Piloting a General Internal Medicine On-Call Physician to Improve Zone-Wide Care Coordination

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Partnerships in Action

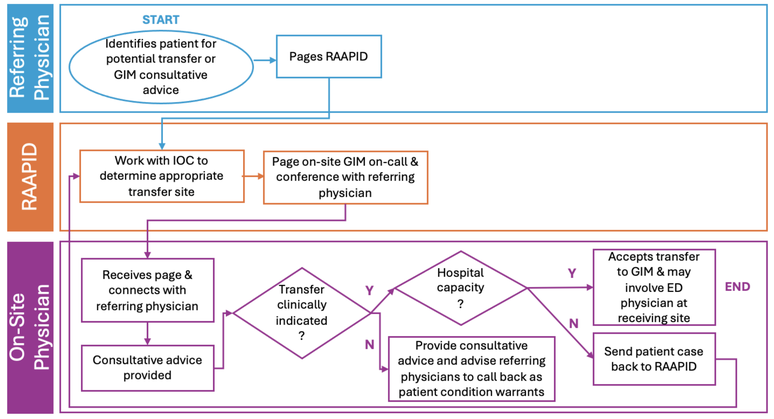
BACKGROUND

- System-wide pressures have led to:
  - Increased **emergency department (ED) patient volume and wait times** (1)
  - **Overcapacity patients** admitted to non-traditional care spaces (i.e. hallway beds) (2)
  - Greater burden on a **fixed amount of healthcare staff and physicians** resulting in burnout (3)
- The demand for hospital General Internal Medicine (GIM) in the Edmonton Zone (EZ) has surged, reaching **~130% of bed base capacity** in January 2025.
- The AHS **RAAPID** (Referral, Access, Advice, Placement, Information & Destination) service offers physicians a **centralized call center** to obtain consultation remotely and coordinate patient care transfers and referrals that reside within the Edmonton Zone.
  - Currently, calls are directed towards teams of GIM ED consult physicians (using an on-call schedule) at separate EZ hospitals.
  - The region lacks a centralized zonal individual subspecialty physician (i.e. GIM) to manage decision-making regarding triage and consultation

CURRENT STATE

RAAPID connects referring physicians to 5 separate GIM specialty service teams located across the EZ hospitals. In addition to their in-hospital role of managing a high-volume of inpatient duties and/or emergency consultations, they are providing telephone consultations and triage to physicians utilizing RAAPID services.

Process Map: Pre-Intervention



Issues Identified

Hospital Overcapacity

Nuances of service availability at each site and hospital/emergency capacity contributed to the larger sites receiving most of the RAAPID calls.

Physician Strain

On-call physicians juggle RAAPID calls with their hospital workload, impacting quality of care and physician well-being.

Duplication of Effort

More than one physician may be consulted for the same patient causing duplication, delays, and confusion.

PROJECT GOALS

Problem Statement:

Rising patient volumes and hospital overcapacity in the EZ have strained GIM services, leading to multiple inefficiencies including inconsistent call routing, physician strain, and frequent duplication of efforts. A fragmented approach to RAAPID calls and pages has increased physician workload, diverted attention from other hospital responsibilities, and limited the system's ability to equalize demand across EZ hospitals.

Aim Statement

To assess the feasibility and impact of a **centralized GIM RAAPID on-call physician** for a regional health zone- the Edmonton Zone.

Outcome Measure

- Number of patient transfers that occurred vs. treated in place (consultation only)

Process Measures

- Number of GIM RAAPID physician participants
- Number of weeks intervention took place
- Number of calls received per day
- Disposition of each call

Balancing Measure

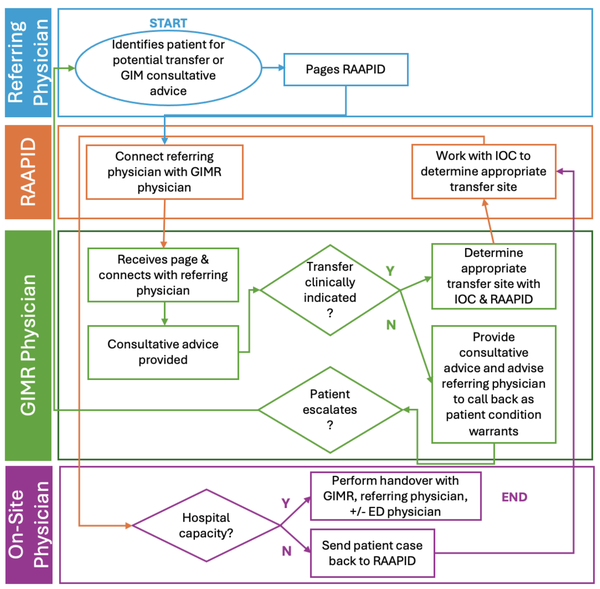
- Satisfaction of referring physicians

INTERVENTION

PDSA Cycle: (Jan – April 2025)

- One designated GIM physician per day to manage all RAAPID calls and provide GIM consult advice for the entire Edmonton Zone, Monday to Friday from 0730 – 1700
- Temporary (3 months) funding provided to support centralized call coverage (TERP)
- RAAPID staff and physicians informed of new process through internal communications
- Evaluation included physician feedback survey (daily shift report)

Process Map: Post-Intervention



Early Adoption Strategies

- ✓ **Engaged Leadership:** willingness to champion an initiative to model improved patient care
- ✓ **Funding:** secured upfront support dedicated to centralized coverage
- ✓ **Existing Culture:** foundation of collaboration and trust among GIM physician teams
- ✓ **Mutual Accountability:** ongoing feedback and willingness to adjust processes

RESULTS

Figure 1: Number of RAAPID patients assigned to each disposition during study period (Jan-April 2025)

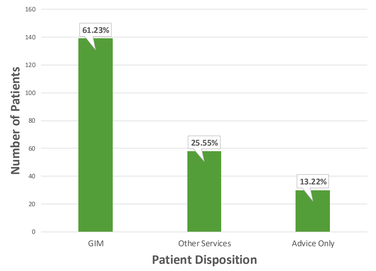


Table 1: Themes and quotes derived from qualitative analysis of GIM-RAAPID physician daily shift reports

Theme	Representative Quotes
Inefficiencies in Workflow Processes	"Multiple calls for a single patient made it hard to stay efficient." "Delays in reconnecting slowed the whole process."
Communication and Coordination Gaps	"Hard to get everyone on the line at the same time." "I wasn't always looped back in when the accepting site called back."
Unclear Roles and Process Expectations	"Some accepting physicians weren't sure what their role was." "Clearer expectations for GIM-to-GIM calls would help."
Variability Across Sites and Services	"Different sites had different rules, which created confusion." "Capacity and service differences made coordination difficult."
Professional Courtesy	"Some services declined without speaking directly, which affected flow." "Collegial communication would prevent unnecessary delays."

Lessons Learned

Change Management Challenges:

- Differences in site-specific cultures, admission protocols, and communication preferences may cause inconsistencies in triage and transfer processes
- Limited centralized tools to share real-time information (ie. call schedules & site capacity, direct communication with IOC regarding pending cases and best disposition for each) can create gaps in care coordination
- Patient flow complexity can increase due to evolving patient conditions and potential differences in opinion between triaging and accepting physicians

Benefits of Zone-Wide Model:

- 38% of calls were diverted from busy GIM physicians in the ED and exclusively handled by the GIMR physician
- Streamline communication and reduce inefficiencies
- Create capacity by preventing delays in admission decisions, preventing transfers, improving transfer site decision-making to avoid perpetuating overcapacity, equalizing demand throughout EZ hospitals

Sustainability planning will require:

- Long-term funding
- Physician engagement
- Ongoing evaluation

NEXT STEPS

Additional Data Collection

- Formal debrief with zone leadership, RAAPID, IOC, ED, and GIM
- Decision on scale-up or integration into standard GIM operations
- Survey GIM ED consult doctors to determine how the new workflow impacted them
- Possible present day data collection to have an estimated reference point for quantitative data in the study period
- Financial analysis to determine cost savings for decreased number of patient transfers

Recommendations

- This pilot provided baseline data to provide insight to inform future interventions
- Moving forward, we hope to better understand:
  - Ability of on-call physician to more effectively manage remote patients without burden of simultaneous ED service
  - Daily log sheets need to be updated to capture nuanced details of each case
  - Concluding survey that asks the physician key questions
  - Data limitations → didn't have access to RAAPID data (ie. number of patients transferred) → incidence of duplication of sites contacted for transfers

ACKNOWLEDGEMENTS & REFERENCES

- Edmonton Zone GIM Physician Teams and hospital leadership teams
- Alberta Health Services – RAAPID Call Centre, and Joseph Vong – EZ Medicine Analyst

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