingIntel · 12 Innovation in Aging, 2022 · Full citations: slide 14. Photo: AI-generated illustration.

THE SOLUTION

Four pillars, and autonomy that is earned rung by rung.

P1 · Encode

Specialist-authored, system-specific protocols, versioned and refreshed on a named cadence.

P2 · Contextualize

Auto-assembled chart context with the basis visible item by item.

P3 · Embed

At the referral decision moment in Epic, PCP-initiated, never interruptive.

P4 · Learn

Outcomes tracked on claims and chart data, feeding the next protocol version.

Rung	What the product may do	Unlocked by
v1 · Advisory floor	On-demand panel, protocol match, auto-context, disposition menu with pended orders. The clinician signs everything.	Day one. This is the permanent floor.
v2 · Auto-drafted	eConsults and referral workups arrive fully drafted; the clinician reviews and signs.	Measured accuracy and edit-rate thresholds on v1, reviewed by the clinical governance committee.
v3 · Narrow, earned auto-resolution	Lowest-risk pathway steps only (repeat-lab scheduling per protocol), opt-in per authoring division, audit-trailed.	Claims-verified avoidance at a pre-registered effect size AND a sub-1 percent adjudicated miss rate, re-reviewed with FDA counsel.

> The question is never "do you trust AI." It is "what has this specific protocol earned, on evidence your own committee reviewed."[11]

Sources 11 FDA, Clinical Decision Support Software guidance, 2022 · 25 Crossbeam venture record (autonomy ladder and evidence gates), 2026 · Full citations: slide 14.

THE MARKET

Who pays: the buyer must keep the savings.

+$490K

per 1,000 deflected GI referrals for a fully capitated system (estimate, internal model)[25]

-$405K

for a pure fee-for-service system: deflection destroys procedure revenue (estimate, internal model)[25]

The honest framing: under fee-for-service, our success costs the buyer money. So Crossbeam sells where risk is real. 53.4 percent of Traditional Medicare lives are in accountable care (January 2025; CMS targets 100 percent by 2030),[14] but only 28.7 percent of payments carried downside risk in 2024.[13] We underwrite on buyer P&L value; no medical-specialty collaborative-care code exists through CY2027.[16]

Payment rail today	Pays	Reality
Interprofessional eConsult, CPT 99446 to 99452[10]	$19 to $76 per consult	Once per 7 days, patchy coverage, chronically under-billed
Behavioral CoCM (99492 to 99494, G2214)[15]	~$48 to $145 per patient per month	The precedent: CMS built a rail AFTER the evidence. Behavioral only
Medical-specialty collaborative PMPM[16]	Does not exist	Nothing on the CMS calendar through CY2027
Risk-bearing system P&L	The real rail	Payer-provider systems, capitated groups, and MSSP savings keepers buy on kept savings

Proof the buyer exists: Baylor Scott & White kept $76.8M of the $104.5M it saved CMS in PY2024.[17] That retained-savings budget line is the customer.

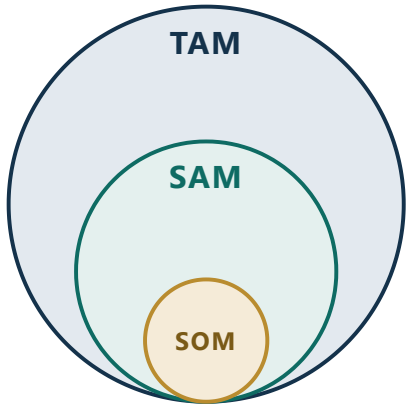
Sources 10 CodingIntel · 13 HCP-LAN, 2024 · 14 NIC, 2025 · 15 Providers Care Billing · 16 CMS, CY2027 PFS proposed rule · 17 Baylor Scott & White, 2025 · 25 internal model (inputs: 18, 19) · Full citations: slide 14.

THE MARKET

Market size: two honest builds, side by side.

Optimistic build

directional · all figures USD · assumes premium pricing no buyer has yet paid[25]



TAM · NEAR-TERM SOFTWARE + SERVICES

~$2B to $4B[25, 20]

US specialty-referral decision and eConsult software, bounded by the referral-management market

SAM · REACHABLE VIA SYSTEM GTM

~$1.0B to $1.5B[25]

Health systems sellable with a direct enterprise motion

SOM · 5-YEAR ARR

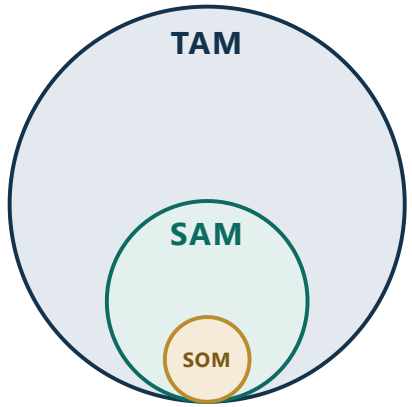
~$25M to $75M[25]

At ~$4,500 per clinician per year, a price point no buyer anywhere has yet paid

Where these numbers come from: internal market build, July 2026,[25] top-down from US clinician counts at premium per-seat pricing (~$4,500 USD per clinician per year), bounded by the US patient-referral-management software market (Grand View Research).[20] Circles illustrative, not to scale.

Diligence rebuild

estimate · all figures USD · at prices the category has actually paid[25]



THEORETICAL TAM

~$450M to $750M[25]

397 US health systems[21] at realized eConsult-category price points

ICP-FILTERED SAM

~$15M to $80M[25]

~150 to 350 qualifying risk-bearing systems, the only buyers whose P&L improves

SOM · 5-YEAR

~$3M to $15M[25]

At realized ~$100K to $400K per-system ACV

Where these numbers come from: internal diligence rebuild, July 2026,[25] bottom-up from 397 US health systems (AHA)[21] at realized eConsult-category prices (USD; vendor list pricing and public program economics).[8, 9, 10] Circles illustrative, not to scale.

Both builds are estimates in USD, and the divergence IS the finding: the workflow is validated in the US, UK, and Canada, the premium software price on none. We either prove premium value with claims-verified evidence, or reprice into the per-provider anchor that already exists.[13, 14]

Sources 13 HCP-LAN, 2024 · 14 NIC, 2025 · 20 Grand View Research · 21 AHA, 2025 · 25 internal market build and diligence rebuild, July 2026 · Full citations: slide 14.

THE OPPORTUNITY

Everyone holds a piece. Nobody runs the loop.

Player (27 profiled; key rows)[25]	P1 Encode	P2 Context	P3 At the moment	P4 Learn	Total
Crossbeam target	2	2	2	2	**8/8**
Epic (platform)	1	2	2	1	**6/8**
NHS Advice & Guidance (UK program)	1	1	2	1	**5/8**
Oshi Health (GI provider, not software)	1	1	1	2	**5/8**
eConsult vendors (AristaMD class)	1	1	1	1	**4/8**
Ontario eConsult (Canada, provincial program)	0	1	1	1	**3/8**
Ambient AI (Ambience, Abridge)	0	1	1	0	**2/8**

P4 The empty column

Across all 27 profiles, no horizontal software closes the outcome loop. The only 2 belongs to a provider group grading itself.

E Epic is the real clock

Closest at 6/8. The competitive question is speed to the loop, not the eConsult incumbents.

$ Why the center stayed empty

Under fee-for-service, deflecting referrals costs the deflector money. The whitespace is an economics gap, not an ideas gap, and risk adoption is closing it.[13]

W The wedge

One specialty (GI), one institution's own protocols, one decision moment, outcomes measured from claims.

Pillar scores: internal whitespace matrix, July 2026 (0 absent, 1 partial, 2 shipped); labeled an evidence gap, not confirmed-empty space. **Sources** 13 HCP-LAN, 2024 · 25 Crossbeam venture record · Full citations: slide 14.

What we must prove, and the console that keeps us honest.

51% (self-reported)

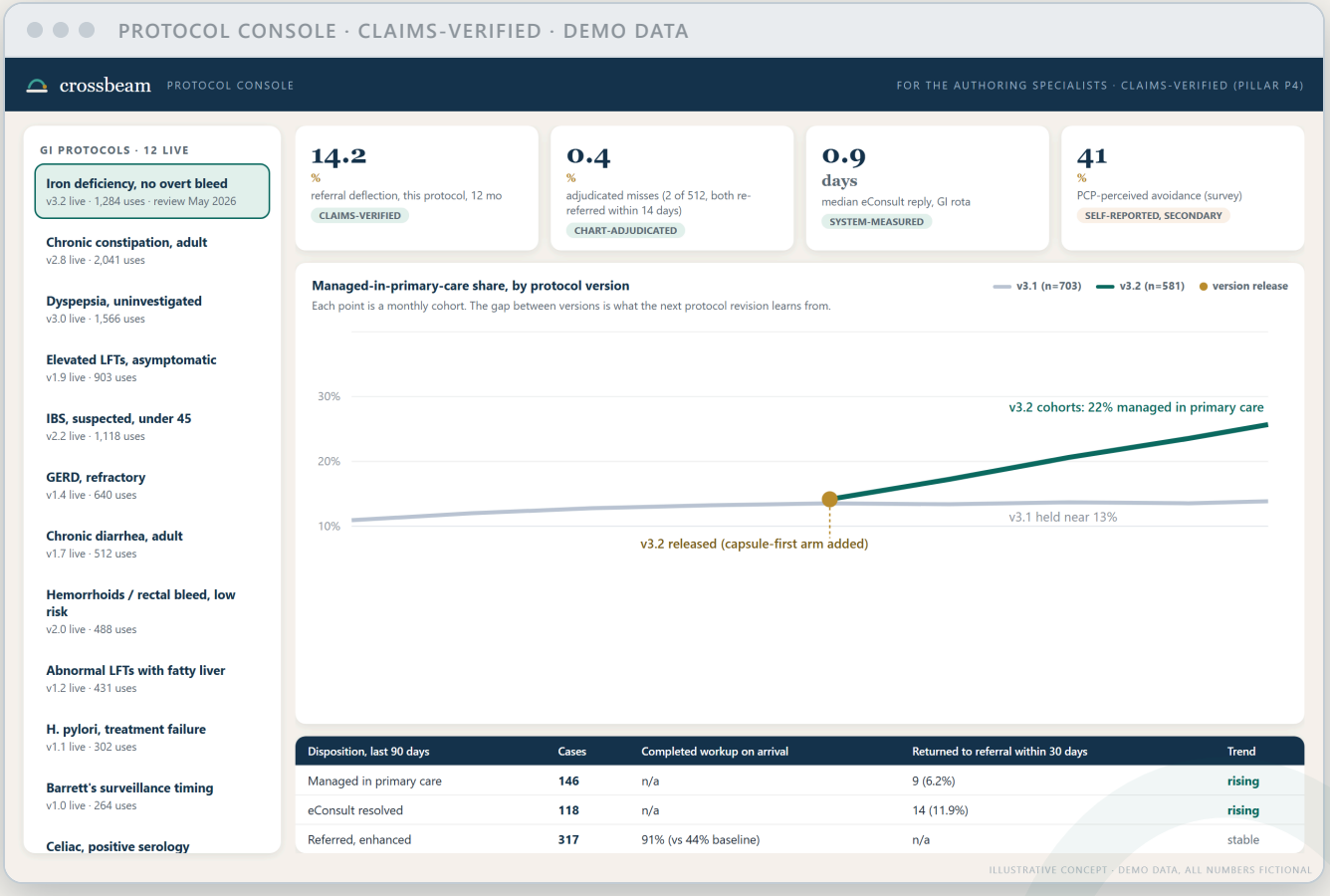
Ontario (Canada) PCPs reporting a contemplated referral avoided, on a mandatory closeout census of 60,474 eConsults[22, 23]

5 to 13%

of eConsults resolved without a referral in the category's newest real-world review, on program records: 2,505 US Medicaid eConsults, 2025[24]

Both numbers can be true; only one is bankable. Vendors quote the first kind. A buyer's actuary finds the second. So Crossbeam commits to claims-verified outcomes from day one, and the protocol console (right) is that commitment built into the product: every KPI is labeled by how it was measured, and self-report is demoted to secondary telemetry.

Three questions we are validating now: Is the referral decision moment where clinicians actually want help? Would your system pay, given its payer mix? Does advisory guidance change behavior enough to show up in claims?



Console: illustrative concept design, all numbers fictional. **Sources** 22, 23 Ontario eConsult program studies, 2022 · 24 JABFM Medicaid eConsult review, 2025 · Full citations: slide 14.

We are validating with clinicians now. Tell us where this is wrong.

- Where in your day would this panel genuinely help, and where would it annoy?
- Would you trust pathways authored by your own system's specialists more than generic guidelines?
- Who in your organization would sponsor and pay for this, honestly?
- If referrals dropped 10 to 15 percent, who in your building would fight it?

DRAFT

We'd love your feedback

docs.google.com/forms/d/e/1FAIpQLSd4RZGojA5Xu4BtR1aX9DELviqutIoHa0PhGe2HYstL_UyHYA/viewform

Scan or click. About 5 minutes.
Blunt is better than polite; we are looking for the reasons this fails.

APPENDIX

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Superscript markers on slides 2 to 12 refer to these numbered sources (abbreviated MLA format; descriptive titles are used where a formal title is not restated). Internal analyses are labeled as estimates where they appear.