



Military Advanced Regional Anesthesia & Analgesia  
Spring 2008 Meeting  
Minutes\*

\*MARAA decisions and recommendations to service Anesthesiology Consultants to the Surgeons General can be found under the heading: **Service anesthesiology consultant recommendation.**

**I. ATTENDANCE**

Meeting Date: 25 April 2008, 1300-1630

Meeting Location: Walter Reed Army Medical Center, Washington DC

Voting Members in attendance:

COL Chester Buckenmaier, MD, Army  
LTC Scott Croll, MD, Army  
LTC Debra Clise, CRNA, Army  
CPT Jimmie Foster, CRNA, Army  
LCDR Kyle Tokarz, MD, Navy  
LCDR Brent Bushey, CRNA, Navy  
LTC Todd Carter, MD, Air Force  
MAJ Brian Koonce, CRNA, Air Force  
MAJ Chris Wentzel, MD, Air Force

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Voting Members Absent:

CDR Ivan Lesnik, MD, Navy

[ilesnik@usuhs.mil](mailto:ilesnik@usuhs.mil)

**Other Attendees (listed as signed in):**

MAJ Greg Malone, MD, Air Force/WRAMC Fellow  
Geselle McKnight, ARAPMI  
Kelly Kiser, ARAPMI

Maisha Evans, ARAPMI  
Angela Awunor, ARAPMI  
Scott Gustafson, Sorenson Medical  
Karl Reinig, Touch of Life Technologies  
James Ray, IONSYS

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## **II. Tour of New Clinical Block Area**

1. Consultants met at WRAMC, Building 2, Ward 44, Room 4C08 for a tour of the new Regional Anesthesia & Acute Pain Medicine Block Area. The clinic opening on 21 April 2008.
2. Rich Nagy, IT Solutions, Drager Medical, provided an overview and demonstration of the Drager Innovian system. The initiative is to use an automated anesthesia information management system as a means of collecting real-time information and monitoring for the purpose of improving patient care, follow-up and safety. To date, recording of vital signs and monitoring information into an anesthesia record has been a manual process.

## **III. Review of Previous Minutes / Old Business**

1. Opening Remarks by COL Buckenmaier.
2. Update on AmbIT pain infusion system.
  - a. Buckenmaier provided feedback from recent inquiries on the monthly evacuation medicine VTC regarding the ambIT pump and that it was voted on in favor of using the ambIT pump in theater. Defense Medical Standardization Board (DMSB) was on the call and there was no push back to date. It was noted the DMSB only has recommendation authority and that the pump of choice is left up the individual facility. It appears that the ambIT is the evacuation pain pump for the foreseeable future.
  - b. Scott Gustafson, Sorenson Medical gave an update (\$2M contract with USAMMRA for the purchase of pumps for OIF/OEF, POC Brian Miller), passed out a sample of the new cassette head, and provided updated ordering information. Added glow in the dark labels. This information was dispersed to attendees and is posted on both the ARAPMI and Sorenson websites.
  - c. Lt. Col. Carter addressed removing pre-sets and inquired if it would require recertification? Sorenson can make changes to MARAA pump, shortening the delay from 5 to 3 seconds and/or remove the pre-set options from pump.
  - d. Short discussion on the use of Stryker pumps. There has been limited use of Stryker pumps out of Landstuhl Regional Medical Center (LRMC).

**Vote #1: Close the issue of the alternate pain pump choices for now, with the understanding that this issue will be reopened and addressed as needed. Concurrence by all to close issue (8 in favor, 0 against, 0 abstain).**

**Service anesthesiology consultant recommendations: Consultants should support the ambIT infusion pump as the evacuation pain pump for the foreseeable future.**

3. Regional Anesthesia Tracking System (RATS) & the Joint Patient Tracking System (JPTS) Integration Update. COL Buckenmaier and Geselle McKnight have started the process of integrating RATS into Theater Data Management System (TDMA). This process will ensure proper documentation concerning pain management technologies follows the patient through the evacuation system. They have completed JRAATS (Joint Regional Anesthesia & Analgesia Tracking System) outlines for pain note requirements. Design and implementation are ongoing. JRAATS will be briefed to the TFWG (Theater Functional Working Group) for funding on 21 August 2008. Please see Appendix A.

**Service anesthesiology consultant recommendations: The JRATS outline is provided was provided with Agenda. Recommend that the Consultants support the development of JRAATS and provide any additional comments on the JRAATS outline to COL Buckenmaier prior to 21 August 2008.**

4. New Pain Medications for Evacuation Flights:

- a. Carter and Wentzel commented that MARAA should 1) provide a list of recommended medications/doses; 2) provide ongoing education.
- b. Ketamine in PCA. Okay for CCAT. Currently, Ketamine is used at WRAMC when all other modalities fail. Ketamine dosing issues continue, standardization imperative.
- c. Use of hydromorphone/dilaudid in PCA. No further discussion.

**Vote #2: Write dosing recommendations before next MARAA meeting. Wentzel to compose, send Carter to review/finalization and then forward to Buckenmaier. Concurrence by all to prepare recommendations (8 in favor, 0 against, 0 abstain).**

5. IONSYS Product Update and Overview of the Iontophoresis Patch, by James B. Ray, PharmD Scientific Affairs Liaison - Internal Medicine Ortho-McNeil Janssen Scientific Affairs, LLC. Unable to provide copy of presentation and product information sheet at this time. Still in FDA approval process.

6. Military Advanced Regional Anesthesia & Analgesia field manual is finished and submitted to Borden Institute for review. Publication expected Fall 2008.

### III. New Business

1. Military Pain Care Act of 2008. Buckenmaier mentioned just approved, out of Iowa, says “that pain control is a disease and the DoD owes soldiers care from the point of injury to home”. [http://www.washingtonwatch.com/bills/show/110\\_HR\\_5465.html](http://www.washingtonwatch.com/bills/show/110_HR_5465.html)
2. Development of Acute Pain Service in LRMC. MAJ Malone is PCSing to Germany after completing Fellowship at WRAMC in July 2008. The MARAA is hopeful that he will be able to get the APS up and moving.
3. Presentation of Regional Anesthesia Training Techniques in Virtual Environment by Karl Reinig, PhD, Director of Engineering and Co-founder, Touch of Life Technologies. Due to logistics/scheduling unable to bring virtual trainer, but provided powerpoint presentation of the training capabilities.
  - a. It was noted by the MARAA that the nerves should be further extended to provide more in depth training. Croll to email Tom Weinert from VH Dissector to inform him of this change.
4. Carter recommended that the MARAA dedicate a MARAA representative (or one from each service) to the monthly continuum of care VTCs. This would enable the MARAA to push more initiatives through as a united group vs. filtering through WRAMC.
5. Fall 2008 MARAA meeting.

The Fall 2008 MARAA meeting will be held 17 Oct 08 in conjunction with USSA in Orlando, FL.

Meeting adjourned

## APPENDIX A. Joint Regional Anesthesia & Analgesia Tracking System (JRAATS) requirements outline.

Red = X-populate from existing record

Blue = pull down menu

Underline = page opens w/ mouse click or key stroke

Green = link to another page in TMDS

### JRATS ACUTE PAIN NOTES

Demographic data:

Last name

First name

SSN

Rank

Age

Ethnicity

Gender

Allergies

Mechanism of injury (IED, RPG, GSW etc.) w/ link to History & Physical

(We don't care how this information is displayed as long as it is easy to locate and the patient's name, SSN (last 4?) and allergies appear on every page.)

### Procedure Note

Select Procedure:

[IV PCA](#)

[Epidural catheter](#)

[Peripheral Nerve Block](#)

1. IV PCA
  - a. Therapy initiated **Date/time**
    - i. Medication
      1. Morphine
      2. Hydromorphone
      3. Other (see comments)
    - ii. Loading dose?
      1. Yes
        - a. Dose: mgs
      2. No
    - iii. Medication concentration
      1. mg/mL
    - iv. Continuous infusion?
      1. Yes
        - a. Rate: ml/hr
      2. No
    - v. Patient controlled bolus (PCA)?
      1. Yes
        - a. Dose: mg
        - b. Lockout: minutes
      2. No

- b. Pre-procedure Verbal analogue score (0-10)
  - c. Post-procedure Verbal analogue score (0-10)
  - d. Comments/Notes/Complications: free text field (no. of characters?)
2. Epidural catheter (selection remains 'active' until the catheter is removed)
- a. Time of placement: **Date/time**
  - b. Level of spine catheter is placed (free text, ex: 'L4')
  - c. Catheter test dosed?
    - i. **Yes**
    - ii. **No – Catheter must be test dosed! Please complete before proceeding.**
  - d. Bolus injection?
    - 1. **Yes**
      - a. Medication
        - i. **Ropivacaine**
        - ii. **Bupivacaine**
        - iii. **Other (see comments)**
      - b. Volume: ml
      - c. Concentration: 0.0%
    - 2. **No**
  - e. Infusion rate: mL/hr
  - f. Patient controlled epidural bolus (PCEA)?
    - 1. **Yes**
      - a. Volume: mL
      - b. Lockout: minutes
    - 2. **No**
  - g. Pre-procedure Verbal analogue score (0-10)
  - h. Post-procedure Verbal analogue score (0-10)
  - i. Comments/Notes/Complications: free text field (no. of characters?)
3. Peripheral Nerve Block (1 note/block)
- a. Select
    - i. **Continuous peripheral nerve block (remains 'active' until catheter is removed)**
    - ii. **Single Injection nerve block (remains 'active' for 24 hours following placement)**
  - b. Continuous peripheral nerve block (CPNB)
    - i. CPNB catheter placed: **Date/time**
    - ii. Laterality of CPNB
      - 1. **Left**
      - 2. **Right**
    - iii. Location of CPNB
      - 1. **Interscalene CPNB**
      - 2. **Supraclavicular CPNB**
      - 3. **Infraclavicular CPNB**
      - 4. **Axillary CPNB**
      - 5. **Paravertebral thoracic CPNB**
      - 6. **Lumbar plexus CPNB**
      - 7. **Femoral CPNB**
      - 8. **Posterior Sciatic CPNB**
      - 9. **Lateral Sciatic CPNB**
      - 10. **Popliteal CPNB**
      - 11. **Other (see notes)**
    - iv. Catheter tunneled?
      - 1. **Yes**

- 2. No
  - v. Catheter test dosed?
    - 1. Yes
    - 2. No – Catheter must be test dosed! Please complete before proceeding.
  - vi. Catheter bolus?
    - 1. Yes
      - a. Medication
        - i. Ropivacaine
        - ii. Bupivacaine
        - iii. Mepivacaine
        - iv. Other (see notes)
      - b. Concentration: 0.0%
      - c. Volume: mL
    - 2. No
  - vii. Infusion rate: mL/hr
  - viii. Patient controlled bolus (PCB)?
    - 1. Yes
      - a. Volume: mL
      - b. Lockout: minutes
  - ix. Pre-procedure Verbal analogue score (0-10)
  - x. Post-procedure Verbal analogue score (0-10)
  - xi. Comments/Notes/Complications: free text field (no. of characters?)
- c. Additional block?
- i. Yes – GO TO (This allows additional blocks, both CPNB and single injection; requires all fields are completed for each individual block).
- d. Single injection peripheral nerve block (PNB)
- i. PNB placed: **Date/time**
  - ii. Laterality
    - 1. Left
    - 2. Right
  - iii. Location PNB
    - 1. Interscalene CPNB
    - 2. Supraclavicular CPNB
    - 3. Infraclavicular CPNB
    - 4. Axillary CPNB
    - 5. Paravertebral thoracic CPNB
    - 6. Lumbar plexus CPNB
    - 7. Femoral CPNB
    - 8. Posterior Sciatic CPNB
    - 9. Lateral Sciatic CPNB
    - 10. Popliteal CPNB
    - 11. Other (see notes)
  - iv. Medication
    - 1. Ropivacaine
    - 2. Bupivacaine
    - 3. Mepivacaine
    - 4. Tetracaine
    - 5. Other (see notes)
  - v. Concentration: 0.0%
  - vi. Volume: mL
  - vii. Pre-procedure Verbal analogue score (0-10)
  - viii. Post-procedure Verbal analogue score (0-10)
  - ix. Comments/Notes/Complications: free text field (no. of characters?)

- e. Additional block?
  - i. Yes – GOTO \* (This allows additional blocks, both CPNB and single injection, but requires all fields are completed for each individual block).

### **Clinical Note**

(This X-populates with all previously entered and currently active procedure notes)

1. IV PCA
  - a. Date/time therapy started
    - i. Medication type
    - ii. Medication concentration: mg/mL
    - iii. Continuous infusion rate: ml/hr
    - iv. Patient controlled bolus (PCA)
      1. Dose: mg
      2. Lockout interval: minutes
2. Epidural catheter
  - a. Catheter placed: Date/time
  - b. Level of placement
  - c. Medication type
  - d. Medication concentration: 0.0%
  - e. Infusion rate: mL/hr
  - f. Patient controlled bolus (PCEA)
    - i. Volume: mL
    - ii. Lockout interval: minutes
3. Peripheral nerve block
  - a. Continuous peripheral nerve block (CPNB) or Single Injection (PNB)
  - b. Block placed: Date/time
  - c. Laterality of CPNB/PNB
  - d. Location CPNB/PNB
  - e. Medication type
  - f. Medication concentration: 0.0%
  - g. Infusion rate: mL/hr
  - h. Patient controlled bolus (PCNB):
    - i. Volume: mL
    - ii. Lockout interval: minutes
4. New Clinical Note: Date/time
5. Adjunct Medication list: (can we populate from existing medication list?)
6. Current Verbal analogue score (0-10)
7. Verbal analogue score last 24 hours (0-10)
8. Is patient satisfied with pain management?
  - a. Yes
  - b. No – Please explain in comments.
9. Treatment/catheter discontinued
  - a. PCA
  - b. Epidural
  - c. CPNB
10. Pain management plan for next 24 hours: Free text field (no. of characters?)

(In order to update a patient's pain management plan we need to be able to edit the X-populated fields in the clinical note. For example: an infusion is running at 10ml/hr. The clinician wants to

increase it to 12ml/hr. The field for that day's clinical note should auto-populate at 10ml/hr but the clinician can click on the field and increase the rate to 12. This rate increase is now saved as the most recent, active note. The previous note is now archived as the clinical note for that particular point in time.)

11. Comments/Notes/Complications: free text field (no. of characters?)

(Once catheters or PCA is discontinued the procedures will no longer populate the active procedure list for the patient. Single injection blocks remain active for 24 hours. However, all terminated procedures should be accessible for review)

### **Transfer Note\*\***

(The transfer note can serve as the clinical note on the day of transfer)  
Note will x-populate as above)

1. IV PCA
  - a. Date/time therapy started
    - i. Medication type
    - ii. Medication concentration: mg/mL
    - iii. Continuous infusion rate: ml/hr
    - iv. Patient controlled bolus (PCA)
      1. Dose: mg
      2. Lockout interval: minutes
2. Epidural catheter
  - a. Catheter placed: Date/time
  - b. Level of placement
  - c. Medication type
  - d. Medication concentration: 0.0%
  - e. Infusion rate: mL/hr
  - f. Patient controlled bolus (PCEA)
    - i. Volume: mL
    - ii. Lockout interval: minutes
3. Peripheral nerve block
  - a. Continuous peripheral nerve block (CPNB)
  - b. Block placed: Date/time
  - c. Laterality of CPNB/PNB
  - d. Location CPNB/PNB
  - e. Medication type
  - f. Medication concentration: 0.0%
  - g. Infusion rate: mL/hr
  - h. Patient controlled bolus (PCB):
    - i. Volume: mL
    - ii. Lockout interval: minutes
4. New Clinical Note: Date/time
5. Adjunct Medication list: (can we populate from existing medication list?)
6. Current Verbal analogue score (0-10)
7. Verbal analogue score last 24 hours (0-10)
8. Is patient satisfied with pain management?

- a. Yes
  - b. No – Please explain in comments.
9. Treatment/catheter discontinued
- a. PCA
  - b. Epidural
  - c. CPNB
10. Pain management plan for next 24 hours: free text field (no. of characters?)
11. Comments/Notes/Complications: free text field (no. of characters?)
12. New Location (**TRACES**)
- Receiving location SHOULD x-populate from TRACES **and** automatically generate an email alerting the receiving location's pain personnel that a patient with advanced pain management technologies are en route and the provider should check TMDS.
  - Active procedures (PCA, Epidural, CPNB) should be available to edit all fields. When the provider selects an active procedure for edit, the old active procedure will be archived to provide a record of management changes.

### **Receiving location email**

Example of a recent email:

RATS user malong has transferred patient:

1lt XXXX

to WRAMC. This is an informational message to inform you of the event. The patient should be visible when you log into the RATS system.

Please visit the RATS site at <http://rats.cermusa.org>

This message was sent from an automated service account; please do not send administrative requests to this address; humans do not read mail sent to this account.