

# Quality Improvement of Mount Sinai Discharge Summaries

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# The Issue

There is room to improve the quality of general surgery discharge summaries at Mount Sinai Hospital

Why it's important...

- Facilitate better communication between the General Surgery Service and family physicians

- Improve efficiency of dictating discharge summaries

- Provide a framework for a thorough discharge summary that can be used by other members of the medical team (eg. medical students, NPs)

- Thorough documentation in the patient's chart for medico-legal purposes

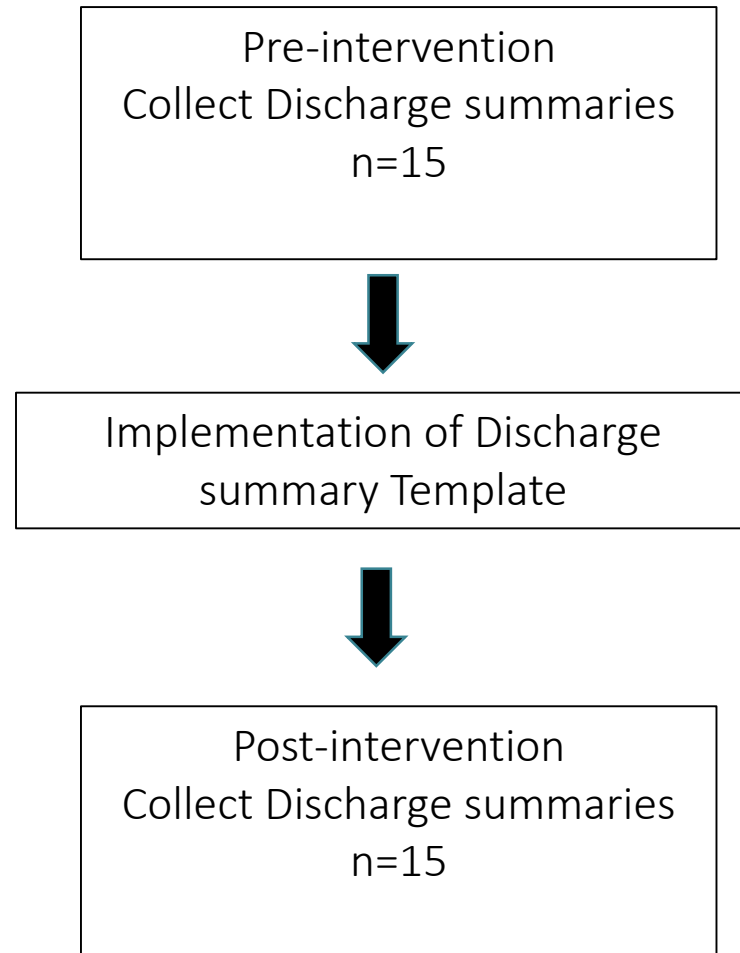
# Aim Statement

By May 2017, we aim to reduce the amount of missing information in each general surgery discharge summary at Mount Sinai Hospital by 50%, by implementing a general surgery specific discharge summary template for residents to use.

# Methods

We created a standardized discharge summary grading scheme

Developed a general surgery discharge template



# An Australian discharge summary quality assessment tool: A pilot study

Carl Mahfouz, Andrew Bonney, Judy Mullan, Warren Rich

## Background and objective

Patients' transition from hospital care to their general practitioner (GP) can put them at risk of unforeseen adverse events, which can be minimised by the GP receiving timely access to hospital discharge summaries. The objective of this article was to develop and pilot a discharge summary assessment tool, inclusive of components that Australian GPs identified as being most important for the safe transfer of care.

## Method

Development of the instrument was informed by a literature review pertaining to key components of effective discharge summaries. These components were included in a survey instrument, which was piloted by Australian GP participants.

## Results

From 118 responses, the five highest ranked components of a discharge summary included lists of medications on discharge, diagnoses on discharge, reasons for any changes in medications, and details of follow-up arrangements and treatment in hospital.

## Discussion

This paper describes the initial development and results of piloting an Australian discharge summary quality assessment tool.

Research indicates that a patient's transition from hospital care to the care of their general practitioner (GP) carries significant risk of unforeseen adverse effects, including emergency department re-admissions, disability and even death.<sup>1,2</sup> It has been reported that almost half (49%) of the patients discharged from hospital experienced at least one adverse event in their continuing care because of incorrect information contained in their hospital discharge summary.<sup>3</sup> Therefore, high-quality hospital discharge communication is essential in helping reduce adverse discharge-related events.<sup>4</sup> Also, from a hospital-based perspective, effective discharge summaries, which enable effective clinical handover, are required for accreditation under the Australian National Safety and Quality Service Standards (Standards). These Standards, derived from Australian and international research, set out to establish a consistent set of evidenced-based processes to be used across healthcare services.<sup>5</sup> Australian hospital discharge documents based on the 'eDischarge summary'<sup>6</sup> are similar to those reported in international literature in regards to providing the information considered to be essential for successful continuity of care.

International and Australian studies concerning discharge summaries have addressed:

- GP satisfaction with the quality and timeliness of electronic discharge summaries<sup>7-9</sup>

- audits of the accuracy of, and GP satisfaction with, medications outlined on discharge summaries<sup>10,11</sup>
- ranking discharge information options by GPs in order of importance<sup>12,13</sup>
- validation of a scale to measure the quality of hospital discharge summaries for older patients from a GP perspective<sup>14</sup>
- examination of the reliability, effectiveness, accuracy and timeliness of information transfer from the hospital to the GP<sup>15-19</sup>

Furthermore, Middleton et al investigated patients' knowledge of their hospitalisation and perceived readiness to leave in comparison with GPs' attitudes towards the usefulness of discharge communications.<sup>20</sup> A consistent theme in the literature has been the significant scope for improvement in the quality of discharge-related communication.

We are only aware of one Australian study undertaken to identify and rank what GPs believed were the essential elements required in a discharge summary to enable successful post-hospital continuity of care.<sup>12</sup> That study was conducted in a single, Western Australian metropolitan location and concerned patients who had undergone total hip or knee replacement.<sup>12</sup> We are aware of extensive research concerning perceptions of adequate discharge planning in Australia and the US.<sup>14,21</sup> However, there remains a pressing need for research to directly inform improvements in the discharge summary instrument itself. Therefore, the aim of this

# Grading Scheme

Family physician identified on d/c summary	1
Reason for admission or presentation to hospital	1
Results of diagnostic tests done in hospital	1
Treatment/Procedures in hospital	1
Progress during hospital admission	1
Complications during hospital stay	1
List of medications on discharge	1
Reasons for any changes in medications	1
List of diagnoses on discharge	1
Laboratory/pathology results to follow up on	1
Patient condition or functional status on discharge	1
Details of follow up arrangements	1
Information given to patient and family	1
Total	/13

# Discharge Summary Template

This is Dr. \_\_\_\_\_ [Your Name] dictating the discharge summary for patient \_\_\_\_\_ [NAME], \_\_\_\_\_ [ MRN #] on behalf of Dr. \_\_\_\_\_ [Attending]. Please send copies to Dr. \_\_\_\_\_ [Attending], to the chart and to the patient's primary care provider, Dr. \_\_\_\_\_ [Family Doctor, **found on patient face sheet/powerchart**].

**Admission date:**

**Discharge date:**

**Reason for admission:**

**Discharge Diagnosis:**

**Past Medical History:**

**Past Surgical History:**

**Home Medications:**

**Allergies:** *Include type of reaction, if known*

**Procedures performed during hospitalization:** *(Include ORs and date, significant procedures including IR procedures and associated complications if any)*

**Presenting complaint:**

*If presenting through the ED*

Mr/Ms. \_\_\_\_\_ is a \_\_\_\_\_ [age] year old \_\_\_\_\_ [male/female] who presented to Mount Sinai Hospital on \_\_\_\_\_ [date] with \_\_\_\_\_ [list main presenting symptoms]. Initial investigations in the Emergency department revealed \_\_\_\_\_ [pertinent bloodwork] and imaging showed \_\_\_\_\_ [summarize significant CT/US/x-ray findings].

The General Surgery team was consulted for further assessment. On exam, \_\_\_\_\_ [important physical findings]. The patient was therefore admitted to the service under team \_\_\_\_\_ [Aqua/Red/Orange/Blue] for further management.

*If presenting for elective surgery*

Mr/Ms. \_\_\_\_\_ is a \_\_\_\_\_ [age] year old \_\_\_\_\_ [male/female] who presented to Mount Sinai Hospital on \_\_\_\_\_ [date] for \_\_\_\_\_ [name of elective surgery]. He/She was diagnosed with \_\_\_\_\_ [diagnosis] in \_\_\_\_\_ [month, year] and it was decided that he/she would benefit from surgical intervention. **[Include pertinent treatment prior to surgery including chemo/radiation/prior surgery].**

### **Course in Hospital**

During Mr./Mrs. \_\_\_\_\_ stay in hospital  
(discuss significant OR, interventions or treatments)

*Major complications (if applicable, otherwise state there were no complications during this admission)*

1. *Line infections treated with \_\_\_\_\_ x \_\_\_\_\_ days*
2. *Hospital acquire pneumonia treated with \_\_\_\_\_ x \_\_\_\_\_ days*
3. *UTI treated with \_\_\_\_\_ x \_\_\_\_\_ days*
4. *Wound complications*
5. *High output stoma managed with \_\_\_\_\_ until outputs were under 1L.*
- 6.

On the day of discharge, Mr./Ms \_\_\_\_\_ was doing well, tolerating a \_\_\_\_\_ [regular/modified] diet with no nausea or vomiting and ambulating as per his/her baseline. His/her pain was well controlled with oral analgesics. He/she was hemodynamically normal, bloodwork was within normal limits and abdominal exam was benign. *Incisions were clean, dry and intact with no evidence of infection.*

He/she was therefore discharged \_\_\_\_\_ [home/rehab/complex continuing care/to another facility/ect..] on \_\_\_\_\_ [date] .



Indications to return to care were discussed with the patient including \_\_\_\_\_ (*fever, nausea/vomiting, worsening abdominal pain, wound or skin changes, jaundice*). Questions and concerns may be addressed by calling Dr. \_\_\_\_\_'s office.

## **Discharge Medications**

### **Discharge Instructions:**

**DIET:** You may resume your normal diet unless otherwise instructed.

**EXERCISE:** Avoid heavy lifting for the next 4 weeks. Light aerobic exercise (walking, jogging) is encouraged within the limits of your pain tolerance. Gradually resume normal physical activities as tolerated.

### **INCISION CARE:**

1. You may shower 48 hours after surgery. Cleanse incision with mild soap and water and let the water flow over the incision. Thoroughly pat dry. Avoid soaking incision for the next 2 to weeks.
2. You may see a small amount of clear, light red, or straw coloured fluid staining your dressing or clothes from your incisions, which is normal. However, please call your surgeon's office or go to the Emergency Department if you develop the following: staining is severe, thick, foul smelling or cloudy drainage, new spreading redness or worsening discomfort near the incision. These are signs of wound infection.
3. If Steri-strip tapes were placed on your incision will flake and fall off on their own. If not, you may remove them 7 to 10 days after surgery.

### **MEDICATIONS:**

1. Please resume your home medications unless otherwise instructed.
2. Do not drive while you are taking any prescription pain killers.

### **ADDITIONAL CAUTIONS:**

1. Please call the office or return to the Emergency Department if you develop the following symptoms: fevers, persistent nausea or vomiting, difficulty breathing, severe chest pain or worsening abdominal pain not relieved by pain medication, persistent diarrhea, or any other medical symptoms you are concerned with.

### **Follow Up Appointments:**

1. Follow up with Dr. \_\_\_\_\_ in \_\_\_\_\_ weeks
2. Follow up with Family Doctor in \_\_\_\_\_ for \_\_\_\_\_ (*staple removal/medication revision/post-operative check-up*)
3. CCAC arranged for \_\_\_\_\_ (*wound care/feeds/staple removal/drain care/ect...*)
4. (*any lab test or pathology report that needs to be followed up on*)

# Intervention

Emailed the discharge template to residents on the General Surgery service at Mount Sinai

Introduced the template in-person at rounds

Posted template in the on-call room

# Results

	Pre-Intervention (n= 15)	Post-Intervention (n= 15)
Family physician identified	40%	47%
Reason for admission or presentation to hospital	100%	100%
Result of diagnostic tests done in hospital	66%	88%
Treatment/Procedures in hospital	93%	100%
Progress during admission	86%	100%
Complications during hospital stay	53%	88%
List of medications on discharge	0%	23%
Reasons for any changes in medications	0%	6%
List of diagnoses on discharge	13%	41%
Laboratory/pathology results to follow up on	13%	18%
Patient condition/functional status on discharge	26%	88%
Details of follow up arrangements	73%	88%
Information given to patient and family	33%	71%

# Results

	Pre-Intervention (n= 15)	Post-Intervention (n= 15)
D/C Summary Grade Average Score	6/13	8/13

We saw a 28% reduction in missing information after implementation of the discharge summary template

# Limitations

Resident awareness

Resident turnover

Short time frame

# Future Directions

Include discharge summary template in Mount Sinai General Surgery orientation package

Post on University of Toronto General Surgery resource website

Already being used at other sites (St. Joe's)

# Conclusion

The introduction of a General Surgery discharge template at Mount Sinai Hospital has shown promising results for improving the amount of important information on general surgery discharge summaries.

Questions?