Welcome to the TLC!

(last updated January 2016)
## TLC Teams

<table>
<thead>
<tr>
<th>Team 1</th>
<th>Team 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attending</td>
<td>Attending</td>
</tr>
<tr>
<td>Fellow</td>
<td>Fellow</td>
</tr>
<tr>
<td>Nurse practitioner</td>
<td>Nurse practitioner</td>
</tr>
<tr>
<td>2 Residents (Anesthesia and EM)</td>
<td>2 Residents (Internal medicine)</td>
</tr>
<tr>
<td>2-3 Interns (Anesthesia, EM, ENT, neurosurgery)</td>
<td>2 Interns (Internal medicine)</td>
</tr>
<tr>
<td>4th year medical student</td>
<td>4th year medical student</td>
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</tbody>
</table>

Attendings change each Monday, Fellows change on the 1st of each month
Daily Schedule

• Whenever you need to get here… – Arrive and round on your patients, be ready to present by 7:45 a.m

• 7:45 a.m.- 8:20 a.m (Tues-Friday) – Morning Lecture (see next slide)

• 8:20 a.m. – X-ray rounds in the radiology conference room
  – Resident gives one-sentence summary of pt before fellow interprets film

• 8:35 a.m. – IMOC Rounds
  – 1-2 computers per team for order-entry and data acquisition.
  – Present the patients you saw that morning to the team.
    • If it’s a Monday or new admission the attending has not yet seen, provide the attending with a summary of the patient’s HPI and ICU stay
    • If it’s a Tuesday-Sunday, the nurse will start rounds with overnight events
  – All team members need to know about all patients, so keep extraneous work and conversation to a minimum.
TLC Morning Conference

- Occurs Tues-Friday (rare cancellations..)
- Begins at 7:45, ends at 8:15-8:20
- Faculty Delivered lectures: Tues, Wed, Thurs
- Resident Delivered: Fridays (Case/Topic Review)
- Please see TLC website:
  - [https://www.medicine.wisc.edu/tlc/trauma-life-center](https://www.medicine.wisc.edu/tlc/trauma-life-center)
    - Lecture Topic Schedule Link
    - Links to PDF’s of Papers to Pre-read for each Topic
- Discussion is expected and encouraged
TLC Organization

- Most patients will be in the TLC but some “board” in Burn Unit (B4/3), CCU (F4/M5), and Neurosurgical ICU (F8/4), Cardiothoracic ICU (B4/5).
- TLC is typically the primary service for their patients.
- Occasionally we serve as a critical care consultant for other services (cardiology, neurosurgery)
- ICU is a multi-disciplinary field (doctors, nurses, pharmacists, nutritionists, respiratory therapists, physical therapy, occupational therapy).
TLC Staff

Dr. Wells
Dr. Kory
Dr. Coursin
Dr. Denlinger
Dr. Ehlenbach
Dr. Goss
Dr. Hammel
Dr. Hollatz
Dr. Jarjour
Dr. Ketzler

Dr. Leibel
Dr. Lingenfelter
Dr. Maki
Dr. Malik
Dr. Regan
Dr. Runo
Dr. Sandbo
Dr. Smith
Erin Billmeyer, NP
Jenna Potter, NP
IMOC Rounds
(Interdisciplinary Model of Care)

Interdisciplinary rounds that include the medical team, nurse, pharmacy, patient’s family and frequently respiratory therapy and nutrition

1. Nurse presents interval events (interval changes, SAT/SBT, CAM/RASS/pain, vasoactive gtts, and wounds/drains)

2. Resident presents system-based plan (no need to repeat data the nurse has stated)

3. Another resident enters orders during other resident presentation

4. Rounding checklist (order readback, line/tube necessity, prophylaxis, antibiotics, plan of the day, family issues/meetings)
Daily Schedule

• End of IMOC Rounds - 4:30 p.m. – Daily work (new admits, follow-up tests, call consults, etc.) and medicine residents attend morning report if time allows

• 4:30 p.m. – Sign-out rounds with the on-call team (provide brief summary of the patient’s reason for admission, ICU stay, and items that need to be followed-up overnight)

• 7:00 p.m. – On-call intern arrives and receives sign-out from leaving intern

• 9:00ish p.m. – Evening rounds with fellow, residents, and charge nurses.
Admissions

• Team 1 and Team 2 alternate admitting days
• Attending physician or EICU is called for transfers from outside facilities
• Fellow or senior resident is called to triage transfers from the floor and admissions from the ED
• Patient placement is coordinated by the nursing coordinator and accepting physician
• Each patient will have a primary resident who sees them daily
  - Typically, both the senior and intern should be helping with the admission of every patient (notes, orders, procedures, talking to families, etc.).
Paperwork

There are four types of notes you will commonly write:

- H&P – please use the TLCHP4 template
- Progress note – please use the TLCDAILYNOTE2 template
  - each patient needs one daily, unless the H&P was started after midnight \textit{and} there are no new problems that morning – Discharge summary – needed for every patient discharging to home, SNF/LTACH, or morgue
- Interim summary – needed for every patient transferring out of the ICU if their ICU stay has been $>72$ hours (not necessary in the situation the receiving team has been following the patient through their ICU stay as often done by BMT and advanced pulmonary service)

All new admits and transfers need new orders – “IP-Intensive Care-Adult-Admission”
Orders

• During rounds, one resident should be entering orders
• Verbal and telephone orders are for emergencies only
• ALL written orders should be verbally communicated to the RN
• Be thoughtful regarding orders
  – Not every patient needs every lab test every day
  – Chest x-rays may not be needed daily
  – Few vent changes require an ABG
• Order stat only when necessary
• Before leaving, make sure your patients have appropriate a.m. orders
Procedures

• Safety is the primary concern
  – Person performing will be determined at the discretion of the fellow (and ultimately, the attending)
• Consent is mandatory (except for emergent procedures) — consent POA (check in the consent tab under chart review) or next of kin if no POA designated
• Nurses should be informed ahead of time for planned procedures
• Nurses have a checklist to ensure sterile technique used for central lines
• Sterile technique should be used for all lines (waterproof, sterile gown will protect you as well as the patient)
• All invasive procedures require a standard procedure note
• NEJM.org has a series of very helpful instructional videos
• Wash your hands
Procedure Carts

• In supply room
• Needs to be returned in order to be re-stocked
Ultrasound

- Sonosite machines in supply room
- One Sparq machine on each side of TLC
- When done clean (no bleach on the Sparq), return, and plug in
Ventilators

• Must place an order for mechanical ventilation in all intubated patients
  – Ask Fellow/Attending/NP to specify the settings: enter the Mode/Tidal Volume/ Rate/FiO2/PEEP
  – Respiratory Therapists (RT’s) are an excellent resource for information guiding respiratory treatment decisions including intubations, extubations, and codes
  – Do not physically change any settings on the ventilator unless an emergency – only the RT’s may physically change settings on the ventilator
Transfers to Floor / Discharges

• To transfer a patient out of the TLC, they need to be accepted by another service
  – Most patients can be transferred out by paging Hospitalist Triage unless there is a specialty service more appropriate (BMT, advanced pulmonary, transplant, etc.)
  – Patients who transfer to IMC status stay on our service until there is an IMC bed available… (see next slides for process)
  – Accepting service writes transfer orders
  – We write interim summary for those in ICU >72 hours
NEW IMC PATIENT TRANSFER POLICY

- **Old policy:** patients downgraded to IMC status immediately switched service to hospitalists, yet would often remain in the TLC on their service
- **New policy:** IMC pts who remain in TLC will stay on CCS service until IMC bed available.

**Process:**

- As soon as a patient is made IMC status, resident pages triage hospitalist:
  - 1) if D6/5 bed available, **transfer of service** is made at that time
  - 2) if D6/5 bed not immediately available,
    - Patient remains on CCS service, resident discontinues all inappropriate critical care orders - ICU meds, sedatives, HD, vent, pressors etc. Also must change level of monitoring. Interim summary completed, resident writes RN communication order “please page triage hospitalist when patient transfers out of TLC to IMC (D6/5)
    - When bed becomes available, resident pages triage hospitalist – if stat transfer, triage writes the transfer orders. Otherwise assigned hospitalist will

**IF BED BECOMES AVAILABLE BETWEEN 5pm-7am, PATIENT REMAINS ON CCS SERVICE UNTIL 7AM (BUT TRIAGE HOSPITALIST MADE AWARE)**
CCS TRANSFER POLICY CONTINUED

• **FOR OVERNIGHT TRANSFERS OUT:** Resident must write RN communication with their name and pager number as well as oncoming (next day) resident’s name and pager for all patients transferred out of TLC after 17:00 who stay on CCS service overnight.

• **General care:** Unlike IMC patients, Patients made general care will be transferred immediately to hospitalist service, even if they stay in the TLC.
  – Only exception to this is the patient made general care after 17:00. In this situation, they will transfer out of TLC but stay on CCS service until 07:00 (again, resident must include their name and pager (and next day resident’s name and pager) for floor RN to contact them for care issues during this time period.)
Nursing

• Reliable source of information about patients in particular and ICU in general
• Able to monitor minute-to-minute changes in patients status
• Need to be present during rounds – we fill out a rounding order during x-ray rounds to help them anticipate our rounding time
• If a nurse questions an order or contacts you because of a patient change, take their concerns seriously
• Two Care Team leaders each shift in TLC (one manages placement of patients within TLC, one manages staffing)
Nurse Practitioners

• Essential Support & Leadership Structure of TLC teams, roles and responsibilities are many, and often “fluid” (change due to housestaff availability and patient loads)
  – Primary function is not that of an intern or resident but they support those roles when needed

• GUIDE HOUSESTAFF TEAMS – Perform orientation, provide expert knowledge in TLC care policies & UW systems

• SUPPORT DAILY PRE-ROUNDING AND Rounding
  – NP’s review all patient data daily (consultant notes, cultures, imaging reports etc) – ensure nothing gets missed 😊
  – NP’s ensure adherence to rounding checklists !! 😊

• PROVIDE CONTINUITY & SUPPORT TO PATIENT CARE – MD’s often post-call, conferences, mtgs, sick
  • NP’s on-site & available to answer the many questions by RN, SW, PT/OT, Nutrition, Consultants
  • NP’s alert housestaff/fellows/faculty to issues that arise or changes in patient condition that need attention

• PROVIDE CONTINUITY AND AVAILABILITY TO FAMILIES
  – NP’s do not switch week to week or month to month – provide continuity in knowledge of family members, meeting discussions, family dynamics and structures

• RELIEVE HIGH PATIENT CARE BURDENS – available to relieve house-staff patient loads (only when census is high, your education comes first!! 😊
  • Help complete admissions during rounds

• ENSURE CONTINUITY IN TLC PRACTICE – promote adherence with changing TLC Initiatives/Policies given frequently rotating faculty/fellows

• LEAD QI INITIATIVES – identify quality issues, perform database analysis/management/collection, ensure adherence to QI initiatives
Pharmacists

- Pharmacists staff the TLC 24/7 and are an invaluable asset for medication-related issues
- On weekdays there are two daytime pharmacists and one will typically round with each team
Social Worker & Nurse Case Manager

- Tracy Ryan is the TLC social worker
- Julie Canter is the TLC nurse case manager

Who should I contact???

Either Julie or Tracy is assigned to each patient, you can find out who under **Treatment Team**

**Julie**
- Medically complex situations
- Utilization Review
- Workman’s Comp
- Cover when Tracy is off

**Either**
- Initial Eval screening
- Routine family support
- Family Meetings/End of Life
- Discharge Planning
- Identify Surrogate decision maker
- Assist w/ leave paperwork

**Tracy**
- HCPOA questions and completion
- Complex family dynamics
- Crisis intervention
- Guardianship
- Government programs/Insurance applications
- Ethics committee
- Cover when Julie is off
Nutrition

• There are three dietitians in the TLC
  – Cass Kight
  – Lesley Appleyard
  – Kathy Golos

• They evaluate all patients in TLC and can write TF orders if you order the delegation protocol within the nutrition consult
Families

- Family members are encouraged to be present for rounds
- **Keep families updated daily either in person or by phone**
- When families are frustrated or hostile, allow the fellow or attending to speak with them to avoid mixed messages
- For those anticipated to be in TLC >3 days, family meetings are set up for day 3 or 4, these are sit down meetings that are in addition to daily updates
Miscellaneous

• No eating or drinking in TLC
• Follow isolation rules – sanitizer and gloves when entering each room, patient-specific isolation signs posted outside each room
• ICU is very different from most medicine rotations.
  – If you have a question … ask it!
  – If you need help … ask for it!
• A very dark sense of humor is a common side effect of ICU work … be careful how it manifests
Resources

• The **TLC website** has key articles and links to useful sites:
  – Link from Department of Medicine site (username: “tlcreidents”, password “Brewers1”)
  – Video lecture series provided by our staff (search “tlc video teaching series” when logged in)
  – Link to Indiana University Critical Care Survival Guide (5-10 minute videos on ICU topics)

• Textbooks can be read throughout residency
  – *Critical Care Medicine* by Marini and Wheeler bases most teaching on physiologic principles to lengthen its relevancy
  – *The ICU Book* by Paul Marino is very popular among residents and fellows

• **Tarascon Internal Medicine & Critical Care Pocketbook** may be helpful
• Society of Critical Care Medicine has guidelines and helpful resources as well
C. diff Testing Algorithm

Algorithm intended as a guide to more appropriate Cdiff testing with intent of:

1) Reducing costs of excessive testing (60% of hospitalized patients will have diarrhea at some point in their stay)

2) Reduce unnecessary treatment of colonized patients (does not benefit - treatment does not eradicate)
# C. diff Testing Algorithm

## Main Points:

1. Test newly admitted patients with unexplained loose stool

   Consider appropriateness of testing **BEFORE SENDING TEST:**

2. Determine if stool is really more than 2 loose/watery and a departure from patient baseline

3. Determine if stool result of a laxative/softener

4. Determine if pt at low risk of infection (no WBC, no fever, no abd pain, no recent abx) – if no, then test

If low risk – isolate and observe for resolution/alternative cause before testing

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**Adult Inpatient Testing Algorithm for *Clostridium difficile* Infection (CDI)**

**In the FIRST 48 hours of admission**

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Does the patient complain of or have any unexplained loose stools prior to admission?</td>
</tr>
<tr>
<td>Yes</td>
<td>ORDER the Test. Place on enhanced contact isolation.</td>
</tr>
<tr>
<td>No</td>
<td>Do NOT Test</td>
</tr>
</tbody>
</table>

**AFTER 48 hours following admission**

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Does the patient have LESS than 3 unexpected liquid/loose stools beyond their known or established baseline within the past 24 hours?</td>
</tr>
<tr>
<td>Yes</td>
<td>Do NOT Test</td>
</tr>
<tr>
<td>No</td>
<td>Can the diarrhea be the result of the patient currently or recently (past 48 hours) being introduced to a new medication or therapy associated with diarrhea such as any of the following: stool softeners, laxatives, enzymes, bowel prep, lactulose, tube feeds, or IV contrast?</td>
</tr>
<tr>
<td>Yes</td>
<td>Do NOT Test. Consider altering therapy. Re-evaluate 24 hours after suspending affecting agent. If agent cannot be suspended, weigh no clinical judgment and if appropriate proceed to the next (“No”) step below.</td>
</tr>
<tr>
<td>No</td>
<td>Place patient on enhanced contact isolation. Maintain isolation until diarrhea resolves or an alternative, non-infectious cause of diarrhea has been determined.</td>
</tr>
<tr>
<td>3.</td>
<td>Is the patient low-risk (i.e. afibrile, no elevated WBC, no abdominal pain, no recent antibiotic use, not an IBD patient nor any recent/frequent healthcare encounters)?</td>
</tr>
<tr>
<td>Yes</td>
<td>Do NOT Test. Pre-test probability is low. Consider alternative causes of diarrhea.</td>
</tr>
<tr>
<td>No</td>
<td>ORDER the Test. Continue enhanced contact isolation. Do not test for cure.</td>
</tr>
</tbody>
</table>

**Disclaimer:** Laboratory limit: 1 Test every 7 days. Complex patients, including obstruction cases, may not readily conform to this algorithm. As always, sound clinical judgment should be applied in conjunction with the information provided here. In some instances, expert opinion should be solicited.
CPOT (Critical Care Pain Observation Tool)

• New **behavioral** pain scale for patients unable to self report pain in TLC starting February 1st, 2016, the Critical Care Pain Observation Tool

• Patients are scored on 4 behavioral domains:
  – facial expressions
  – body movements
  – compliance with the ventilator/vocalizations
  – muscle tension

• A score $\geq 2$ indicates pain is present (on a scale of 0-8)

• CPOT is recommended by SCCM’s Pain, Agitation, and Delirium Guidelines
Questions ?

Erin Billmeyer at erin.billmeyer@uwmf.wisc.edu
or
Jenna Potter at jenna.potter@uwmf.wisc.edu