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Supplementary Material

A community of practice to address system-based issues and promote clinical leadership among trainee medical officers in a large public health service: an evaluation of a trainee-led forum

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Sunrise EMR Tips

- **How to order:**
  - Browse
  - Order sets
  - Wild card search
  - Consults
  - PET scans
- **How to reprint:**
  - Pathology Form
  - Discharge Script
- **How to find:**
  - Previous admissions
  - Random documents
    - 7-Step pathways
    - Discharge summaries
    - Clinic notes
    - Scanned documents
  - Outpatient bookings
  - Colonoscopy reports
  - Admission medications
  - When was a medication last given?
  - Weight
  - BSLs with insulin
  - Whether a test has been sent or is pending
  - Incomplete notes

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Browse

Order → top left of box click dropdown "Start of browse" → Go from there

- E.g. Medical imaging → Nuclear medicine → General Nuclear medicine → NM lung vent/perf VQ

Order sets

Order sets ("quick pick"): COMMON, GAST, ORTHO etc.

Examples

- End of life medications: "End of Life"
- Different types of analgesia: "CORE. ADULT Inpatient Acute Pain Management"
- Different types of IVT: "COMMON. Infusion Therapy"
- Different types of electrolyte replacement: "COMMON. Electrolyte replacement - Adult"

Wild card search

%_____

- *E.g., "%tetanus" will show up anything with tetanus in title*

Consults

"Consult –" will give list of options

Tip: psychiatry is under mental health

PET scans

Tip: Only consultants can order PET scans, so order "on behalf" of them

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Pathology Form

How do I reprint a blood form that has already been ordered?

Print reports → orders → pathology requisition order → time/date (exact)

Discharge Script

How do I reprint a discharge script that has already been ordered?

Print reports → orders → prescription order reprint → time/date (exact) (*can only reprint your own discharge scripts – not other prescribers*)

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Previous admissions

Click “view all visits”

Random documents

7-Step pathways/ Discharge summaries/ Clinic notes

- Documents → display format → select 7 step or discharge summary or outpatient → will find 7-Step pathways/ Discharge summaries/ Clinic notes

Old Consent forms/ Old ECGs

- Documents → display format → scanned documents → will find old consent forms/ old ECGs

Outpatient bookings

Patient Info → Visit History

Colonoscopy reports

Results → default results → diagnostic gastroenterology

Admission medications

Orders → display format → historical medications

When was a medication last given?

When was [X medication] last given?

Orders → Right click on medication → View → Order/Task Summary

Or Clinical Data Viewer tab OR Worklist Manager

Weight (daily weights)

Chemotherapy summary tab

Or patient info → height/weight

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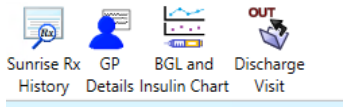
BSLs with insulin

Toolbar → BSL button



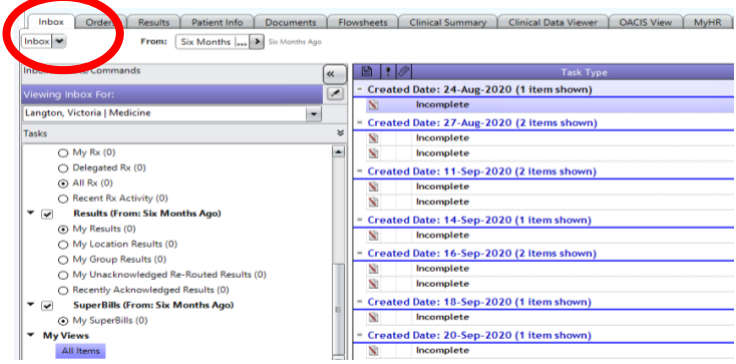
Whether a test has been sent or is pending

Oacis tab → Pathology (“interim”)

Orders → Pathology → “sent to lab”

Incomplete notes

Tip: How to find your incomplete notes: Check your inbox!



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Supplementary Material S2: TMO Forum Initiative Example – Clinical Documentation Template

Handover to GP Document Guide

General Principles: Minimise use of acronyms and specialist-terminology. Ensure language used is non-judgmental and the patient/family would be able to read the content comfortably

INTRODUCTION

Not required in OACIS

Admitting team required as title for EMR summaries currently

SITUATION

Profile – Single line incorporating residential situation and level of baseline function

Presenting Complaint – Single line of reason for hospital presentation

History of Presenting Complaint – Single succinct paragraph summarising the events and symptoms that lead to the patient's admission

Do not include

- *Examination findings*
- *Medications at time of admission*
- *Initial Investigations*

BACKGROUND

List of Past Medical Conditions with single line of detail

ASSESSMENT

List of issues addressed during admission with single line of detail including treatment

- Antibiotics used and duration should be specified
- Key consultations with other inpatient teams should be mentioned if they played a significant role in diagnosis or management
- Changes to direction or care or advanced care planning should be included

RECOMMENDATION

Discharge destination

Plans for discharge divided into:

- Outstanding investigations (who will review)
- Planned Management by Hospital
- Requested Management by GP

Key contact details for admitting unit

INVESTIGATIONS

<u>Only</u> key investigations should be attached, when appropriate

- *Include imaging or pathology that is critical to a diagnosis*
- *Include specific test results for direct comparison when the discharge plan is to follow-up or arrange a repeat result*
- *Do not include routine bloods from admission or discharge*

MEDICATION CHANGES

Medicine Name, Dose, Frequency & Route

Change reason / clinical indication

- Be specific e.g. ceased, dose increased, held and indicate reason for change

MEDICATIONS ON DISCHARGE

Complete list of medications at discharge

Medicine Name, Dose, Frequency & Route

- Include all on-going medicines to be taken by the patient, including prescription, over-the-counter, complementary, intermittent and 'as required' medicines

If a community pharmacy has been involved in dose administration aids (blister packs, dosettes or other methods), please specify which pharmacy

Example 1 – QEH Cardiology

INTRODUCTION

CARDIOLOGY ADMISSION

SITUATION

Profile: BJ is a 75 year-old woman living at home alone with basic support from her daughter, mobilises with walking stick

PC: One week of progressive dyspnoea and leg swelling without infective symptoms

HPC: Over the week prior to admission, BJ had progressive worsening of her leg swelling and gradual onset of dyspnoea. She denied coryzal symptoms but did feel dizzy when standing on the day of admission which was her main reason for presenting. BJ reported regular adherence to medications, but her daughter outlined increasingly frequent issues with BJ's short-term memory and her tablet supplies demonstrated that medications were not taken for several days prior to her admission. She was found to have decompensated heart failure and rapid AF on presentation to hospital.

BACKGROUND

Ischaemic Heart Disease – STEMI 2011, LAD stented, NSTEMI 2017

Heart Failure – Last Echocardiogram showed LVEF 38% (Sept 2018)

Atrial Fibrillation – On Apixaban 2.5mg twice daily

Hypertension – On treatment since 1996

Chronic Kidney Disease – Hypertensive nephropathy, baseline creatinine ~140

Osteoarthritis of hands and knees

ASSESSMENT

Exacerbation of Heart Failure – Treated with diuresis and fluid restriction, likely due to missed medications and rapid Atrial Fibrillation

Rapid Atrial Fibrillation – Likely due to missed medications, treated with oral Metoprolol

Memory Impairment – Suspicious for underlying Alzheimer's Disease, MMSE 22/30

RECOMMENDATION

Discharged home with increased visits by daughter

Hospital Management

- Referred to QEH Memory Clinic for further cognitive assessment
- Referred for community Aged Care Assessment (ACAT) for home supports/respite
- Referred to Community Heart Failure Nursing Service
- Medications changed to blister pack
- Frusemide maintenance increased

Requested GP Management

- Please repeat kidney function in one week and review patient's heart failure symptoms
- Please review patient with daughter to consider arranging Enduring Power of Guardian (EPOG) and Advanced Care Directive (ACD)

Key Contact – Jennifer, Cardiology Registrar via QEH switch 8222 6000

INVESTIGATIONS – Biochemistry at time of discharge (for comparison with repeat kidney function)

MEDICATION CHANGES

Frusemide 20mg mane PO – increased to 40mg mane due to fluid overload

MEDICATIONS ON DISCHARGE

Apixaban 2.5mg BD PO

Frusemide 40mg mane PO

Perindopril 5mg mane PO

Bisoprolol 5mg mane PO

Atorvastatin 40mg nocte PO

Paracetamol 1g QID PO – As required for arthritic pain

Community pharmacy for blister pack: TerryWhite Chemmart Port Road Medical Centre
(844-850 Port Rd, Woodville South)

Example 2 – RAH General Surgery

INTRODUCTION

GENERAL SURGERY ADMISSION

SITUATION

Profile: AB is a 36yo woman from home with partner, fully independent

PC: Right upper abdominal pain, nausea and vomiting for 2 days

HPC: AB had progressive abdominal pain which began 2 days prior to presentation. This was initially generalised discomfort but gradually became more severe with localisation to the right hypochondria and epigastrium. This was not relieved by Panadol or ibuprofen. She presented following several vomits overnight with inability to hold down food or water.

BACKGROUND

Endometriosis – Managed by private O&G specialist, nil issues in recent years

Appendicitis – Appendicectomy 2000

Depression – On Venlafaxine last 3 years, sees private Psychologist

ASSESSMENT

Acute Cholecystitis – Diagnosed on Ultrasound, treated with intravenous antibiotics (Piperacillin/Tazobactam 3 days)

Acute Kidney Injury – Related to vomiting and anorexia, resolved with intravenous fluids

RECOMMENDATION

Discharged home with partner

Hospital Management

- Review in Gen Surg clinic in 2 months to consider elective cholecystectomy
- Patient to complete further 5 days oral Amox/Clav

Requested GP Management

- Please review patient's symptoms within one week of discharge

Key Contact – Max, General Surgery Resident via RAH switch 7074 0000

INVESTIGATIONS

- Ultrasound report detailing cholecystitis features

MEDICATION CHANGES

Amoxicillin/Clavulanate 875/125mg BD PO for 5 days – Commenced for acute cholecystitis

MEDICATIONS ON DISCHARGE

Venlafaxine 150mg mane PO

Paracetamol 1g QID PO – As required for endometrial pain

Amoxicillin/Clavulanate 875/125mg BD PO for 5 days – For acute cholecystitis

Acronym Expansion

.dcs

INTRODUCTION

Admitting team: ####

SITUATION

Profile – ####

Presenting Complaint – ####

HPC – ####

BACKGROUND

Past Medical History
- ####

ASSESSMENT

Issues Addressed during admission

- ####

RECOMMENDATION

Discharge destination: ####

Outstanding investigations (who will review)

- ####

Planned Management by Hospital

- ####

Requested Management by GP

- ####

Key Contact - ####

KEY INVESTIGATIONS ATTACHED

MEDICATION CHANGES

Medicine Name, Dose, Frequency & Route – Change reason / clinical indication

MEDICATIONS ON DISCHARGE

Medicine Name, Dose, Frequency & Route

(Include all on-going medicines to be taken by the patient, including prescription, over-the-counter, complementary, intermittent and 'as required' medicines)

Community Pharmacy for dose administration aids: <Delete if not relevant>

Supplementary Material S3: Trainee Medical Officer (TMO) Forum – TMO Survey Questions

1. Are you currently a member of the TMO Forum?

    - ☐ Yes
    - ☐ No

2. Have you been a member of the TMO Forum in the past (i.e. prior to this year)?

    - ☐ Yes
    - ☐ No

3. The TMO Forum aims to have 4-6 meetings per year. How regularly do you attend TMO Forum meetings (either online or in-person)?

    - ☐ All meetings
    - ☐ More than half of all meetings
    - ☐ At least twice a year but less than half of all meetings
    - ☐ Up to once a year
    - ☐ Never

4. With regards to your past attendance at TMO Forum meetings, was this:

    - ☐ Online
    - ☐ In-person
    - ☐ Both
    - ☐ N/A (e.g. never attended/participated)

5. Do you find it easy to raise issues at a TMO Forum meeting?

    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral

- Disagree
- Strongly disagree
- N/A (e.g. never attended)

6. One of the roles of the TMO Forum is to facilitate communication between TMOs and CALHN leadership, including but not limited to via Forum meetings, through projects, or via Forum members.

   Do you feel the TMO Forum has helped to facilitate communication between TMOs and CALHN leadership?

   - Strongly agree
   - Agree
   - Neutral
   - Disagree
   - Strongly disagree
   - N/A (e.g. never attended/participated)

7. How regularly do you read TMO Forum bulletins?

   - All bulletins
   - More than half of all bulletins
   - At least twice a year but less than half of all bulletins
   - Up to once a year
   - Never

8. Have you found any aspects of the TMO Forum helpful to you at any stage during your training?

   - Yes

- No
- N/A (e.g. never attended/participated)

9. The TMO Forum has made me more aware of system-based issues in the organisation (i.e. CALHN).
   - Strongly agree
   - Agree
   - Neutral
   - Disagree
   - Strongly disagree
   - N/A (e.g. never attended/participated)
10. In my opinion, the TMO Forum has provided some improvement to at least one systems-based issue in the organisation.
   - Yes
   - No
   - N/A (e.g. never attended/participated)
11. At least one initiative affiliated with the TMO Forum has positively impacted my wellbeing as a trainee.
   - Yes
   - No
   - N/A (e.g. never attended/participated)
12. I have become involved with/held a representative position on another committee within CALHN, at least partially due to my involvement in the TMO Forum.
   - Yes

- ☐ No
- ☐ N/A (e.g. never attended/participated)

13. If you answered “yes” to Question 12, please comment on which other committees you have been involved with. (optional)

    _____ *(free text section)*

14. Have you ever been involved in/worked on a project affiliated with the TMO Forum, and if so, which of the following? (you may select multiple answers)

    - ☐ Medical workforce optimisation
    - ☐ CALHN Professional Accountability Program
    - ☐ EMR improvement initiatives
    - ☐ Safe rostering practices
    - ☐ Coding/medical documentation improvement initiatives
    - ☐ None (i.e. I have participated in the Forum, but never its projects)
    - ☐ Other: _____ *(free text section)*
    - ☐ N/A (e.g. never attended/participated in the Forum)

15. In your opinion, what are the most valuable aspects of the TMO Forum? (you may select multiple answers)

    - ☐ Regular updates on organisational issues via bulletins
    - ☐ Regular updates on organisational issues via Forum meetings
    - ☐ Being able to raise system/wellbeing issues at Forum meetings
    - ☐ Bering able to raise systems/wellbeing issues to Forum leadership
    - ☐ Opportunities to be involved in CALHN/Forum initiatives (e.g. as listed in the question above)

- ☐ Leadership opportunities within the Forum
- ☐ Leadership opportunities in other CALHN committees
- ☐ Opportunities for direct communication with the CALHN Executive
- ☐ I do not find any aspect of the Forum valuable
- ☐ Other: _____ *(free text section)*
- ☐ N/A (e.g. never attended/participated)

16. What do you feel are the main barriers to attendance at TMO Forum meetings? (you may select multiple answers)

- ☐ Forums are too long
- ☐ Forums are too brief
- ☐ Forums held in-hours are inconvenient for me
- ☐ Forums held after-hours are inconvenient for me
- ☐ I find it difficult to attend online forums
- ☐ I find it difficult to attend in-person forums
- ☐ Forums do not address issues relevant to me
- ☐ I find it difficult to express my opinions at forums
- ☐ I have not noticed any meaningful systemic change since participating in previous forums
- ☐ I prefer to only attend forums when lunch/food is provided
- ☐ None (i.e. I have never experienced any barriers to attending)
- ☐ Other: _____ *(free text section)*
- ☐ N/A (e.g. never attended/participated)

17. What do you feel are the main barriers to engaging with TMO Forum Bulletins? (you may select multiple answers)

- ☐ Bulletins are too long
- ☐ Bulletins are too brief
- ☐ Bulletins do not address issues relevant to me
- ☐ Bulletins are sent out too frequently
- ☐ Bulletins are sent out too infrequently
- ☐ None (i.e. I have never experienced any barriers)
- ☐ Other: _____ *(free text section)*
- ☐ N/A (e.g. never attended/participated)

18. In your opinion, what are the main areas in which the TMO Forum can improve? (optional question)

- ☐ _____ *(free text section)*

19. Are there any other comments you would like to make? (optional)

- ☐ _____ *(free text section)*

Supplementary Material S4: Trainee Medical Officer (TMO) Forum – Medical Lead and Executive Survey Questions

1. What is your role/position in the hospital?
    - ☐ _____ *(free text section)*
2. Have you heard of the TMO Forum?
    - ☐ Yes
    - ☐ No
3. Are you aware of how the TMO Forum can help you communicate with TMOs?
    - ☐ Yes
    - ☐ No
    - ☐ Somewhat
4. Have you ever used the TMO Forum to communicate a message to the TMOs (either via a bulletin or at a forum)?
    - ☐ Yes – at a forum
    - ☐ Yes – via a bulletin
    - ☐ Yes – both
    - ☐ No
5. If you answered, "Yes - at a **forum**": How effective did you find this as a method of communication for your purposes?
    - ☐ Not effective
    - ☐ Neutral
    - ☐ Effective

6. If you answered, "Yes - at a **forum**": Did you find this to be more or less effective than other methods of communication with TMOs?
    - ☐ Much less effective
    - ☐ Somewhat less effective
    - ☐ No more or less effective
    - ☐ Somewhat more effective
    - ☐ Much more effective
7. If you answered, "less effective" to "at a **forum**", what other methods of communication do you find more effective? (optional)
    - ☐ _____ *(free text section)*
8. If you answered, "Yes - via a **bulletin**": How effective did you find this as a method of communication for your purposes?
    - ☐ Not effective
    - ☐ Neutral
    - ☐ Effective
9. If you answered, "Yes - via a **bulletin**": Did you find this to be more or less effective than other methods of communication with TMOs?
    - ☐ Much less effective
    - ☐ Somewhat less effective
    - ☐ No more or less effective
    - ☐ Somewhat more effective
    - ☐ Much more effective
10. If you answered, "less effective" to "via a bulletin", what other methods of communication do you find more effective? (optional)

- ☐ _____ *(free text section)*

11. Would you ever consider using the TMO Forum as a platform to communicate with the TMO group in the future?
    - ☐ Yes – at a forum
    - ☐ Yes – via a bulletin
    - ☐ Yes – both
    - ☐ No
12. Are there any other comments you have regarding the TMO Forum, such as its strengths or areas for improvement? (optional)
    - ☐ _____ *(free text section)*